

***Help a Sculpture* and other abfunctional potentials**

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Abstract

This practice-led research investigates the relationship between sculpture and concepts of function in contemporary art. Since the Enlightenment, art and function have commonly been understood as mutually exclusive concepts. Associated with everyday life, function is considered outside the sphere of art, where the art object is predominantly positioned as “functionless” and hence “autonomous” from the everyday prerequisites of living. In the instances where art has incorporated function, this has frequently been framed in terms of dysfunction, “dissolving art into life,” or as an alternative strategy in the “dematerialisation of the art object.” Yet, a neologism that emerged from my own art practice – “abfunction,” meaning to move away from function – implies that function is implicit within art itself, suggesting that the neat separation between art and function is not so clear cut.

This thesis, includes the artwork produced for the *Help a Sculpture* exhibition at the Margaret Lawrence Gallery, VCA in July 2016 and the written dissertation. The project asks: in what ways can the neologism abfunction reveal and divert the role of function within the production and end-effect of the contemporary artwork? Three bodies of artworks were produced for the project and have been used as case studies within the written dissertation. They are: *How long* (2008-ongoing), *Houses that are happy to help with at least one of the possible problems of art* (2010-ongoing) and the *Hold UP* series (2013-ongoing). These artworks comprise: video, photographic installations, photo-sculptures and sculptural assemblies.

The written dissertation establishes a foundation for abfunction within contemporary art. Part I seeks to define “function” that abfunction maybe moving away from within the artwork. Given art is considered to be functionless, concepts of function are investigated by Aristotle, early modernist architectural discourse, and those involved in function theory, such as Beth Preston and Ruth Millikan. It is proposed that function can be understood from two points of view. I have termed this as, “use-ready” function (what something is for), and function as “forming” of an object or thing (summarised by the adage: “form follows function”). Part II of the written thesis investigates how these two roles of function occur within art. The Russian and Polish avant-garde from the 1920s to the mid-1930s, provides an uncharacteristic example of artists and theorists activating the role of function in art.

Discussed in this written component of the thesis, are artworks and theories from the Russian Constructivists and Productivists, including artists Alexandr Rodchenko, and Karl loganson and theorist Boris Arvatov, in addition to the Polish Unists: sculptor Katarzyna Kobro and her husband, painter Władysław Strzemiński. Part III applies the understanding of the role of function in the artwork to investigate how abfunction both reveals and departs from function in the artwork case studies produced for the project.

Abfunction represents a significant opportunity for a more complex understanding of how function might operate with the artwork. Its meaning in relation to art is not encompassed by existing terms of function including, functionless, dysfunction, malfunction and the lesser known term para-functional. Moreover, in describing a deviation away from the end expectations of function, abfunction also acknowledges the alternative materialisation of objects and things produced through this method which the terminology associated with the “dematerialised” object fails to do. This research project draws to a conclusion with the argument that abfunction offers a new insight into processes within the production of art. Revelatory in its reveal of the pervasive role of function that it generatively departs from, abfunction accounts for the alternative unimagined outcomes produced in art beyond the teleological grip of function.

Declaration

This is to certify that:

- I. this thesis comprises only my original work towards the Doctor of Philosophy except where indicated in the preface
- II. due acknowledgement has been made in the text to all other material used
- III. The thesis is 85,000 words exclusive of tables, maps, bibliographies, footnotes and appendices.
- IV. Signature:

Preface

Two artworks prior to the project were the catalyst for this project. These are the *On* body-suit work (2002–03) (Fig. 17) and *Help a Sculpture* (2005-2008) (Fig. 18), which shares its name with this project. They are discussed within the written thesis.

On is an artwork comprising a series of white vinyl jackets, with a hole in the centre that exposed the wearers' abdominal regions and belly button. This artwork has had multiple iterations over the last fourteen years. It has included installations, live performances, posters and social media sites.

Help a Sculpture is a performance artwork where a goldfish helps a sculpture stand for a period of time. The artwork consisted of a range of elements: a circular cardboard ring sculpture covered with mirror foil; eight goldfish in an aquarium propped up on a celeriac; two vertically standing fluorescent lights; a collection of aquarium-type paraphernalia; a provisional work-jacket and a timer and myself as the artist who enacts the performance.

I would like to acknowledge and thank Dr Hilary Maddocks for copy-editing my thesis who is knowledgeable in the academic discipline of the thesis

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Images of my artwork in this thesis are courtesy of myself and Sarah Scout Presents, Melbourne.

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Fig. 1 Simone Slee, *Hold UP (being a prop – being a pole)* (2013)

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Photo: Kay Abude



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View: *Hold UP* series (2013-ongoing)

Photo: Christo Crocker



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Photo: Christo Crocker



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Photo: Kay Abude



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Photo: Kay Abude



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<https://vimeo.com/180540855> PASSWORD: abfunction

Photo: Christo Crocker



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Photo: Kay Abude



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Photo: Christo Crocker



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Photo: Kay Abude

Introduction

Problem statement

Since the Enlightenment, art and function have commonly been understood as mutually exclusive concepts. Associated with everyday life, function is considered outside the sphere of art, where the art object is predominantly positioned as “functionless” and hence “autonomous” from the everyday prerequisites of living. In the instances where art has incorporated function (often as a critique of art’s historical functionless status), this has frequently been framed in terms of dysfunction, “dissolving art into life,” or as an alternative strategy in the “dematerialisation of the art object.”¹ While this draws attention to the binary separation between art and function, it nevertheless acts to maintain it. To date there has been little acknowledgement of the role of function within art beyond this dichotomy. Yet, a neologism that emerged from my own art practice – “abfunction,” meaning to move away from function – implies that function is implicit within art itself, suggesting that the neat separation between art and function is not so clear cut. Abfunction represents a significant opportunity for a more complex understanding of how function might operate with the artwork. Its meaning in relation to art is not encompassed by existing terms of function, including functionless, dysfunction, malfunction, the multifunctional and the lesser known term para-functional. Moreover, in describing a deviation away from the end expectations of function, abfunction also acknowledges the alternative materialisation of objects and things produced through this method which the terminology associated with the “dematerialised” object fails to do.²

¹ The phrase, the dematerialised art object was coined by Lucy Lippard, to catalogue the rise of artworks from the 1960–70s. It included artworks such as minimalism, earthwork and conceptual art, live, performance, video or installation art, that did not present the conventional static autonomous art object. See Lucy R. Lippard, *Six Years: The Dematerialization of the Art Object from 1966 to 1972* (London: Studio Vista, 1973). Lippard’s concept of the dematerialised art object was also considered an attack and departure from the “modernist” agenda of the American critic, Clement Greenberg who advocated for medium specificity and the autonomous art object. Medium specificity for Greenberg, was the “purity” of each art medium, where painting or sculpture, for example, would be defined by the literal qualities essence of each of their mediums. See Clement Greenberg, “Towards a Newer Laocoon,” in *Clement Greenberg, the Collected Essays and Criticism*, Vol. 1: Perceptions and Judgments, 1939-1944 ed. J. O’Brian (Chicago; London: University of Chicago Press, 1986).

² More recently, the concept of the dematerialised art object has been questioned and considered misleading, see Iovino Serenella and Oppermann Serpil, “Material Ecocriticism: Materiality, Agency, and Models of Narrativity,” *Ecozon@: European Journal of Literature, Culture and Environment* 3, no. 1 (2012): 76.; Boris Groys, “Introduction—Global Conceptualism Revisted,” *e-flux Journal* # 29, no. 11/11 (2011); Dorothea von

Project Aim

This thesis, which comprises artwork produced for the Margaret Lawrence Gallery exhibition and the dissertation, asks the question: In what ways can the neologism abfunction reveal and divert the role of function within the production and end-effect of the contemporary artwork? The first task is to understand and define what abfunction might be. Consequently, before outlining the scope and research methodology of this project, in addition to questions raised by abfunction, I will briefly foreground the artworks that initially generated the concept of abfunction: *On* (2000–03) and *Help a Sculpture* (2005).

The origins of abfunction: On (2000-2003) and Help a Sculpture (2005) – commencing a definition of abfunction



Fig. 17 Simone Slee, *On_Community*, (2002)

Photo: Lyn Pool

The concept of abfunction emerged through the dialogue of my art practice associated with the *On* body-suit work (2000–03) (Fig. 17). Comprised of a series of white vinyl jackets, each sporting a hole in the centre, this artwork exposed the wearers' soft abdominal nether

Hantelmann, *How to Do Things with Art: The Meaning of Art's Performativity*, trans. Jeremy Gaines and Michael Turnbull (Zurich: JRP Ringier, 2010), 144.

regions and the central punctum of the belly button. Wearers reported that the jacket had the strange effect of simultaneously giving them a sense of security, because it was soft, padded and firm, but also a feeling of exposure, as one of the most vulnerable and emotional parts of their body – the stomach – was left wide open. On the one hand, this artwork could be identified with performing the functional role of a body suit – of protection – but on the other hand, it also performed the unexpected role of exposure. Responding to the surprising and unexpected effects of the *On* body-suit, they were neither purely dysfunctional, nor multifunctional, but seemed to provide an alternative and unexpected effect that departed from the original purpose. The word abfunction emerged intuitively in my practice's vocabulary as an alternative that other functionally based concepts could not accommodate.

A subsequent artwork, entitled *Help a Sculpture* (2005) (Fig. 18), (which shares its name with this project), also revealed unexpected roles of objects, animals and things when engaged in a performance. In this artwork, a goldfish helps a sculpture stand for a period of time. An ensemble of elements installed within the gallery provided the constituent components necessary to achieve this aim. They included: a circular cardboard ring sculpture covered with mirror foil on its front face, lying upwards on the floor; eight goldfish in an aquarium propped up on a celeriac; two vertically standing fluorescent lights; a collection of aquarium-type paraphernalia; a provisional work-jacket and a timer. At an un-prescribed moment, I entered the work, decanted a goldfish into a bag of water and, while propping the sculpture vertically, placed the goldfish in the bag at the base of the sculpture, which enabled it to stand.



Fig. 18 Simone Slee, *Help a sculpture*, (2005), (reconstructed 2008)

Performance sculpture, variable size. Installation view in the exhibition *Common Space, Private Space*, Margaret Lawrence Gallery, Melbourne, curated by Rebecca Coates. Photographs by Christian Capurro.

These artworks, produced prior to the project, stimulated a provisional definition of the term abfunction as: “doing the right thing with the wrong thing, and its inverse, doing the wrong thing with the right thing.” In this early definition of abfunction, function was acknowledged within the artwork and identified as the purpose and role of objects and things. However, while function was acknowledged, it was simultaneously observed that there was a generative departure from its parameters, where things and objects took on alternative and unexpected functions and purposes.

“Ab”

In the construction of the word abfunction, this concept of moving away from something is nominated by the prefix “ab.” The etymological meaning of “ab” in English is used to indicate: “away from”; “off”; “from off”, “down”; being derived from the Latin *ab*: “off”, also “away from”; where in Greek and Sanskrit it is also used as “away from”.³ Using this as a basis, abfunction could then be defined as a “move away from function.”

³ Douglas Harper, “Ab-,” accessed May 15, 2015, http://www.etymonline.com/index.php?term=ab-&allowed_in_frame=0.

ab + function = move away from function

function—————>abfunction

The catalyst for this research project, led by artistic practice, was to clarify the definition and to test the implications of this neologism, abfunction. As mentioned, the objective was to see how abfunction could identify and disclose the ways function is incorporated within the artwork and also to investigate how it might divert away from function within the practice of contemporary art.

More questions

If abfunction is a move away from function in the artwork, what is the definition and nature of function that it is moving away from? However, as mentioned above, function has frequently been excluded from art, rather, having been associated with everyday objects and things. Concepts and theories of function and functionalism have been well established with twentieth-century architectural modernism. More recently, function has also been a concern of philosophers of science and material culture and the producers of technical artefacts. This prompted several further questions: What is the definition and parameters of function offered through architecture and philosophers of material culture? And then: In what ways can these definitions of function be identified within art? These questions established the foundation for the investigation of how this new concept of abfunction could generatively divert away from function in the contemporary artwork. Before outlining the full scope of the project it is important at this point to outline the research methodology and method in order to more fully contextualise the project.

Research methodology and method

This project is developed from the position of artistic practice-led research, where three bodies of artwork were produced: *How long* (2008–ongoing), *Houses that are happy to help with at least one of the problems of art* (2010), and the *Hold UP* series (2013–15). These were exhibited in the *Help a Sculpture* PhD exhibition at the Margaret Lawrence Gallery

(2015). An “expanded sculptural” practice with a concern for the “logic of the medium” has formed the basis of my artistic practice and the artworks produced for this project. These concepts of artistic practice have been solidly developed since at least the 1970s, hallmarked by Rosalind Krauss’ seminal essay, “Sculpture in the Expanded Field” (1979)⁴ and in her post-medium discussions from late 1999 to the early 2000s on the logic of the medium.⁵ This type of artistic practice provides the conventions and framework and inflects how I conceive of “art”⁶ in this research project. I also have a background as a landscape architect where these concepts of function were first introduced to me. While my practice is placed within the conventions of art, there is a residue of my prior background that also contributes to the medium and conventions of art through which the questions of abfunction is addressed.

This research project through practice shares characteristics with other established qualitative research methodologies. These include naturalistic research (Yvonna S. Lincoln and Egon G. Guba)⁷ and performative research (Brad Haseman and Barbara Bolt).⁸ It follows

⁴ In 1979 Rosalind Krauss published her ground breaking text, “Sculpture in the Expanded Field,” motivated by historicist critics, such as Clement Greenberg’s, inability to acknowledge newness or difference with the emergence of artworks, such as minimalism or earthworks. Krauss contended that sculpture could not be considered a universal category (as Greenberg argued), but was rather “historically bounded,” and therefore cultural. She argued sculpture had its origins located in the logic of the monument, where place contributed to its meaning. By contrast using examples of minimalist and earthworks, she mapped an expanded scope of sculptural practice that would acknowledge context, in particular the axiomatic conditions of landscape and architecture. Moreover, in 1979 Krauss saw this as the advent of post-modernism, as a rupture with the history of modernism. Rosalind E. Krauss, “Sculpture in the Expanded Field,” in *The Originality of the Avant-Garde and Other Modernist Myths* (Cambridge, Mass.: The MIT Press 1986).

⁵ Approximately twenty years after establishing an expanded field of sculpture, Krauss critiqued what she saw as the worse-case examples of postmodernism and the post-medium. Krauss advocated for a return to the medium, in the “logic of the medium.” Rather than being grounded in materials, such as by Greenberg, the logic of the medium would be based on the concept and rules of that medium of art. As she says: “A medium grounds an artistic production, and provides a set of rules for that production.” Hal Foster et al., “The Predicament of Contemporary Art,” in *Art since 1900: Modernism, Antimodernism, Postmodernism* (London: Thames & Hudson, 2004), 674. As Yve-Alain Bois interprets: “it’s a question not of the materiality of the medium so much as the concept of the medium.” Ibid. See also Rosalind E. Krauss, *A Voyage on the North Sea: Art in the Age of the Post-Medium Condition*, The Walter Neurath Memorial Lecture (London: Thames & Hudson, 2000), 56.

⁶ The logic of the medium, provides the parameters for the artwork I produce. This is in contrast to other methodologies in the production of sculpture which I do not share for example, Matthias Winzen, who discusses the sculptural object as being an “image-generating technique.” See Matthias Winzen, “Why Sculpture,” in *Bodycheck : Skulptur = Bodycheck: Sculpture* (Köln: Snoeck, 2007), 19.

⁷ Yvonna S. Lincoln and Egon G. Guba, *Naturalistic Inquiry* (Beverly Hills, Calif.: Sage Publications, 1985), 39-43.

⁸ See Brad Haseman, “A Manifesto for Performative Research,” *Media International Australia Incorporating Culture and Policy*, Theme Issue “Practice-led Research”, no. 118 (2006). Barbara Bolt, “A Performative

a tacit and emergent methodology where “a world is built up” through the collection of materials: literal, concrete materials as well as ideas of writers, theorists and historians. This aligns with the “smart bomb” analogy proposed by Lincoln and Guba where the bomb winds its way through an undifferentiated field until something “sticks” and the “target” is tacitly understood.⁹ Ideas, hypotheses and associations emerge through this collection methodology. The project has developed through a thickening process of seeming chaos until an internal logic emerges, at which point ideas and things are shed enabling a clarity. This process describes both the making of the artwork and the construction of the written argument comprising the project’s thesis.

In the project’s research method, the three bodies of artwork were produced simultaneously with the literature review of works and ideas that addressed concepts of function and the role of function in art. This took place before argument of the thesis was established. Artworks in my practice have always tended towards waywardness – they ignore my intentionality. While broadly framed by the investigation of abfunction, these artworks were produced to follow their own internal logic (as dictated by the parameters of an expanded sculptural practice). In this context, the artworks have been used as case studies, reflectively and reflexively analysed for the potential of abfunction.¹⁰ It is important to note that the use of my own artwork as case studies brings a particular inflection to a definition of abfunction. Moreover, the scope of the project did not afford any significant testing of the concept of abfunction with artworks beyond the case studies that I made. While this limits the project, it nonetheless provides a firm foundation for further investigation.

The structure of the written case

The following written argument bears out the contention of the project: If function can be identified within the artwork, then it can be revealed how abfunction generatively diverts away from it, creating something beyond the definition and expectations of function itself.

Paradigm for the Creative Arts?," (2008),
https://www.herts.ac.uk/__data/assets/pdf_file/0015/12417/WPIAAD_vol5_bolt.pdf.

⁹ Lincoln and Guba, *Naturalistic Inquiry*, 43-44.

¹⁰ This practice-led research project is not an overt reflexive enquiry into the ontology of my practice.

This underlying hypothesis anchors the structure for the three parts of the thesis. Part I and Part II provide the background chapters and also form the basis for Part III's examination of the case studies in relation to abfunction. Part I investigates a definition of function, mainly in the context of architectural discourse and the more recent work of philosophers involved in function theory. This is followed in Part II by an enquiry into the role of function in art. These background sections provide the framework for Part III, which asks the question: In what ways can abfunction be seen to reveal and divert function, using the artworks produced for the project as case studies? Each of these parts are comprised of several smaller chapters which outline the scope of the work. It should be noted that the structure of this written thesis does not conform to the usual academic format where a literature review is followed by research design, outcomes of research, discussion chapters and conclusion. Rather, based on the evidence in the literature review, the chapters in each part develop the argument, reaching mini-conclusions that are further discussed in the following sections.

As mentioned, Part I: "Looking for function," comprises two chapters that seek to define function. This keeps in mind how function could be viably considered within art which is commonly understood as being functionless, and following, the potential this may offer abfunction. Because art has historically been considered immune from function, it is necessary to examine the ways function has been conceived. Aristotle's concept of function is investigated, followed by the fervently debated notions of function and functionalism in architectural discourse, particularly in the twentieth-century. In addition, philosophers of science and material culture who have more recently sought to develop theories of function are discussed. All have agreed, that the concept of function is, at best, diverse and, at worst, muddled and confused. Chapter one and two in Part I make the case that function can be understood from two opposing perspectives: that of the "forming" or the "production" of an object (such as identified by the adage: "form follows function"); and that of the end-use or already formed object. These two positions are referred to in the project as function as "forming" and function as the "use-ready." Part I will demonstrate the potential for considering function within art from these two perspectives while keeping abfunction in mind. Furthermore, it also seeks to describe how abfunction is distinct from already

established terms of function associated with art such as the functionless, dysfunction or mal-function and the lesser known term, para-functional.

“Part II: Looking for function in art” asks how these definitions of function as the “use-ready” and as a process of “forming” be identified in the art object so that principles can be established for looking for function. Before abfunction can be identified in the case-study artworks is it necessary to ascertain the function that abfunction may move away from. Part I establishes that art has traditionally been identified as being functionless; however, Part II aims to address a relatively uncharacteristic example of when art addresses function in positive terms. This does occur in some contemporary artwork, for example by Austrian artist Franz West, who confronts the “non-functionality” of artwork with objects that can be “used” or held, such as his series of *Passstücke* [Adaptives] (from 1976) and his series of furniture, such as *Auditorium* (1992), (Fig. 19). However, to contain the discussion, this project focuses on early twentieth-century examples by artists who engaged function. This also parallels the time frame that concepts in function were being developed in architecture.¹¹ The case-studies of Russian avant-garde – the Constructivists and Productivists, (1919–24) – and the Polish avant-garde, specifically the Unists, Katarzyna Kobro and Władysław Strzemiński (1922–36) – demonstrate one of the few occasions when artists actively engaged function as an agenda within art practice. Underpinning the decision to focus on early modernism is the growing appreciation that there was a greater diversity and idiosyncrasy in modernist thinking and practice than has been presented by many generalising postmodernist revisionist critiques.¹² The first chapter in Part II (chapter three), will specifically address how these two groups, the Productivists and then the Unists positioned art from this “use-ready” position of function. The Productivists, for example, reprogrammed art for utilitarian purposes. In both examples, it is demonstrated that their active repurposing of the art object as “use-ready,” or what I call “effect-ready,” disclosed the “functionless” art object as a misnomer of the bourgeoisie. This is useful for the project’s enquiry as it reveals the role of function at the end-use of the art object as implicit

¹¹ See: Franz West in Tom Holert, “Postscript on the Societies of Comfort,” *Texte zur Kunst* June, “How We Aim to Work”, no. 90 (2013): 34-36.

¹² See: Svetlana Boym, *Architecture of the Off-Modern*, (New York: Buell Center; Princeton Architectural Press, 2008), 7-8.

in the discourse of the autonomous artwork. However, I argue that even when art is positioned as “use-ready,” it is in the greater context of “forming.” In this case, the end-point was not the production of the art object, but rather, the individual and culture itself.



Fig. 19 Franz West, Performing with *Adaptives (Passstücke)*, (circa 1976)

In West, Franz, and M. Darsie Alexander. *Franz West, to Build a House You Start with the Roof: Work 1972-2008*. (Cambridge, Mass.; Baltimore, Md: MIT Press; Baltimore Museum of Art, 2008), 84. (left)

Franz West, Installation of Auditorium, for Documenta IX, Kassel, Germany, (1992)

In West, *Franz West, to Build a House You Start with the Roof*, 18. (right)

Chapter four of Part II continues the examination of the Constructivists and the Unists. By addressing the *Spatial Constructions* (1920–21) of Alexandr Rodchenko, the Cold Constructions (1919–21) of Karl Ioganson and Kobro’s laboratory sculptures, the *Spatial Sculptures* and *Spatial Constructions* (1925–1932), this chapter asks how function can also be found in the “forming” and production of these artists’ art objects. It is shown how the internal production of these artworks were informed by concepts of function associated with the production of systems, the agency of materials and structures, and the durational and spatial division of space based on the incremental movements of the body. It is also demonstrated that they share strategies with architectural examples discussed in Part I. These Russian and Polish avant-garde case studies show how and where function can be found, both from the use and effect-ready position and in the forming of the production of the artwork. This is despite art generally being considered immune from function. This analysis provides the foundation for determining where function (and abfunction) can be located within the artwork, particularly with regard to the case studies.

Part III is based on discussion of the location of function in the avant-garde examples. The three case study artworks are addressed with the question: how does abfunction reveal and generatively divert away from the function within the artwork? Three different abfunctional strategies are generated from each case study, where it is found that function was primarily located within the forming of the artwork, with attributes of the use-ready also incorporated within this production process. It is important to note here that in the description of each case study, I employ a device of writing in the first person in order to open up a space for the reader to identify with and embody the space and context of the artworks' making. Other contemporary and historical artworks are brought into this discussion to frame and support the argument.

The first case study, *How long* (chapter five), proposes that abfunction could be the surplus actions of the body only, divorced from the logical teleological outcomes conventionally associated with the function of "doing things." Moreover, I argue that the inclusion of the photographic apparatus into its method of making brings with it the historical relationship of the camera to the understanding of the role of the body in functional production. The chapter also makes the case that the inclusion of the camera in an expanded sculptural practice is itself an abfunctional diversion in the process of making. Here, abfunction's processes provide an account of the alternative material outcome of the artwork, which enables a revision of the commonly understood "dematerialised artwork."

The second case study, *Houses that are happy to help with at least one of the possible problems of art* (chapter six) draws on the concept of "truth to materials," as a value within functional methods of sculptural and architectural modernist production. This case study proposes that rather than being mute or behaving as required for expected teleological endpoints, materials can take part in a personal rendezvous where an abfunctional situation can erupt. In this context, materials can speak back, be happy or unhappy, or plain misbehave, activating us to behave in non-normative fashions. Recent developments in new materialism will contextualise this independent willfulness of materials and offer further potential for research framed in the context of materials generating abfunctional behaviours.

In chapter seven, the final case-study examined – the *Hold UP* series – builds on the understanding of the role of function within my own art practice in chapters five and six. I elaborate on the case of abfunction enlisting non-normative behaviour with objects and things, in addition to the incursion of the camera apparatus and its logic. In the *Hold UP* series of works I aim to demonstrate how abfunction resists the release of the output of the object and thing – the teleological endpoint of a functional process of “forming.” In this process, abfunction also stalls the clock-time associated with functional production and inserts and proposes endless duration as an abfunctional effect. In several of the artworks in the *Hold UP* series, like *How long*, discussed in chapter five, other procedures associated with video and photography can be seen to consolidate the case for how abfunction can lead to an understanding of the materialisation of alternative outputs. In this respect, abfunction offers an alternative understanding to the concept of the dematerialised artwork.

This research project argues that abfunction can provide new insights into processes within art. Revelatory in its disclosure of the pervasive role of function, abfunction accounts for alternative, unimagined outcomes produced in art that lie beyond the teleological grip of function.

Part I: Looking for function

Overview

Part I aims to establish the parameters of function that the neologism abfunction might effectively depart from within contemporary art practice. However, art and function are commonly considered as mutually exclusive when the artwork is conceived of as autonomous from the practice of everyday life. Given this, where do we look for a definition of function to enable the abfunction's potential within art? An overt discourse surrounding function is scant in art. By comparison, concepts of function, including theories of "functionalism," are prolific, understood as being synonymous and ubiquitous with modernist international style architecture over the duration of the twentieth-century.¹³ A search for "function theory" has also emerged from the late 1970s associated with the disciplines of the philosophy of science, in particular biology, material culture,¹⁴ design anthropology, and others associated with the engineering and production of technical artefacts.¹⁵ It is clearly beyond the scope of this project to provide a comprehensive overview of all of these associated areas with the concept of function. No one particular area can be given full justice, nor every significant theory of function nor all major contributors to the debate will be covered.¹⁶ Part I will focus rather on those disciplines associated with the production of forms – architecture and those involved in function theory. In this context, Part I will first ask, is: In what ways can these diverse disciplines provide a framework for defining function that could be potentially applied to art?

¹³ Rosmarie Haag Bletter, "Introduction," in *The Modern Functional Building* ed. Harry F. Mallgrave (Santa Monica, CA Getty Research Institute for the History of Art and the Humanities, 1996), 9.; Stanford Anderson, "The Fiction of Function," *Assemblage* 2 no. February (1987): 19.; Larry L. Ligo, *The Concept of Function in Twentieth-Century Architectural Criticism*, Studies in the Fine Arts: Architecture No. 2 (Ann Arbor, Mich.: UMI Research Press, 1984), 7.; Stephen Grabow and Kent F. Spreckelmeyer, *The Architecture of Use: Aesthetics and Function in Architectural Design* (New York, NY: Routledge, 2015), 3.

¹⁴ Material culture is a recent interdisciplinary area of enquiry that enquires into the relationship of people and the things in the world.

¹⁵ Theodora Vardouli, "Making Use: Attitudes to Human-Artifact Engagements," *Design Studies* (2015): 3.; Beth Preston, *A Philosophy of Material Culture: Action, Function, and Mind*, Routledge Studies in Contemporary Philosophy (Hoboken: Taylor and Francis, 2013), 135.

¹⁶ This thesis focuses primarily on the German and American contribution to function in architecture. For an overview of the Dutch De Stijl movement see Kees van Wijk, "'Yesterday Art Today Reality'. The Discourse on *Neue Sachlichkeit* in *I 10*," in *Neue Sachlichkeit and Avant-Garde* ed. Ralf Grüttemeyer, Klaus Beekman, and Ben Rebel (Amsterdam: Editions Rodopi, 2013), 66-75.

One characteristic of function that these broad disciplines agree upon is that if anything, the concept of function is at best diverse and complex, and at worst muddled and confused.¹⁷ In light of this diversity the research has turned to Aristotle's concept of function in order to lay the ground work for the investigation of function within these adjacent fields. In this context, I have teased out two broad areas that function has been broadly been conceived within. Firstly, the most commonly understood concept of function today: that function is an attribute of an object or thing – what something is *for* – its use or purpose. For this project, I have called this the “use-ready” type of function. Secondly, the less appreciated, but nonetheless prolific use of function throughout architectural discourse is: how something, an object is a function of something else. This is associated with the concept of function where, something is a function *of* a variable, in contrast to a function of a thing. It can be summarised by the famous adage of the American architect, Louis Sullivan, “form follows function,” and paralleled in the architectural term, functionalism. I have referred to this as function as “forming.” The following question then asks: In what ways can these disciplines offer a framework and parameters for considering the use-ready and forming positions of function, that can then be viably considered in art?

Part I is divided into two chapters: Chapter one, initially establishes the case for the two functions of function – the use-ready and the forming. I will primarily draw on Aristotle's concept of function and hylomorphism – the Aristotelian term for how something comes into being. The second part of Chapter one scopes the parameters of function as forming, surveying how architectural discourse conceived of function, within the production of architecture, primarily as architectural modernism emerged from the late nineteenth to the early twentieth-century. Chapter two, by contrast addresses function from the use-ready position of objects and things from the disparate disciplines of architecture and function theory. I will show that establish an expanded set of use-ready terms associated from “proper function” to alternatives such as dysfunction or malfunction, idiosyncratic use and parafunction offer an expanded framework for considering function within art. The last question for Part I commences speculating: What opportunity do the use-ready and forming perspectives of function afford abfunction?

¹⁷ See p. 19.

The aim of Part I is to establish the scaffolding for a definition of abfunction that can then be applied to the artwork case studies produced for the project. By firstly establishing the parameters of function in Part I, that can be conceived of as attributable to art, in Part II, then the question of how abfunction can depart from function within the contemporary artwork can then unfold in Part III.

Chapter one: The two functions of function “forming” – versus – “use-ready”

Introduction

Chapter one commences the investigation into abfunction by asking what is “function” that abfunction is moving away from? As mentioned in the overview, this chapter proposes that function can be understood from two polar perspectives. Firstly, to reiterate from the overview, the commonly understood definition of function, is understood as an attribute of an object, as explained by what something is *for*. I have called this function “use-ready.” Secondly, function can be understood enacting a role in the forming of an object or thing, which I have named, function as “forming.” Yet, these two divergent types of function are being teased out of a diverse field, ranging from architectural discourse to those involved in function theory. In their search for a definition of function, they frequently conclude that it is a mutable term, often confused, and in architecture, it was fraught and deeply polemical.

In this context, chapter one will first ask: What is the foundation for and characteristics of the use-ready and forming of function? In addressing this question the chapter will first turn to architecture, and then to Aristotle, whose consideration of function commences a scaffold for the two positions of function – the use-ready and the forming of function. The second part of this chapter will address modernist architectural discourse in context to function as forming. It will ask: In what ways does the emerging modernist architectural discourse in the early twentieth-century establish parameters and criteria to consolidate the concept of function as forming? I argue that the polemical nature of function in architecture establishes a range of values that can be understood as criteria and attributes of function. Moreover, architecture’s numerous conceptions of function and its methodologies can also establish the constituents that function enacts in the forming of architecture. This could equally be attributable to the forming of the artwork. The aim is to articulating how function may exist within art for abfunction to move away from.

Architecture and the two functions of function

Function as forming – “form follows function”

In 1843, the American sculptor and architectural critic, Horatio Greenough made a claim for function as being the principle for establishing architectural form and hence its beauty.¹⁸ Fifty years later, the architect Louis Sullivan (Fig. 20) in his essay *The Tall Office Building Artistically Considered* (1896), would claim: “form ever follows function and this is the law.”¹⁹ Sullivan, drew on an organic concept of function, derived from the eighteenth-century science of biology established by Jean-Baptiste Lamarck, as had Greenough before him. Sullivan’s “organic thinking” in architecture was also informed by a metaphysical romantic tradition inflected heavily towards the English Romantic writer, Samuel Taylor Coleridge’s poetic vision of form.²⁰ Together, this established Sullivan’s premise of function, where, a metaphysical drive from within would establish the outward expression of forms in nature and life. For Sullivan this was not simply about “expressing” function in the form, as a symbolic register, but that function itself literally “created” and “organised” its form.²¹ As this was the principle of forming in nature, it would follow, for Sullivan that it should also be in architecture. Sullivan’s principle proliferated rapidly – truncated to the alliterative: “form follows function.”²² This adage, both championed and derided as a cliché became the vital force, synonymous, with international modernist architectural practice and theory over the twentieth-century. With Sullivan, and Greenough, before him, the possibility that form in architecture could be produced through function – function as forming – had been brought to the fore establishing the precedent for a modernist debate within architectural theory.

¹⁸ Horatio Greenough, "American Architecture," in *Form and Function: Remarks on Art, Design, and Architecture by Horatio Greenough* ed. Harold Adams Small (Berkeley: University of California Press, 1947), 71.; Erle Loran, "Introduction," *ibid.*

¹⁹ Louis H. Sullivan, "The Tall Office Building Artistically Considered," in *Kindergarten Chats (Revised 1918) and Other Writings* ed. Isabella Athey (New York: George Wittenborn, Inc., 1947), 208. Greenough is commonly understood as the antecedent, to Sullivan’s concept of form follows function. See Loran, "Introduction," xvii.; Bletter, "Introduction," 11.

²⁰ Peter Collins, *Changing Ideals in Modern Architecture, 1750-1950*, 2nd ed. (Montreal: McGill-Queen's University Press, 1998), 156.

²¹ Louis H. Sullivan, *The Autobiography of an Idea* (New York, Dover Publications, 1956; repr., 2009), 290.

²² Bletter, "Introduction," 11.

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Fig. 20 Louis Sullivan, *Wainwright Building*, St Louis, Missouri, USA, (1890-91)

Accessed August 15, 2016. <http://www.archdaily.com/127393/ad-classics-wainwright-building-louis-sullivan/50380ac128ba0d599b000ad4-ad-classics-wainwright-building-louis-sullivan-photo>

Use-ready – “a tool called ‘house’”

By contrast, in the year of 1923, the German architectural critic Adolf Behne and the Swiss born, French architect, Le Corbusier,²³ both proposed the idea of the house as a tool. In the forward of Behne’s book, *Der moderne Zweckbau*, (The Modern Functional Building) (1926), Behne states that there is a: “tool called ‘house,’”²⁴ where the primordial drive for building is compelled by “necessity” and “urgent purpose” to provide shelter. As functional, the “nature” of the building is essentially as a tool. Along with utility, play is also identified as a base primordial drive by Behne. Similarly, Le Corbusier in his seminal and pervasive text *Vers une architecture* (Towards a New Architecture), (1923)²⁵ famously proposed that: “The

²³ Le Corbusier was the pseudonym of Charles Édouard Jeanneret-Gris.

²⁴ Adolf Behne, “The Modern Functional Building,” in *The Modern Functional Building* ed. Julia Bloomfield, Thomas F. Reese, and Salvatore Settis (Santa Monica, CA: Getty Research Institute for the History of Art and the Humanities, 1996), 87.

²⁵ Le Corbusier’s book, *Towards a New Architecture* (1923), was based on his own practice, unlike Behne’s who focused on his contemporaries. As many have noted, Le Corbusier’s writing was equally as influential as his buildings.

house is a machine for living in.”²⁶ Accompanying our human existence like “working tools,”²⁷ the house for Le Corbusier, would be used as “a tool as the motor-car is becoming a tool.”²⁸ The object of the house-building, already formed as an artefact and object, with its form, shape and space serves us. We “use” the house as a tool – the building is use-ready.

Greenough and Sullivan’s concept of form follows function in contrast to Behne and Le Corbusier’s house as a tool or play thing, demonstrates in architecture these two divergent positions regarding function – function as forming and function as use-ready. The architectural historian, Joseph Rykwert also notes this division, where function is most commonly understood as an attribute of an object (the function of something – what it is *for*), whereas historically it was associated with action and process, and as I will argue determines form (something is the function *of*).²⁹ Before turning to Aristotle to lay the ground work for these two concepts of function, I will briefly outline the concept of function’s perceived messy **state** that these two functions of function are emerging from.

Function’s messiness

Definitions of function and functional discourse are commonly acknowledged as exceptionally entangled and complex. The only consistent agreement across the various disciplines is that the concept of function and functionalism, is at best pluralist and, at worst, muddled and difficult to define. Recently, the English engineer Nathan Crilly, writing on the design of technical artefacts and function has noted a lack of a: “stable or generally accepted definition of function.”³⁰ Similarly, the architectural historian, Edward De Zurko in his classic book *Origins of Functionalist Theory* (1957), also identified that there was no simple definition of function, where meanings altered between various writers.³¹ The English architectural historian, Adrian Forty, claims it is confused because the origins of

²⁶ Le Corbusier, *Towards a New Architecture* (Burlington: Elsevier Science, 2014), 4.

²⁷ Ibid., 227.

²⁸ Ibid., 237.

²⁹ Joseph Rykwert, “Neoclassical Architecture,” in *The First Moderns: The Architects of the Eighteenth Century* (Cambridge, Mass.: MIT Press, 1980), 324.

³⁰ Nathan Crilly, “The Roles That Artefacts Play: Technical, Social and Aesthetic Functions,” *Design Studies* 31 (2010): 313.

³¹ Edward Robert De Zurko, *Origins of Functionalist Theory* (New York: Columbia University Press, 1957), 3.

many architectural uses of the term function come from what he calls “metaphors,”³² or what other architectural historians such as Larry Ligo, call “analogies”³³ from other disciplines such as mathematics and biology.³⁴ Forty also attributes confusion to the term because of the translation between French, English and German – where each language had nuanced understandings that did not fully translate between the different languages.³⁵ Further, architectural historian Rosmarie Haag Bletter states that function and functionalism in architecture has “many guises.”³⁶ Ironically, Forty argues that it has been through the critique of functionalism that these various guises have become clearer.³⁷ It can be added that what function sought to critique and replace, also facilitates an understanding of its underlying premises and conditions.

Given this complex context, this chapter will now turn to the antecedent functional principles Aristotle established to ask: What parameters and criteria can Aristotle’s ideas of function offer these two divergent roles of function – the use-ready and forming? This will then establish a framework for the second part of this chapter to address function as forming in the context of early modernist architectural discourse.

To begin with Aristotle and function at the use-ready position:

Aristotle and the function of function

Aristotle – function as use-ready

Aristotle’s investigation of function initially facilitates the framing of the most commonly understood concept of function – the use-ready category. For Aristotle, function is the key attribute that defines a “thing” – its “what-ness.” In *Meteorologica (Meteorology)* he explains that eye cannot be an eye unless it can see. Seeing is the purpose of the form,

³² Adrian Forty, “Function,” in *Words and Buildings: A Vocabulary of Modern Architecture* (London: Thames & Hudson, 2000), 174.

³³ Ligo, *The Concept of Function in Twentieth-Century Architectural Criticism*, 45.

³⁴ Forty, “Function,” 174.

³⁵ Ibid.

³⁶ Bletter, “Introduction,” 9.

³⁷ Forty, “Function,” 174.

shape and matter that composes the eye. If it cannot see, such as it being “dead,” or is made of matter that cannot enable sight – such made of stone or being drawn – yet it has the appearance and illusion of an eye, it is an eye only by name. As such, it is homonymous. For a thing to really be what it must be, it must be able to realise its purpose. This locates function, for Aristotle, as a bonded ontological condition of the object or thing. As he says:

*What a thing is is always determined by its function: a thing really is itself when it can perform its function; an eye, for instance, when it can see. When a thing cannot do so it is that thing only in name, like a dead eye or one made of stone, just as a wooden saw is no more a saw than one in a picture.*³⁸

The ontology of the eye’s being is “to see.” It is not enough for an eye to share a visual similitude and to have the same name. For a thing to be itself it must be enabled to “perform” the essential “action,” to fulfil its purpose, of having an effect on something else. As he says: “By attributes and functions I mean the movements of these and of all other things in which they have power in themselves to cause movement, and also their alterations and reciprocal transformations.”³⁹ Function is casual and an agent of change, that enables a thing to be truly what it must be. The eye, in his example, must be able to see so that a thing – a person or animal, can fulfil what is necessary and required for life.

Teleology, is an essential condition of function. *Telos* in ancient Greek means goal, end or purpose. For Aristotle, function is an action toward a goal or end-point. Calling this the “final cause,”⁴⁰ Aristotle observed this in nature and also in the things and objects that are produced by people.⁴¹ As the Aristotelian scholar Jonathan Barnes explains, Aristotle draws on the example of the webbed feet of a duck. For Aristotle, the shape, form and matter of a duck’s webbed feet, is for the “for the sake of swimming.” Moreover, the action of fulfilling

³⁸ Aristotle, *Metereology*, Aristotle: The Complete Works Volume 1, ed. E. W. Webster and Jonathan Barnes, (Princeton, New Jersey, USA: Princeton University Press, 1992). 4.12.389b25-90b2.

³⁹ *On the Heavens*, Aristotle: The Complete Works. Volume 1, ed. J. L. Stocks and Jonathan Barnes, (1984 edition; Princeton, New Jersey, USA: Princeton University Press, 1992). 3.298a23-98b10.

⁴⁰ For discussion on Aristotle’s four causes, see below.

⁴¹ Jonathan Barnes, “Teleology,” in *Aristotle: A Very Short Introduction* (Oxford: Oxford University Press, 2000), 117.

the function of swimming constitutes a part of the essence of “being” a duck.⁴² There is necessity, and final causes which are required for “life.” However, as Barnes identifies, necessity restricts final causes.⁴³ Continuing with the example of the duck, Aristotle explains that webbed feet are not only necessary, but it are also “better” for a duck’s life, as in the water they cannot fly but must swim.⁴⁴

The function of a part of an animal, instrument or tool, for example, is in Aristotle view always for “the sake of” something.⁴⁵ This includes not only their specific teleological goal (final cause), but also their contribution to a “complex” action within a larger body or system that it belongs. As Aristotle says:

*As every instrument and every bodily member is for the sake of something, viz. some action, so the whole body must evidently be for the sake of some complex action. Thus the saw is made for sawing, for sawing is a function, and not sawing for the saw. Similarly, the body too must somehow or other be made for the soul, and each part of it for some subordinate function, to which it is adapted.*⁴⁶

The action of function, is not for the sake of the action alone – for pleasure in and of itself – without a teleological goal or final cause. The saw is for sawing something – whether that be wood to make a fire, or to build a house. It is an action towards a greater “sake of” necessity and also for life – towards warmth, safety and comfort. The essential nature of what it means to be a saw is bonded with its function – its purpose of transforming something else through the action of sawing in a larger complex of actions.

Man, is not excluded from this bonded ontological connection with function. Aristotle also identifies the function of man as the activity in accordance to his “soul”⁴⁷ to live a certain

⁴² Ibid., 116-17.

⁴³ Ibid., 118. As Aristotle says in “Parts of Animals”: “There are then two causes, namely, necessity and the final end.” Aristotle, *Parts of Animals*, Aristotle: The Complete Works. Volume 1, ed. W. Ogle and Jonathan Barnes, (Princeton, New Jersey, USA: Princeton University Press, 1992). 1.1.642a1-42a13.

⁴⁴ *Parts of Animals*. 4.12.694a22-94b12.

⁴⁵ Barnes, “Teleology,” 116.

⁴⁶ Aristotle, *Parts of Animals*. 1.5.645b15-45b20.

⁴⁷ Aristotle’s concept of the soul is beyond the scope of this project.

kind of life with the final cause or teleological goal as excellence and goodness. As Aristotle explains:

*Now if the function of man is an activity of soul in accordance with, or not without, rational principle, and if we say a so-and-so and a good so-and-so have a function which is the same in kind, e.g. a lyre-player and a good lyre-player . . . eminence in respect of excellence being added to the function (for the function of a lyre-player is to play the lyre, and that of a good lyre-player is to do so well): if this is the case, [and we state the function of man to be a certain kind of life, and this to be an activity or actions of the soul implying a rational principle, and the function of a good man to be the good and noble performance of these . . .]*⁴⁸

For Aristotle, the performance of function of “man” is an action with a final cause – the teleological goal, based on goodness and excellence. It is the defining attribute that makes a thing or a person what they must become in order to fulfil what is necessary for life. The philosopher Christine Korsgaard has noted that for Aristotle there is a link between function and virtue.⁴⁹ Moreover, based on the specific functional attributes that a thing or person must perform this can, in Aristotle’s view, establish types or kinds of things which can then create categories of likeness.⁵⁰ For example he discusses the role of “common” functions that are shared by animals, such as walking, breathing, reproducing,⁵¹ more specific functions can also define genus or species.⁵²

Summary – Aristotle’s schema at the use-ready position of function

Aristotle’s definition of function commences the scoping of the use-ready function of an object or thing. In Aristotle’s terms, as in the use-ready, function is what something is *for*,

⁴⁸ Aristotle, *Nicomachean Ethics*, Aristotle: The Complete Works. Volume 2, ed. W. D. Ross, J. O. Urmson, and Jonathan Barnes, (Princeton, New Jersey, USA: Princeton University Press, 1992). 1.7.1097b23-98a16.

⁴⁹ Christine M. Korsgaard, "Aristotle's Function Argument," in *The Constitution of Agency: Essays on Practical Reason and Moral Psychology* (Oxford: Oxford University Press, 2008), 133.

⁵⁰ Christopher Shields, *Aristotle*, 2nd ed., The Routledge Philosophers (Hoboken: Taylor and Francis, 2014), 107.

⁵¹ Aristotle, *Parts of Animals*. 1.5.645b32-46a6.

⁵² *Ibid.*, 1.5.645b21-45b27.

and what it *does*. For Aristotle, function establishes the “what-ness,” – the defining attribute of a thing, animal or object. Function is ontologically bound to the meaning and action of things, animals or objects towards a teleological end-goal that establishes the essence of their being. Moreover, the enactment of function can also be understood as a virtue, of goodness, excellence and necessity. By contrast, the actions of function can never be purely for pleasure of the action alone, rather it must always be towards this teleological end-goal of the final cause, for necessity and for the sake of life. This establishes an initial framework of the use-ready function which will be the focus of Chapter two.

The function of forming – Aristotle and the process of things coming into being

To turn now to the project’s category of function as forming. Attention to how Aristotle conceptualises the way things are brought into being both in nature and by people, provides a useful inheritance for how function performs a role in producing objects and things. However, before outlining the role of function within Aristotle’s understanding of the production of artefacts, it is necessary to briefly explain more generally how he conceives things coming into being, and the relationships between form, matter and change which is encapsulated in his concept of hylomorphism.

Hylomorphism

The Aristotelian conception of how a thing of ordinary form in nature, comes into being is known as hylomorphism, where *hyle* is matter, and *morphe* is form.⁵³ Aristotle’s understanding of form, that underpins his concept of hylomorphism is understood by many to be in contrast to Plato’s concept of form. Form for Plato, is conceived to be an “idea” or an archetype, without matter. Aristotle, by contrast does not separate form from matter and is commonly understood to identify two types of form: ordinary or “sensible form” (*morphe*) and intelligible form (*eidos*). Ordinary form – the form that we see in the everyday world, has shape and is composed of matter. In comparison, intelligible form, is the idea of the form, with an “incorporeal” similitude to matter that is conjured in the mind.⁵⁴

⁵³ Tim Ingold, "The Textility of Making," *Cambridge Journal of Economics* 34, no. 1 (2010): 92.

⁵⁴ John Hendrix, *The Contradiction between Form and Function in Architecture* (Abingdon, Oxon; New York, NY: Routledge, 2013), 1.

Change is the underlying principle of hylomorphism that establishes the matter present within form. In a circular argument Aristotle identifies the reciprocal relationship between form and matter as being necessary contingencies for change.⁵⁵ The Aristotelian scholar Christopher Shields explains that in this system of change, matter is what continues to persist through change. Whereas form, is what remains, as a gain or a loss in this process of change.⁵⁶ The matter remaining through change is made present in the form and shape of the ordinary physical object, thing or life-form. Reciprocally, it is also the form that enables this matter to be present. Moreover, for something to come into existence it requires a metaphysical coding that exists in the form. This specifies the characteristics unique to the type of form, its shape and its structure and how it will hold matter. To draw on an example by Shields: For a child to be born of its parents, there is not only physical matter, but also the realisation of the characteristics of humanity that will provide the form, that the matter will change into, as the child grows.⁵⁷ Or, if it were a house, the house is not defined only by the matter of bricks and mortar. In another form, the materials of bricks and mortar, could constitute other things in the world, such as a wall or pavement. For it to be a house the metaphysical form “house” must combine with the matter through the process of change, where the builder constructs the building to produce a house.⁵⁸ Shields summaries this as:

*The form is that whose presence makes some matter come to be the matter of a particular physical object; the matter is that which persist though change and underlies the form. Every ordinary physical object, every compound, is thus a metaphysical complex consisting of matter and form.*⁵⁹

Further, Shields identifies that there are varying degrees of change in Aristotle’s schema. The change which brings something into being that did not exist before, Aristotle nominates as: “generation.”⁶⁰ Aristotle also called this type of change production. As he would say:

⁵⁵ Shields, *Aristotle*, 63-64.

⁵⁶ *Ibid.*, 63.

⁵⁷ *Ibid.*, 65-66.

⁵⁸ *Ibid.*

⁵⁹ *Ibid.*, 66. Shields’ italics.

⁶⁰ *Ibid.*, 61.

“what tends to generate tends to produce, then to be generated is to be produced, and generation is production.”⁶¹ For example, before the house existed and was thought of, there was no house. It is the process of the type of change, called generation that produces the house. Generation (or production), is in contrast to a lesser form of change which is called “qualitative,” where minor changes occur to forms that already exist. For example, when a teacup loses a handle, it is nonetheless still a teacup with a slight alteration.⁶²

Aristotle’s four causes

In the explanation of how something comes into being through a process of change Aristotle famously establishes what is known as the four causes.⁶³ As Barnes explains, Aristotle’s causes establish the “because-of-which” something is.⁶⁴ The causes can be understood as constituents that brings something into being.⁶⁵ The final cause, already mentioned is one of the four causes and is considered the fourth cause, known as *causa finalis*. It is the final teleological end goal, that which is for the sake of.⁶⁶ In the example of the house above, it is the concept of “house” that is for the sake of shelter and dwelling for necessity and living. By comparison the first cause, *causa materialis* is the constituent that something is made from. It is its matter, that allows something to be.⁶⁷ We can see this as the bricks and mortar, timber or concrete. The second cause, *causa formalis*, is the form, shape or pattern of the thing that holds matter.⁶⁸ This is the form of the house itself, that holds the metaphysical conditions of house-form. The third cause, *causa efficiens*, is the agency that motivates the form, such as the person who makes the form – in this case it is the builder.

⁶¹ Aristotle, *Topics*, Aristotle: The Complete Works. Volume 1, ed. W. A. Pickard-Cambridge and Jonathan Barnes, (Princeton, New Jersey, USA: Princeton University Press, 1992). 4.4.124a15-24a34.

⁶² Shields, *Aristotle*, 61.

⁶³ Barnes, "Causes," 83-84.; Shields, *Aristotle*, 49-50.; Barbara Bolt, "The Artist in a Post-Human World?," in *Heidegger Reframed: Interpreting Key Thinkers for the Arts* (London: I.B. Tauris & Co. Ltd., 2011), 113.

⁶⁴ Barnes, "Causes," 84.

⁶⁵ *Ibid.*, 83.

⁶⁶ *Ibid.*, 88.; Shields, *Aristotle*, 52.; Bolt, "The Artist in a Post-Human World?," 113.

⁶⁷ Barnes, "Causes," 86.; Shields, *Aristotle*, 52.; Bolt, "The Artist in a Post-Human World?," 113.

⁶⁸ Barnes, "Causes," 86.; Shields, *Aristotle*, 52.; Bolt, "The Artist in a Post-Human World?," 113.

Function in Aristotle's process of coming into being through production

In Aristotle's view there is a particular order in the process of the four causes that instigates change that brings things into being. Moreover, in his conception function plays a central role. As Shields notes, the final cause – function – is the “causes of causes.”⁶⁹ This has been identified as Aristotle's “functional determination thesis.”⁷⁰

In Aristotle's schema, all things that come into being through matter, either do so via nature or by art.⁷¹ Living beings have their “own internal principle of change” whereas an artefact, is “fashioned from without, by the agency of its maker.”⁷² For Aristotle those things that come into being through art, the source of the agency of change is the maker and they belong to Aristotle's third cause, *causa efficiens*. The maker of the artefact is the source of change in the process of generation, also called production.⁷³

In order to enact the changes of production the maker must first set the end point – its function. This is the first act and other acts that follow are framed by this teleological agenda. Following they must deliberate on how these things must be done. These deliberations are over which actions are required, for the “sake of” the purpose of the thing to be made. These deliberations do not focus on what the end should be, as this is already set.⁷⁴ As Aristotle says:

*It seems, then, as has been said, that man is a moving principle of actions; now deliberation is about the things to be done by the agent himself, and actions are for the sake of things other than themselves. For the end cannot be a subject of deliberation, but only what contributes to the ends.*⁷⁵

⁶⁹ Shields, *Aristotle*, 107.

⁷⁰ *Ibid.*, 107-08.

⁷¹ Aristotle, *Metaphysics*, Aristotle: The Complete Works. Volume 2, ed. W. D. Ross and Jonathan Barnes, (1984 edition; Princeton, New Jersey, USA: Princeton University Press, 1992). 7(Z).7.1032a16-32a26.; *ibid.*, 7(Z).7.1032a27-32b21.

⁷² Shields, *Aristotle*, 66.

⁷³ As Aristotle says: what tends to generate tends to produce, then to be generated is to be produced, and generation is production.” Aristotle, *Topics*. 4.4.124a15-24a34.

⁷⁴ *Nicomachean Ethics*. 3.3.1112b12-13a2.

⁷⁵ *Ibid.*

Once the maker has set the teleological end-goal, they deliberate on what actions would best and most efficiently contribute to this teleological end.⁷⁶ Only after this process of deliberation, would the new thing’s matter be established. The first cause, something’s matter (*causa materialis*), comes last in the process of bringing something into being. As Aristotle says:

*Having set the end they consider how and by what means it is to be attained; and if it seems to be produced by several means they consider by which it is most easily and best produced, while if it is achieved by one only they consider how it will be achieved by this and by what means this will be achieved, till they come to the first cause, which in the order of discovery is last.*⁷⁷

For clarity, I will briefly reiterate Aristotle’s order of the four causes to enact the process of generation change of production. The third cause, (*causa efficiens*), which is the maker, first establishes the final cause, (*causa finalis*), the teleological end point. They then deliberate on the best method in which to achieve this end goal, in which they come to the first cause (*causa materialis*), the thing’s matter, last.⁷⁸ In this middle phase of deliberation, as Aristotle view it, there is also a correct order. The first stage is the thinking—the deliberation (as mentioned above). Following is the second stage, which is the making with materials. As he says in *Metaphysics*: “Of productions and movements one part is called thinking and the other making, – that which proceeds from the starting-point and the form is thinking, and that which proceeds from the final step of the thinking is making.”⁷⁹ In the first part of the maker’s thinking occurs through “art” that establishes a “true course of reasoning.” As he states below, using an example of a building coming into being:

Now since building is an art and is essentially a reasoned state of capacity to make . . . involving a true course of reasoning. All art is concerned with coming into being, i.e.

⁷⁶ As Aristotle says: “We deliberate not about ends but about what contributes to ends.” Ibid.

⁷⁷ Ibid.

⁷⁸ For a discussion see Barnes, “Causes,” 86-88.; Bolt, “The Artist in a Post-Human World?,” 113.

⁷⁹ Aristotle, *Metaphysics*. 7(Z).7.1032a27-32b21.

*with contriving and considering how something may come into being which is capable of either being or not being, and whose origin is in the maker and not in the thing made.*⁸⁰

Art, for Aristotle, is the method of producing something which had not existed before and is the process of thinking that is reasoned and rational. By contrast, making with matter, cannot be relied upon as a course of reasoning. As Aristotle says: “Art, then . . . is a state concerned with making, involving a true course of reasoning, and lack of art on the contrary is a state concerned with making, involving a false course of reasoning.”⁸¹ These two stages of making, firstly the rational thinking phase of art, followed by the unreasoned action of making with matter, occur after the establishment of the new thing’s end-goal (*causa finalis*), and also after the establishment of form (*causa formalis*). As Bolt identifies, for Aristotle, form falls out as a consequence of the teleological end goal.⁸² Aristotle continues to elaborate on the places of these four causes in the generative processes of production in “Parts of Animals,” saying:

*In order of time, then, the material and the generative process must necessarily be anterior; but in logical order the substance and form of each being precedes the material. This is evident if one only tries to define the process of formation.*⁸³

Here, for Aristotle, while the matter and the thinking and making process of production come later, the form (the second cause – *causa formalis*) comes prior and as mentioned above, contains the complex metaphysical coding that holds matter. Function establishes the prerequisites and conditions of both the idea of the form and then the physical properties of its shape and its materials (that is: the first cause – *causa materialis*), of the thing to be produced. This is both in regard to the metaphysical and ordinary form. Shields explains the relationship of function, form and material in reference to a hammer:

⁸⁰ *Nicomachean Ethics*. 6.4.1140a1-40a23.

⁸¹ *Ibid.*, 4.4.1140a1-40a23.

⁸² Bolt, “The Artist in a Post-Human World?,” 113.

⁸³ Aristotle, *Parts of Animals*. 2.1.646b1-46b10.

A function, however, can express itself only via various forms, and ultimately, in suitable kinds of matter. A hammer has the function of pounding nails; so, it requires a structure suited to that end. Nothing shaped like a nimbus cloud will be a hammer, because nothing with that form can drive nails. Having the right shape, however, is not yet sufficient. Something shaped like a hammer but made out of chocolate will not really be a hammer at all. If we call it a hammer, then we are speaking again, as Aristotle says, homonymously – we apply the name “hammer” . . . Hammers are realizable only in functionally suitable matters, and chocolate is not suited to the task of driving nails. Note, however, that talk of functional suitability is already to constrain the material cause by some prior appeal to function, and so to the final cause. It is in this sense that the final cause is prior: it sets constraints on the suitability of form and matter for the expression of some end.⁸⁴

Aristotle’s schema of hylomorphism and the process of generation which bring something into being through the four causes has been critiqued by many.⁸⁵ The philosopher Tim Ingold for example, questions the manner in which this Aristotelian inheritance assumes thinking to be rational and matter, by contrast, to be mute.⁸⁶ Yet Ingold, like others recognise its antecedence in our Western construction of thinking.⁸⁷ Of interest to this debate is the observation by the contemporary material culture philosopher Beth Preston. Preston identifies Aristotle’s separation of the two phases of making, that specifies thought first, followed by making with matter, as the antecedence for the contemporary design phase prior to construction.⁸⁸ Moreover, as she notes this Aristotelian division not only establishes the order of these processes, but also establishes a clear hierarchy where thinking has greater value over making and matter.

⁸⁴ Shields, *Aristotle*, 107-08.

⁸⁵ Bolt notes that such methods of forming objects and things such as Aristotle’s an instrumentalist means-ends has been pervasive, and in her opinion: “dominated modern understanding of technology (including the making of art), [and] has focused on the cause that brings something about, the cause that gets results.” Bolt, “The Artist in a Post-Human World?,” 114. Others such as philosopher Christine Korsgaard note that many dismiss Aristotle’s concept of function as “antique metaphysics.” Korsgaard, “Aristotle’s Function Argument,” 133.

⁸⁶ Ingold, “The Textility of Making,” 92.

⁸⁷ Ibid.; Korsgaard, “Aristotle’s Function Argument,” 1.

⁸⁸ Preston, *A Philosophy of Material Culture: Action, Function, and Mind*, 18.

Summary – Aristotle’s schema within function as forming

To return to the project’s category of function within the role of forming, Aristotle reveals a genealogy that is not only useful for the project but as Preston notes can still be observed in current practice. In the forming of an object or thing, in Aristotle’s conception, function is located in the first instance of setting the teleological goal of bring something into being through the generation change of production. The rational thinking, that occurs before the making, is driven towards the teleological agenda of that goal, that is necessary for life. While Aristotle, maintains the concept of function as the goal, the actions that are enacted as a consequence of the rational deliberations and the unreasoned making phase necessarily require a fidelity to function. Moreover, the form and matter of the object or thing that is brought into being, in Aristotle’s terms are equally responsible toward the fulfilment of function’s end goal.

Use-ready function within the forming of function

In the consideration of Aristotle’s schema, the project’s two categories of function – the use-ready and forming – it has to be noted, are not necessarily mutually exclusive. To return to Aristotle’s example of the function of the saw. The saw is one part enacting a role that contributes to a complex series of actions towards a larger system or whole that it belongs. In this instance, it can be understood that the use-ready function of the saw is contributing to the making phase of the broader teleological function of building a house. Aristotle acknowledges the transformational role of functions effecting other things, matter, objects or parts. To recall Aristotle’s quote previously mentioned: “By attributes and functions I mean the movements of these and of all other things in which they have power in themselves to cause movement, and also their alterations and reciprocal transformations.”⁸⁹ Moreover, when discussing the organs of animals in “Parts of Animals,” he also identifies the necessary sequential relationship between the parts in relation to their functions. And further, some parts reliance on other part’s functions in order for them to perform toward the forming of the greater body they belong. As Aristotle says:

⁸⁹ Aristotle, *On the Heavens*. 3.1.298a23-98b10.

*When a function is ancillary to another, a like relation manifestly obtains between the organs which discharge these functions; and similarly, if one function is prior to and the end of another, their respective organs will stand to each other in the same relation. Thirdly, there are functions which are the necessary consequences of others.*⁹⁰

In this example, the actions of animal organs sequentially discharging their functions connect and create change in other organs to produce the whole being of the animal. Occurring in time, these functions require the sequential placement of parts in relation to one another. In this context, function, which is the ontological condition of the thing, is in a constant state of acting out its purpose, affecting and transforming other things, in a sequence in time and in a proximity to one another. This is the use-ready function within the framework of function as forming other objects, things or life-forms.

Concluding Aristotle’s framework for the use-ready and forming of function

Aristotle offers a framework for commencing the consideration of function from the two perspectives of the use-ready and forming of an object or thing. At the use-ready, Aristotle identifies function as an ontological condition of the object or thing’s being toward the teleological end-goal necessary for life. For Aristotle, function is connected to the values of goodness and excellence. In the forming category, function can be understood as the cause of all causes that instrumentalises all the constituents of what makes something come into being, the thinking and making phase, its form and its matter.

Having established a context for these two divergent roles of function, based on Aristotle’s concept of function, the next task in this chapter is to ask: In what ways can architectural discourse in early modernism continue to expand the parameters and attributes of the category of function within forming? The focus will be architecture, primarily from the early twentieth-century as modernism was emerging in Europe and North America. As I will show, the contested pursuit of consolidating function as a strategy in producing architecture, establishes parameters and criteria of function that extends this Aristotelian groundwork.

⁹⁰ *Parts of Animals*. 1.5.645b28-45b31.

This aims to build a set of criteria for function in the forming of the art object that enables a basis for abfunction.

Architecture and the forming of function

The value of being true – “fitness for purpose” overcoming false beauty

By the late nineteenth-century in Europe, the question of architectural form became one of moral urgency. In the mid-1890s Dutch architect Hendrik Petrus Berlage levelled the accusation: “[we] have lived in surroundings more hideous than any known before ... Lying is the rule, truth is the exception,” and further: “*‘Scheinarchitektur, d.h. Imitation, d.h. Lüge’*” (‘Sham architecture, i.e., imitation; i.e., lying’).⁹¹ Many artists and architects associated with the avant-garde in Europe had begun to react to the nineteenth-century grandiose displays of excessive materialism, the fickleness of fashion and consumption by aristocrats, such as by the Prussian Wilhelmine society⁹² and the aspirant rising classes of the bourgeoisie. Art and architecture movements of the Jugendstil (Art Nouveau in France and the Succession movement in Austria), for example, were derided by many such as the Viennese Architect Adolf Loos, as an expensive indulgence to satisfy the desire for “subjective” aesthetic consumption by the aristocrats and rising bourgeoisie.⁹³ The principle of architecture through this period of eclectic revivalism had prioritised form, shape and the mass of the building. Functional purpose and utilitarian requirements were required to fit into any eclectic, often excessively ornamented work of architecture.⁹⁴ The eclectic revivalism in architecture was seen by the avant-garde as establishing a “tyranny of form” where combinations of historical architectural styles were regurgitated without context to the purposes they were to serve, nor the rising industrialisation and developments in material technologies.

⁹¹ Sigfried Giedion, *Space, Time and Architecture: The Growth of a New Tradition*, 5th ed., The Charles Eliot Norton Lectures: 1938-1939 (Cambridge: Harvard University Press, 1967), 292.

⁹² Kai Konstanty Gutschow, "The Culture of Criticism: Adolf Behne and the Development of Modern Architecture in Germany, 1910-1914" (Ph.D., Columbia University, 2005), 39-40.

⁹³ Adolf Loos, "Ornament and Crime," in *Programs and Manifestoes on 20th-Century Architecture* ed. Ulrich Conrads (Cambridge, Mass.: MIT Press, 1971), 22.; *ibid.*, 19.

⁹⁴ Horatio Greenough, *Form and Function: Remarks on Art, Design, and Architecture by Horatio Greenough*, ed. Harold Adams Small (Berkeley: University of California Press, 1947), 61-62.; De Zurko, *Origins of Functionalist Theory*, 219.

By contrast to the tyranny of form, function framed as: “fitness for purpose,” established a methodology of producing architecture and a series of values that could overcome this nineteenth-century eclecticism.⁹⁵ Fitness for purpose, enabled the consideration of the “purpose” and utilitarian requirements of the building, as the initial consideration that would then determine the forms of architecture that would appropriately “fit” these concerns. For Greenough, this “wisdom” was in opposition to the misleading and false approach to architecture dependent on “taste” and “arbitrary” rules of eclecticism’s historical styles that encouraged slavish copying of architectural forms.⁹⁶ Based on the “eye” and fashion, this was not only “false beauty” producing embellishment for Greenough,⁹⁷ but an indication of social decline.⁹⁸ Straight-forward, practical, objective, approaches servicing “utilitarian needs” established ethical values in the deliberations within the production of how to bring architecture into being.

The sobriety of Sachlichkeit

In Germany, the term *Sachlich* and *Sachlichkeit*, literally meaning thingness, but also sobriety and objectivity⁹⁹ emerged in architectural discourse to encompass these values associated with function.¹⁰⁰ The German architectural historian Richard Streiter in 1896, is commonly attributed with the initial use of the term.¹⁰¹ As “straight forward” *Sachlichkeit* was considered an ethical response to purify architecture and all forms, including the art of “excess” and further was seen as a principle to improve the culture,¹⁰² that those such as Berlage had previously attacked. For example in 1903 the German architect, Hermann Muthesius, advocated *Sachlichkeit*, as simplicity and straightforwardness to every aspect of

⁹⁵ Giedion, *Space, Time and Architecture: The Growth of a New Tradition*, 293.

⁹⁶ Loran, "Introduction," xvii.; Greenough, *Form and Function: Remarks on Art, Design, and Architecture by Horatio Greenough*, 65.; De Zurko, *Origins of Functionalist Theory*, 219.

⁹⁷ Greenough, *Form and Function: Remarks on Art, Design, and Architecture by Horatio Greenough*, 73.

⁹⁸ Ibid., 54-55.; De Zurko, *Origins of Functionalist Theory*, 220.

⁹⁹ Adrian Forty, *Words and Buildings: A Vocabulary of Modern Architecture* (London: Thames & Hudson, 2000), 180.; Bletter, "Introduction," 48.

¹⁰⁰ In Germany, by the end of the 1920s there were three terms associated with the concept of function, *Sachlich*, *Zweck*, meaning purpose (discussed below), and *Funktionell*. Forty, *Words and Buildings: A Vocabulary of Modern Architecture*, 180.

¹⁰¹ Ibid.; Bletter, "Introduction," 48.

¹⁰² Gutschow, "The Culture of Criticism: Adolf Behne and the Development of Modern Architecture in Germany, 1910-1914," 132, 34.

living, from architecture, to the clothing of the middle classes, as he said to: “take one step out of the extravagantly false culture in which we live,” and then, to disengage the patronage of, “those parties who struggle for the sensational of whatever type and at any price, above all to shine before an army of admirers in the pomp of their opulence. . . . If it wants to better the world . . . [it must] move in the track of complete simplicity and straightforwardness (*Sachlichkeit*).” *Sachlichkeit*, as a particular facet of function became synonymous with non-aristocratic, anti-ornamental, scientific, sober, practical and rational qualities. As a value it proliferated and became embedded in German culture more generally. By the 1920s, it had come to embody the very idea of modernism and its ambition to purify architectural form.¹⁰³

Adolf Loos – ornament and degeneracy

The puritanical revision of architecture and more broadly society hit a fervent pitch with Loos in his lecture for the Deutsche Werkbund of 1908 titled “Ornament and Crime.”¹⁰⁴ Here, he famously advocated for the expulsion of ornament, in the production of any utilitarian and architectural forms. For Loos, the modern man who advocated and produced ornament was a degenerate. In his argument, Loos aligned the production of ornament with art, where art’s primal motivation was erotic and therefore debased. As he said: “But the man of our day who, in response to an inner urge, smears the walls with erotic symbols is a criminal or a degenerate.”¹⁰⁵ Whilst the advocacy of function within the processes of production in architecture had not always excluded ornament, ornament was frequently derided in the purifying tendencies associated with functionalist thinking.¹⁰⁶

¹⁰³ Forty, *Words and Buildings: A Vocabulary of Modern Architecture*, 181.

¹⁰⁴ While Loos did not specifically address function in this essay, rather the role of ornament for utilitarian objects, this essay is nonetheless central to the concept of function. This is evident when philosopher Theodore Adorno, aimed to revitalise functionalism through aesthetics and focused on the initial contribution Loos made to concepts of function. See Theodore W. Adorno, “Functionalism Today,” [*Functionalismus Heute*.] *Oppositions*, no. 17 (1979).

¹⁰⁵ Loos, “Ornament and Crime,” 19.

¹⁰⁶ For Sullivan function was also a method of generating ornament. See De Zurko, *Origins of Functionalist Theory*, 4. See also Sullivan’s treatise on ornament where he discusses function. Louis H. Sullivan, “Sullivan’s Manuscript Draft of the System of Architectural Ornament,” in *Louis H. Sullivan: A System of Architectural Ornament* ed. Lauren S. Weingarten (New York: Rizzoli, 1990). For the purifying tendency of function in modern architecture see: Heinrich Klotz, *The History of Postmodern Architecture*, trans. Radka Donnell (Cambridge, Mass.: MIT Press, 1988), 8-9.

Industrial production, countering waste – the morality of cost, efficiency, and health

These purifying tendencies frequently oriented modernism and function away from ornament in the thinking process of the production of architectural form. Moreover, Loos identified the ethical issues that could be aligned within the Aristotelian “making” phase of the production of ornament. For Loos, this was associated with the cost of manual labour, the moral inequities for the craftsman’s wealth and health, and further, the social implications of this for the nation. As he said:

. . . the criminally low wages paid to the embroideress and the lacemaker are well known. The ornamenter has to work twenty hours to achieve the income earned by a modern worker in eight. . . . Omission of ornament results in a reduction in the manufacturing time and increase in wages. The Chinese carver works for sixteen hours, the American worker for eight. . . . Ornament is wasted labour power and hence wasted health.¹⁰⁷

Here the values of function – of efficiency, economy, the rejection of wastefulness in terms of time, human power and health – were called into question with the production of ornament. Traditional craft methods of making compromised these values, as they maintained an underclass, in contrast to the improved financial status and wellbeing of the worker in modern manufacturing.

The issues presented by Loos return us to Aristotle’s deliberations of the actions one must take to establish the most easily and best produced thing in the process of production. The purifying impulse that the eradication of ornament proposes, identifies the adaption of the rationalising tendency of function to the second phase of production – the process of making, or the construction phase.¹⁰⁸ For Loos suggested that modern manufacturing would be a better – for the sake of – time efficiency, financial cost and health of the worker and

¹⁰⁷ Loos, "Ornament and Crime," 22.

¹⁰⁸ To reiterate, making was located in Aristotle’s second phase of production separate from thinking. See p. 28.

the final product, than the hand labour of traditional craft. Moreover, this is not just about the welfare of the individual, for Loos, but the broader social implications for the nation. As he says: “But it is a crime against the national economy that it should result in a waste of human labour, money, and material.”¹⁰⁹ Loos identified these processes of making in the production of architectural form to be complicit in the forming of the social, of the relationship to the economy of the nations through the types of labour that it engaged.¹¹⁰

Values as a defining principle of function

By 1957, the architectural historian Edward de Zurko, in his classic book, *The Origins of Functionalist Theory*, would identify that function in the forming of architecture, was, primarily, a value. This was irrespective of all the variations by writers associated with the mantra, form follows function, the debated concepts of functionalism and its associated terms of utility, fitness and purpose.¹¹¹ That form should follow function established guiding principles in the deliberations associated with generating architectural form that would also establish the criteria for judging architecture.¹¹² Moreover, from the mid-nineteenth-century onward, function could provide a moral and ethical measure for the development of form in architecture. This developed and expanded upon functional values Aristotle had already identified that were: “for the sake of” necessity, and for life. The association of function with concepts of utility, objectivity, sobriety, economy and efficiency, both in terms of finance and peoples’ health and wellbeing became embedded with an ethical approach to architecture and its social responsibility. The concept that architecture, like “man” should be ethical, truthful and not dishonest, have integrity and practicality, became an expectation that concepts of function in the forming of architecture could deliver.¹¹³ Moreover, in the development of early twentieth-century European modernism concepts of function and functionalism were rarely quarantined from the broader social and ideological context.

¹⁰⁹ Loos, “Ornament and Crime,” 21.

¹¹⁰ Ibid., 20-21.

¹¹¹ De Zurko, *Origins of Functionalist Theory*, 3.

¹¹² Ibid.

¹¹³ Ibid., 11-12.

Function’s various polemical values

Having established function’s identification with values, what is important to note, there was certainly no unified moral code. Frequently, individual theorists and architects would develop their impassioned and nuanced theories, in contention with others. Whilst it is not possible to summarise all these fraught and polemical debates, here it will suffice to quote a few notable cases. Behne and the German Architect and first director of the Bauhaus,¹¹⁴ Walter Gropius, for example, maintained an ongoing dialogue during the late 1910s and 1920s. Yet, Behne frequently criticised Gropius’ inclusive approach to function,¹¹⁵ as demonstrated by the students at the Bauhaus under Gropius tutelage. By comparison, the German architect and second director of the Bauhaus, Hannes Meyer is the most celebrated “doctrinaire” exemplar of functionalism. Meyer’s specific strain of radical utilitarian functionalism is in stark contrast to Gropius’ inclusivity. Meyer, like Loos, pitted art and hence aesthetics, with its associated principles of composition, against function, building and life.¹¹⁶ Later in 1932, by contrast, these values of the social were demeaned by the American architectural historian and architect, Henry Russell Hitchcock and Philip Johnson at the launch of the *International Style*, exhibition and catalogue at the Museum of Modern Art in New York. In this exhibition, they brought together a survey of European, American and international architecture (Fig. 21).¹¹⁷ Leveraging the title, *International Style*, Hitchcock and Johnson advocated for the visual and aesthetic attributes of the new emerging modernist architecture with the aim of deliberately divorcing the social, ethical, and what they summarised as anti-aesthetic principles associated with the “European functionalists.” They

¹¹⁴ The Bauhaus was established in Weimar in 1919, in the liberal revolutionary state of the Weimar Republic in Germany and moved to Dessau in 1925 before being closed by the Nazis in 1933. While the Bauhaus is commonly understood to represent modernism and hence “functionalism” Bletter has noted “Bauhaus functionalism,” emerged as a cliché, interchangeable with Sullivan’s “form follows function.” Bletter, “Introduction,” 11.; Grabow and Spreckelmeyer, *The Architecture of Use: Aesthetics and Function in Architectural Design*, 3. Bletter argues rather that there was an eclectic fusion of functional concepts. Bletter, “Introduction,” 27.

¹¹⁵ For Behne’s criticisms of Gropius and his students at the Bauhaus see “Introduction,” 31-32. Yet Gropius and Behne continued a dialogue, where Behne introduced him the artist László Maholy-Nagy who would become influential in the Bauhaus shift from Expressionism to Constructivism. Ibid., 31.

¹¹⁶ Hannes Meyer, “Building,” in *Programs and Manifestoes on 20th-Century Architecture* ed. Ulrich Conrads (Cambridge, Mass.: MIT Press, 1971).

¹¹⁷ Henry-Russell Hitchcock and Philip Johnson, *The International Style* (New York, N.Y.: W.W. Norton & Company Inc., 1932), 33.

accused the European’s sociological anti-aesthetic position as being driven not by ethics but by economics alone,¹¹⁸ claiming that these “exaggerated functionalists” believed building was a science and not an art.¹¹⁹ In their summation Hitchcock and Johnson belittled the “European Functionalists” as evading the genuine world of architecture in an irrelevant political domain.

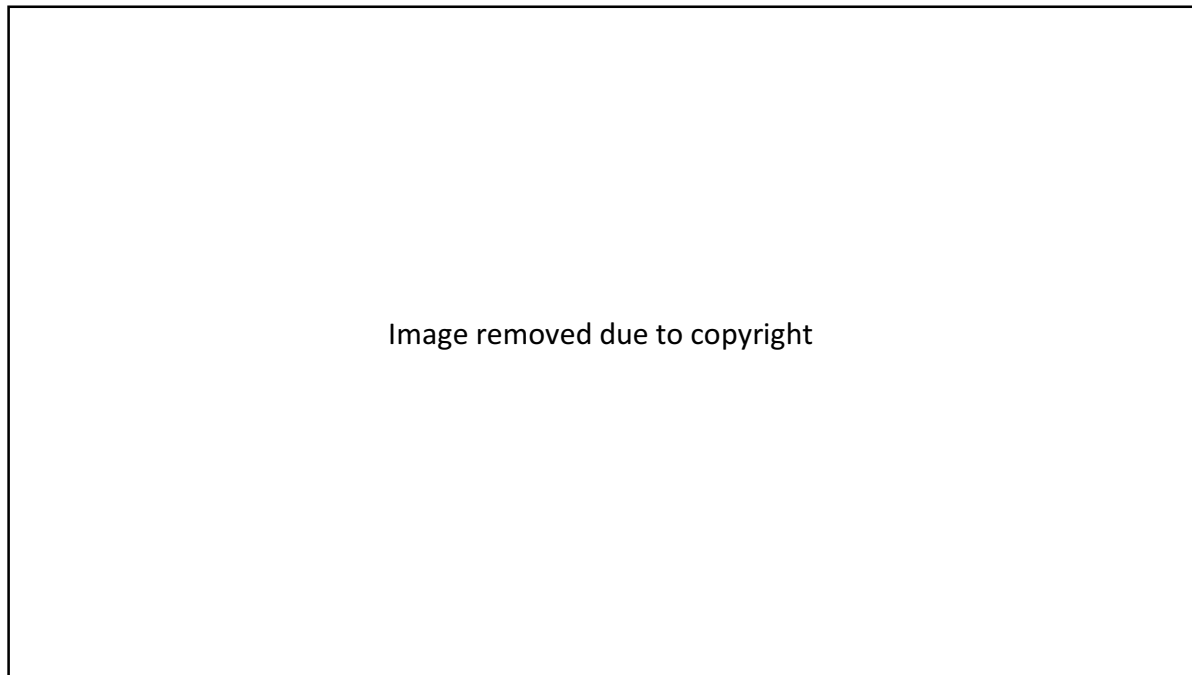


Fig. 21 Henry Russell Hitchcock and Philip Johnson, *International Style*, exhibition, Museum of Modern Art in New York (1932)

Accessed May 10, 2016. <https://archhistdaily.wordpress.com/tag/moma/>

Summary – values towards criteria of function as forming

Despite the abounding arguments over the perceived principles of function, these values in early modernist architectural discourse can be seen as a continuation of the moral agency associated with function as identified by Aristotle. For early architectural modernists, these values offered criteria for what Aristotle would identify as the deliberations in the thinking phase of producing architectural form. The association with function in Aristotle’s terms, “for the sake of” necessity (utilitarian needs), and for life, expanded to include the functional values of: sobriety, efficiency, necessity, economy, health of the individual and

¹¹⁸ Ibid., 36.

¹¹⁹ Ibid., 35, 80.

the nation. Further, Loos’ concern for the ornament versus the worker in modern manufacturing, began to imply that the values and rational thinking associated with function were being assimilated into what Aristotle would quarantine as the making or construction phase of production. These values can be seen as attributes of the category of function within the process of forming an object or thing.

The overriding value associated with function would be truth and honesty of the forms in architecture expressing the functional role that they were to perform. The question of what method these values might enact to enable the shape, material and form of a building, like values were various. While this can never hope to be comprehensive, this next section will survey a range of conceptions of function and functionalism, from Greenough to various German protagonists, Gropius and Behne, to the French architect, Le Corbusier. This is with the aim of drawing out the constituents of these functional values that could equally be addressed in art.

An assortment of methods of making fitness to purpose

Fueled by its underlying values that function offered, many architects and theorists, like Aristotle, from the mid-nineteenth century looked to nature, and further, the ordering principles of the machine, to establish methods for generating form through function. Others also looked to adjacent disciplines such as mathematics to understand what function was and how it could establish form. Biological and mechanical analogies were applied by proponents to develop methodologies to activate the role of function in producing architecture. Architectural historians and theorists, such as De Zurko, Peter Collins and Forty, all identify the use of these analogies in the search to define function. As Collins would point out, the use of analogies was largely pseudoscientific and in regards to the organic analogy particularly generalised and poetic.¹²⁰ The use of these analogies, whilst constructive, were frequently used liberally. Forty has argued this has confused the very definition of function.¹²¹ Although this is the case, on the other hand, it also demonstrates the mutability and breadth of the various and nuanced approaches to function and its

¹²⁰ Collins, *Changing Ideals in Modern Architecture, 1750-1950*, 153.

¹²¹ Forty, *Words and Buildings: A Vocabulary of Modern Architecture*, 174.

definition. For the framing of the category, function as forming, biological and mechanical analogies offer a way of thinking about how space and time could be organised in the thinking processes in the forming of architecture. Further, as Loos began to indicate, how developments in mass production and standardisation, could bring function into the very making phase of production. This next section will provide an overview of how analogies, and variations on the term function facilitate the production of architectural form, that reveal the constituents and strategies of function in both the thinking and making phases of production.

Horatio Greenough's biological analogy

Greenough, in the mid-eighteenth-century drew on nature and its “flawless functionalism,”¹²² to establish a model where the actions of function could generate architectural form. Lamarck’s eighteenth-century science of biology, developed with his colleagues, Georges Curvier and Georges-Louis Leclerc (Comte de Buffon), established function as a critical term in understanding how the forms in nature came to be. It further conceived of an organic body as being comprised of parts of a body, such as organs, where each part would perform functional roles in relation to a whole. This was in contrast to earlier natural historians, who relied on appearance to define specimens.¹²³ Lamarck’s premise of evolution was based on the concept that changes in the environment would necessitate the “laws of adaption” that would then modify form.¹²⁴ This principle Greenough applied to architectural form where the environment and the functional role of parts of a building would establish the principles of construction and form. The “effective shape” of a form could only arrive out of the consideration of the processes and actions of its required functions. The “organic structure” or requirements of a building, was how

¹²² Loran, “Introduction,” xvii.

¹²³ Forty, *Words and Buildings: A Vocabulary of Modern Architecture*, 175.

¹²⁴ Darwinian natural selection, as Collins notes, favours function following form, where it is assumed that the form exists first. Whereas, Lamarck contended that the environment altered the form which was then passed via heredity to other forms, locating form following function. Collins, *Changing Ideals in Modern Architecture, 1750-1950*, 153.

Greenough would conceptualise his functional approach to the establishment of form.¹²⁵ As he would say:

*Instead of forcing the functions of every sort of building into one general form, adopting an outward shape for the sake of the eye or of association, without reference to the inner distribution, let us begin from the heart as the nucleus, and work outward. The most convenient size and arrangement of the rooms that are to constitute the building being fixed, the access of the light that may, of the air that must be wanted, being provided for, we have the skeleton of our building.*¹²⁶

And further:

*To plant a building firmly on the ground; to give it the light that may, the air that must, be needed; to apportion the spaces for convenience, decide their size, and model their shapes for their functions – these acts organise a building. . . . It has reference also to the external expression of the inward functions of the building – to adaption of its features . . . between external breadth and interior detail.*¹²⁷

Based on a Lamarckian organic analogy, the building, like a body, was divisible into multiple parts. For Greenough, these parts could consist of the various rooms where each space’s utilitarian requirements would be their function. This would determine the needs of light, air, space, “for the sake of” “convenience.” The organisation of these inner parts would act as the generator of the visual appearance of the outer form of the building.

In the consideration of function within the forming of an object or thing, Greenough’s biological analogy establishes a principle in Aristotle’s thinking and deliberating phase of the production of an architectural form, where a whole can be divided into multiple parts that enact from within to produce the form itself. The success of these architectural forms based

¹²⁵ Greenough, *Form and Function: Remarks on Art, Design, and Architecture* by Horatio Greenough, 20-21, 57-59.

¹²⁶ Ibid., 61-62.

¹²⁷ Ibid., 20-21.

on a biological analogy Greenough would then conflate with a machine metaphor. Greenough would claim these buildings: "They may be called machines," with "the laws of structure and apportionment, depending on definite wants, obey a demonstrable rule."¹²⁸ This was seventy years before Le Corbusier would refer to his famous adage: "The house is a machine for living in."¹²⁹ This provided Greenough with the call to abandon the formalist copying of shapes, to no longer "ape them like monkeys," and to learn from these principles,¹³⁰ that would register the function in its form to establish its specific character and its beauty.

Louis Sullivan – forms metaphysical expression of function

Like Greenough, Sullivan also drew on Lamarckian biology inspired by Coleridgian Romantic poetics.¹³¹ This lent Sullivan a metaphysical purpose to the form and function relationship. Sullivan's metaphysical drive within function adopted a sense of pre-ordained destiny.¹³² Function as destiny was for Sullivan the ultimate metaphysical "end-purpose" or "goal." Form and function, for Sullivan, were inextricably linked. As he would say in "Kindergarten Chats," (1902): "the form, oak-tree, resembles and expresses the purpose or function, oak . . . So the form, wave, looks like the function, wave . . . And so does the form man, stand for the function, man."¹³³ Later: "And so, in man-made things . . . the form, axe, the function, axe; the form, engine, the function, engine."¹³⁴ Sullivan would underline this metaphysical drive of function when he would say: "The Germ is the real thing: the seat of identity. Within its delicate mechanism lies the will to power: the function which is to seek and eventually to find its full expression in form."¹³⁵ Returning to Aristotle, this bound connection bears a striking parallel, when Aristotle said: "a thing really is itself when it can perform its function; an eye, for instance, when it can see."¹³⁶ In Sullivan view, form and

¹²⁸ Loran, "Introduction," xvii.; Greenough, *Form and Function: Remarks on Art, Design, and Architecture by Horatio Greenough*, 65.

¹²⁹ Corbusier, *Towards a New Architecture*, 4.

¹³⁰ Greenough, *Form and Function: Remarks on Art, Design, and Architecture by Horatio Greenough*, 65.

¹³¹ Collins, *Changing Ideals in Modern Architecture, 1750-1950*, 155-56.

¹³² Sullivan, "Kindergarten Chats," 46.; Forty, *Words and Buildings: A Vocabulary of Modern Architecture*, 178.

¹³³ Sullivan, "Kindergarten Chats," 43.

¹³⁴ *Ibid.*, 44.

¹³⁵ "Sullivan's Manuscript Draft of the System of Architectural Ornament," 46.

¹³⁶ Aristotle, *Metereology*. 4.12.389b25-90b2.

function continuously folded together in a transcendental drama of coming into being through universal time:

According to their nature, their function, some forms are definite, some indefinite; some are nebulous, others concrete and sharp; some symmetrical, other purely rhythmical. . . . But all, without fail, stand for relationships between the immaterial and the material, between the subjective and the objective – between the Infinite Spirit and the finite mind. . . . All is form, all is function – ceaselessly unfolding and infolding – and the heart of Man unfolds and infolds with them: Man, the one spectator before whom this drama spreads . . . Time, soaring, from eternity to eternity.¹³⁷

This essentialist link between form and function throughout the universe is played out through time, placing “man” in the privileged position of being both within and also outside the “laws” of this metaphysical drama – between function and form. It also identifies the origins of Sullivan’s “organic thinking” in architecture and an updated variation on his own adage when he wrote in “Kindergarten Chats”: “form ever follows function, that is the law – a universal truth.”¹³⁸ For Sullivan this function was the agent itself literally *creating* and *organising* its form.¹³⁹ In adapting these principles to architecture, he identified the building as having form, and as such, there was the need for there to be a function, a purpose for that building. And as it would follow, a reason for the shape of that building that is caused by and brought into being by its function.¹⁴⁰ That the appearance of Sullivan’s building would also speak of its function would reinforce function’s aspiration of honesty and truth.

Paul Frankl –the expansion of function as Zweck (purpose)

Adjacent to the organic analogy as developed by those such as Greenough, Sullivan an additional term to *Zweck* – meaning purpose – began to emerge in German architectural debates at the turn of the twentieth-century. This added to the repertoire of concepts

¹³⁷ Sullivan, “Kindergarten Chats,” 45.

¹³⁸ Sullivan, “Kindergarten Chats,” 170.

¹³⁹ *The Autobiography of an Idea*, 290.

¹⁴⁰ “Kindergarten Chats,” 46.

associated with function of *Sachlichkeit*, which to reiterate referred to the objective, rational and straight-forward. The development of these specific concepts for function further enabled the mechanisms by which function could generate form.

Zweckmässigkeit, as purpose, was used not only in the context of fulfilling immediate and utilitarian needs, but also lent the debate regarding function a greater sense of fulfilment and a sense of destiny as was meant by Sullivan. However, like all various approaches to function, the term *Zweck* and *Zweckmässigkeit*, were not used consistently by advocates and protagonists alike and the terms *Zweck* and *Sachlich* were frequently interchanged. Some such as Behne would claim in 1928 that *Zweckmässigkeit* would satisfy only the minimum expectations of the requirements of buildings.¹⁴¹ Others, such as the architectural historian Paul Frankl in 1914, made it clear that purpose as *Zweck* was the essence and greater purpose of architecture as manifested in its materiality.¹⁴² In his book, *Principles of Architectural History*, (1914), Frankl identifies the role of purpose in the spatial form of architecture. Frankl’s analysis of historic buildings, not only identified various parts of buildings and their purpose, like Greenough and Sullivan. He also articulated these function as particular actions of its occupants, and that these actions were based in time and had specific spatial relationships. These durational and spatial actions of people establish the physical building’s spatial form and shape. As Frankl said:

*When I speak of purpose in architecture, I mean that architecture forms the fixed arena for actions of specific duration, that it provides the path for a definite sequence of events. Just as these have their logical development, so the sequence of spaces, and so too the principal and secondary passages existing within each space, have their logic. The clearly prescribed circulation, which leads us through the different spaces in an opera house . . . presupposes a definitely ordered activity, and the spatial form is completely dependent upon the particular type of activity.*¹⁴³

¹⁴¹ Adolf Behne, *Eine Stunde Architektur* (One Hour of Architecture) (Stuttgart: Akademischer Verlag Dr. Fritz Wedekind, 1928) Cited in Bletter, "Introduction," 53.

¹⁴² Paul Frankl, *Principles of Architectural History: The Four Phases of Architectural Style, 1420-1900*, trans. James F. O’Gorman (Cambridge, Mass.: MIT Press, 1968), 158.

¹⁴³ Ibid., 157-58.

Further to his concept of purpose being the essence of the building, grounded in the activity the actions and movement of the occupants in the building, Frankl identifies this movement and activity as presupposed, ordered activity. Like Greenough, he located these articulations of function as prior thinking in the process of production of architectural form. Frankl extends Greenough and Sullivan’s division of the building as a complex operating whole, to include the consideration of the sequentiality of the occupants’ actual activities located in time and placed in space.

The biological analogy, conflated by Greenough with a mechanical analogy, in addition to the specification of function as purpose (*Zweckmässigkeit*) enabled the building to be conceived as a multi-divisible complex whole, where parts, conceived of interconnected individual activities would generate their logical distribution. This could then enable function in the forming of architecture to be an organising and planning device. Moreover, in Frankl’s conception, the body’s movement, actions and activities in time were also conceived as constituents of this method of forming though function to produce the form and space of architecture. Here, buildings would be designed from the inner forces of function outwards.

Realismus – *rational construction of materials and structure*

The concept of *Zweck* emerged in contrast to another term commonly used at the time of the turn of the century known as, *Realismus*. Frankl was keen to disassociate his concept of function [*Zweck*] with that of the more commonly understood interpretation of the “purpose of architecture” that Forty identified as being referred to by the German word *Realismus*.¹⁴⁴ This later term, Frankl defined as meaning constructional suitability and mechanical strength.¹⁴⁵ It also was commonly understood as the expression of the mechanical forces and materials within the architectural structure. This concept of function was housed within the mechanical and physical forces of the material and structural components of the architecture itself.

¹⁴⁴ Forty, "Function," 180.

¹⁴⁵ Frankl, *Principles of Architectural History: The Four Phases of Architectural Style, 1420-1900*, 158.

The engineering of structures such as bridges and towers that had emerged as a consequence of the industrial revolution came to be seen by architects as superior examples of the development of form based on this principle of function identified as *Realismus*. Using the logic of the rational construction it offered not only a solution to form without the need to search for it, it would also inevitably lead to beauty.¹⁴⁶ Greenough, for example, looked to contemporaneous everyday structures such as the American design of bridges, ships, yachts and instruments, as inspiration.¹⁴⁷ The Belgian architect and member of the Art Nouveau, and then the Deutsche Werkbund, Henry van de Velde, in 1901, had also admired the artistic potential of engineering approaches to building form, suggesting that: “The extraordinary beauty innate in the work of engineers has its basis in their unconsciousness of its artistic possibilities – much as the creators of the beauty of the cathedrals were unaware of the magnificence of their achievements.”¹⁴⁸ Later, in 1923, the English architect Fredrick Etchells’ introduction to Le Corbusier’s *Towards a New Architecture*, would identify Le Corbusier’s orientation towards the rational construction principles of the engineer over the traditional architect. As Etchells noted: “The modern engineer, then, pursues function first and form second, but it is difficult for him to avoid results that are plastically good.”¹⁴⁹ The industrial revolution with the associated expansion of modern manufacturing and mass production along with the developments in material and structural technology, provided source material for this rational approach to construction. It further provided an image of the future embodied in the machine.

Carlo Lodoli’s antecedent material functionalism

This concept of rational construction has its antecedent in one of the first examples of the use of function in architecture by the Venetian Friar architect and theorist, Carlo Lodoli in

¹⁴⁶ De Zurko, *Origins of Functionalist Theory*, 9.

¹⁴⁷ Greenough, *Form and Function: Remarks on Art, Design, and Architecture by Horatio Greenough*, 59-61. See also Loran, “Introduction,” xvii.; Edward Robert De Zurko, “Greenough’s Theory of Beauty in Architecture,” *Rice Institute Pamphlet - Rice University Studies* 39, no. 3 (1952).

¹⁴⁸ Henri van de Velde, “Die Rolle der Ingenieure in der modernen Architektur,” in *Die Renaissance im modernen Kunstgewerbe* (Berlin, 1901). Cited in Giedion, *Space, Time and Architecture: The Growth of a New Tradition*, 217.

¹⁴⁹ Frederick Etchells, “Introduction,” in *Towards a New Architecture* (Burlington: Elsevier Science, 2014), viii.

1740.¹⁵⁰ Lodoli's rationalism, like those after him in the turn of the century, sought honesty, truth and reasonableness in architecture, unlike the contradictions Lodoli witnessed in Baroque architecture.¹⁵¹ The method of establishing true architecture for Lodoli was through the rationalising principles of function that would determine the correct use of materials to establish the structure within architectural form. Anything superfluous to the “strictest necessity” would be denounced. For Lodoli, the binding principles for this true architecture would be: “Nothing shall show in a structure which does not have a definite function, or which does not derive from the strictest necessity.”¹⁵² Further he comments that: “There shall be no architecture which does not conform to the very nature of the material.”¹⁵³ Finally he affirms that, “*the function of material(s)* . . . is their increased and improved action, where they are used demonstratively, according to their proper nature and the proposed end.”¹⁵⁴

The source of Lodoli's rationalism through function was the inherent properties of the material, its physical and mechanical forces. As Rykwert points out, Lodoli's concept of function was informed by the science and mathematics of the eighteenth-century, where function was aligned with action and process.¹⁵⁵ Function for Lodoli, was the relationships of the various structural and material components of the architecture according the physical laws of statics, that would produce inner and outer forces and then the direct expression of this within the shape and lines of the architecture.¹⁵⁶ In the Pilgrims Hospice, S. Francesco della Vigna, Venice, (Fig. 22) Lodoli expressed this relationship in the window sills of the second storey, where the stone sills are deeper at the point that they were most likely to crack.¹⁵⁷ Here the sills become a graphic element on the facade of the building revealing the

¹⁵⁰ Forty, *Words and Buildings: A Vocabulary of Modern Architecture*, 174.

¹⁵¹ Emil Kaufmann, "At an Eighteenth Century Crossroads: Algarotti Vs. Lodoli," *The Journal of the American Society of Architectural Historians* Vol. 4, no. 2 (1944): 27-28.

¹⁵² Francesco conte Algarotti, "Saggio Sopra L'architettura," in *Opere Del Conte Algarotti*, Vol. II (Venice: 1764), 62. Translated and cited in Kaufmann, "At an Eighteenth Century Crossroads: Algarotti Vs. Lodoli," 27.

¹⁵³ Algarotti, "Saggio Sopra L'architettura," 66. Translated and cited in Kaufmann, "At an Eighteenth Century Crossroads: Algarotti Vs. Lodoli," 27.

¹⁵⁴ Loudly cited in Rykwert, "Neoclassical Architecture," 324. No source given.

¹⁵⁵ Ibid.

¹⁵⁶ Ibid.

¹⁵⁷ Forty, *Words and Buildings: A Vocabulary of Modern Architecture*, 175.

functional relationship between the material nature of the stone the load bearing capacity of the structural sill as it spans across the opening for the window above.

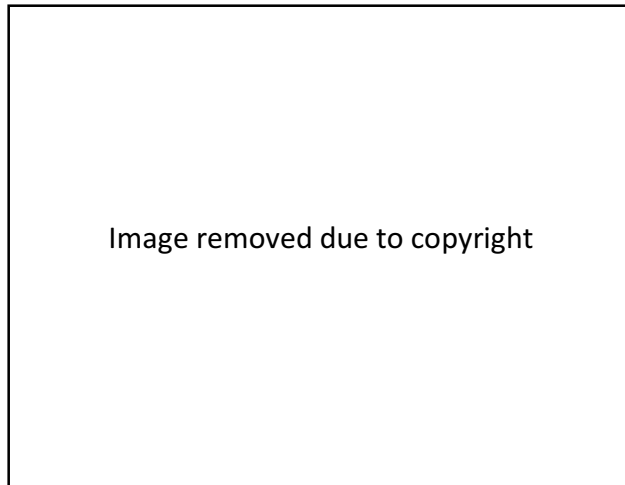


Fig. 22 Carlo Lodoli, *Pilgrims Hospice, San Francesco della Vigna, Venice, (Lodoli's restoration 1739-43)*

In Forty, Adrian. "Function." In *Words and Buildings: A Vocabulary of Modern Architecture*, 174-95. (London: Thames & Hudson, 2000), 175.

Rational construction, as a form of function, can be understood to have its antecedence in Lodoli's concern for the inherent physical forces within materials and structures. This establishes further constituents for the category of function as forming. Function through the inner working of material and structure extends the concept of function. For Sullivan, Greenough and Frankl function was purpose (*Zweckmässigkeit*) where mechanical and organic analogies enabled the organisational planning of multi divisible interacting activities in time and space within a building. Furthermore, function for Lodoli, is acknowledged as the actions of the internal forces within the materials and structures themselves.

What is worth noting here for the concept of function as forming is that rational construction (*Realismus*) and Lodoli's expression of the inherent qualities and inner forces of material provides not only a contribution to the thinking phase of production by the architect. Significantly, it identifies the agency of change as not the person, but the material itself that produces the functional outcomes of the shape of the structure. While it requires the agent of the architect to deliberate upon this before, in the thinking phase, yet in the building and construction phase, it is contingent on the matter to perform in the way that is

anticipated. This is what would enable Lodoli, and those after him to claim the moral certitude of honesty and truth of the architecture’s or engineered form’s performance.

Purpose (Zwegmässigkeit) and rational construction: Walter Gropius and the Bauhaus building at Dessau

As many have argued, Germany in the 1920s had become the centre of the international dialogue between architects, artists and the growth in modernism associated with concepts of function.¹⁵⁸ Architectural movements identified as the *das Neue Bauen* (the new building) came to embody the social, purifying, honest and rational outcomes of the functional imperative. The “G” group, for example, formed in Berlin in 1923 had aimed to bring together both principles of function associated with *Realismus* (rational construction) and *Zweck* (purpose) in order to displace the old guard of architecture.¹⁵⁹ Whilst Gropius was never a member or published in the G group specifically, the Bauhaus building at Dessau (1926) (Fig. 23), became the exemplar of modernism and the functional imperative associated with purpose, rational construction and the principles associated with the machine and the organic analogy.¹⁶⁰

¹⁵⁸ German institutions such as the establishment of the Bauhaus, (1919); the exposition by the Deutsche Werkbund of the Weissenhof estate in Stuttgart (1927); events such as the Congrès Internationaux d’Architecture Moderne (CIAM II) founded in 1928; brought together international dialogues between architects and centred the debate of modernism. Bletter, “Introduction,” 15.

¹⁵⁹ Forty, *Words and Buildings: A Vocabulary of Modern Architecture*, 183. See also Behne, “The Modern Functional Building,” 119-20. The term *Gestaltung*, associated with the G group’s magazine, *G: Material zur Elementaren Gestaltung* (*G: Materials for Elemental Form-Creation*) referred to “design,” and significantly, the “process of formation.” Further, the term had been derived from concepts of morphology in biology, where they aimed to bring together what had been conceived as opposites: the biology and technology – the organic with the mechanisms. Detlef Mertins and Michael William Jennings, “Introduction: The G-Group and the European Avant-Garde,” in *G: An Avant-Garde Journal of Art, Architecture, Design, and Film, 1923-1926* ed. Detlef Mertins and Michael William Jennings (Los Angeles: Getty Research Institute, 2010), 5.

¹⁶⁰ The architect and architectural historian Sigfried Giedion claimed that in 1926 nothing comparable, to the Bauhaus Dessau building had been built in modern architecture, bringing together function and a new space conception to twentieth-century architecture. Giedion, *Space, Time and Architecture: The Growth of a New Tradition*, 496. Alfred H. Barr Jr., the director of the Museum of Modern Art (MOMA), New York, hailed it as the most architecturally significant building of the decade. See Jr Alfred H. Barr, “Preface,” in *Bauhaus 1919-1928* ed. Walter Gropius, Ise Gropius, and Herbert Bayer (New York: Arno Press for The Museum of Modern Art, 1938), 6.

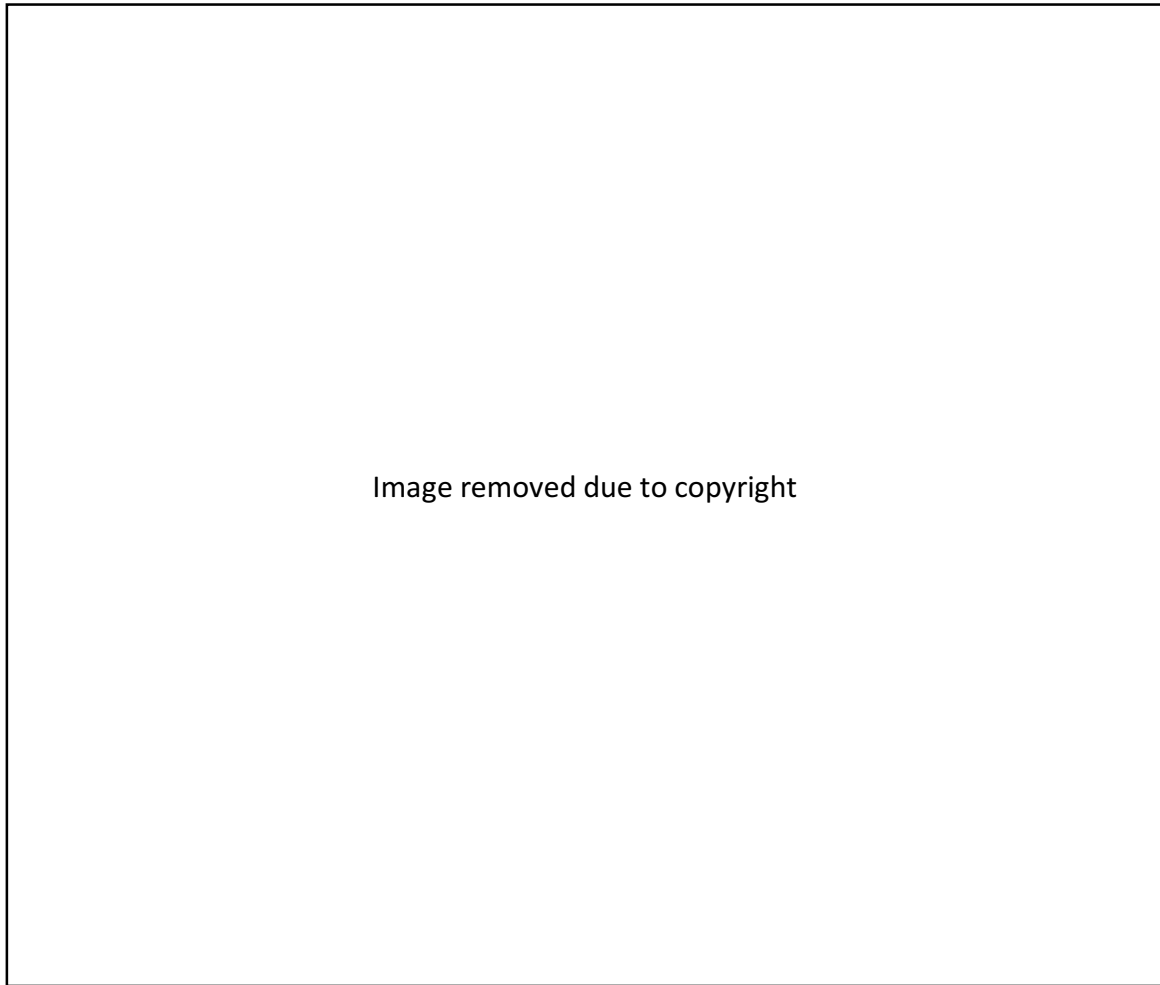


Fig. 23 Walter Gropius, Bauhaus building at Dessau, (1926)

In Leuthäuser, Gabriele, *Functional Architecture: The International Style = Funktionale Architektur: Le Style International, 1925-1940*, (Cologne: Benedikt Taschen, 1990), 68.

In the Dessau building Gropius articulated the complex brief that included the Bauhaus school, with the municipal Dessau trade school, student accommodation and dining, studio and offices, into divisible parts each performing a specific functional role. In this scheme the various activities were then distributed to generate an asymmetrical “pin-wheel” plan with efficient spatial and durational interrelations between the components. Gropius’ design methodology of the Dessau building would follow through Greenough’s proposal for functionalism, seventy-five years earlier where the building was designed from the inside out, where he would say: “the external expression of the inward functions of the building – to adaption of its features.”¹⁶¹ The plan, in modernism became prioritised as the key

¹⁶¹ Greenough, *Form and Function: Remarks on Art, Design, and Architecture by Horatio Greenough*, 21.

organisational device for the functional distribution of the elements and would become known as the “functional articulation of the plan.”¹⁶² This method would generate the physical visual elements of the Dessau building volume, its regularity and rhythm.

The Dessau building’s radiating form of the pinwheel plan, projected beyond its own boundary into the landscape. With this came not only the implied interconnectedness to the infrastructure of the city but the literal connection where the road carrying transport penetrated into and through the form of the building. The biological and mechanical analogy of the interconnectedness of parts to a whole, began to imply the body of the building as a functional and operating part of the total environment. Through these analogies, the concept of function in the production of space and form could be seen to have a radiating effect to the space beyond.

In addition to the organisational principles of function inherited from biological and mechanical analogies, the Dessau Bauhaus building brought the functional principles of rational construction to the physical structure and form. Reinforced concrete established a skeleton of columns that became the structural element of the building. This was then clad with a glass curtain wall, cantilevered off the load bearing columns. Liberated from the necessity to support structure the wall of glass enabled the internal operations of the building to be visible from the exterior. The literal transparency offered in the material and its form, would enact the values of honestly revealing the purpose of the building, aspired by those such as Berlage, and moreover would provide the image of what it was. The Bauhaus building at Dessau would come to speak of the function “Bauhaus.” Moreover, the Bauhaus building at Dessau with its glass curtain wall, its reinforced concrete structure, its organisational structure and pinwheel footprint, its visual image says function. And this means: industrial manufacturing, technology, objectivity, rationalisation, standardisation, infrastructure, progress and the future.

¹⁶² Ligo, *The Concept of Function in Twentieth-Century Architectural Criticism*, 27-28.

In the Bauhaus building, Gropius would bring the multiplicity of function’s constituents to bear: the articulation of the unique and separate activities of the building, with the consideration of the body’s movement into incremental units, organised and distributed in space and time. This was combined with the rational construction of materials and structures modelled by function’s internal operations with the forces and physics of matter engaging the production of the latest technology. As Greenough would say, buildings: “may be called machines.”¹⁶³

Cars and aeroplanes – Le Corbusier and Werner Gräff redeploying making into the assembly line of mass production

For Le Corbusier the question of “the house is the machine for living in” took the mechanical analogy, not only as a spatial and duration distribution device but sought its solution in the factories of mass production. As he pronounced in *Towards a New Architecture* in 1923:

A great epoch has begun.

There exists a new spirit.

Industry, overwhelming us like a flood which rolls on towards its destined ends, has furnished us with new tools adapted to this new epoch, animated by the new spirit.

Economic law inevitably governs our acts and our thoughts.

The problem of the house is a problem of the epoch. . . .

We must create the mass-production spirit.

The spirit of constructing mass-production houses.

The spirit of living in mass-production houses.

*The spirit of conceiving mass-production houses.*¹⁶⁴

Le Corbusier looked to aeroplanes and automobiles. Machinery, with its economy, rationalisation, efficiency, standards, logic and analysis offered Le Corbusier perfection with a moral sentiment produced on the assembly line. In Le Corbusier’s view, this was the

¹⁶³ Greenough, *Form and Function: Remarks on Art, Design, and Architecture* by Horatio Greenough, 65.

¹⁶⁴ Corbusier, *Towards a New Architecture*, 6.

future. The house driven by the imperatives of function, like the automobile could be produced on the assembly line (Fig. 24).

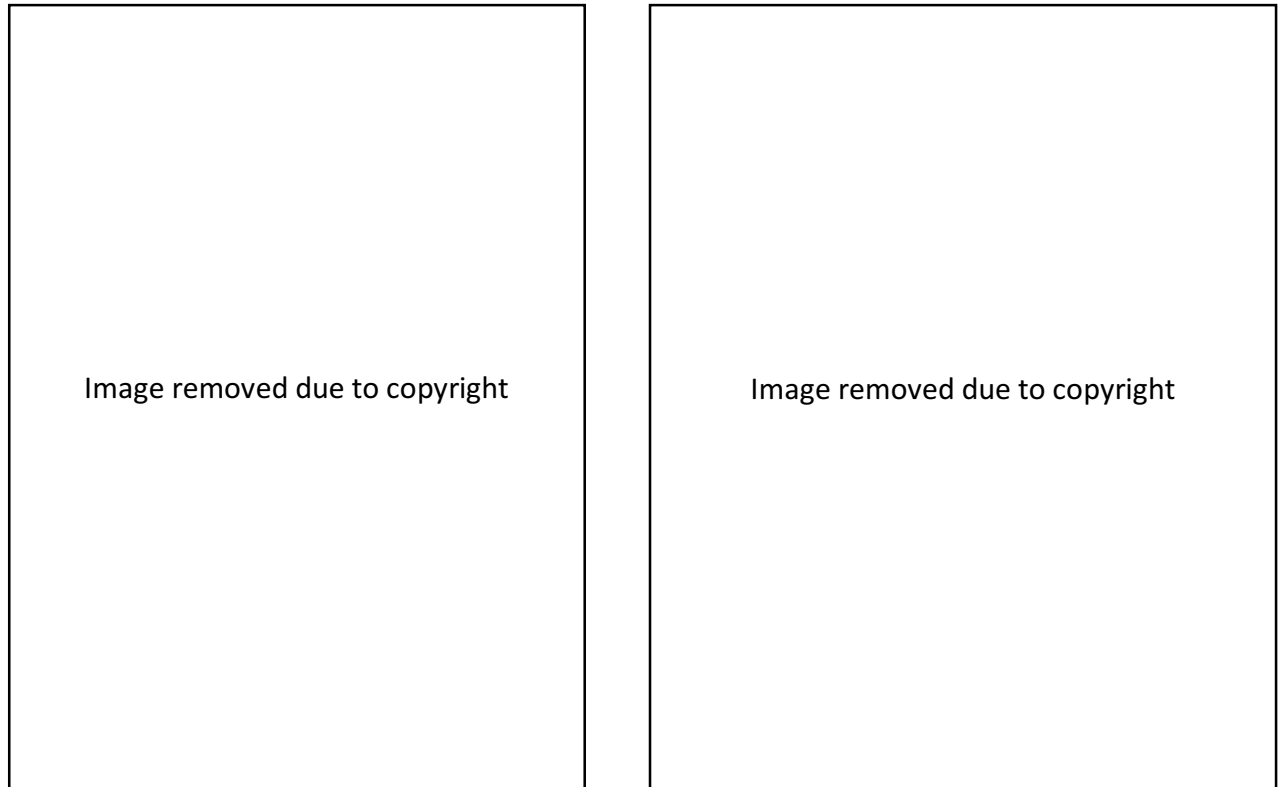


Fig. 24 Le Corbusier, *Towards a New Architecture*, (1923)

In Corbusier, *Le. Towards a New Architecture* [Electronic resource]. (Burlington: Elsevier Science, 2014), 146. (left)

Fig. 25 Werner Gräff, *Rumpler Waterdrop Automobile Sedan*, *G-magazine*, (1924)

In *G: An Avant-Garde Journal of Art, Architecture, Design, and Film, 1923-1926* ed. Detlef Mertins and Michael William Jennings (Los Angeles: Getty Research Institute, 2010), 132. (right)

Not only Le Corbusier was looking at car manufacturing as a functional model for production of architecture and form.¹⁶⁵ In the third edition of the *G-magazine* (1924) the German artist, Werner Gräff, would present the assemblage of an automobile, the engine, chassis, its spatial distribution of parts working in unison with poetics. Gräff would equate a semi-axle assembly having the ability to: “sway like birds’ wings.”¹⁶⁶ It was the exemplar of

¹⁶⁵ "Eyes Which Do Not See: Airplanes," in *Towards a New Architecture* (Burlington: Elsevier Science, 2014). and "Eyes Which Do Not See: Automobiles," in *Towards a New Architecture* (Burlington: Elsevier Science, 2014).

¹⁶⁶ Werner Gräff, "What Do You Know About the Automobile of the Future?," in *G: An Avant-Garde Journal of Art, Architecture, Design, and Film, 1923-1926* ed. Detlef Mertins and Michael William Jennings (Los Angeles: Getty Research Institute, 2010), 131.

functionality made in the predominantly on the assembly line. The Rumpler drive axle's suitability for mass production was based on the simplicity of its form. Anticipating the performance of the automobile's teleological end-goal of comfort and speed, he expounded the virtues of the Rumpler Waterdrop Automobile Sedan (Fig. 25) This car's aerodynamic form, not only saved energy, maximised speed, but would also minimise the collection of dust as the slip-stream of air would glide past. The machine, likened to the biological analogy provided a model of function generating form, that in this case could inform architects and artists alike. Moreover, Gräff's emphasis on the expectation of efficiency was brought about via the making phase of production redeployed onto the functional assembly-line of mass production.

Shoveling bricks – function employed on industrial production's assembly line

The assembly line had become a paragon, not only of functional methodologies and values exemplified through standardisation, time and economic efficiencies. It had also come to represent collective social potential and equity. The American Industrialist, Henry Ford's¹⁶⁷ book, *My Life and Work*, had been a best seller in German in 1923 and those such as Behne were actively quoting him in *The Modern Functional Building*.¹⁶⁸ The revolution that Ford applied to the assembly line was a combination of less hours and increased wages for workers and improvements based on the Scientific Management principles such as developed by the American mechanical engineer, Fredrick Winslow Taylor and later, by his followers, husband and wife team Frank and Lillian Gilbreth. Using what can only be described as a functional system of production, Taylor studied the best possible way of workers performing the task of shoveling material in the Bethlehem Steel Company. In this method he divided the series of actions associated with shoveling, and the associated components required into visible parts to analyse and arrive at a solution of the end-goal of

¹⁶⁷ The American Industrialist Henry Ford is most notably known as the founder of the Ford Motor Company and his role in developing the assembly line and improved higher wages for workers. This model of industrial production and division of labour captured the modernist utopian aspirations across industrialised nations, including the Soviet Union.

¹⁶⁸ Behne, "The Modern Functional Building," 104-05.; Rosmarie Haag Bletter, "Introduction," *ibid.* ed. Harry F. Mallgrave (Santa Monica, CA), 41.

maximum productivity.¹⁶⁹ This provides an astonishing parallel with Aristotle's' proposal for the function of man as an activity with the final goal as excellence.¹⁷⁰ In fact much later in 1975, the Detroit production line would be drawn on as an example of the attribute of function as a system by the science philosopher of science Robert Cummins. As Cummins would say:

Assembly-line production provides a transparent example of what I mean. Production is broken down into a number of distinct tasks. Each point on the line is responsible for a certain task, and it is the function of the workers/machines at that point to complete that task. If the line has the capacity to produce the product, it has it in virtue of the fact that the workers/machines have the capacities to perform their designated tasks, and in virtue of the fact that when these tasks are performed in a certain organised way – according to a certain program – the finished product results.¹⁷¹

Under the functionalist imperative, the hand-crafting of objects by skilled craftsman from the inception of the object to the end had become redirected onto the conveyor belt of the assembly line. Here the assembly line was a designed system of rationalised incremental tasks and actions performed by unskilled workers in time and space. In the context of Le Corbusier's vision, the production line could provide the place for the mass production of housing component. As Mumford would point out: "The charm of good building, the charm due to the carpenter's or the mason's feeling for his material and site, would disappear; but as compensation there would be the austere clarity of good machinery."¹⁷² The nuanced and irrational "making phase" of Aristotle, that provided the unique response of the craft-worker to their material would be subsumed by the functional imperative and its economy of standardisation delivered by the machine and its mass production. With all the efficiencies garnered by the rationalisation of the systemisation of its making, and the

¹⁶⁹ Fredrick Winslow Taylor, "The Principles of Scientific Management," in *The Industrial Design Reader* ed. Carma Gorman (New York: Allworth Press, 2003).

¹⁷⁰ See p. 22 and Aristotle, *Nicomachean Ethics*. 1.7.1097b23-98a16.

¹⁷¹ Robert Cummins, "Functional Analysis," *The Journal of Philosophy* 72, no. 20 (11/20/1975): 760.

¹⁷² Lewis Mumford, "Mass Production and the Modern House: The Limits of Mechanization," in *Architecture as a Home for Man: Essays for Architectural Record* ed. Jeanne M. Davern (New York: Architectural Record Books, 1975), 50.

possibility of increased wages, was the potential of a cost effective affordable home, car or numerous other possible commodities. The moral imperative, that Le Corbusier was offering could mobilise the solution to Loos’ earlier complaint of the social and moral inequities of the overworked underpaid worker.

The functional imperative of the spatial and organisational attributes of the assembly line would reciprocally instrumentalise the arrangement the factory building. This in turn would distribute its system into the broader city and national infrastructure. The German architect Peter Behrens, who was engaged by the company AEG and built several factories including an assembly line, articulated these principles:

The placement of the building. It has to follow the scale of the production process. The location of railroad tracks is crucial to the siting of the building. Staggering the buildings allows for the proper entry of rail tracks through the gates of the factory buildings. At the same time spacious storage yards should be provided, and this touches upon a city planning principle of great aesthetic significance. . . . But the same is also true of a factory’s interior layout. The spatial arrangement grows out of the organisation of the production process. Clear layout, ease of interchange and forward movement of products, and unhampered mobility of tools, machines, or trucks require open, uncluttered, well-lit halls. Workplaces should be as well lit and spacious as possible.¹⁷³

Like the radiating form of Gropius’ pinwheel plan, of the Bauhaus building at Dessau, the factory and its assembly line spread out into the infrastructure of the environment, the city and the nation. Drawing on both the organic and biological analogy of function, the functional systems of the factory production line and the broader infrastructure simultaneously and reciprocally fed each other. Fifty-four years later, in a critique of functionalism and its role in the production of space, the French Marxist philosopher, Henri Lefebvre would identify functionalism as pervasive force within the modernist capitalist

¹⁷³ Peter Behrens, AEG (Plakat, June 1920) cited in Behne, "The Modern Functional Building," 107.

economic system.¹⁷⁴ Lefebvre would argue that functionalism is entwined with form and structure. In this triad of function, form and structure, buildings, furniture, systems were not isolated objects in space, but were a part of a greater series of relationships of production and technology. Lefebvre conceived this as a atic whole that produced industrialisation and urbanisation.¹⁷⁵ In discussing the Bauhaus, and specifically Gropius and Le Corbusier, Lefebvre would say: "The production of spatial ensembles as such corresponded to the capacity of the productive forces, and hence to a specific rationality. It was no longer a question of introducing forms, functions or structures in isolation, but rather one of mastering global space by bringing forms, functions and structures together in accordance to a unitary conception."¹⁷⁶ The imperative of function, as a method of production, can now be seen as not only generating objects, architectural forms and assembly lines but an open, expansive and colonising system that could bleed into a global context, and as Lefebvre would claim, dominate and propagate capitalism.

Summary – the constituents of function as forming in architecture

Over the course of the early twentieth-century various methods of applying the values of function revealed a range of strategies and constituents contributing toward the forming of architecture. This expands the criteria and parameters of function as forming, as was commenced by Aristotle in the early part of the chapter that also includes function’s values. In these examples discussed, from Greenough to Le Corbusier, function established the principles to guide decision making – the “deliberations” as Aristotle would phrase it – within the production of architectural form. The adaptation of biological or mechanical analogies in functionalism showed how a whole, could be divided into multiple parts, where the purpose and functions of parts through objective organisation could determine the form of architecture from the inside out. In this context, the constituents of space and time could be modelled through function. Moreover, nominating and addressing the buildings required activities and uses, would articulate the body as a series of spatial and durational actions

¹⁷⁴ Henri Lefebvre, *The Production of Space*, trans. Donald Nicholson-Smith (Oxford, OX, UK, Cambridge, Mass., USA Blackwell, 1991), 124-25.

¹⁷⁵ Ibid.

¹⁷⁶ ibid.

and movement. This establishes an additional constituent that function could model toward the teleological objective of what is necessary for architecture to contribute to life. In addition, the consideration of function as rational construction, activated materials and structure to deliver functional imperatives. Furthermore, the internal physics and forces within materials and structure were understood to deliver not only the external teleological objectives of a building, but equally materials were fulfilled their inherent internal physical functional properties.

The aspiration to reorient of the making and construction phase of architecture, from the craftsperson into the industrial assembly line in early architectural modernism reconceived the two phases of production as conceived by Aristotle. Where Aristotle maintained that the thinking process of production was aligned with art and rational decision making, this methodology became transferred into the assembly line of industrial production. This would usurp with the traditional making process with matter, conceived by Aristotle as unreasoned now subject to the rationalising imperative of forming of function itself. Like architecture the constituents of function: space, time the incremental actions of the body, matter, were modelled through the values of function to produce the form of the assembly line and factory and as Lefebvre would note the global space of production and capitalism.

Conclusion: the two functions of function – towards – >function as forming

To return to the initial question that this first chapter asked: What is the foundation for and characteristics of the use-ready and forming of function? And secondly: In what ways does the emerging modernist architectural discourse establish parameters and criteria to consolidate the concept of function as forming?

Drawing on Aristotle’s concept of function, this chapter has commenced scoping the parameters of the two functions of function – the use-ready and forming – what something is *for* versus how something comes to be. In the context of the use-ready, Aristotle identified function as an ontological attribute of things, animals or objects, that establishes the essence of their being. For Aristotle, the function of an object, thing or part is always

towards a teleological end-goal for necessity and for the sake of life. Furthermore, Aristotle identified the relationship between function and virtue, where goodness and excellence was a teleological end-goal of function.

Aristotle also commenced a ground work for the consideration of the role of function as forming which this chapter has expanded with the example of early modernist architectural discourse. For Aristotle, function operated as the first act in the production of objects and things produced by people. In addition, he outlined how function would establish the primary imperative for the constituents that bring things into being – the form, the rational decision making and finally its matter. The examples of architectural discourse extended Aristotle’s relationship of virtues associated with function. Aristotle’s values: “for the sake of” necessity (utilitarian needs), and for life, for goodness and excellence are expanded to include: sobriety, efficiency, necessity, rejection of wastefulness and excess, economy, health of the individual and the nation, honesty and truth. These values can be seen as criteria and attributes of function. As also discussed above, the various conceptions and methodologies of applying functions virtues to the forming of architecture revealed a range of constituents that function would model in the forming of architecture, that was also seen to inform the assembly lines. This would include the various making and thinking phases of an object or thing, the physics and matter of materials and structures, the actions of people and activities distributed in time and space, framed within teleological objectives.

Speculating on function as forming in art

Having established the criteria, attributes and constituents of function within the function as forming category, the question then turns to art. Can these attributes and constituents within function as forming be witnessed in the forming of the art work or art object, despite art being commonly considered outside of function’s parameters? It is this thesis’ contention that it can. If one considers the production of art within the model of function as forming, with its numerous criteria of values and constituents, that are equally recognisable in art, multiple potentials emerge. Further, artist and theorist Barbara Bolt has identified the Aristotelian doctrine of the four causes as having framed the instrumentalist understanding

of the making of art.¹⁷⁷ Moreover, the pervasiveness of function along with its values of economy and efficiency, its systems of production, it would almost be impossible for art and artists to operate outside of function's imperative in the forming objects and things. The art historian Thierry de Duve notes that context can influence the artwork: "the artist may be permeated by a context and may draw from it some consequences that will manifest in the artwork itself."¹⁷⁸ As this can be the situation, I will also show that the role of the forming of function has also been specifically intentional within art. This was the case with the case study artworks of Russian Constructivists Alexandr Rodchenko and Karl Ioganson, and Polish Unist Katarzyna Kobro, which will be discussed in chapter four. Having proposed that function can exist within the forming of the artwork, this then establishes the potential for abfunction may move away from this function in the production of the artwork. This will be the focus of Part III.

The next task is to expand the groundwork for the use-ready position of function. The following chapter will ask: in what ways can architectural discourse and those involved in function theory contribute to function at the use-ready position of the object, building on the foundation already established in this chapter by Aristotle? Further, in what ways have these framings of the use-ready been associated with art, and further, what potential do they offer abfunction.

¹⁷⁷ Barbara Bolt, "Contingency and the Emergence of Art," in *Art Beyond Representation : The Performative Power of the Image* (London ; New York: I.B. Tauris, 2004), 73.

¹⁷⁸ Thierry de Duve, "Resonances," in *Pictorial Nominalism : On Marcel Duchamp's Passage from Painting to the Readymade* (Minneapolis: University of Minnesota Press, 1991), 97.

Chapter two: Establishing a framework at the use-ready position of function

Introduction

In chapter one, early twentieth-century architectural discourse was addressed in order to develop parameters for the definition of function as forming. It was established that function exists within the various making and thinking phases of an object or thing. This could include the physics and matter of materials and structures, as well as the actions of people and activities distributed in time and space, framed within teleological objectives. In this context, function brought with it a range of values – efficiency, economy, objectivity, rationality, honesty, necessity and sobriety. These values could be considered virtues and criteria essential to the application of function. Moreover, chapter two seeds the concept that function could be considered within the making of the artwork. From this perspective there are many criteria and attributes of function that could enable abfunction to move away from in the forming of the artwork, including function's main criteria – its teleological end-point.

This focus of this chapter is the use-ready type of function, which is the most commonly understood definition of function. As established in chapter one, the use-ready function is an attribute of an object or thing, driven by teleological end-goals for necessity and as Aristotle would say: for life. It can also be identified as what something is meant to *do* or what people *do* with objects or things. This chapter elaborates on various arguments relating to function at the use-ready end of the object, including those contained in architectural discourse as well as in a very different field, described loosely here as "function theory." This second field incorporates various disciplines, including material culture, design anthropology, engineering of technical artefacts, the philosophy of science and biology. This chapter focuses on building the context of the use-ready in preparation for addressing the case study artworks in relation to abfunction in Part III.

This chapter asks: in what ways has function at this use-ready position of the object been conceptualised by the disciplines of architecture and those associated with function theory? I make the case that in addition to the use-ready, the inverse conditions of function –

dysfunction or malfunction – and variations such as idiosyncratic functions, expand the field of the use-ready, which can also be seen to operate within a broader system of forming. A secondary question is: In what ways have these framings of the use-ready been associated with art, and what potential do they offer abfunction? Drawing on German art historian Peter Bürger, in particular his *The Theory of the Avant-garde* (1974), and Immanuel Kant's aesthetic theory, I will show that in art, the use-ready has predominantly been framed within the terms of functionlessness. Moreover, when art addresses function it has frequently been framed in terms of its inverse, as malfunctional or dysfunctional. However, alternatives such as Baudrillard's little-known term "para-function" and idiosyncratic variations can also be seen to operate within a broader context of forming the artwork. I will argue that it is in the context of the use-ready within a broader system of forming that we can find significant potential for abfunction, which can then be considered within the case studies produced for the project.

The house-tool architecturally use-ready

To return briefly to Behne and Le Corbusier's conception of the house as a tool, which offers an example of the use-ready principle:¹⁷⁹ In this context, the house was envisaged as an artefact to be employed by its user (the occupants) for living, in fulfilment of its teleological aspiration or goal of "house-ness". As Le Corbusier predicted, like the motor car, the house would become a tool.¹⁸⁰ In the use-ready category, the function of house-ness aims to deliver the teleological aspirations of what a house must ontologically perform for it to be a house—to provide the necessity of shelter as well as the possibility of dwelling for the sake of life. This brings an inheritance from Aristotle¹⁸¹ and further, the house-tool or house-machine also carries the expectation of the values implicit with function in the process of production – the fulfilment of purpose (life), necessity, efficiency (economy), rationality and directness (truth and honesty).

¹⁷⁹ See p. 18.

¹⁸⁰ Le Corbusier, *Towards a New Architecture* (Burlington: Elsevier Science, 2014), 237.

¹⁸¹ See p. 20.

Extending architectural function as “use”

While the concept of function as an attribute of an object – what it does – is ubiquitous to a definition of function today, Adrian Forty notes that the idea that function fulfils a “need” only became commonplace in twentieth-century architectural discourse.¹⁸² This notion of function originated in the mid-nineteenth century in French and English, to reference the use or activity of a specific building or part of a building.¹⁸³ This concurs with Larry Ligo’s finding that the term “physical function” can be found only rarely before 1950 but becomes more prevalent after 1960.¹⁸⁴ Physical function denoted the fulfilment of the most elementary of human needs, including shelter and provision for nominated activities.¹⁸⁵ As Ligo viewed it, this definition of function as the physical function of the building demonstrated a concern for the wellbeing of the building’s users.¹⁸⁶ The building could be critiqued on the basis of whether it performed its use satisfactorily or otherwise. Along with this shift in the terminology of function was the expectation that a building must work and perform. As Mumford wrote in 1975: “Every building performs work, if it is only to keep off the rain or to remain upright against the wind.”¹⁸⁷ Implicit in this concept of function as use-ready is the Aristotelian principle that for a thing, such as an eye, to be an eye, it must be able to see.¹⁸⁸ And so a house or building must also enact its ontological function of being necessary for the life of its occupants in order to fulfil its purpose.

Baudrillard and the revolution of the object

As the discourse of architecture extended the concept of function to mean the building performing its physical uses, Baudrillard commenced his attack on the social conditions that, in his view, reduced objects to pure signifiers of their function. Baudrillard argues that establishing meaning through an object’s reductive identification with its function is a

¹⁸² Adrian Forty, “Function,” in *Words and Buildings: A Vocabulary of Modern Architecture* (London: Thames & Hudson, 2000), 180.

¹⁸³ *Ibid.*, 179.

¹⁸⁴ *Ibid.*, 43-44.

¹⁸⁵ *Ibid.*, 37-38.

¹⁸⁶ *Ibid.*, 37.

¹⁸⁷ Lewis Mumford, “Function and Expression in Architecture,” in *Architecture as a Home for Man: Essays for Architectural Record* ed. Jeanne M. Davern (New York: Architectural Record Books, 1975), 154.

¹⁸⁸ Aristotle, *Metereology*, Aristotle: The Complete Works Volume 1, ed. E. W. Webster and Jonathan Barnes, (Princeton, New Jersey, USA; Princeton University Press, 1992). 4.12.389b25-90b2.

condition that developed only after the pervasive influence of functionalism as introduced by the Bauhaus. Baudrillard's claim concurs with Ligo's argument that the concept of use defining function in architecture commences in the mid-twentieth century. Framed by the context of the crisis of functionalism and its critique, Baudrillard scopes a diagnosis for the bonded relationship of function to the object in his 1987 essay, "Design and Environment of How Political Economy Escalates into Cyberblitz."¹⁸⁹ In this essay, Baudrillard attacks function's reduction of the object to pure utility, seeing this as a consequence of the pervasive instrumentalisation and totalising effect of functionalism within capitalism. He points the finger squarely at the Bauhaus,¹⁹⁰ sharing with Henri Lefebvre a concern for the global rationalisation and pervasiveness of functionalism.¹⁹¹ As Baudrillard argues, the Bauhaus launched a "revolution of the object," that was commenced by the industrial revolution.¹⁹² According to Baudrillard, before the Bauhaus things or objects (he uses the word "object" "for want of a better word") were not separate and isolated from other things in the world. For example, it was not possible to establish where a building or piece of clothing would begin or end.¹⁹³ Objects and things were connected and interwoven into traditional symbolic and ritual contexts.¹⁹⁴ In this pre-industrial revolution, Baudrillard identified that "the object is not a thing, nor even a category; it is a status of meaning and a form."¹⁹⁵ Baudrillard argues that in the object revolution propelled by the Bauhaus, objects become distinct and separate from other objects and that this is based purely on the rationality of their unique function. In this new status, objects become objective and rational and are liberated from their traditional, symbolic, magical or religious modes.¹⁹⁶ These objects, now divorced from the traditional interconnectedness status, become what Baudrillard calls pure "signs" of their function. As he says, the "object . . . takes on the force

¹⁸⁹ Jean Baudrillard, "Design and Environment or How Political Economy Escalates into Cyberblitz," in *For a Critique of the Political Economy of the Sign* (St. Louis, MO.: Telos Press, 1981).

¹⁹⁰ *ibid.*, 186.

¹⁹¹ See p. 57.

¹⁹² Baudrillard, "Design and Environment or How Political Economy Escalates into Cyberblitz," 185.

¹⁹³ *Ibid.* While there is not the scope here to elaborate, this draws some parallels with Heidegger's notion of things and objects. For Heidegger things exist in an interconnected network of other things, mostly hidden from us, whereas objects present themselves to us as distinct and separate from other things. See Martin Heidegger, "The Thing," in *Poetry, Language, Thought* (New York: Harper & Row, 1971). For discussion see p. 239.

¹⁹⁴ *Ibid.*, 185-87.

¹⁹⁵ *Ibid.*, 185.

¹⁹⁶ *Ibid.*, 185-87.

of a sign. And when we say that it becomes a sign, it is according to the strictest definition; it is articulated into a 'signifier' and a 'signified,' it becomes the signifier of a rational, objectifiable 'signified' that is its function."¹⁹⁷

Ferdinand de Saussure and the system of signs

In this theory of the sign, Baudrillard drew on linguistics that has its inheritance in the work of Swiss linguist, Ferdinand de Saussure. Saussure's *Course in General Linguistics* (1916),¹⁹⁸ published posthumously, proposed that language was adjunct but also central to an understanding of the world in which we live. Saussure's influential ideas on the construction of language established the foundations of structuralism and post-structuralism, which was a significant influence on twentieth-century art.¹⁹⁹ As literary theorist Terry Eagleton explains, Saussure proposed that language was a formal system of signs, where the sign is comprised of the signified (the content or meaning) and the signifier (the form that the sign comes in).²⁰⁰ For example, as Eagleton continues, the black marks on a page that spell c-a-t together with the sound "cat" is the signifier of the signified, which is the meaning of cat in the mind of an individual. The actual four-legged furry animal that is the cat roaming around in the world is what Saussure calls the referent. A significant attribute of Saussure's theory is that the relationship between the signified and signifier is arbitrary, as is the relationship of the sign to the real thing in the world (its referent). There is no real reason why the three marks on a page "c-a-t," along with the sound that comes out of the English speaker's mouth, should necessarily refer to the concept in the reader or speaker's mind of a "cat" or the furry, four-legged meowing animal in one's backyard, except that it is a cultural and a

¹⁹⁷ Ibid., 187.

¹⁹⁸ Ferdinand de Saussure and Roy Harris, *Course in General Linguistics*, Bloomsbury Revelations (London: Bloomsbury Publishing, 2013).

¹⁹⁹ The philosophy of linguistics, such as developed by Saussure and others such as Charles Sander Peirce or John Langshaw Austin has had considerable influence in art, such as in cubism, conceptual art, photography, to those who more broadly within artists working in the sculptural expanded field. By contrast, many associated with the recent developments in the "material turn" have critiqued this emphasis on linguistic and social structures as a method of constructing the world and its resultant effect of the "'dematerialisation' of the world." Serenella Iovino and Serpil Oppermann, "Material Ecocriticism: Materiality, Agency, and Models of Narrativity," *Ecozon@: European Journal of Literature, Culture and Environment* 3, no. 1 (2012): 76.

²⁰⁰ Terry Eagleton, "Structuralism and Semiotics," in *Literary Theory: An Introduction* (Malden, Mass.: Blackwell Pub., 2008), 84.

historical convention. Saussure proposal is considered to be a complete system of signs.²⁰¹ What distinguishes meaning in this system is not the sign in itself, but rather the difference between one sign and the next; for example, the difference between a cat and a dog and a tree.

Baudrillard's diagnosis – the object signifying functions

Since the Bauhaus, in Baudrillard's formulation, the object's meaning – what it signifies – is its function. It is homologous with utility.²⁰² The material form of the object, the signifier, like the word and sound "cat," signifies only its function – its use and purpose. The object is now distinct and classifiably different from other objects by its use and purpose. This is in contrast to the traditional symbolic object, the meaning of which is not purely associated with the object's utility, but also with all the other meanings associated with the relational, symbolic, ritual, subjective and historical attributes of that object. However, as Baudrillard notes, the irony of this new revolutionised object that transparently signifies function as its exclusive meaning is: "this rationality, which is of necessity blind to its own arbitrariness."²⁰³ In the force of the sign the object convinces us of its unique and bound relationship to its function as its meaning. For example, the meaning of the house is its function and utility as a house. Yet, as Baudrillard implies, this conviction of functionalism denies one of the main principles of the relationship between the sign and the referent and the sign and the signifier: its arbitrariness. In Baudrillard's critique, the ideological imperative of capitalism, as exemplified by the Bauhaus, drives this transparent relationship of the object to its function.

Function theory's proper function of things and objects – Ruth Millikan and Beth Preston

Recent work associated with "function theory" is in contradistinction to Baudrillard's argument of the arbitrary relationship of the object to its function as based on the principle of the sign. These theories recall the Aristotelian concept where a thing or object must

²⁰¹ Eagleton, "Structuralism and Semiotics," 84.

²⁰² Baudrillard, "Design and Environment or How Political Economy Escalates into Cyberblitz," 191.

²⁰³ Ibid., 192.

perform its purpose as use in order to fulfil its ontological attribute of an object. Since the late 1960s, philosophers such as Beth Preston, Ruth Millikan, Larry Wright and Robert Cummins,²⁰⁴ working in a range of fields including material culture, language, biology and science, have been aiming to build a “function theory” through analysis of function itself. They identify function as essential to understanding and conceiving of objects and things, both natural and culturally produced. As Preston claims: “function is one of the salient aspects of items of material culture. It would be hard to understand why we would even have material culture unless it were functional in the sense of doing something for us.”²⁰⁵ Yet, proponents of function theory commonly perceive the concept of function to be unstable and mutable,²⁰⁶ which in the view of philosophers Glenn Parson and Allen Carlson is attributable to the indeterminacy of human intention.²⁰⁷ However, for many in the field, function is identified as a property or attribute of object and thing,²⁰⁸ where the teleological expectation is that a thing will “perform its actions” in order for us to “use” or for it to fulfil an end-goal, want or need “for us.”

A central concept emerging from Millikan’s research, “proper function” can be identified with the use-ready. In the 1980s, Millikan proposed that things can be identified by their proper function. She defines proper function as: “a matter of having been ‘designed to’ or of being ‘supposed to’ (impersonal) perform a certain function.”²⁰⁹ This locates the proper function within intentionality, whether it be “willful” intention, belief, or hoping.²¹⁰ She

²⁰⁴ See for example Pieter E. Vermaas and Wybo Houkes, "Ascribing Functions to Technical Artefacts: A Challenge to Etiological Accounts of Functions," *The British Journal for the Philosophy of Science* 54, no. 2 (6/1/2003).

²⁰⁵ Beth Preston, *A Philosophy of Material Culture: Action, Function, and Mind*, Routledge Studies in Contemporary Philosophy (Hoboken: Taylor and Francis, 2013), 134.

²⁰⁶ Nathan Crilly, "The Roles That Artefacts Play: Technical, Social and Aesthetic Functions," *Design Studies* 31 (2010): 313.

²⁰⁷ Glenn Parsons and Allen Carlson, "Indeterminacy and the Concept of Function," in *Functional Beauty* (Oxford: Oxford University Press, 2008), 40.

²⁰⁸ Clive Lawson, "An Ontology of Technology: Artefacts, Relations and Functions," *Techne: Research in Philosophy & Technology* 12, no. 1 (2008): 56.; Preston, *A Philosophy of Material Culture: Action, Function, and Mind*, 134.

²⁰⁹ Ruth Garrett Millikan, "Direct Proper Functions," in *Language, Thought, and Other Biological Categories: New Foundations for Realism* (Cambridge, Massachusetts: The MIT Press, 1984), 17. Preston’s grounding of the term proper function, as she makes clear, is pragmatic and for ordinary purpose, rather than the broader metaphysical or conceptual framings of function. *Ibid.*, 18.

²¹⁰ *Ibid.*, 17. The concept of intentionality is a broad field of inquiry within function theory and is beyond the scope of this project. For a discussion see: Parsons and Carlson, "Indeterminacy and the Concept of Function."

frequently cites the example of a heart to demonstrate her point. The proper function of a heart is not to make noise even though the beating heart creates this effect as blood is circulated around the body. Its proper function is to circulate blood, even if the heart has never had the capacity to do so because it was damaged or malformed in some way.²¹¹ Moreover, as Millikan notes, there are many new technical inventions that can also perform this function, for example a water pump, but it is not actually a heart.²¹² As Preston notes, Millikan's concept can explain how the proper function of an object or thing can still be identified irrespective of whether it can or cannot perform this duty.²¹³ This concept of a thing or object's ability to succeed or to fail in performing its expected functional duty, brings us to the argument's next key point. That it is through malfunction or dysfunction, as Millikan and Preston identify, that what something is really meant to do becomes clear. Malfunction or dysfunction facilitates the definition of a thing's proper function.

Malfunction establishing normativity and proper function

One of the values of malfunction is that it can establish what a proper function might be and consequently the normative expectations of that object. In the first instance, as Preston explains Millikan's theory, malfunction reveals immediately what something is supposed to do and hence reinforces its proper function.²¹⁴ In addition, as Millikan notes, a malfunctioning thing identifies what is common to the thing, which serves to establish its proper function.²¹⁵ To return to the example of the heart. Preston argues that even if a heart came into the world that was not capable of circulating blood, its proper function would still be to circulate blood, because all other previous hearts had circulated blood in order to continue to exist.²¹⁶ The ancestral forms that came before establish what is common. In biological examples, such as the heart, this would be the genetic forebears. In artefacts, such as a shovel, Carlson and Parsons argue it is the cultural reproduction of the form of a thing that come before it, determined by the demand and distribution of the

²¹¹ Preston, *A Philosophy of Material Culture: Action, Function, and Mind*, 142.; Millikan, "Direct Proper Functions," 17.

²¹² "Direct Proper Functions," 17.

²¹³ Preston, *A Philosophy of Material Culture: Action, Function, and Mind*, 143.

²¹⁴ *Ibid.*; Millikan, "Direct Proper Functions," 17.

²¹⁵ "Direct Proper Functions," 17.

²¹⁶ Preston, *A Philosophy of Material Culture: Action, Function, and Mind*, 142.

market place, which continues to reinforce proper function.²¹⁷ In Preston's determination, these common functions are normative conditions despite statistical outcomes: she refers to Millikan's example of sperm, where very few achieve their proper function.²¹⁸

While malfunction might identify proper function and normative expectations of things and objects, Preston notes it is not function itself that malfunctions. Malfunction can occur from a range of possibilities. On a structural level, there may be a defect in the form of the object, possibly because of over-use, fatigue or mis-use.²¹⁹ This shifts malfunction from not only implicit within the object or thing—what something does—however, to what should be done with that thing or object. To elaborate once again on the spoon: The expectation of the proper function of a spoon is to transfer food, particularly fluids, such as soup or a soft dessert, to the mouth. The spoon's proper function is also based on the history of the spoon and its form. This establishes the conventional and normative set of actions and behaviours associated with the spoon and the expectations we have of its performance. Preston also uses the example of the spoon to demonstrate on what basis the structure of the spoon malfunctions. It may be the crooked handle of the spoon that facilitates the spoon's malfunctioning, or a manufacturing defect that produces a hole in the spoon,²²⁰ or the spoon could be so old that the edges are deformed and the hot soup inevitably dribbles out the side of the spoon down the cheek and onto the front of one's new frock or tie. Alternatively, it could be mis-use – wanton, accidental or plain idiosyncratic – that misaligns the spoon's contents and results in a mess.

Architecture, dysfunction and idiosyncratic use

Returning once again to architecture: Once it was acknowledged that a building must perform its use to satisfy the "user's" needs, it was understood that it was therefore possible for buildings to "not work," fail or malfunction. Ligo argues that the accusation of a building's failure to "function" was rarely levelled at modernist architecture before the

²¹⁷ Parsons and Carlson, "Indeterminacy and the Concept of Function," 77.

²¹⁸ Preston, *A Philosophy of Material Culture: Action, Function, and Mind*, 143.; Millikan, "Direct Proper Functions," 29.

²¹⁹ Preston, *A Philosophy of Material Culture: Action, Function, and Mind*, 138.

²²⁰ Ibid.

1960s. Until then, concepts of function were primarily oriented toward the visual expression or form of the building, including structure and material.²²¹ This locates the shift in the consideration of function as forming to include function as use-ready in architectural discourse. With the understanding that function concerned practical use, the question of the architecture's ability to perform these adequately brought negative criticism. Until this time, any criticisms of the great works of modernist architecture had been mostly overlooked.²²² Identification of the failures of architectural modernism rose to a ground swell, fueling postmodernist architectural critique (such as Baudrillard above). In many instances this criticism was squarely directed at functionalism, which was accused of being reductive and limited in its methodology of forming architecture. In a review on modernism as postmodernism was consolidating, the German architectural historian Heinrich Klotz described modernist functionalist examples of buildings as: "The obtrusive, meaningless uniformity that marks the functionalist boxes and crates defacing mile upon mile of our environment."²²³ Moreover, malfunction or failure could also occur on the domestic scale, where for example, leaky roofs were the bane of clients' lives in modernist icons.²²⁴ Modernism and functionalist approaches to forming architecture were frequently held accountable for both the symbolic poverty of architecture²²⁵ and its failure to perform its functional use-ready status.²²⁶

These failures of modernist architecture to perform a use-ready function was not the only cause to question function as a viable method in forming an object. The architectural

²²¹ Ligo, *The Concept of Function in Twentieth-Century Architectural Criticism*, 44.

²²² *Ibid.*, 45.

²²³ Heinrich Klotz, *The History of Postmodern Architecture*, trans. Radka Donnell (Cambridge, Mass.: MIT Press, 1988), 8.

²²⁴ The leaky roof of Le Corbusier's Villa Savoye in Poissy, France (1931), now a national monument is renowned. See Tim Benton, *The Villas of Le Corbusier and Pierre Jeanneret: 1920-1930* (Basel: Birkhäuser, 2007), 194-95.

²²⁵ Reyner Banham, *Theory and Design in the First Machine Age* (London: Architectural Press, 1960), 320-21.; Klotz, *The History of Postmodern Architecture*, 8.

²²⁶ There is not the scope nor purpose here in this thesis to elaborate here on the significant and nuanced debates that questioned function and functionalism's premise—mostly framed as a "naive" and reductive; its alternatives; nor to address the reasons for the current revitalisation of function in architecture. See Bletter, "Introduction," 13.; Stephen Grabow and Kent F. Spreckelmeyer, *The Architecture of Use: Aesthetics and Function in Architectural Design* (New York, NY: Routledge, 2015), 3-5.; Adrian Forty, *Words and Buildings: A Vocabulary of Modern Architecture* (London: Thames & Hudson, 2000), 192-94. A very interesting revision of function and form, that could also be considered in terms of abfunction in architecture is John Hendrix, *The Contradiction between Form and Function in Architecture* (Abingdon, Oxon; New York, NY: Routledge, 2013).

historian Stanford Anderson also noted function's lack of ability to accommodate the concept of unexpected use. As he stated in his essay, the "Fiction of Function":

*No description of function, however thorough, will automatically translate into architectural form. The more thorough the description of function, the less likely that the description will hold true even for the duration of the design process. It would be difficult if not impossible to find an artifact, simple or complex, that has not functioned in unanticipated ways.*²²⁷

The unanticipated use, as identified by Anderson, reorientates the proper function of architecture. Now, the unexpected function, locates what is done to that thing or object and as a consequence the normative or non-normative intentions and behaviours of those who engage with objects or things.

Proper function, culturally standardised alternative uses and idiosyncratic, non-normative variations and system functions within a containing system

Accidental functions or idiosyncratic and unexpected functions of objects and things have also been identified by those developing a function theory. These offer an alternative consideration to proper function at the use-ready perspective of function. The philosopher Larry Wright gives an example of an accidental function where a belt buckle deflects a bullet in the Old West or in a battlefield that leads to the saving of a person's life.²²⁸ Here serendipity activates accidental function that no proper function could have ever anticipated.

Preston has also suggested alternatives to proper function such as the unexpected or idiosyncratic use of objects and things. She makes an important distinction between proper function and these alternative functions. Proper function is determined by its history of reproduction.²²⁹ By comparison, unexpected or idiosyncratic uses of objects and things can

²²⁷ Stanford Anderson, "The Fiction of Function," *Assemblage* 2 no. February (1987): 22.

²²⁸ Larry Wright, "Functions," *The Philosophical Review* Vol. 82, no. 2 (4/1/1973): 147.

²²⁹ Preston, *A Philosophy of Material Culture: Action, Function, and Mind*, 161.

be put to use in what is called a broader “containing system.” For example, propping open a house door with a brick is an alternative use of an object that has a proper function. In this scenario, the house is the containing system and the brick performs its alternative function or “system function.” The brick’s proper function is determined through its prior genealogy, while its system function involves performing a role in the larger containing system of the house. According to Preston’s definition, a system function enacts “a role in a containing system.”²³⁰ Preston identifies that proper functions can also exist within a containing system. She uses the example of the brakes in a car. In this situation, the car is the containing system in which the brakes perform their proper function. The brakes also have a system function, as they enact a role in the overall system.²³¹

This concept of a system function was developed by philosopher Larry Wright and elaborated by Robert Cummins. System function accounts for the causal relationships of things in relation to a whole system and the capability of its various parts. This recalls Cummins’ description of the Detroit assembly line²³² as well as his observations based on biology. As Cummins stated: “Function analysis in biology is essentially similar. The biological significant capacities of an entire organism are explained by analysing the organism into a number of “systems”—the circulatory system, the digestive system, the nervous system, etc.,— each of which has its characteristic capacities.”²³³ The containing system, like a biological system or the Detroit assembly line, has within it any number of things operating as a system function. The containing system is not necessarily reliant on the thing performing its proper function and will frequently co-opt things for system function purposes.²³⁴ As Preston notes, the conception of a system is very inclusive: “the notion of a system is extremely open-ended, comprising almost any orderly arrangement of interacting things. Thus, for the majority of performances something manifests, it is possible to describe a system in which it is a functioning component.”²³⁵ Following this logic, a brick, with its proper function to assist in building a wall is co-opted into another system, in this

²³⁰ Ibid.

²³¹ Ibid., 144.

²³² Robert Cummins, “Functional Analysis,” *The Journal of Philosophy* 72, no. 20 (11/20/1975): 760. See p. 56.

²³³ Ibid., 760-61.

²³⁴ Preston, *A Philosophy of Material Culture: Action, Function, and Mind*, 146.

²³⁵ Ibid., 141.

instance, to keep the door from slamming shut as the cocktail waiter moves through the entry balancing a tray of champagne glasses. As Preston explains, as each system function can potentially play different roles within a containing system, the use of a system function is non-normative.²³⁶ By comparison, proper function is normative because it is connected to its historical origins and conventions.²³⁷

Preston identifies two different types of system functions: the “standardised” and the “idiosyncratic”.²³⁸ Standardised system function forms are often broadly understood and accepted alternatives.²³⁹ For example, chocking a door open with a brick while moving into a house is a culturally understood and not uncommon occurrence. These standard alternatives, however, can never acquire the status of proper functions, even though they are culturally acceptable: a brick does not exist because it is required to hold open a door.²⁴⁰ Rather, the form, material and structure of the brick is required in order to fulfil its proper function of contributing to the building of a wall.

The idiosyncratic, non-normative system function is commonly associated with creativity and innovation in small groups of people, such as families.²⁴¹ For example, the often cited and unexpected application of a frying pan for the purpose of a satellite dish is an example of an idiosyncratic system function use. Unlike its culturally standardised use, the frypan as a satellite does not comply with any standard alternative that could be anticipated and hence it could not be considered culturally standard. Such idiosyncratic uses operate outside expectations and cultural standards and consequently reveal the autonomous action of the user in relation to objects and things. This highlights the autonomy of the user’s actions in relation to the normative expectations of function. According to Preston:

Thus, proper function in material culture – as might be expected from its Normative nature – operates on the side of social constraint. On the other hand, system function

²³⁶ Ibid., 143.

²³⁷ Ibid., 143, 150.

²³⁸ Ibid., 146.

²³⁹ Ibid., 146-47.

²⁴⁰ Ibid., 147.

²⁴¹ Ibid., 147, 214-15.

*in material culture is mostly a matter of non-standard use of proper-functional items. So it operates on the side of individual autonomy with regard to social constraints.*²⁴²

Standardised culturally accepted use of objects such as the brick for propping the door open, whilst not proper function, is non-normative, and provides a broader ambit of possibilities than the prescribed notion of proper function.²⁴³ In contrast, idiosyncratic use allows for greater latitude in relation to social conventions of the expectations of use and reciprocally, the expectations of how someone may choose to act with and use an object, thing or space. The possibility that some actions with objects will be culturally endorsed while others will not,²⁴⁴ bring us to what Preston terms “non-proper” use. For Preston, non-proper use is expressed as a complex scenario involving violation of the socially sanctioned use of objects and things.²⁴⁵ On the one hand this presents the potential for a *faux pas* where social mores are confronted,²⁴⁶ or causing more serious social injunctions such as political and social resistance. Preston gives the example of John Irwin’s study of prisoners “making do” by improvising tattoo needles from electrical motors sourced from toys, needles and ink made from soot or ground-up lead pencils.²⁴⁷ Non-normative, non-proper, idiosyncratic use offers a further degree of creativity, play, making-do and improvisation.²⁴⁸

As identified in chapter one, the use-ready category and the forming category are not necessarily mutually exclusive types of function. In the context of containing system, the use-ready object, thing or part can be activated with its proper function or idiosyncratically (as a system function). Here, the use-ready object or thing is enveloped within a system of forming, where this system can be subject to the forming of function. Aristotle also made this observation: “By attributes and functions I mean the movements of these and of all other things in which they have power in themselves to cause movement, and also their

²⁴² Ibid., 211.

²⁴³ Ibid.

²⁴⁴ Ibid., 214-17.

²⁴⁵ Ibid., 213.

²⁴⁶ Ibid., 151.

²⁴⁷ Ibid., 214-17.; John Irwin, *The Jail: Managing the Underclass in American Society* (Berkeley: University of California Press, 2013), 89.

²⁴⁸ Preston, *A Philosophy of Material Culture: Action, Function, and Mind*, 214-15.

alterations and reciprocal transformations.”²⁴⁹ According to Aristotle, things discharging their function could have a transformative effect on other things and objects. In the context of the use-ready, coopting a thing (that has its proper function) for an idiosyncratic use shows that every act of doing something with a thing can be conceived of belonging to and interacting within a containing system that leads to the forming of something larger.

Summary – an expanded use-ready framework

This section has explored function at the use-ready position, including disparate discourses of architecture and more recent development of function theory by philosophers of material culture and science. Implicit in these discourses is that function is an attribute of an object or thing. By contrast, Baudrillard understood that the object transparently signifies its function was a consequence of the historical and ideological conditions that propagated functionalism. In both architecture and the separate discursive field of those working towards a function theory, there is the premise that an object should “work” to fulfil what is required of it. Millikan identifies proper function as a characteristic that highlights what an object or thing should do. Attached to the concept of proper function are normative conventions, both within the object and then what is done to the object or thing. Moreover, with the expectation that something should fulfil its function is that the inverse can and will occur, causing objects or things fail, malfunction or dysfunction. This serves to reinforce what a thing or object is meant to do, further defining what a thing’s proper function should be.

This investigation into the use-ready has also identified alternatives to proper function. It can be seen that non-normative, standardised and idiosyncratic variations (called system functions) of the use of an object or thing occur in a broader containing system. This framing of the occurrence of non-normative behaviours in a containing system leads to the possibility of conceiving the use-ready within a broader context of function as forming. These alternatives to proper function provide a productive field of function that abfunction

²⁴⁹ Aristotle, *On the Heavens*, Aristotle: The Complete Works. Volume 1, ed. J. L. Stocks and Jonathan Barnes, (Princeton, New Jersey, USA: Princeton University Press, 1992). 3.1.298a23-98b10.

may depart from. However, before discussing abfunction from a use-ready perspective, I will explore the relationship in art between the use-ready and its inverse of malfunction and dysfunction. This will frame the discussion of abfunction in relation to function and art and provide the context for a fuller analysis of function and art in Part II.

Art's use-readiness – Peter Bürger, Immanuel Kant and the functionlessness of art

It is commonly understood, as the German sociologist Niklas Luhmann notes, that art does not “arise as mere relics of purposeful behaviour like tools, [or] houses.”²⁵⁰ As many have claimed, if art engages in a use-ready function it risks draining away and dissolving into life. In fact, the German philosopher Theodor Adorno has identified the purpose of art as being “functionless.”²⁵¹ In this next section I will show how historically, functionlessness had been regarded as the use-ready purpose of art. Moreover, when art is considered in terms of function it has often been within the inverse terms of function – that of malfunction or dysfunction. This will commence framing how abfunction might be considered to move away from function within the artwork – given this is a rather sticky impasse if art is functionless at the use-ready point of the artwork.

The rise of the bourgeois autonomous art object

In his *Theory of the Avant-Garde*, Bürger explains how the separation of the art object from everyday life arose from specific historical conditions. For his account he draws on the work of philosopher Jürgen Habermas, who noted that the rise of bourgeois power during the enlightenment enabled art and culture to become detached from economics, political constraints and ritual use.²⁵² This detachment of art from life enabled two separate spheres: the realm of “everyday practice of life,” and then the sphere of “art,” with its associated aesthetic experience.²⁵³ In this bourgeois paradigm, art belongs to a “socially sanctioned

²⁵⁰ Niklas Luhmann, “The Medium of Art,” *Thesis Eleven*, no. 18/19 (1987): 101.

²⁵¹ Peter Bürger, *Theory of the Avant-Garde*, Theory and History of Literature: V.4 (Manchester: Manchester University Press, 1984), 10. The concept that art is “functionless” or purpose free (*zweckfreie*) is discussed by Adorno where he refers to Kant’s philosophical formula of art as: “purposiveness without a purpose,” (*Zweckmäßigkeit ohne Zweck*). Theodor W. Adorno, “Functionalism Today,” *Oppositions*, no. 17 (1979): 31.

²⁵² Bürger, *Theory of the Avant-Garde*, 24.

²⁵³ The aesthetic experience referred to by Bürger draws on the legacy of Enlightenment philosopher, Immanuel Kant. *Ibid.*, 42. See below.

‘special’ sphere,” which is distinct, separate and immune from the means-ends rationality – hence “function” – required of the practice of everyday life.²⁵⁴ This special status was a catalyst for the framing of art as “autonomous.”²⁵⁵ Here art is autonomous and exempt from having to conform to the everyday social demands of use,²⁵⁶ and, according to this project’s terminology, from a use-ready function. Moreover, Bürger argues that this attribute of autonomy sanctifies art’s distance from everyday life and facilitates a level of freedom to critique everyday life.²⁵⁷

Immanuel Kant and the excising of function in art

The immunity of the autonomous art object from function is not confined to art’s use-ready status. Function was also exiled from the aesthetic experience of beauty and hence the art object. This is the legacy of the German Enlightenment philosopher Immanuel Kant’s philosophy of aesthetics, which Bürger links with the rise of the autonomous art object.²⁵⁸ The exclusion of function in Kant’s aesthetic apprehension of beauty is briefly outlined below.

In Kant’s *Critique of Judgment* (1790), he argues that the criteria for aesthetic apprehension of beauty is located only within the subjectivity of the perceiver. For Kant, beauty is not a characteristic embedded within the object (such as the art object or nature). Rather, this “feeling” of beauty within the subjectivity of the perceiver is generated by the presence of the object and is a sense perception only. It cannot be established by “concepts” or even “concepts of perfection,” which would include utility.²⁵⁹ For Kant, function is a “concept,” and he proposes that the perceiver cannot desire or have in mind an end-use or purpose for

²⁵⁴ Ibid., 10, 31.

²⁵⁵ As Bürger says: “Autonomy here defines the functional mode of the social subsystem ‘art’: its (relative) independence in the face of demands that it be socially useful.” Ibid., 24. Bürger notes however this is not stable and can be called to question by the society (that is by society’s rulers—as can be the case in fascism). Ibid., 24-25.

²⁵⁶ Ibid., 24, 110n13.

²⁵⁷ Ibid., 10, 50.

²⁵⁸ Ibid., 42.

²⁵⁹ Immanuel Kant, *Critique of Judgement*, Oxford World's Classics. ed. Nicholas Walker, (Oxford: Oxford University Press, 2007). 57-58.; Glenn Parsons and Allen Carlson, *Functional Beauty* (Oxford: Oxford University Press, 2008), 21.

an object. This is the prerequisite for the aesthetic that Kant names as “disinterest.”²⁶⁰ As Kant explains: “*Taste* is the faculty of judging an object or a mode of representation by means of a delight or aversion *apart from any interest*. The object of such a delight is called *beautiful*.”²⁶¹ For the perceiver experiencing the sensation of “free beauty” the object must have no purpose, function or use value. Further, function is a concept because it is associated with ideas of value, whether good or otherwise. “Disinterest” establishes a non-conditional relationship between the perceiver and the art object.

Kant establishes a conundrum that summarises the experience and judging of beauty: “the beautiful. . . is judged on the ground of a mere formal purposiveness, i.e. a purposiveness without a purpose.”²⁶² As Kant explains, the purposiveness of an object can be external or internal. However, for Kant, external purposiveness defined by utility is discounted in the experience of beauty for reasons discussed above. Whereas internal purposiveness refers to the object’s internal perfection, and in Kant’s view, perfection comes closer to beauty.²⁶³ This is Kant’s philosophical formula of art that is: purposiveness without a purpose.

Art functioning as functionless

The separation of art and function has been consolidated by both Kantian aesthetics and the notion of the autonomous bourgeois art object. At this use-ready position of function, art is normatively identified by its functionlessness. Moreover, as Bürger argues, the autonomous sphere of art and its aesthetic experience must also continue to resist the end-needs of function demanded by the construction of social life.²⁶⁴ In this model, artistic activity equally belongs to a state of non-purposive creation and not to social life, where the task is to rationally order to create a definable end for the future.²⁶⁵

²⁶⁰ For a discussion on disinterest see *Functional Beauty*, 24-25.

²⁶¹ Kant, *Critique of Judgement*. 42. Kant’s italics.

²⁶² *Ibid.*, 57.

²⁶³ *Ibid.*, 57-58.

²⁶⁴ Bürger, *Theory of the Avant-Garde*, 10.

²⁶⁵ *Ibid.*, 42.

The imperative for art to hold on to the condition of functionlessness is one of the conditions that prevent it, as many say, from simply disappearing into life and draining away. Moreover, when art critiques function or takes on attributes or things from everyday life within its anatomy of the special separate sphere of art (as Bürger explains), it is often framed within the inverse of function – in the terms of dysfunction or malfunction. These criteria maintain art's dialogue with the conditions of the functionless. This is an area that deserves further research, and while it is not possible to give a full analysis in this thesis, I will briefly turn to the most notable and early example of art addressing concepts of function: Marcel Duchamp and his readymade.

Duchamp and the readymade

In 1913, Duchamp took a bicycle wheel, turned it upside down and screwed it to a kitchen stool. A year later, he went to the Bazar de l'Hôtel de Ville and bought a bottle rack. When he selected the bottle rack he chose it as an artist might when purchasing colour from a tube.²⁶⁶ These works would comprise the first two readymades,²⁶⁷ although the term readymade was coined by Duchamp two years later when he was living in New York.²⁶⁸ Allegedly, approximately fifty artworks from 1913 have been described as readymades, including variations such as the "aided," "assisted" and "reciprocal" readymades. It has been acknowledged that a definitive typology of the readymade is near impossible to establish.²⁶⁹ Despite this, Duchamp explained a readymade is an object already made and also not made by an artist.²⁷⁰ The readymade for Duchamp was selected and chosen from everyday life,

²⁶⁶ Unpublished radio interview with Georges Charbonnier, Radio-Television Francaise, January 1961 (translated by de Duve). Cited in Thierry de Duve, "Resonances," in *Pictorial Nominalism : On Marcel Duchamp's Passage from Painting to the Readymade* (Minneapolis: University of Minnesota Press, 1991), 141, 207n68.

²⁶⁷ Herbert Molderings, *Duchamp and the Aesthetics of Chance.: Art as Experiment*, Columbia Themes in Philosophy, Social Criticism, and the Arts (New York; Chichester Columbia University Press, 2010), 74.

²⁶⁸ Hal Foster et al., "Tatlin's Constructions and Duchamp's Readymades," in *Art since 1900: Modernism, Antimodernism, Postmodernism* (London: Thames & Hudson, 2004), 128.; Duve, "Resonances," 98.

²⁶⁹ Thierry de Duve and Rosalind Krauss, "Echoes of the Readymade: Critique of Pure Modernism," *October* 10/1/1994, 67. In a 1968 BBC interview Duchamp said there was only thirteen readymades in thirty years. Marcel Duchamp, "Late Night Line-up Marcel Duchamp 15/6/1968 The Late Show BBC Television Post Production Centre, Date, Year, accessed August 31, 2015, https://www.youtube.com/watch?v=Bwk7wFdC76Y&list=PL3nzfckSr_3xExIDAKbmn26s4V7-45wPZ.

²⁷⁰ Francis Roberts, "Propose to Strain the Laws of Physics," *ARTnews* Vol. 67 (December 1968): 47. As sourced in Duve, "Resonances," 170.

where the choice of the readymade is, as he elaborated: “always based on visual indifference and, at the same time, on the total absence of good or bad taste.”²⁷¹ Duchamp described the selection and choice of the object as a type of rendezvous with the object, which like a “snapshot” removed the object into the sphere of art.²⁷²

In numerous early readymades, such as the *Bicycle Wheel* (1913) (Fig. 26) and *Bottle Rack* (1914) (Fig. 29) and subsequent readymades including *Fountain* (1917) (Fig. 27) and *In Advance of the Broken Arm* (1915), (Fig. 28) a utilitarian commodity from an industrial production line has been chosen from everyday life. Produced on the assembly line the object is without the hand of the artisan steeped in skill and taste. The object is then relocated, isolated and decontextualised in the purposeless sphere of “pure” art, cauterising the object’s delivery of function. As the art historian Thierry de Duve comments: “Duchamp chooses an industrial product, displaces it, puts it to another purpose, whereby it loses all its utilitarian value, as well as all ergonomic adjustment of its form to its function.”²⁷³ De Duve specifically notes that Duchamp’s readymade invention operated as a reflection on the conditions of functionalism itself: “The readymade equally emphasised material, production processes, and utility . . . to the detriment of all aesthetic value and all use values, both now losing their point and purpose.”²⁷⁴ By enunciating the utilitarian commodity – the bicycle wheel, the shovel, the urinal, the bottle rack – as “pure” art, the functional object is relocated into the quarantined, “useless” space of art. It renders the object’s function

²⁷¹ Pierre Cabanne, *Dialogues with Marcel Duchamp* (London: Thames and Hudson, 1971), 48.

²⁷² As written by Duchamp:

“Specifications for ‘Readymades’.

by planning for a moment

to come (on such a day, such

a date such a minute) . . .

. . .

The important thing is then just

this matter of timing, this snapshot effect . . .”

Marcel Duchamp, *The Bride Stripped Bare by Her Bachelors, Even: A Typographic Version by Richard Hamilton of Marcel Duchamp's Green Box*, trans. George Heard Hamilton, *The Documents of Modern Art: 14* (New York: Jaap Rietman Inc., 1976), “Specifications for ‘Readymades’”.

²⁷³ de Duve, “Resonances,” 114.

²⁷⁴ Ibid., 109.

functionless (the bottle rack, the shovel), dysfunctional (the urinal) or malfunctioning (the bicycle wheel).

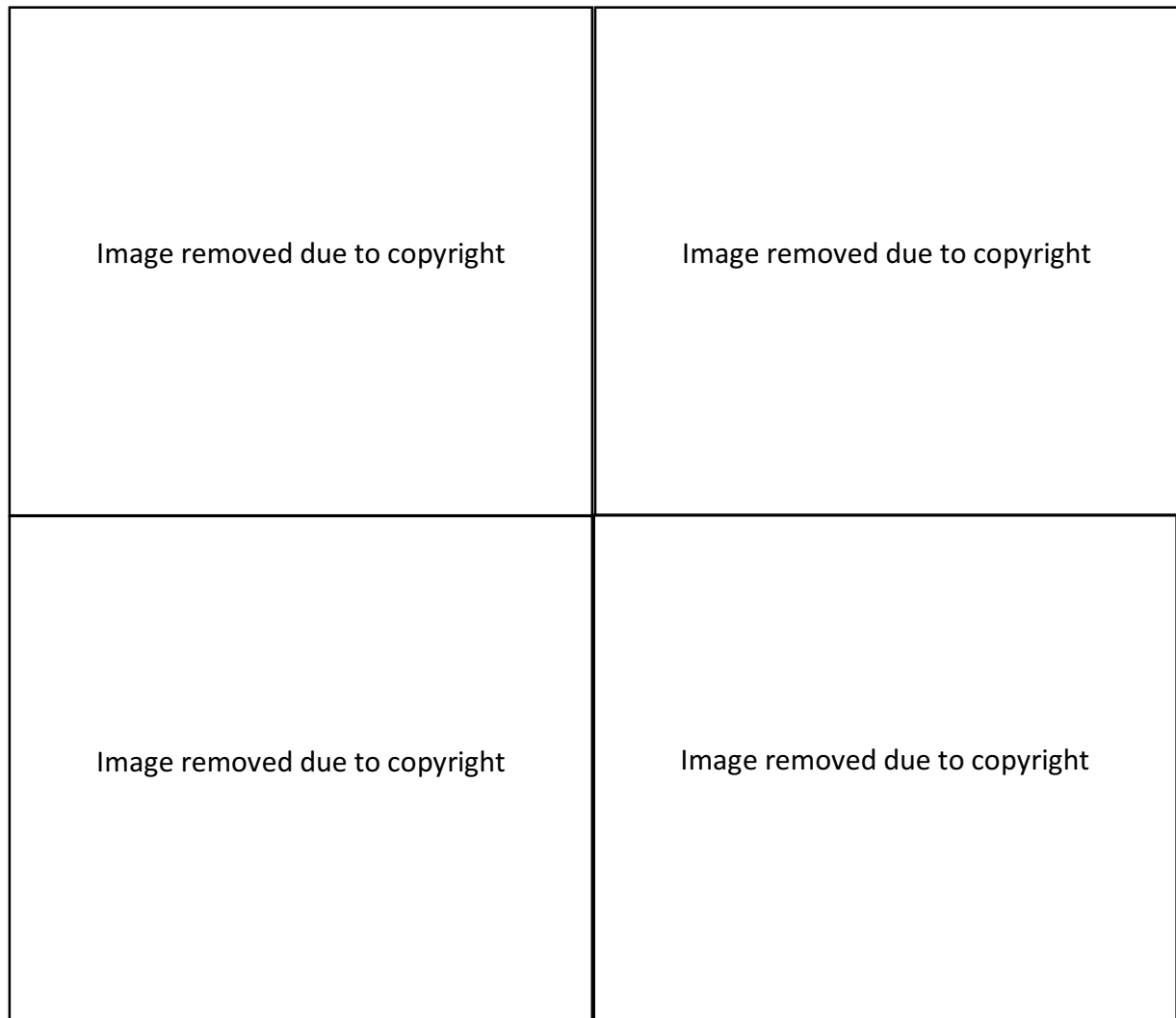


Fig. 26 Marcel Duchamp, *Bicycle Wheel*, (1951, third version, after lost original, 1913)

Accessed May 20, 2016. https://www.moma.org/m/tours/8/tour_stops/181?locale=en (top left)

Fig. 27 Marcel Duchamp, *Fountain* (1917)

Accessed May 10, 2016. [https://en.wikipedia.org/wiki/Fountain_\(Duchamp\)](https://en.wikipedia.org/wiki/Fountain_(Duchamp)) (top right)

Fig. 28 Marcel Duchamp, *In Advance of the Broken Arm*, (1964, fourth version, after lost original 1915)

Accessed May 10, 2016. https://www.moma.org/learn/moma_learning/themes/dada/marcel-duchamp-and-the-readymade (bottom left)

Fig. 29 Marcel Duchamp, *Bottle Rack*, (1914, reconstructed 1964)

Accessed May 10, 2016. <http://nga.gov.au/international/catalogue/Detail.cfm?IRN=44875> (bottom right)

The operation between the terms of function and the functionless is a strategy Duchamp continued to play out with what he called the reciprocal readymade. Here he switches between the sphere of art and the everyday world. In contrast to taking an object from the everyday into art, the reciprocal readymade proposes the inverse, where a work of art is offered to the everyday. In *The Box of 1914*, a collection of notes for the artwork *The Large Glass* (1915–23),²⁷⁵ Duchamp specifies this reciprocal readymade: “Reciprocal Readymade = Use a Rembrandt as an ironing board—.”²⁷⁶ In this case, Duchamp proposes a “Master” – a Rembrandt – to be transferred from the special sphere of art into the quotidian everyday world to take on the use-ready function of an ironing board. Yet, despite being a Master artwork, the object loses its traction and value. It could never function properly as an ironing board – as helpful as this intention may be – because it would malfunction and become dysfunctional. Its form and its material, thanks to the hand of the artist Rembrandt, does not follow its newly ascribed function. If the hot iron presses onto the deep brown hues, the colour would spread and its viability as a Master destroyed. In the action of the reciprocal readymade entering the everyday, the art object is rendered dysfunctional and of little value. Simultaneously, Duchamp’s proposal of a use-ready artwork, reveals that it is the sphere of art and its functionlessness outside of utility that maintains the value of the art object. And conversely, it could be said that art’s functionlessness comprises the very value and premise of art – a condition inherited from Kant and the Enlightenment.²⁷⁷

Duchamp’s works have often been framed in terms of dysfunction. For example, the American curator Helen Molesworth argues that the readymades as functional objects are “rendered deliberately dysfunctional.”²⁷⁸ Moreover, others acknowledge that Duchamp’s interest in chance and the possibilities of failure has resulted in dysfunctional machines of

²⁷⁵ *The Box of 1914* (1914), and following, *The Green Box* (1934), are both publications of the collection of notes and projects associated with *The Large Glass* (1915–1923) also known as the *The Bride Stripped Bare By Her Bachelors, Even*. See Arturo Schwarz, *Notes and Projects for the Large Glass* (London: Thames & Hudson, 1969), 1–12.

²⁷⁶ Michel Sanouillet, and Elmer Peterson, *Salt Seller: The Writings of Marcel Duchamp* (New York: Oxford University Press, 1973), 32.

²⁷⁷ Foster et al., “Tatlin’s Constructions and Duchamp’s Readymades,” 129.

²⁷⁸ Helen Molesworth, “Work Avoidance: The Everyday Life of Marcel Duchamp’s Readymades,” *Art Journal* 57, no. 4 (Winter, 1998): 52.

desire.²⁷⁹ The logic of dysfunction or malfunction plays out to reveal what something is meant to do. Millikan's term of proper function immediately comes to mind. That the object is stripped of its capacity to perform its use establishes a distance based on loss between its object form and its function. This recalls Baudrillard's diagnosis of the object signifying its function. The separation of the function and form within the readymade object acknowledges the arbitrary relationship between the signifying form of the object and its signified function. In the readymade's strange vacuum of functionlessness, it could be that any other function could take its place. However, with the forms we recognise, such as: the urinal, the bicycle wheel and the coat rack, there is a harkening that takes us back to what the object should really should do. We think of the shovel shovelling snow, the urinal and the bicycle wheel turned the correct way and at work, performing their use-ready functions. Because the functional object is brought into the space of art, the logic of malfunction continues to reiterate proper function. Here the proper function of art is its purposiveness without a purpose. This leads to what many have claimed is Duchamp's strategy: to reveal the very conventions, in particular the ontological, epistemological and institutional, by which art is defined.²⁸⁰

Art's dysfunction, malfunction and Heidegger's "unreadiness-to-hand"

In this context, art's use-readiness operates within the framework of function's inverse: its functionlessness, dysfunction and malfunction. As Barbara Bolt comments, art tends to flourish in situations when things do not function as they ought, capitalising on the potential this offers.²⁸¹ Here she draws on the philosopher Martin Heidegger's concept of the unreadiness-to-hand that examines what the being of something is.²⁸² The concept of the unready-to-hand is derived from Heidegger's well-known tool analysis developed in *Being and Time* (1927).²⁸³ In this proposition, Heidegger proposes that our ordinary way of "dealing with things" through everyday use is by taking things for granted and that this

²⁷⁹ Foster et al., "Tatlin's Constructions and Duchamp's Readymades," 127.;

²⁸⁰ Foster et al., "Tatlin's Constructions and Duchamp's Readymades," 129.

²⁸¹ Barbara Bolt, "Contingency and the Emergence of Art," in *Art Beyond Representation : The Performative Power of the Image* (London ; New York: I.B. Tauris, 2004), 67-68.

²⁸² Bolt, "Contingency and the Emergence of Art," 67.

²⁸³ Martin Heidegger, *Being and Time*, trans. John Macquarrie and Edward Robinson (New York: Harper & Row, 1962).

renders them invisible. This is what Heidegger calls this *Zuhandenheit*, “readiness-to-hand.” Heidegger uses the example of the hammer. He proposes that to develop our closest relationship (referred to as “primordial”) with objects in the world, we do things with them by engaging and manipulating them in order to achieve a goal or end point. We do not gain knowledge of the hammer by looking at it, but through its skilful use. According to Heidegger:

In dealings such as this, where something is put to use, our concern subordinates itself to the "in-order-to" which is constitutive for the equipment we are employing at the time; the less we just stare at the hammer-Thing, and the more we seize hold of it and use it, the more primordial does our relationship to it become, and the more unveiledly is it encountered as that which it is-as equipment. The hammering itself uncovers the specific 'manipulability' ["Handlichkeit"] of the hammer. The kind of Being which equipment possesses—in which it manifests itself in its own right—we call "readiness-to-hand" [Zuhandenheit].²⁸⁴

When the carpenter uses a hammer, not only does the hammer fall away from consciousness, but also the world system it belongs to: the nails; the workbench; the subjectivity of the carpenter himself. This occurs in a flow of seamless incremental activity.²⁸⁵ Heidegger explains: “The peculiarity of what is proximally ready-to-hand is that, in its readiness-to-hand, it must, as it were, withdraw [zurückzuziehen] in order to be ready-to-hand quite authentically.”²⁸⁶ However, when the hammer breaks, or if something gets in the way of this process, such as the carpenter is replaced (i.e. by someone without competency), the invisibility of this readiness-to-hand is broken. In this situation, an obstinate block occurs in our consciousness that disrupts the flow of activity. For Heidegger, this is identified as “unreadiness-to-hand,” and enables a consciousness of what something is through the conspicuousness it creates in the system.²⁸⁷ As Heidegger elaborates:

²⁸⁴ Ibid., 98.

²⁸⁵ Michael Wheeler, "Martin Heidegger," accessed May 31, 2015, <<http://plato.stanford.edu/archives/fall2014/entries/heidegger/>>.

²⁸⁶ Heidegger, *Being and Time*, 99.

²⁸⁷ Ibid., 102-03.

Similarly, when something ready-to-hand is found missing, though its everyday presence [Zugegenheit] has been so obvious that we have never taken any notice of it, this makes a break in those referential contexts which circumspection discovers. Our circumspection comes up against emptiness, and now sees for the first time what the missing article was ready-to-hand with, and what it was ready-to-hand for. The environment announces itself afresh. What is thus lit up is not itself just one thing ready-to-hand among others . . . it is in the 'there' before anyone has observed or ascertained it.²⁸⁸

When something is functioning, we exist in a seamless flow of activity as we are in the process of doing something “in order to” fulfil the function’s teleological end point. However, in Heidegger’s unready-to-hand, it is through malfunction or dysfunction that the being of a thing is brought to our consciousness. What was always there, but undisclosed, is as Heidegger says, “lit up” and this obstinacy makes the ready-to-hand new.²⁸⁹

In the context of the unready-to-hand, Duchamp’s double strategy of the readymade and the reciprocal readymade “lights up” both the condition of art’s functionlessness and the proper function signified by the quotidian object from the world. Here we can witness art at its use-ready, maintaining its dialogue with function through the activation of its inverse dysfunction and the functionless.

Abfunction and its place within art’s use-ready context

To return to the broader question posed in this chapter: What place does this offer abfunction, as a condition that reveals and diverts away from function? I would argue that when art maintains a fidelity to its functionlessness and its associated conditions of dysfunction or malfunction, it is resistant to abfunction. This is because the inverse conditions of function continually short-circuit back to proper function, revealing what was

²⁸⁸ Ibid., 105. Heidegger’s italics.

²⁸⁹ Ibid., 103.

invisible and offering no room for abfunction to move away. However, as I argue, the location of the use-ready within the greater context of the forming of something creates an opening for abfunction. Furthermore, this is expanded when the variations on proper function, such as the non-normative use of objects and things are activated within a containing system as suggested by Preston. This leads to a reconsideration of function within art beyond the binary of function and its inverse conditions and also suggests additional openings for the operations of abfunction.

Para-functionality – objects with hybridised functions within the forming of art

The rarely used term, para-function was employed by Baudrillard in the essay discussed above,²⁹⁰ to mean a strategy of resistance to the pervasive object revolution associated with functionalism. To reiterate, the object was understood to operate as a transparent sign of its function, divorced from all other ritual and associated use that linked it into a broader system of pre-industrial social practice.²⁹¹ While Baudrillard couples para-function with dysfunction, it can nonetheless be considered as an alternative to function and dysfunction or malfunction, particularly because para-function is contextualised in the forming of the artwork.

Baudrillard's proposal of para-function shares some similarity to the release of Duchamp's readymades from their function. Baudrillard states that he aims to: "[liberate] the object from its function, returning it to free associations."²⁹² This is a "revolt against the new reality principle of the object."²⁹³ Here, he cites Surrealism and kitsch as examples of para-function. Baudrillard refers also to the nineteenth-century French poet, Lautréamont, famous for his

²⁹⁰ Baudrillard, "Design and Environment or How Political Economy Escalates into Cyberblitz," 192.

²⁹¹ Ibid. Since Baudrillard introduced this term para-function in this essay, it is not a concept that has become widespread. I believe the industrial designer, Anthony Dunne, is the only person who has loosely adopted Baudrillard's term. Anthony. Dunne, "Para-functionality: The Aesthetics of Use," in *Hertzian Tales: Electronic Products, Aesthetic Experience and Critical Design* (1999). Dunne's proposes "para-function" as a design strategy, "a tool box of ideas," to establish a functional estrangement with the industrial design object in order to create a poetic experience in the user. Ibid., 44, 147. From my research, to date very little development of Dune's concept has occurred since. The predominant use of the term parafunction is in the discipline of dentistry where it refers to habitual abnormal functions of a body part that is not its common function, such as grinding of the teeth.

²⁹² Ibid., 194.

²⁹³ Ibid.

poetic line: “beautiful as the chance encounter of a sewing machine and an umbrella on a dissecting table” and the Surrealist works of Rene Magritte, such as *The Red Model* (1934), where shoes and feet are blended together, as well as other Surrealist works that hybridise function to produce anthropomorphic machine forms. In these Surrealist examples of para-function two operations are being advanced by Baudrillard. First, he indicates that Surrealism returns the object to the undifferentiated field of being a thing amongst other objects and things. This is a state, Baudrillard argues, that is prior to the instrumentalisation of functionalism. The Surrealist artwork is born out of this undifferentiated field, producing new forms that hybridise functions that would otherwise be attributed to other objects and things. For example, the shoe is also a foot, the torso of a body is also a chest of drawers.²⁹⁴ Second, Baudrillard claims that this strategy of para-function extends functionalism to the point of absurdity.²⁹⁵ For him, the idea that an object or person could only be signified by its function is equally surreal – for example, reducing the concept of “man” to a bureaucratic function was Kafkaesque.²⁹⁶ As he stated:

*The Surrealist metaphor defines itself as a compromise formation, as a short-circuit between the two orders of functionality (here transgressed and made ridiculous) . . . It seizes the moment when the object is still stuck in anthropomorphism and has not yet given birth to its pure functionality.*²⁹⁷

At the outset, Baudrillard couples para-function with dysfunction. I would argue that this is because he aims to “liberate” the use-ready object from signifying its function. In this way para-function could rectify the betrayal of the object defined and produced by functionalism which, as Baudrillard said, in its rationalism was “blind to its own arbitrariness.”²⁹⁸ Denying the arbitrary relationship of form to its function was one such blindness. Moreover, Baudrillard’s alignment of para-function with dysfunction could also be understood to affirm the resistance to the object revolution. However, despite Baudrillard’s claim, it has been

²⁹⁴ Ibid., 193.

²⁹⁵ Ibid.

²⁹⁶ Ibid., 192n7.

²⁹⁷ Ibid., 193.

²⁹⁸ Ibid., 192.

shown by Millikan, Preston and Heidegger that dysfunction cannot liberate the object from function.

Abfunction from the expanded use-ready position of function within art

What can this variation of para-function offer abfunction? Here, I propose that para-function can provide a base to build on as well as an alternative position for abfunction to occupy. Unlike para-function, abfunction can simultaneously acknowledge and reveal function. Para-function's ambition for liberation aligns it with dysfunction. Here, a parallel with Svetlana Boym's concept of the "off-modern" in architecture clarifies abfunction's distinction in contrast to Baudrillard's para-function. Boym rejects the categorical postmodern schism with modernism which, as she says: "follow[s] the logic of crisis and progress."²⁹⁹ She proposes that there are alternative paths within critical modernity, such as a "third road," an alternative path to be "'off," as in "off-stage," "off key," "off-beat."³⁰⁰ Abfunction, akin to Boym's off-modern, acknowledges that modernism is more diverse and less reductive than the crisis of postmodernity might indicate. Rather than aiming to liberate and sever the object from function, abfunction acknowledges this is not a possibility. This allows function to be revealed as abfunction moves away on an alternative path.

Where para-function's method is helpful to abfunction, is the manner in which it capitalises on the use-ready object's functional free association within the process of forming an object. It is these two strategies that then enable the possibility of new hybrid forms. In this way, abfunction can potentially adopt these two useful attributes of para-function, but reject its concept of entirely liberating the object from function and so reverting to dysfunction.

²⁹⁹ Svetlana Boym, *Architecture of the Off-Modern*, Forum Project (New York: Buell Center; Princeton Architectural Press, 2008), 4.

³⁰⁰ Ibid. While Boym identifies this third way as an "adventure," she draws heavily on the metaphor of narrative to make a case for architecture between the imaginary and material. Ibid., 6, 37. By contrast, the proposition of abfunction, is not to conjure metaphor or imaginary narratives, but rather to enable an alternative path via the concrete and physical actions and operations associated with the forming of something that can lead to an outcome outside the teleological intentions of function.

Further potential for abfunction may be found in the idiosyncratic uses of objects and things within the forming of artworks. While Duchamp's practice has frequently been discussed in terms of dysfunction, there is considerable scope in which to reconsider this from the perspective of idiosyncratic use of objects and things within the containing system of the artwork. This could open a discussion of Duchamp's work beyond the simplistic inverse of function and also provide the opportunity to consider the role of abfunction in his practice. While there is not the scope in this thesis for a full investigation, Duchamp's readymade of the coat rack, *Trap* (1917), offers one such example. This object taken from everyday life is relocated into the context of art, where a new artwork is produced that in Preston's terms could be considered the containing system. The use-ready function of the coat-rack, with its proper function of hanging up coats, is co-opted into a new system that is the artwork relocated and nailed onto the studio floor. As described by Duchamp, it was the "real coat hanger that I wanted someone to put on the wall and hang my things on but I never did come to that – so it was on the floor and I would kick it every minute, every time I went out – I got crazy about it and I said the Hell with it, if it wants to stay there and bore me, I'll nail it down . . . and then the association with the Readymade came and it was that."³⁰¹ The French title of *Trap* is *Trébuchet*, which means to trip or fall and also refers to an important move in the game chess where an important piece is taken by the pawn.³⁰² While still harkening back to its origins of its function as a coat rack, it is now nailed on the studio floor (as a system function) and has a new role as a trip hazard. As Molesworth notes, it is now akin to a slippery banana skin in a slap-stick joke.³⁰³ The artwork produces a new space. This is not the space of Gropius' Bauhaus building at Dessau (as mentioned in the previous chapter),³⁰⁴ which conforms to function's efficient flow of people and activities. Rather, *Trap* produces a disrupted, inefficient space that brings to our awareness functionalism's expectations of movement in the space in everyday life, as well as the productive space of play and humour.

³⁰¹ *Marcel Duchamp*, ed. Anne D'Harnoncourt and Kynaston McShine (London: Thames and Hudson, 1974), 283.

³⁰² "Work Avoidance: The Everyday Life of Marcel Duchamp's Readymades," 56n25.

³⁰³ *Ibid.*, 56.

³⁰⁴ See p.50.

Duchamp's *Trap* can provide an example of how, from the use-ready position, abfunction could be seen to reveal and move away from function in an artwork that is in the process of producing something else not in conformity with the pre-requisites of function. Another example can illustrate the role of abfunction at the use-ready position of function, within the broader context of the forming of function.

The artwork *Help a Sculpture*, (2005–08), (Fig. 18) was produced prior to this project.³⁰⁵ As already mentioned, *Help a Sculpture* is a performance artwork, where goldfish facilitated the standing of a circular cardboard sculpture covered in adhesive mirror foil. In this performance, all the components of the artwork are distributed within the gallery. They include eight goldfish in an aquarium that is propped on a celeriac root; two fluorescent light tubes hanging vertically from the ceiling; a sculptural cardboard ring, covered in mirror adhesive foil, lying on the floor; aquarium paraphernalia, including a work jacket for myself as the artist. The performance consists of a paced and timed series of actions by me, the artist, decanting the fish into an aquarium bag of water, that then is placed at the rear of the sculpture, as a weight, enabling the sculpture to stand. That is, to stand for a period of time, before the goldfish in its bag is taken away and the sculpture collapses to the ground.

I propose that the performance of *Help a Sculpture* complies with the definition of a containing system that is conceived as an open, co-opting and instrumentalising system. In this system, things, animals and objects are co-opted in idiosyncratic and non-normative ways in order to enable the artwork system to function. It is clear that the work of the goldfish in helping a sculpture stand is a non-normative and idiosyncratic use of their labour. Furthermore, the role of the celeriac is also non-normative, as it is usually activated to make soup rather than support an aquarium. In this instance, the idiosyncratic use of objects and things calls to mind the proper use of these elements, or in Heidegger's terms the unreadiness-to-hand, that reveals what is taken for granted to make something function. This reveals the proper function of goldfish that generously extend their use-ready function to include helping a sculpture. Within a containing system, this also reveals the proper

³⁰⁵ See p. 3.

function of sculpture – to stand as a sculpture ought – the teleological endpoint of the artwork. And so, for only one short period of time does this artwork achieve this goal before it malfunctions and collapses to the floor.

Help a Sculpture seeds the principles of how abfunction might operate within the use-readiness of the object. It can be seen through the idiosyncratic non-normative use of objects, animals and things and also within the forming of the containing system. However, rather than collapsing into terms conventionally associated with art – the concepts of dysfunction or malfunction – the genuine potential and ambition for abfunction lies in its revelation of function that occurs at the same time as it moves away from the prerequisite of function in the forming of the object. This establishes a principle by which to investigate the case-study artworks from the use-ready position within forming.

Concluding: an expanded use-ready framework towards abfunction

In summary, the aim of this chapter is to expand the definition of the use-ready concept of function, and its place within art in order to seed the potential for abfunction.

The concept of the use-ready draws on the conventional understanding of function, which has its origins in Aristotle's framing of function as a key attribute of an object, thing or animal that moves toward a teleological end-point or goal. During the twentieth century, the use-ready concept of function can be seen in architectural discourse and also by those loosely associated with function theory. The concept of proper function that was developed by Millikan, Preston and others, has added terms such as malfunction, dysfunction and the non-normative and idiosyncratic use of objects and things. Invaluable for this project is the contribution of the object and thing in its use-ready role within the larger context of forming something else. This was identified through Preston's elaboration of the non-normative, idiosyncratic use of objects and things within a containing system.

In this consideration of the use-ready position of art, it was found that art has commonly been understood as being immune from function. Historically, the proper function of art was understood as being functionless. When concepts of function have been addressed,

such as in the readymade, they are frequently framed within the inverse conditions of function: functionlessness and dysfunction. As was shown, these conditions are resistant to the potential for abfunction. However, the expanded understanding of the use-ready function, which includes non-normative and idiosyncratic functions within the broader context of forming, reconsiders the role of function within the production of the artwork. This significantly expands our consideration of function beyond the limiting binary of function and non-function. Moreover, it offers a productive site for investigating abfunction as both revealing and diverting away from function within the use-ready object while contributing to the forming of the artwork itself.

Part I of this thesis has proposed a framework for function from two perspectives: function's role in the forming of an object and thing and the use-ready position of the object. Part II addresses the relationship of function and art through examples from the Russian and Polish avant-garde in the early twentieth-century. These case studies are uncharacteristic, in that the artists advocated for function in art, rather than the inverse and more common condition of functionlessness. This was in order to destroy the autonomous functionless art object identified with the bourgeoisie toward creating a new utopian society. The following chapters examine how the two functions of function – the use-ready and forming – were seen to operate within art, particularly when art positively addressed function. This is to consolidate further principles for the consideration of abfunction within the artwork case studies discussed in Part I.

Part II Reprogramming art toward function – the Russian and Polish Avant-garde 1919–1936

Overview

Part I of this thesis established that concepts of function could be considered from both the forming perspective of producing a cultural object or thing, and then also from the end-point of its purpose or use, which have been termed for this thesis as: function as forming, and use-ready. This was with the aim of conceiving how function could be considered within art in order for abfunction to depart from in the making and end effect of the artwork. The investigation of Aristotle's conception of function, early modernist architectural discourse, and philosophers involved in function theory consolidated the groundwork for these two categories of function.

Chapter two acknowledged that art has been conventionally framed within the inverse terms of function, that is, of its functionlessness or dysfunction. Part II investigates a significant, although brief and fraught historic example of art which uncharacteristically adopted the concept of function – the Russian and Polish avant-garde in the early 1920 to the mid-1930s. These avant-garde artists reconceptualised the function of art not only as a weapon to be used in the war waged on the bourgeois art object but also a method of producing the ultimate “social task” – the construction of a new social utopia. Part II will ask: how do the two positions of function – the use-ready and function as forming – occur in the theories and artworks produced by the Russian and Polish avant-garde? And following: what framework does this offer the consideration of function within the case study artworks I have produced for this project, that abfunction may move away from?

Part II is divided into two chapters and discusses different threads of this avant-garde movement: the Russian Constructivist and Productivist movement that emerged out of INKhUK (the Moscow Institute of Artistic Culture) from 1920 to 1924;³⁰⁶ followed by an investigation into the Polish avant-garde movement Unism, spanning 1922–1936.

³⁰⁶ I would like to note that despite the rhetoric and ambitions of both the Constructivists and Productivists, the period of this movement was very brief. Christina Kiaer, *Imagine No Possessions: The Socialist Objects of*

Chapter three of Part II will firstly address the use-ready function of art in relation to these avant-garde movements. I show how artist and theorists from the Constructivists, Productivists and the Unists re-conceived the parameters of the art object as use-ready and in the case of the Unists, effect-ready, to activate the art object toward producing social change. Artists and theorists of Productivism and Constructivism that will be discussed include: Vavara Stepanova, Aleksandr Rodchenko and Boris Arvatov. Unist artists, Katarzyna Kobro, and her painter husband Władysław Strzemiński,³⁰⁷ will also be investigated in relation to the movement's inheritance in UNOVIS (Affirmation of the New Art) established by Kasimir Malevich in Vitebsk in 1919. I argue that in both the Unist and Productivist instances, the use-ready and effect-ready function of the art object could be considered in the broader context of function as forming toward the teleological end point of a new utopia.

Chapter four continues the discussion of the Polish and Russian avant-garde movements to consider how function was activated within the forming of the art works by these artists. I argue that the artwork considered as an autonomous and experimental laboratory for both the Constructivists and Unists enabled concepts of function and functionalism to focus on the forming of the artwork itself. I will show how function facilitated the determination of both material and structure in experimental laboratory artworks of the Constructivists, Rodchenko and Karl Ioganson.³⁰⁸ Following this, I discuss how the spatial construction of

Russian Constructivism (Cambridge, Mass.: MIT Press, 2005), 2. Many scholars of Constructivism and Productivism have given considerable attention as to why such a potent and compelling program of the Constructivist and Productivist avant-garde was so small and short lived with many concluding that it failed. See: Christina Lodder, *Russian Constructivism*, 2 ed. (New Haven: Yale University Press, 1985), 181.; Benjamin H. D. Buchloh, "From Faktura to Factography," *October* (1984): 107.; Paul Wood, "The Politics of the Avant-Garde," in *The Great Utopia: The Russian and Soviet Avant-Garde, 1915-1932* (New York: Guggenheim Museum : Distributed by Harry N. Abrams, 1992), 5. Peter Bürger, *Theory of the Avant-Garde*, Theory and History of Literature: V.4 (Manchester: Manchester University Press, 1984). Peter Bürger, Bettina tr Brandt-Förster, and Daniel L. tr Purdy, "Avant-Garde and Neo-Avant-Garde: An Attempt to Answer Certain Critics of Theory of the Avant-Garde," *New Literary History* 41, no. 4 (2010): 705. By contrast, Boris Groys argues it was a success as Soviet Realism was its natural inheritance. Boris Groys, "Art in the Age of Biopolitics: From Artwork to Art Documentation," in *Documenta11platform5: Exhibition Catalogue* (Ostfildern-Ruit: Hatje Cantz, 2002), 9. For a thorough overview of the inception and evolution of the various groups of artists and theorists in of INKhUK see Kiaer, *Imagine No Possessions: The Socialist Objects of Russian Constructivism*, 6-17.

³⁰⁷ Unism was also brief and the oeuvre of Katarzyna Kobro has relatively little scholarship to date. See p. 109.

³⁰⁸ There is considerable variation in spellings of Russian names across scholarly texts. For consistency, I follow the transliteration as per Christina Kiaer. Kiaer, *Imagine No Possessions: The Socialist Objects of Russian Constructivism*, xvii.

Kobro's Unist laboratory sculptures established a reciprocal and mutually informing relationship with a definition of functionalism as the rhythmic movement of the body in time and space.

Both of these chapters in Part II aim to reveal how function, whilst previously understood as immune from art, played an implicit role in the conception and forming of artworks by these two sets of avant-garde artists. These specific articulations of function within the forming of the artwork and the use-ready, provide a precedent for considering how function might equally occur in this project's case studies investigated in the following chapters. Once identified, it can be investigated how abfunction may move away from these conditions of function within the making (forming) and effect (use-readiness) of the artwork.

Chapter three: Reprogramming art toward the use-ready function – the Productivist and Unist avant-garde art object

Introduction

Drawing on the definition of the use-ready established in Part I, chapter three investigates a less common example from the history of art that actively engages function in the production of the art object. This argument is in contrast to the predominantly held position of art that is considered in the negative terms of function, that of its functionlessness or dysfunction. This chapter will ask: in what ways did the protagonists of Productivism in Russia, and Unism in Poland re-conceive the art object as use-ready? The Unists and Productivists, in their various manifestos, both identify art as an ideological tool and aimed to harness this functional attribute with the ambition of creating a new social utopia. Here, I argue, that while these two case studies reprogrammed art for this social engineering purpose, they did so from two very different theoretical positions. This extends the term use-ready in art to include an additional variation – the “effect-ready.” In the context of the use-ready, the Productivists redefined art as a utilitarian object³⁰⁹ in order to have a direct engagement within the sphere of everyday life. By comparison, the Unists insisted on art as a supreme organising force that would then have an effect to bring about the reorganisation of life through function itself. This argument will demonstrate that both Productivists and Unists conception, the use-ready or effect ready application of the re-conceived artwork can be understood within a larger context of forming that complies with the project’s alternative category of function – function as forming. Following this discussion, I will investigate the multifunctional utilitarian objects of Aleksandr Rodchenko’s students at the Faculty of Metalwork at VKhUTEMAS (Higher State Artistic and Technical

³⁰⁹ The actual number of “utilitarian objects” produced in the phase of Productivism was very small, as was the number of artists working within “production.” Ibid., 2. Whilst there is not the scope here to debate this, some scholars (Christina Lodder and Victor Margolin) have interpreted these utilitarian objects as nascent design objects. Victor Margolin, *The Struggle for Utopia: Rodchenko, Lissitzky, Moholy-Nagy, 1917-1946* (Chicago: University of Chicago Press, 1997), 85.; Christina Lodder, “Towards a Theoretical Basis: Fusing the Formal and Utilitarian,” in *Russian Constructivism* (New Haven: Yale University Press, 1985), 73. As will be shown in this chapter, the language associated with these utilitarian objects by theorists and artists at the time, are as artworks. This extends the position of Christina Kiaer, who understands the utilitarian object as a new type of artwork by the Constructivists and Productivists. Kiaer, *Imagine No Possessions: The Socialist Objects of Russian Constructivism*, 36-37.

Workshops),³¹⁰ Moscow (1923), and Rodchenko's *Workers' Club* (1925) for the Paris International Exhibition of Decorative Arts in 1925, (Fig. 42.). These avant-garde artworks will be contextualised by the Productivist theoretician Boris Arvatov's concept of the "culture of Things" (1925). In these examples the use-ready function of art, re-conceived as a utilitarian object aspired to energise the comrade toward the production of a new socialist utopia. This provides a concrete example of how function at the use-ready may be conceived within the art work that may then be applied in the case study artworks towards the potential of abfunction.

Productivism – reprogramming art to the use-ready utilitarian object

By 1923, two Constructivist artists: Vavara Stepanova and Liubov Popova, were producing geometric patterned textiles, at the First State Cotton-Printing Factory, on the banks of the Moscow River. These fabrics were intended for the dresses of post-revolutionary Russian women, (Fig. 30, Fig. 31, Fig. 32). The factory director Aleksandr Arkhangelskii had invited the two avant-garde artists with significant public notoriety to become textile designers, as a strategy to reinvigorate the flailing cotton factory.³¹¹ The State Cotton-Printing Factory, like all industry at that time, was groaning under inefficient production methods, out of date machinery, passé designs within a volatile and profoundly depleted post revolution economy. Popover and Stepanova took up the invitation with the ambition of enacting the new foundation for art and artists to produce utilitarian objects as production art. In 1924, Stepanova's mass-produced fabrics were displayed in numerous Moscow store fronts for purchase.³¹² For Popova, great artistic satisfaction was gained by the possibilities of peasant women and workers purchasing her fabric.³¹³ On Popova's posthumous exhibition (she had died of Scarlet Fever aged 35), the critic Iakov Tugendkhol'd, wrote:

³¹⁰ VKhUTEMAS (Higher State Artistic and Technical Workshops), Moscow was established in 1920 by the State. Similar to the Bauhaus it was dissolved in 1930. Aleksandr Mikhaïlovich Rodchenko, Varvara Fedorovna Stepanova, and Peter Noever, *The Future Is Our Only Goal* (Munich; New York, NY, USA: Prestel; Distributed in the USA and Canada by te Neues Pub. Co., 1991), 258.; Christina Lodder, *Vkhutemas: The Higher State Artistic and Technical Workshops*, 2 ed. (New Haven: Yale University Press, 1985).

³¹¹ Kiaer, *Imagine No Possessions: The Socialist Objects of Russian Constructivism*, 92-94.

³¹² Ibid., 117-18.

³¹³ Ya. Tugendkhold, "Po vystavkam," *Izvestiia VTsIK*, Moscow, no. 26 (235), 1 February 1925. Cited in Natalia Adaskina, "Constructivist Fabrics and Dress Design," *The Journal of Decorative and Propaganda Arts* 5, no. Russian/Soviet Theme (Summer 1987): 157.

She was drawn to the ultimate logical step, the introduction of art into production itself, into everyday life. She was the first to make a breach in the Bastille of our factory conservatism with her designs for the Textile Print Factory (formerly the Tsindel Factory). She used to say that not one of her artistic successes ever gave her such deep satisfaction as the sight of a peasant woman and a worker buying lengths of her material. And, in fact, last spring, without even knowing it, all of Moscow was wearing fabrics which Popova had designed, fabrics with bright, strong designs and full of movement, like the artist herself.³¹⁴

Acclaimed at the time as Constructivist pioneers,³¹⁵ Stepanova and Popova were aiming to contribute to the Soviet economy, producing artworks that infiltrated into the everyday life of Russian women.³¹⁶

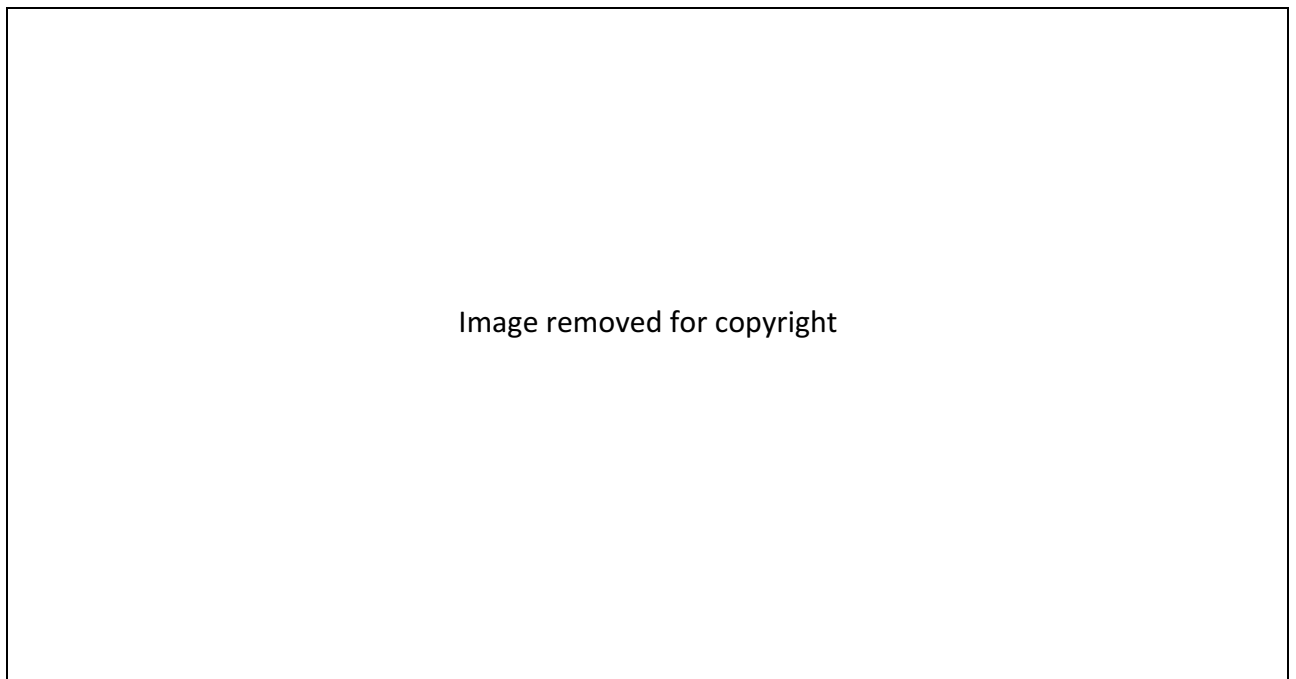


Fig. 30 Vavara Stepanova's fabric in a store window, Photo: Aleksandr Rodchenko, (1924)

In Kiaer, *Imagine No Possessions: The Socialist Objects of Russian Constructivism*, 119.

³¹⁴ Ya. Tugendkhold, "Po vystavkam," *Izvestiia VTsIK*, Moscow, no. 26 (235), 1 February 1925. Cited in *ibid.*

³¹⁵ *Ibid.*

³¹⁶ Christina Kiaer, "'Into Production!': The Socialist Objects of Russian Constructivism," *Transversal* (2010).

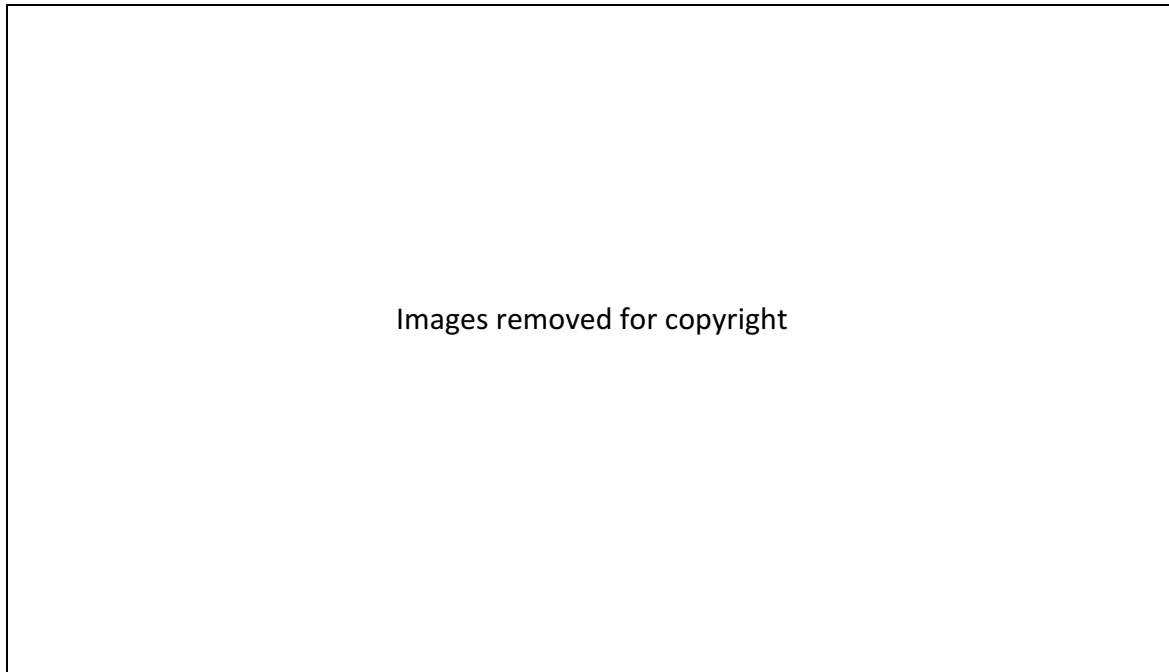


Fig. 31 Liubov Popova, Fabric Samples, (1923-4)

In *Rodchenko & Popova: Defining Constructivism*. Edited by Margarita Tupitsyn. (London: Tate Pub. 2009), 112. (left)

Fig. 32 Liubov Popova, Dress Design, (1923-4)

In *Rodchenko & Popova: Defining Constructivism*, 113. (right)

Building a new post-revolutionary culture

As many have noted, by 1921 in Russia, the imperative for artists to contribute to the building of a new socialist society was alarmingly urgent.³¹⁷ This brought the question of function as an end goal in art to the forefront of debate, both amongst artists and the political elite of the Bolshevik party. Whilst much of the Russian avant-garde production discussed in this chapter occurs in the relatively peaceful period of the New Economic Plan (NEP),³¹⁸ the circumstances it emerged out of was devastating. Following the 1917 October Revolution (in the midst of World War 1), and two years of civil war (War Communism), life in Russia was in profound disarray and equivalent to a war zone. Russia was primarily an agrarian society with a primitive economy that was out of date and ill equipped, aspiring to

³¹⁷ Margolin, *The Struggle for Utopia: Rodchenko, Lissitzky, Moholy-Nagy, 1917-1946*, 83-84.

³¹⁸ The New Economic Plan (1921-1928) was an interim semi-capitalist period of instituted by Lenin in order to facilitate the economic recovery of Soviet Russia. Kiaer, *Imagine No Possessions: The Socialist Objects of Russian Constructivism*, 2-4.

be transformed into an industrialised nation. International embargoes, collectivised property, scarcity of housing (let alone with heating), saw people suffering and dying from famine and starvation.³¹⁹ As the poet Andrei Belyi, noted: “the victory of materialism in Russia resulted in the complete disappearance of all matter.”³²⁰ Unlike other avant-gardes of the West who actively resisted the existing political structure of governments the Russian avant-garde, particularly the Constructivists and Productivists actively joined with the Bolshevik power brokers. Equally the Bolsheviks harnessed the traction of the avant-garde and together they developed an agenda to work towards the collective and ideological aim of building a new Marxist and communist society.³²¹

Embracing the Productivist mandate

Stepanova, Popova, were Constructivist artists who had embarked on the Productivist model of a new type of artistic practice. On November 24, 1921 the theorist Osip Brik, pronounced the new mandate of Productivism at INKhUK.³²² INKhUK had been established in Moscow as a State research institute into the nature of art in 1920, first led by Wassily Kandinsky.³²³ In the first year a group of artists and theorists calling themselves Constructivists emerged with the focus of investigating laboratory artworks led by Aleksandr Rodchenko.³²⁴ Brik’s announcement ushering in Productivism was based on the revolutionary situation.³²⁵ It made obsolete any art without a purpose, particularly the

³¹⁹ See Boris Groys, *The Total Art of Stalinism: Avant-Garde, Aesthetic Dictatorship, and Beyond*, trans. Charles Rougle (Princeton, N.J.: Princeton University Press, 1992), 20.; Kiaer, *Imagine No Possessions: The Socialist Objects of Russian Constructivism*, 7, 18.

³²⁰ Andrei Belyi as cited in Groys, *The Total Art of Stalinism: Avant-Garde, Aesthetic Dictatorship, and Beyond*, 20. No source given.

³²¹ There is not the scope here to fully outline the complex politics associated with this early period, however to say that most leftist artists, including those within INKhUK were inspired by the Bolshevik revolution and their War Communist policies. Kiaer, *Imagine No Possessions: The Socialist Objects of Russian Constructivism*, 18.; Groys, *The Total Art of Stalinism: Avant-Garde, Aesthetic Dictatorship, and Beyond*, 20, 23.; Maria Gough, "Formulating Production," in *The Artist as Producer: Russian Constructivism in Revolution* (Berkeley University of California Press, 2005), 102-03.

³²² "Formulating Production," 101.

³²³ Rodchenko, Stepanova, and Noever, *The Future Is Our Only Goal*, 257.; Kiaer, *Imagine No Possessions: The Socialist Objects of Russian Constructivism*, 7.

³²⁴ Gough, "Formulating Production," 101.

³²⁵ At that meeting Ioganson, Medunetskii the Stenberg brothers and Popova were among the sixteen of the twenty-five members of INKhUK to become signatories to the declaration. Allegedly, Stepanova, Rodchenko and Aleksei Gan (the Constructivist theorist), were not present and became involved later. Ibid., 102.

representational painting of the bourgeoisie, known as “easelism.”³²⁶ The call was to now work in real, practical situations of production, meaning – soviet industry. This was to produce utilitarian objects that had a social use in facilitating the construction of a new post-revolutionary culture.

By 1923, theorist Nikolai Tarabukin would place Productivism as the natural historical development of art. In his seminal essay, *From the Easel to the Machine*, he would write that Productivism was “presenting art with new forms and a new content. . . . [where] ‘the content’ is the utility and expediency of the object, its tectonism which conditions its form and construction, and which justifies its social purpose and function.”³²⁷ The job now was two-fold – practical and theoretical. Practical, in this context meant the production of actual art work was for real situations. The artwork was now re-conceived as the utilitarian art object. This first domain was the work of the artists, they were the Constructivists, including: Aleksandr Rodchenko, Stepanova, Karl Ioganson, Popova, Konstantin Medunetskii, the brothers: Georgii and Vladimir Stenberg.³²⁸ The second field of activity was the theoretical and this was cordoned off for the theorists, namely: Osip Brik, Boris Kushner, Boris Arvatov and Tarabukin.³²⁹

The Productivists had actively taken up the Constructivist's prior two years of work that had focused on construction.³³⁰ This emphasised the functional, utilitarian and industrial production aspects of the new art. It was a consolidation of the “uncompromising war on

³²⁶ Ibid.

³²⁷ Nikolai Tarabukin, “From the Easel to the Machine,” in *Modern Art and Modernism: A Critical Anthology* ed. Francis Francina and Charles Harrison (New York: Harper & Row, 1982), 142. Tectonics was one of three central principles of “intellectual production” in the rhetoric of Constructivism: tectonics, *faktura* and construction. Tectonics specifically referred to the ideology of communism. See p. 140.

³²⁸ At that meeting Ioganson, Medunetskii the Stenberg brothers and Popova were among the sixteen of the twenty-five members of INKhUK to become signatories to the declaration. Allegedly, Stepanova, Rodchenko and Aleksei Gan (the Constructivist theorist), were not present and became involved later. Gough, “Formulating Production,” 102.

³²⁹ Ibid.

³³⁰ At the pronouncement, the Productivists were speaking to the converted, although there was much consternation and a sense of crisis about how to achieve the new art. Ibid., 102, 05.; See also: Vavara Stepanova, “V. Stepanova: On Constructivism (Framentary Notes toward a Paper to Be Given at Inkhuk),” in *Art into Life: Russian Constructivism, 1914-1932* ed. Nicholas H. Allison (Seattle Henry Art Gallery, University of Washington, 1990).; “Transcript of the Discussion of Comrade Stepanova's Paper ‘on Constructivism,’ December 22, 1921,” ibid.; Selim. O. Khan-Magomedov, Vieri Quilici, and Aleksandr Mikhaïlovich Rodchenko, *Rodchenko: The Complete Work*, ed. Vieri Quilici (London: Thames and Hudson, 1986), 114.

art!”³³¹ pronounced in 1920 by the theoretician, Aleksei Gan. He was the appointed mouth-piece responsible for developing the conceptual premise of the First Working Group of Constructivists established in the Spring of 1921.³³² These concepts had been evolving with the theorists ever since the commencement of the revolution. As the Russian avant-garde art historian Christina Lodder points out, Brik, one of the Productivist theorists had earlier in 1919 identified the object of art as being a category of work.³³³ This had enabled him to consider art as a form of production – and more specifically – industrial work. As Brik would write in 1918: “It is not a matter of decoration, but of the creation of new artistic objects. Art for the proletariat is not a sacred temple for lazy contemplation, but work, a factory, producing completely artistic objects.”³³⁴ In this schema, art was associated with work, construction, production and life. By making this connection between art and production Brik could theorise the collapse between art and life that had been central to the bourgeois conception of art.

The ideological function of art – fighting the uncompromising war on the bourgeois separation of art and life

Rupturing the separation between art and life was essential to the development of the Productivist ambition of creating a new world order where art’s agency would be activated by function. The avant-garde identified that the separation between art and life, that rendered art functionless, was not an inherent condition of art. The functionlessness of art was not an ontologically bound definition, nor was it the “proper function” of art (in Aristotle or Beth Preston and Ruth Millikan’s terms).³³⁵ Rather, the avant-garde saw art’s autonomy as a result of historical conditions that gave rise to the creation of a bourgeois society. Further, the leftist avant-garde had recognised the functionless autonomy of the

³³¹ Aleksei Gan, "Aleksei Gan: From *Constructivism*, (1922)," in *The Tradition of Constructivism* ed. Stephen Bann (London: Thames and Hudson, 1974), 33.

³³² Lodder, "Towards a Theoretical Basis: Fusing the Formal and Utilitarian," 94.; Kiaer, *Imagine No Possessions: The Socialist Objects of Russian Constructivism*, 10. Also called the Working Group of Constructivists, in other texts this is shortened to the Working Group.

³³³ Christina Lodder, "Constructivism and Productivism in the 1920s," in *Art into Life: Russian Constructivism, 1914-1932* ed. Nicholas H. Allison (Seattle Henry Art Gallery, University of Washington, 1990), 100.

³³⁴ O. Brik, "Primechanie redaktsii" (Editorial Comment), *Iskusstvo kommuny* 8 (1919): 2. Cited in Lodder, *Art into Life: Russian Constructivism, 1914-1932*, 100.

³³⁵ See p. 68.

bourgeois art object's lack of responsibility for social agency and change.³³⁶ As Lodder identifies, by 1923 Arvatov had traced what in his view was the true function of art. Art, for Arvatov was social and technical, however art had been betrayed and gone into decline with the bourgeoisie, because it had become social and ideological. Representational art, that embodied easel painting, was in Arvatov's view, the ideological organisation of ideas intrinsic to the bourgeoisie.³³⁷

In 1974, Peter Bürger theorised the Russian avant-garde, analysing how bourgeois society's separation of the art object and everyday life created the bourgeois individual and reinforced the ideological conditions of bourgeois society. In making his case, Bürger draws on the German American philosopher Herbert Marcuse, who articulates the function of the autonomous art work as being the place that fulfills the higher ideals of humanity that cannot be fulfilled in the prosaic struggle of the means-ends rationality of everyday life. Marcuse argues the longings for goodness, joy, truth, rebellion, utopia and fantasy, could be tolerated and represented in art because art was relegated to its separate sphere from everyday life.³³⁸ The function of the bourgeois art object was to fulfill a need in the bourgeois individual that could not be satisfied in life in order to perceive themselves as a personality.³³⁹ In this way, as Bürger would claim: "this art is the objectification of the self-understanding of the bourgeois class."³⁴⁰ This frames the Productivist and Constructivist's revolutionary urgency to eradicate the autonomous bourgeois art object, and the social structures that supported it.³⁴¹

³³⁶ Many historians have accounted for the revolt against the bourgeois art object as consequence of the historical juncture at the beginning of the twentieth-century which saw the lack of response in art to the social upheaval associated with industrial revolution and social revolution. See Richard Murphy, *Theorizing the Avant-Garde: Modernism, Expressionism, and the Problem of Postmodernity*, Literature, Culture, Theory: 32 (Cambridge, UK: Cambridge University Press, 1999), 6-7. Bürger also identifies the impotency of the autonomous bourgeois art object with its lack of social consequence as a motivating factor of the avant-garde protest who aimed to integrate life and art. Bürger, *Theory of the Avant-Garde*, 22.

³³⁷ Lodder, "Towards a Theoretical Basis: Fusing the Formal and Utilitarian," 105.

³³⁸ Herbert Marcuse, "The Affirmative Character of Culture," in *Negations: Essays in Critical Theory* (London: MayFlyBooks, 2009), 84.

³³⁹ Bürger, *Theory of the Avant-Garde*, 12-13.

³⁴⁰ Ibid., 47.

³⁴¹ In Bürger's terms this is defined as the "historical avant-garde" where the avant-garde not only attacked the art of the bourgeoisie but the very social structures that supported it. Ibid., 22.

Both the Constructivists and Productivists had acknowledged the historic relationship between the use-ready function of the autonomous functionless art object as ideological, creating and reinforcing bourgeois life. In 1923 Sergei Tretyakov, the Russian Constructivist writer and playwright would refer to the art of easelism: "Fat-assed petit-bourgeois daily life, into which the art of the past and the present (Symbolism) entered as kindred parts, shaping the stable taste of a peaceful, serene, and secure existence."³⁴² Gan would also identify the arbitrary historical relationship of the autonomous art object with the bourgeoisie individualist ideology they were fighting. As he would espouse in his publication *Constructivism* (1922):

The fact that all so-called art is permeated with the most reactionary idealism is the product of extreme individualism; this individualism shoves it in the direction of new, unnecessary amusements with experiments in refining subjective beauty.

ART

IS INDISSOLUBLY LINKED:

WITH THEOLOGY,

METAPHYSICS,

AND MYSTICISM.

It emerged during the epoch of primeval cultures . . . floundered in utter primitiveness.

. . .

It was artificially reheated by the hypocrisy of bourgeois culture and, finally, crashed against the mechanical world of our age.

DEATH TO ART!

IT AROSE NATURALLY

DEVELOPED NATURALLY

AND DISAPPEARED NATURALLY.

*MARXISTS MUST WORK IN ORDER TO ELUCIDATE ITS DEATH.*³⁴³

³⁴² Sergei Tretyakov, "From Where to Where? (Futurism's Perspectives)," in *Words in Revolution: Russian Futurist Manifestoes 1912-1928* ed. Anna Lawton (Washington, DC: New Academia Publishing LLC, 2005), 206.

³⁴³ Gan, "Aleksei Gan: From *Constructivism*, (1922)," 36-37. Emphasis in quoted text.

Rodchenko would also reiterate the rejection of bourgeois art and call for art to enter everyday life in his “Slogans” of the 22nd of February, 1921:

It is time that art entered into life in an organized fashion.

. . .

Down with art as a beautiful patch on the squalid life of the rich.

Down with art as a precious stone in the midst of the dismal and dirty life of the poor.

Down with art as a means of escaping from a life that is not worth living.³⁴⁴

The work that the avant-garde had before them was to break this historical division between the separate and special realm of art that permitted the fulness of life yet denied it in reality. In Arvatov’s view, the destruction of the discrete art object would enable the “proletarian artists” to annihilate the “historical divisions” of the isolated autonomous art object, and its processes from the practice of everyday life.³⁴⁵ For the Productivists, any remnants of autonomous functionless art objects also included the Constructivist “laboratory experiments” that did not link art and production and did not have any direct purpose. These were considered, as Brik would say: “a survival of bourgeois structures,”³⁴⁶ that the Revolution had sought to overthrow. The laboratory experiments had been the focus of the First Working Group of Constructivists, (mentioned above) and had been exhibited in the May 1921 OBMOKhU (Society of Young Artists)³⁴⁷ exhibition (Fig. 33). These artistic experiments had been instrumental in developing the Constructivists’ ideological principles towards construction and the use of materials within utilitarian and functional processes of production. The laboratory experiments proposed by the Constructivists were

³⁴⁴ Aleksandr Rodchenko, "Aleksander Rodchenko (1891-1956) 'Slogans' and 'Organizational e' of the Workshop for the Study of Painting in State Art Colleges," in *Art in Theory, 1900-1990: An Anthology of Changing Ideas* ed. Charles Harrison and Paul Wood (Oxford, Cambridge Mass.: Blackwell Publishers, 1995), 315.

³⁴⁵ Lodder, "Towards a Theoretical Basis: Fusing the Formal and Utilitarian," 106.

³⁴⁶ Brik cited in "Constructivism and Productivism in the 1920s," 100. No source given.

³⁴⁷ OBMOKhU, (Society of Young Artists) was established in Moscow 1919. Original members included Rodchenko, Stenberg Brothers, G. Yakulov. Rodchenko, Stepanova, and Noever, *The Future Is Our Only Goal*, 257.

transitional activities before the “real work” of “practical activity” in art could occur.³⁴⁸ As far as the Productivists were concerned, however, while these works were necessary, the period of this development was now over.³⁴⁹ The Productivists saw a deep contradiction in the laboratory works, demonstrated by a lack of social purpose or utilitarian potential of these objects. In the opinion of the Productivists, this lack of real social purpose rendered these artworks as representational of construction, no different, in fact, to the condemned easel art of the bourgeoisie.³⁵⁰

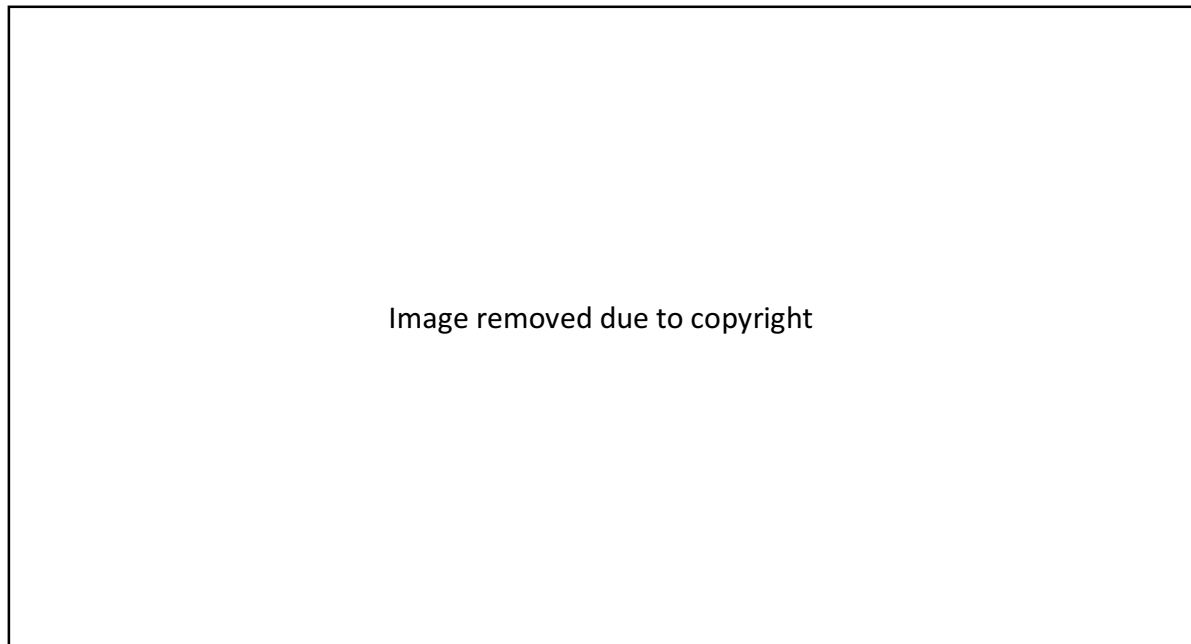


Fig. 33 Second Spring Exhibition of the OBMOKhU, (May 1921).

In Lodder, Christina. *Russian Constructivism*. New Haven: Yale University Press, 1985, 66.

Art reprogrammed – the solution of the utilitarian object toward a new social utopia

The Productivists and the Leftists artists while rejecting the Constructivists laboratory artworks instead embraced the Constructivists' concept of utility. This provided a solution to lay the foundations for a new type of artwork, the functional utilitarian object which would enter into and construct life. For the Constructivists, utility was formulated as exercising

³⁴⁸ "Program of the Constructivist Working Group of Inkhuk," in *Art into Life: Russian Constructivism, 1914-1932* ed. Nicholas H. Allison (New York, NY: Rizzoli, 1990).

³⁴⁹ Kiaer, *Imagine No Possessions: The Socialist Objects of Russian Constructivism*, 13.

³⁵⁰ Lodder, "Towards a Theoretical Basis: Fusing the Formal and Utilitarian," 104.

“the logic of everyday life.”³⁵¹ Activating this concept of utility, the Productivist's would further extend the art object into everyday life by bringing it into the production line of industry. Here, Popova and Stepanova provided the leading examples of artists producing utilitarian fabrics, infiltrating everyday life through industry. Moreover, the fabric production line offered Popova and Stepanova an extension of their artistic process.³⁵² Here, the aspiration was that life provided the artwork's material. The solution was functionalism and the implications were, as Arvatov would say: “real working with materials becomes in reality a great organising power, when it is directed to the creation of necessary utilitarian forms, i.e. objects.”³⁵³ For Productivists and Constructivists such as Arvatov, Stepanova and Popova, redeploying art in this way offered the organisation of life that would collapse the perceived historical division between art and life intrinsic to the bourgeois art object.

For the Productivists and leftist theoreticians it was not only the utilitarian object that was the new art, but rather life itself would become art. In 1923 the theoretician Nikolai Chuzhak, would claim: “Art is a method for building life – this is the slogan behind the proletarian conception of the science of art.”³⁵⁴ In Bürger's analysis, the avant-garde redirected the practice of aesthetics into the construction of everyday life as its organising principle.³⁵⁵ As Bürger would say: “Now, it is not the aim of the avant-gardistes to integrate art into *this* praxis [the means-end rationality of everyday life]. . . . the attempt[ed] to organize a new life praxis from a basis in art.”³⁵⁶ I would further add, that the avant-garde harnessed both the ideological function of art that they had recognised in the bourgeois art

³⁵¹ Stenberg brothers and Medunetskii, from a manuscript used to prepare a paper they delivered at INKhUK 4 Feb 1922, ‘Tezisy po dokladu “konstruktivizm,”’:1. Cited in *ibid.*, 97, 282n125.

³⁵² Popova and Stepanova requested to have full access to all the production sections, with rights to vote on issues of production plans, design drawings, hiring of artistic workers; participation in chemical and colour laboratories, the oversight of their own specifications for fabric designs; contact with the industry, tailors, magazine, promotion advertising and designs for window displays. V.F. Stepanova and L.S. Popova, “Memo to the Directorate for the First State Cotton-Printing Factory,” unpublished manuscript, 1924, The Rodchenko-Stepanova Archive, Moscow. Cited in Kiaer, *Imagine No Possessions: The Socialist Objects of Russian Constructivism*, 94.

³⁵³ Boris Arvatov, *Iskusstvo i proizvodstvo*, (Moscow, 1926): 72-73. Cited in Lodder, “Towards a Theoretical Basis: Fusing the Formal and Utilitarian,” 106.

³⁵⁴ Nikolai Chuzhak, “Pod znakom zhiznestroeniia,” *Lef* 1, (1923): 36. Cited in Groys, *The Total Art of Stalinism: Avant-Garde, Aesthetic Dictatorship, and Beyond*, 27.

³⁵⁵ Bürger, *Theory of the Avant-Garde*, 34.

³⁵⁶ *Ibid.*, 49. Bürger's italics.

object, towards their own socialist ends. And, unlike the functionless bourgeois art object, the avant-garde demanded art to become a mobiliser within the construction of everyday life.³⁵⁷ The proposition of the utilitarian use-ready object would practically connect the art object to the creation of everyday life through the agency of function. This was to create not art in life, but rather life in and through art. Function provided this active agent for the reprogrammed use-ready art object within a greater effort of forming the teleological end point of life itself.

Rodchenko and his student's multifunctional utilitarian objects, in addition to Arvatov's conception of the everyday life of things, would provide exemplar precedents for how the Constructivists and Productivists could practically imagine these utopian end aspirations. However, before I commence this, I will turn to an alternative avant-garde example, the Polish Unists, sculptor Katarzyna Kobro and painter husband Władysław Strzemiński who also aspired to activate the function of art toward a new world order.

Unism – producing the generative effect-ready laboratory art object

By contrast, an alternative trajectory emerged in Poland from the early 1920s that also aimed to build a new utopian world activated through art. Strzemiński, who developed the art movement of Unism, in collaboration with his wife Kobro, were central protagonists in the Polish avant-garde during the 1920s and 1930s (Fig. 34, Fig. 35, Fig. 36).³⁵⁸ The

³⁵⁷ Ibid.

³⁵⁸ Despite Kobro and Strzemiński's acknowledged active contributions as international figures within the art world during 1920s and 1930's, there has been limited knowledge of their work from the mid-twentieth-century in the West. There is however, more research on Strzemiński than Kobro. It is outside the scope of this project to account for this situation however, for a thorough summary of an overview of the status of scholarship in 1990 on their work see Yve-Alain Bois, "Strzemiński and Kobro: In Search of Motivation," in *Painting as Model* (Cambridge, Mass.: MIT Press, 1990), 296n2. The 1973 exhibition and catalogue remains a key source of their work and writings translated into English. Ryszard Stanisławski et al., *Constructivism in Poland 1923-1936*, trans. Piotr Graff and Ewa Krasieńska (Łódź: Museum Sztuki, 1973). Since then the most comprehensive overview of Kobro's practice and writing is the catalogue from the Henry Moore Institute exhibition of her work in 1999. Katarzyna Kobro, *Katarzyna Kobro, 1898-1951*, ed. Elżbieta Fuchs, et al., trans. Jerzy Jarniewicz Joanna Holzman, Alina Kwiatkowska, Axel Lapp, Sophie Lefèvre, Piotr Szymor, Maciej Świerkocki (Leeds, England: The Henry Moore Sculpture Trust, 1999). Strzemiński and Kobro's written theories of Unism and art in general, remains mostly untranslated from the Polish with fragments in English and others in French. For a rather stunning claim on the potential of Kobro's sculptural contribution to modernism and the twentieth-century sculpture more generally see Bois, "Strzemiński and Kobro: In Search of Motivation," 144, 51. For an overview of their contribution to the numerous avant-garde groups: *BLOK* Group, *Praesens*

overriding principle of Unism developed by Strzemiński over the 1920s was the unity of the artwork with space, where art would function as an autonomous laboratory into the problem of artistic form. This was in contrast to the Productivist agenda where the utilitarian art object sought a direct engagement with everyday life. Kobro and Strzemiński's advocacy for art as an autonomous laboratory was conceived as quasi research providing generative solutions that could be applied to life. In this context, I will argue, that rather than reprogramming art into a use-ready functional effect in the world, like the Productivists, Kobro and Strzemiński, positioned the artwork as having a generative effect producing other use-ready outcomes in the world. For Kobro, the laboratory of sculpture in particular, could provide instruction for the principles of functionalism that could then order and structure the new social utopia – the end-goal of art. Art was reprogrammed for the Unists as effect-ready.



Fig. 34 Katarzyna Kobro (Summer 1924?) (left)

in *Katarzyna Kobro, 1898-195*, ed. Elżbieta Fuchs, et al. (Leeds, England, Łódź, Poland: Muzeum Sztuki, The Henry Moore Sculpture Trust, 1999), 12.

Fig. 35 Władysław Strzemiński, *Kompozycja unistyczna 9* [Unist Composition 9] (1931)(right)

Accessed May 20, 2015. <http://msl.org.pl/pl/kolekcja-sztuki/artysta/wadysaw-strzeminski/>.

Group, both with publications and then the *a.r.* group, followed by the Polish Artists Trade Union, and their exhibition and publication contributions during the 1920s-1930s, see Steven A. Mansbach, *Modern Art in Eastern Europe : From the Baltic to the Balkans, Ca. 1890-1939* (Cambridge : Cambridge University Press, 1999., 1999), 126, 13, 336n100.; For further acknowledgement of their international contribution see Hal Foster et al., "The Social History of Art: Models and Concepts," in *Art since 1900: Modernism, Antimodernism, Postmodernism* (London: Thames & Hudson, 2004), 228.; Janina Ładnowska, "Katarzyna Kobro — an Outline of Her Life and Work," in *Katarzyna Kobro, 1898-195*, ed. Elżbieta Fuchs, et al. (Leeds, England, Łódź, Poland: Muzeum Sztuki, The Henry Moore Sculpture Trust, 1999), 63.

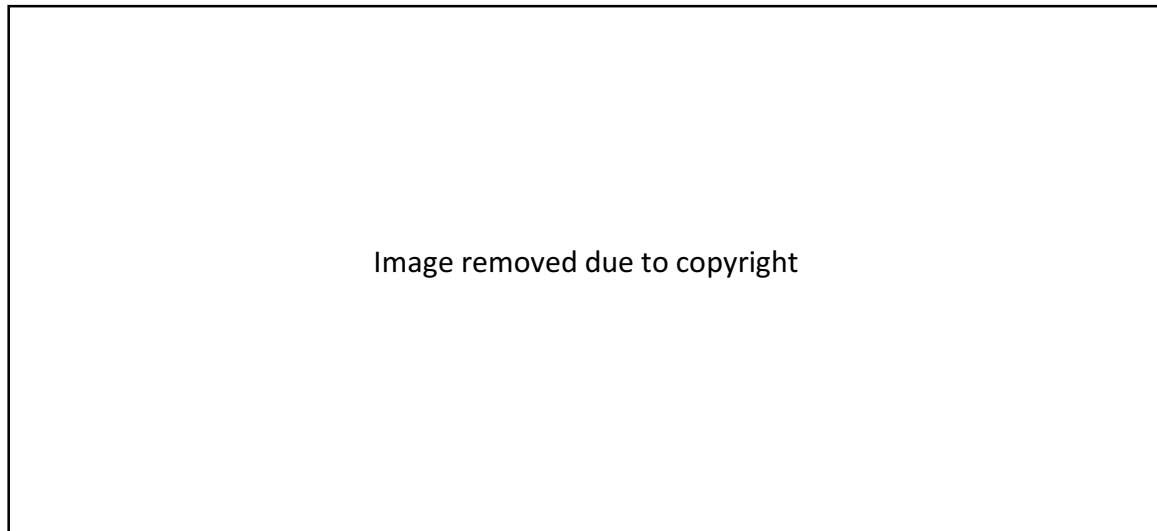


Fig. 36 Władysław Strzemiński, *Unizm w Malarstwie*, Biblioteka Praesens, Warsaw, no. 3, (1928)

Screen Shot. In Wladyslaw Strzemiński Retrospective at MS2. Łódź, Poland Vernissage TV. Accessed June 1, 2015 <https://www.youtube.com/watch?v=60oeAPGT7V4>.

Despite Kbro and Strzemiński's thinking and practice commonly being associated with International Constructivism,³⁵⁹ their allegiances were, in fact, not with Moscow's brand of INKhUK Constructivism. Rather their position was a continuation of Suprematism that had informed the Affirmation of the New Art (UNOVIS)³⁶⁰ where the latter two movements had been directly led by Kazimir Malevich. Fleeing Russia to live in Poland, sometime toward the end of 1921 or early 1922,³⁶¹ Kbro and Strzemiński brought with them the legacy of the Productivist, Constructivist and UNOVIS debates of the Russian avant-garde. Kbro and Strzemiński had both been raised in Russia and had studied art in different institutions in

³⁵⁹ Discussion of Kbro's and Strzemiński's practice are often under essay titles of "International Constructivism." For example: Foster et al., "The Social History of Art: Models and Concepts," 228.; Christina Lodder, "International Constructivism and the Legacy of Unovis in the 1920s: El Lissitzky, Katarzyna Kbro Władysław Strzemiński," in *Constructive Strands in Russian Art, 1914-1937* (London: Pindar, 2003).

³⁶⁰ UNOVIS (The Affirmation of the New Art) was a group of avant-garde artists led by the artist Kasimir Malevich at the Vitebsk Art School in 1919. It ceased activities in Vitebsk in 1922. Aleksandra Shatskikh, "Unovis: Epicenter of a New World," in *The Great Utopia: The Russian and Soviet Avant-Garde, 1915-1932* (New York: Guggenheim Museum : Distributed by Harry N. Abrams, 1992), 63.

³⁶¹ Zenobia Karnicka, "Chronology of Kbro's Life and Work," in *Katarzyna Kbro, 1898-1951* Vol. no. 182/99 ed. Alina Kwiatkowska Elżbieta Fuchs, Penelope Curtis, Stephen Feeke (Leeds, England: The Henry Moore Sculpture Trust, 1999), 34.

Moscow.³⁶² During that time they had become followers of Malevich³⁶³ who subsequently moved in 1919 to teach in the Faculty of Vitebsk's Peoples' Art School.³⁶⁴ Malevich had brought to Vitebsk a Suprematist pedagogical agenda which shortly after, in 1920, was formalised as UNOVIS³⁶⁵ within the Faculty. It was a motion that initiated the "non-objective"³⁶⁶ principles of Suprematism.³⁶⁷ Later, Kobro and Strzemiński also left Moscow and settled for a short time in Smolensk. Here they developed a frequent dialogue with Malevich³⁶⁸ and subsequently led the Smolensk branch of UNOVIS.³⁶⁹

Unism's laboratory artwork – its UNOVIS and Suprematist inheritance

In order to understand Kobro and Strzemiński's insistence on the artwork as an autonomous laboratory in relation to the end-goal of producing a new society, it is worth briefly outlining the principles of UNOVIS in relation to Suprematism. UNOVIS was seen by Malevich as renewing art under the premise of Suprematism – a theory he had been developing since 1915 as a non-objective, non-representational search for the reality of cosmic space in painting.³⁷⁰ As Lodder points out however, UNOVIS redirected the mystical associations of Malevich, toward technology and the material everyday ends with the aim of building a

³⁶² Kobro attended the School of Painting, Sculpture and Architecture, (Uchilishche Zhivopisi, Vayaniya i Zodchestva) (1917-1920) in Moscow. Ibid., 31. Strzemiński studied at VKhUTEMAS and INKhUK. Andrzej Turowski, "Władysław Strzemiński," in *Constructivism in Poland 1923-1936* ed. Ryszard Stanisławski, et al. (Federal Republic of Germany: Museum Sztuki, Łódź, 1973), 137-38.

³⁶³ Strzemiński became aligned with Malevich at Vkhutemas and INKhUK. "Władysław Strzemiński," 137-38.

³⁶⁴ Aleksandra Semenovna Shatskikh, *Vitebsk: The Life of Art*, trans. Katherine Foshko Tsan (New Haven: Yale University Press, 2007), 66-67.; Joop M. Joosten, "Biographical Outline," in *Kazimir Malevich 1878-1935* (Amsterdam: Stedelijk Museum, 1988), 78.

³⁶⁵ Evgenii Kovtun, "Kazimir Malevich: His Creative Path," *ibid.*, 161. Malevich established and led multiple branches of UNOVIS in various cities such as Moscow, Petrograd, Smolensk and Odessa.

³⁶⁶ Catherine Cooke translates the Russian term *bezpredmetnyi* as meaning having no subject. It is commonly translated in English as non-objective. Catherine Cooke, *Russian Avant-Garde: Theories of Art, Architecture, and the City* (London: Academy Editions, 1995).

³⁶⁷ Joosten, "Biographical Outline," 78.

³⁶⁸ Karnicka, "Chronology of Kobro's Life and Work," 33.

³⁶⁹ Shatskikh, "Unovis: Epicenter of a New World," 57.; Karnicka, "Chronology of Kobro's Life and Work," 33. Multiple branches were established in various cities such as Moscow, Petrograd, Smolensk and Odessa. On the closure of the Vitebsk branch Malevich moved to Petrograd. Kovtun, "Kazimir Malevich: His Creative Path," 161.

³⁷⁰ "Kazimir Malevich: His Creative Path," 161. Malevich had coined the term Suprematism by 1915 in his search for a non-objective, non-representation of the cosmic reality of space and number and the fourth dimension in painting. See: *ibid.*, 155-60. For a discussion on Suprematism see also Hal Foster et al., "1915: Malevich and Suprematist Painting," in *Art since 1900: Modernism, Antimodernism, Postmodernism*, ed. Hal Foster, et al. (London: Thames & Hudson, 2004).

progressive society.³⁷¹ Advocating for a “utilitarian world of things,” UNOVIS on the surface shared a similar rhetoric to that of the Constructivists. Yet there were significant differences in their philosophical underpinnings, and in fact, fierce opposition to the Constructivist ideology.

UNOVIS’ “utilitarian world of things,” was underpinned by Malevich’s drive to understand the “real” foundations of the universe, despite muting Suprematism’s mystical attributes.³⁷² The “world” of UNOVIS was vastly different to that of the Moscow INKhUK Constructivists and Productivists concept of “everyday life.” In his theory, Malevich had sought the differentiation of “reality” from “actuality.” Reality for Malevich was UNOVIS central enquiry, where reality was defined as what lay behind the world’s objective realm. UNOVIS aimed to create a new reality. In comparison to “reality” was another condition that Malevich termed, “actuality.” Actuality was the everyday, conceived of as: “illusoriness incarnate, enslaving man’s soul.”³⁷³ As Malevich and UNOVIS members saw it, this was the terrain of the Productivists,’ who were servants and nothing but the “lackeys of the factory,”³⁷⁴ The Productivist utilitarian object was in UNOVIS’ view limited to the banal ordinariness of servicing needs and belonged to the latter category of actuality.³⁷⁵

Later, when Strzemiński, had moved to Poland, these Russian avant-garde acrimonious and ideological schisms about the nature of art and the most productive way forward to construct a new reality, were not only still searing, but provided the groundwork for his ideological position within the Polish avant-garde.³⁷⁶ In Strzemiński’s view Productivism was

³⁷¹ Lodder, "International Constructivism and the Legacy of Unovis in the 1920s: El Lissitzky, Katarzyna Kobro Władisław Strzemiński," 544.

³⁷² Ibid.

³⁷³ Shatskikh, "Unovis: Epicenter of a New World," 59.

³⁷⁴ Malevich. Cited in *ibid.*, 59-60. No original source given.

³⁷⁵ Ibid.

³⁷⁶ There had been competition between Moscow institutions INKhUK and OBMOKhU on the one side, and UNOVIS on the other. The antagonism between the two groups was evident in an exhibition where over two hundred UNOVIS works were shown with INKhUK art works in Moscow December 1921. See *ibid.*, 60. Strzemiński’s (along with Kobro)’s, frequent and tumultuous instigation and then abandonment of artist groups, could be seen as a continuation of the tension between the “laboratory” versus the Productivist schism from the Russia they had escaped. For example, they belonged to groups such as *BLOK* (1924-1926), *Praesens* (1926-1939) and the *a.r.* Group (1929-1936). Their departure from these groups were often based on ideological disagreements. Karnicka, "Chronology of Kobro's Life and Work," 35, 38, 41.

the outcome of State oppression where Productivism had been reduced to a shallow version of art, existing only because of its endorsement by the Soviet regime. In an article titled “Notes on Russian Art,” for the *Zwrotnica* publication, (1922) he gave a scathing review on what he called the “infertility of the Productivists,” as he would say:

Most Productivists can be described as people just talking, preaching their principles, but not working. Some have not produced a single work, others produced works which do not comply with Productivist principles. Among the latter, one must include Tatlin, with his disgraceful design for the Monument to the Third International, and Lavinsky, with his designs . . . based on the principle of ‘engineerism’ (engineerism – a movement which emerges when the artist, bankrupt in his art, justifies himself by using engineering forms and objectives).

And later:

Productivist trends are an outcome of a compromise between new art and the authorities in the Soviet Union. . . . In Russian conditions, art either exists as official art or does not exist at all.

This compromise came at a cost – Productivism had a negative effect on the minds of people connected with art – it made them turn away from solving the problem of an organic unity, of form and space, problems left by Cubism and Suprematism.³⁷⁷

As Strzemiński argued, the Productivists’ and Constructivists’ concept of art as functionally serving the everyday was bereft. Underpinning Strzemiński’s agenda was the production of new form through a unity with space. For Strzemiński, this was a legacy of Malevich and Suprematism which had also informed UNOVIS thinking. Fundamental to UNOVIS’

³⁷⁷ Władysław Strzemiński, “Notes on Russian Art,” in *Between Worlds: A Sourcebook of Central European Avant-Gardes, 1910-1930*, ed. Éva Forgács and Timothy O. Benson (Cambridge, Mass.; London: MIT Press, 2002), 278.

conception of art was its spiritual value, a concept maintained from Malevich.³⁷⁸ Moreover, from this perspective in contrast to the Constructivists and Productivists, art was understood to be a supreme organising force.³⁷⁹ Frequently referring to Malevich in their writings, this perspective was propounded by Kobro and Strzemiński. This position was also shared by the Russian artist El Lissitzky, a member of UNOVIS, where art was charged with the problem of producing new form. As Lissitzky would explain in a lecture in 1922 titled “New Russian Art: a Lecture,” the difference between the Constructivists’ and UNOVIS’ concept of functionality. In Lissitzky's view, the Constructivist's sought art's role as direct serviceability in everyday life, whereas UNOVIS' solution to functionality was the search for new form.³⁸⁰ As Lissitzky would outline:

*Unovis distinguished between the concept of functionality, meaning the necessity for the creation of new forms, and the question of direct serviceableness. They [UNOVIS] represented the view that the new form [art's] is the lever which sets life in motion, if it is based on the suitability of the material and on economy. This new form gives birth to other forms which are totally functional, and through them it is itself enriched, modified and further developed.*³⁸¹

UNOVIS’ agenda was to use the new forms of art to generate other practical and functional innovations everyday forms which would then activate and organise life through function.³⁸² In Lissitzky, Kobro and Strzemiński’s shared view, this new form of art was conceived as the most profound organising force and should not be reduced to the Constructivist and

³⁷⁸ Lodder, "International Constructivism and the Legacy of Unovis in the 1920s: El Lissitzky, Katarzyna Kobro Władisław Strzemiński," 544.

³⁷⁹ Ibid., 546.

³⁸⁰ El Lissitzky, "New Russian Art: A Lecture, 1922," in *El Lissitzky: Life, Letters, Text* ed. El Lissitzky and Sophie Lissitzky-Küppers (London: Thames and Hudson, 1968), 340.

³⁸¹ Ibid.

³⁸² Lodder, "International Constructivism and the Legacy of Unovis in the 1920s: El Lissitzky, Katarzyna Kobro Władisław Strzemiński," 546. While UNOVIS, Kobro, Lissitzky would advocate for the separation of art, UNOVIS members also produced practical objects and had extended their engagement to architectural and engineering projects. Ibid. This also applied to Kobro and Strzemiński who produced designs for kiosks and Kobro had also produced a design for a functional child's nursery. Janina Ładnowska, *Katarzyna Kobro, 1898–1951*. Leeds England; Łódź: Henry Moore Institute; Muzeum Sztuki, 1999), 151–52. See p. 166.

Productivist's banality of immediate utility, practicality and function – the use-ready.³⁸³

Moreover, art existed outside the everyday world of objects as things, yet essential to it, in order to act as an agent in generating other forms, that would reconstruct and organise the world through function. Art was ready – to take effect.

Unism's laboratory artwork – effect-ready as a supreme organising force

In this context, Kobro and Strzemiński's defence of the autonomy of the artwork as a "laboratory" was firm. It staked out their ideological ground as inherited from UNOVIS with its Suprematist value of the artwork as a supreme organising force. As Strzemiński would say in defence of art conceived as a laboratory of experimentation: "the aim of modern painting and sculpture is . . . a creative experiment, an invention of form, which stimulates the growth of opportunity provided by daily life."³⁸⁴ For Strzemiński, this would also mean that laboratory abstract art, may not have immediate application into the everyday world.³⁸⁵ Further, art for Kobro, was not the production of beautiful objects, nor ornamentation, or other fantasy subconscious dream worlds as was produced by impressionists and Surrealists. Kobro, like those in the Soviet Russia before her condemned the separation of arts productivity from human need. In this paradigm of the past, Kobro saw art located in the realm of "unearthly, Platonic beauty" that produced a passive contemplation as she would say a: "factory of illusions and dreams . . ." and she continues: "[where] art becomes a narcotic anaesthetic against its [life's] imperfections."³⁸⁶ For Kobro, like Strzemiński, the goal of sculpture was not only sculpture itself, that would risk this factory of illusion of dreams, but rather its ultimate effect-ready function – the restructuring of life itself. As Kobro would also reiterate: "The task of art is co-operation in achieving the

³⁸³ Lodder, "International Constructivism and the Legacy of Unovis in the 1920s: El Lissitzky, Katarzyna Kobro Władysław Strzemiński," 542, 44, 46.

³⁸⁴ Władysław Strzemiński, "'A.R' 2," in *L'espace Uniste: Écrits Du Constructivisme Polonais* ed. Antoine Baudin and Pierre Maxime Jedryka (Lausanne: L'Age d'homme, 1977), 129. Cited in Bois, "Strzemiński and Kobro: In Search of Motivation," 127.

³⁸⁵ Strzemiński, "'A.R' 2," 130. Cited in Bois, "Strzemiński and Kobro: In Search of Motivation," 133.

³⁸⁶ Katarzyna Kobro, "Functionalism," in *Constructivism in Poland 1923-1936* ed. Ryszard Stanisławski, et al. (Federal Republic of Germany: Museum Sztuki, Łódź, 1973), 118.

victory of higher forms in the organisation of life.”³⁸⁷ The new art in Kobra and Strzemiński’s terms, was not fantasy or illusion, but the construction of reality.

What is also distinctive about Kobra’s proposition for the goal of sculpture was not only that she harnessed the generative potential of the research laboratory to produce the ideological end-goal of art. Kobra also conceived of function, in particular functionalism as a goal of art itself. It was as if functionalism, was an autonomous motivating drive that was searching for an art to realise its goals in the world. As Kobra would say: “The task of Functionalism is to find a type of art form which can perform its utilitarian functions in the most economical way. Functionalism is seeking the simplest method of producing artistic emotions which would be released by means of organising activities of utilitarian value.”³⁸⁸ This idea that functionalism was an agent in itself searching for simplicity of organisational method to give form to things strikes a parallel with the architect, Louis Sullivan.³⁸⁹ Sullivan also shared this position when he wrote in “Kindergarten Chats”: “form ever follows function, that is the law – a universal truth.”³⁹⁰ For Sullivan, function was an agent itself, literally *creating* and *organising* its form.³⁹¹ In these terms, art and sculpture for Kobra would be a laboratory for functionalism, as she says: “the field of plastic experimentation which yields formal solutions that are useful from the point of view of the utilitarian realization of Functionalism.”³⁹² Sculpture as a laboratory could establish the principles that functionalism was searching for that could then in turn provide solutions for living. In the essay “Functionalism,” she would articulate this as being:

Our psyche is in a tangle, being over-complicated. Its entanglements are to a large extent due to the condition of the surrounding world – chaotic and disorganized. Being shaped by contradictory forces, society consequently produces a psyche that is

³⁸⁷ Katarzyna Kobra, “A Sculpture Is...” in *Katarzyna Kobra, 1898-1951*, Vol. no. 182/99 ed. Elżbieta Fuchs, et al. (Leeds, England: The Henry Moore Sculpture Trust, 1999), 169.

³⁸⁸ “Functionalism by Katarzyna Kobra,” in *Katarzyna Kobra, 1898-1951* ed. Elżbieta Fuchs, et al. (Leeds, England: The Henry Moore Sculpture Trust, 1999), 165.

³⁸⁹ See p. 43.

³⁹⁰ Louis H. Sullivan, “Kindergarten Chats,” in *Kindergarten Chats (Revised 1918) and Other Writings* ed. Isabella Athey (New York: George Wittenborn, Inc., 1947), 170.

³⁹¹ *The Autobiography of an Idea* (New York, Dover Publications, 1956; repr., 2009), 290.

³⁹² Kobra, “Functionalism by Katarzyna Kobra,” 166.

*uncoordinated and paradoxical in its various effects. If society were founded on the principle of functional fulfilment of its needs, we should be able to free ourselves from the condition of “over-refined flutter.”*³⁹³

Sculpture was conceived as a specific laboratory for functionalism. Its generative effect-readiness would establish the principles of functionalism enabling the reorganisation of the world to produce a new utopia of artistic emotions and psychic states of calm.

Summary – Productivist and Unist reprogramming of art as use-ready and effect-ready within a broader context of forming

The Productivists and the Unists provide two case studies into the aspirations of activating function at the end-use of the art object – its use-ready and effect-ready function. While each positioned art in two totally irreconcilable and bitterly fought over positions, they nonetheless shared the rejection of the bourgeois art object and the ultimate ideological function of art as the creation of a new utopian world order. Where the Productivists sought actual engagement of the art object with the material everyday reality – its use-readiness was direct, Kobro and Strzemiński (informed by Malevich), by comparison, insisted on arts autonomy within the laboratory – as effect-ready.

These avant-garde examples continue to build the case that that the use-ready and effect-ready art object can be considered within the overall process of function as forming towards a teleological end-goal of building life. In this thesis, this was first identified with Aristotle,³⁹⁴ and then following with philosophers of function theory when considering the open and inclusive containing system as articulated by Beth Preston.³⁹⁵ The Unist laboratory artwork considered as effect-ready is clearly identifiable within the broader context of forming. For the Unists, art as a supreme organising force generatively activates the production of new practical and functional forms to organise everyday life. This is also the case for the Productivists, where the direct engagement of the utilitarian object produces the

³⁹³ Ibid.

³⁹⁴ See p. 20.

³⁹⁵ See p. 72.

teleological end-goal of forming of the new socialist comrade and society. This next section will consider examples of multi-functional utilitarian artworks that Rodchenko and his VKhUTEMAS students produced in addition to the theory of Arvatov that provide practical instruction for how the reprogrammed functional art work was theorised to produced the new socialist world.

Aleksandr Rodchnko's and Boris Arvatov's functional system field of utilitarian use-ready art objects and Things

Aleksandr Rodchenko's Metfak student's multifunctional furniture

In 1923, a range of multi-functional, portable and interchangeable utilitarian objects by Rodchenko's students were shown at the first exhibition of the Faculty of Metalwork at VKhUTEMAS (Metfak). Brik had lauded Rodchenko as the new model artist. He claimed Rodchenko has having "iron constructive power"³⁹⁶ where: "He has become a Constructivist and production artist. Not just in name, but in practice."³⁹⁷ Rodchenko's student work included: a folding bed by Peter Galaktionov, (Fig. 37), an armchair bed by Nikolai Sobolev (Fig. 38), and three very economical spatial framed kiosks and books shelves: a book shelf by Vladimir Pylinsky, (Fig. 39), another by Alexander Galaktionov (Fig. 40), and a versatile portable, foldaway kiosk for the theatre by Zakhar Bykov (Fig. 41). Out of all the exhibits Bykov's kiosk offered the most expansive vision of an adaptable and flexible object. Utilising a concertina framed structure, it could transform from a box carrying books, while being transported for installation, to a kiosk at various theatre sites where it would be used. When opened, the kiosk established a virtual sense of volume where this object would address the theatre goers in three dimensions, offering various opportunities for displaying books and other information that a kiosk might disseminate. In an article on these multi-functional utilitarian furniture objects that Rodchenko's students exhibited, Stepanova (Rodchenko's partner) would write:

³⁹⁶ Osip Brik, "Into Production," *Screen* 12, no. 4 (1971): 38.

³⁹⁷ *Ibid.*, 37.

The works displayed on the basis of this criterion offer three examples of a solution to the problem:

- 1. an object ready for use, with moving parts . . .*
- 2. an object that can be dismantled and folded up after use . . .*
- 3. a multi-functional object for personal use by a student at home . . .*³⁹⁸

Here in Stepanova's account, these Constructivist utilitarian objects produced by the students under Rodchenko's pedagogical model were art objects "ready for use." Brik would also write in a review:

*Naturally the works by students are not yet concrete objects, ready for use; they are just trials, important tests that demonstrate how art has emerged from the narrow confines of the easel, and that little by little, but decisively, the way towards production is opening up. From it will be born the material culture of the future.*³⁹⁹

As new Productivist objects justified with a social purpose, they were ready for practical action to enable its functions and effects on the people, materials and things in the world for the ultimate end-goal of actively organise and construct the new ideological conditions aspired by the revolution.

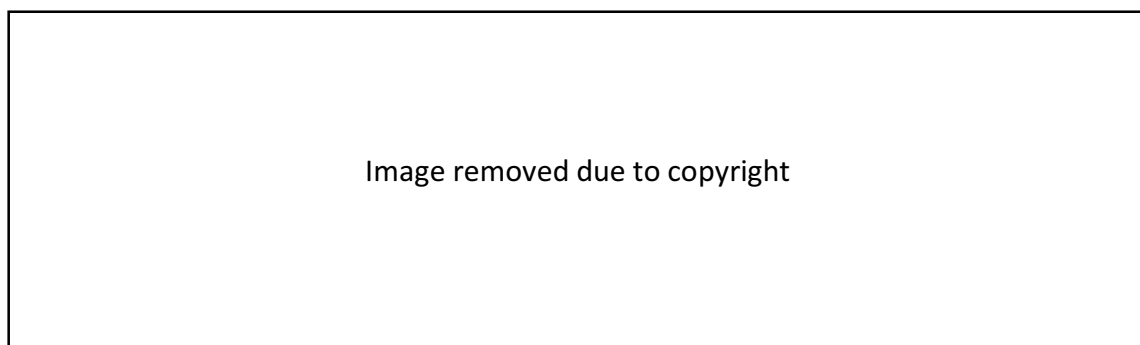


Fig. 37 Peter Galaktionov, Folding Bed, (1923)

In Margolin, Victor. *The Struggle for Utopia: Rodchenko, Lissitzky, Moholy-Nagy, 1917-1946*. (Chicago: University of Chicago Press, 1997), 90.

³⁹⁸ V. Stepanova, "O rabotakh konstruktivistskoi molodëzhi," (On the works of the young Constructivists), *Lef* 3 (1923): 53-56. Cited in Khan-Magomedov, Quilici, and Rodchenko, *Rodchenko: The Complete Work*, 174n12.

³⁹⁹ Osip Brik, "The School of the Constructivists," *Lef* 3 (1923): 53. Cited in *ibid.*, 175n13.

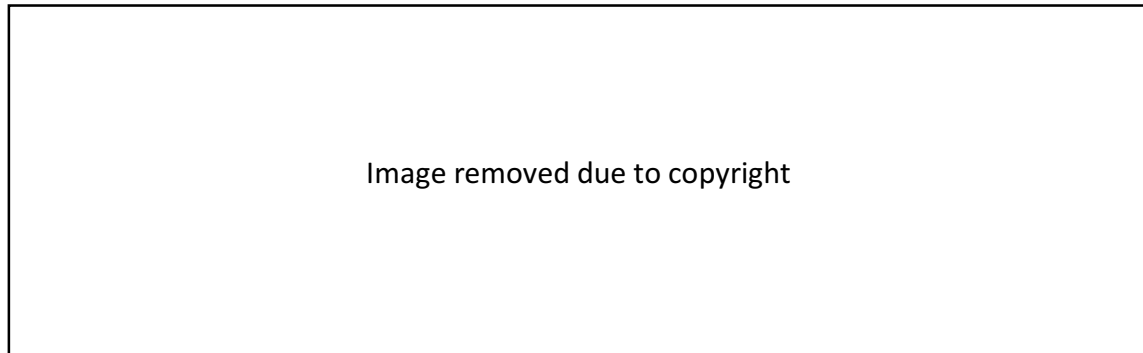


Fig. 38 Nikolai Sobolev, An armchair bed, (1923)

In Margolin. *The Struggle for Utopia*, 91.

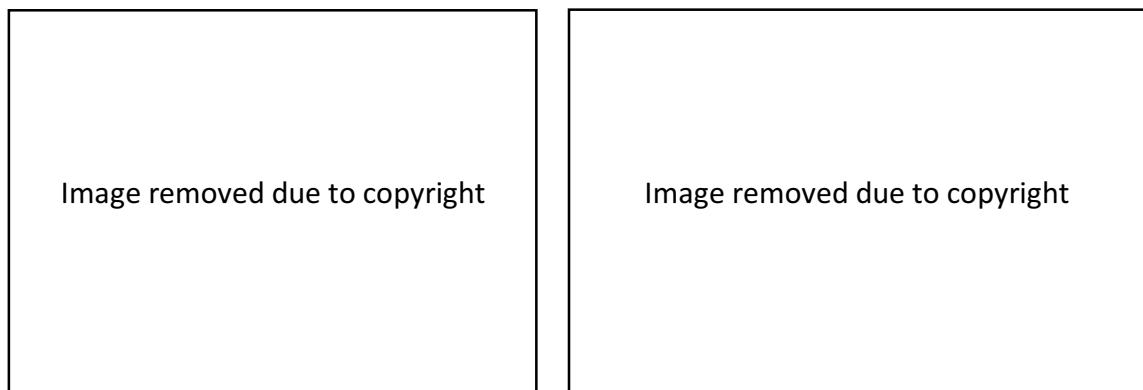


Fig. 39 Vladimir Pylinsky, Book Shelf, (1923)

In Khan-Magomedov, Selim. O., Vieri Quilici, and Aleksandr Mikhaïlovich Rodchenko. *Rodchenko: The Complete Work*. Edited by Vieri Quilici (London: Thames and Hudson, 1986), 174. (left)

Fig. 40 Alexander Galaktionov, Book shelf, (1923)

In Khan-Magomedov, *Rodchenko*, 174. (right)

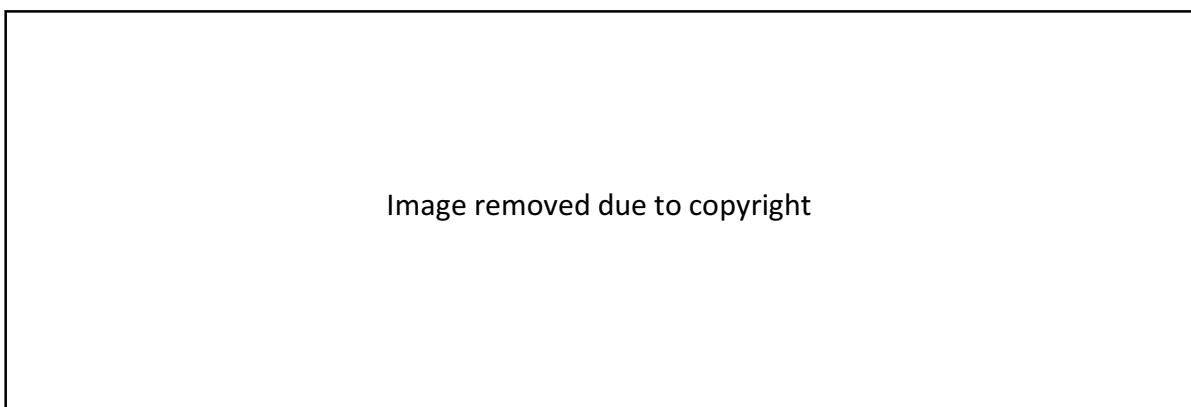


Fig. 41 Zakhar Bykov, Portable foldaway kiosk for the theatre, (circa 1923)

In Margolin. *The Struggle for Utopia*, 92.

Rodchenko's *Workers' Club*

Rodchenko would develop these pedagogical principles of multi-functionality taught to the Metfak students in the *Workers' Club*, for the Paris International Exhibition of Decorative Arts in 1925, (Fig. 42, Fig. 43). Conceived as a whole three-dimensional structure, the *Workers' Club* comprised of interacting parts and multiple objects that would reciprocally function as required. Fabricated specifically for the Paris exhibition the room for the *Club* was oblong in shape and anticipated accommodating thirty people. It included a reading room, theatre, games and relaxation activities and a lecture hall. Exercising the principles of economy, flexibility, and efficiency the elements within the club, such as the furnishings, were required to be limited and standardised to serve various functions and according to need. Objects were to be convertible, where the process of changing these utilitarian objects from one function to another, would not be arbitrary, but rather, considered in order to reduce time and wasted effort. There was a platform in the centre of the room, for example, that could be moved according to the function at the time. During lectures when posters or illustrative material was required, a section could be moved to form a vertical surface. In other circumstances a podium could move from underneath to create a stage for theatre or for exhibits. A folding screen could also become a backdrop for performances.⁴⁰⁰ As Rodchenko would write: "almost all the pieces are built on a dynamic principle so that you can open out an object in a small space to work and put it back compactly afterwards. I consider this principle to be a characteristic typical of and inherent in contemporary work."⁴⁰¹ Stepanova identified that Rodchenko focused on a simplicity of use and standards that would enable objects to expand and contract as required with a focus on maximum economy of space and usability.⁴⁰² Rodchenko painted the moving parts red, while the supporting construction was a neutral grey. As Stepanova elaborated, the colour coding articulated the functional attributes of the component parts that enabled the room to transform into specialist uses.⁴⁰³

⁴⁰⁰ Alexander Lavrentiev, "Alexander Rodchenko," in *Rodchenko and the Arts of Revolutionary Russia* ed. David Elliot (New York: Pantheon, 1979), 29-30. (Note: Lavrentiev is Rodchenko and Stepanova's grandson); Khan-Magomedov, Quilici, and Rodchenko, *Rodchenko: The Complete Work*, 186-87.; Varvara Fedorovna Stepanova, "The Workers' Club: Constructivist A. M. Rodchenko," in *The Future Is Our Only Goal* ed. Peter Noever (Munich; New York, NY, USA: Prestel; Distributed in the USA and Canada by te Neues Pub. Co., 1991).

⁴⁰¹ Rodchenko cited in Lavrentiev, "Alexander Rodchenko," 30. No source given.

⁴⁰² Lodder, "Constructivism and Productivism in the 1920s," 110.

⁴⁰³ Stepanova, "The Workers' Club: Constructivist A. M. Rodchenko," 181.

The *Workers' Club*, like the multifunctional furniture was a utilitarian artwork, fulfilling what Arvatov would prescribe as “the most perfect work of art”: “high quality, extremely flexible and adaptable in its construction, fulfilling its function as an object most of all in its form.”⁴⁰⁴ These new Productivist utilitarian artworks activated the principles of function as use-ready objects within the practice of everyday life that were to combat not only the bourgeois art object, but also facilitate in the construction of a new activated comrade and hence a new social order.

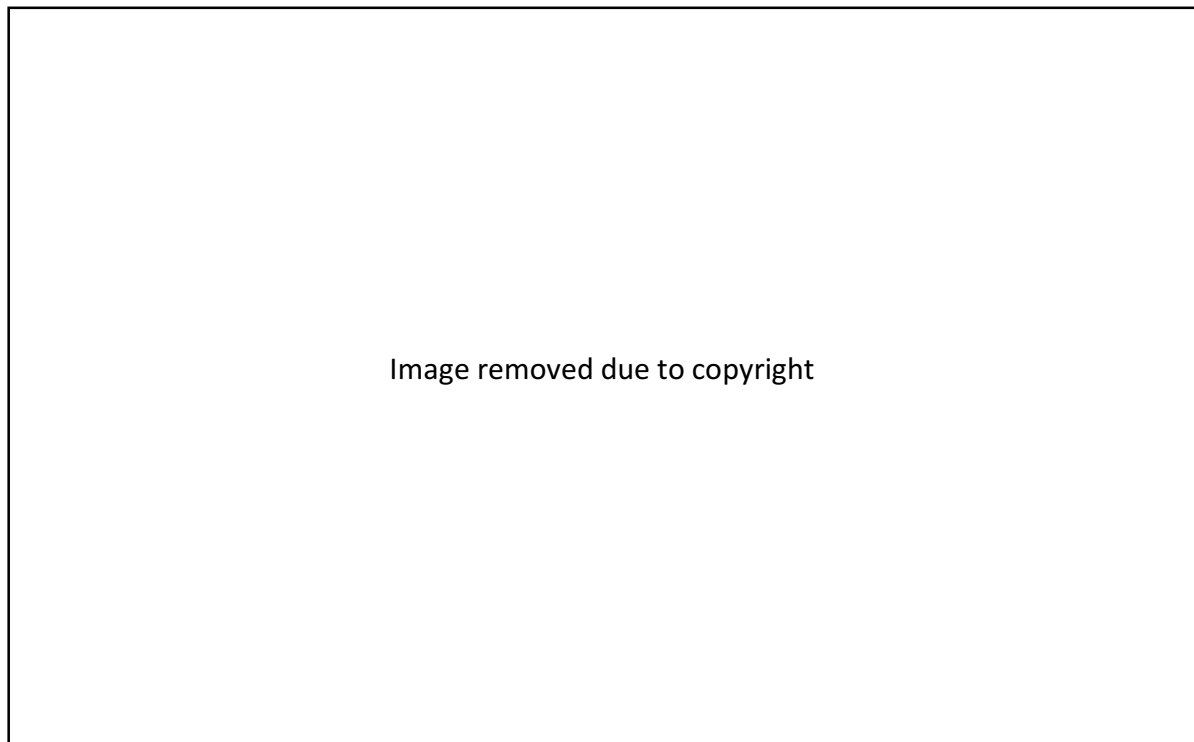


Fig. 42 Aleksandr Rodchenko, Worker's Club, (1925)

In Khan-Magomedov, *Rodchenko*, 176.

⁴⁰⁴ Boris Arvatov, *Iskusstvo i proizvodstvo*, (Moscow, 1926): 91. Cited in Lodder, "Towards a Theoretical Basis: Fusing the Formal and Utilitarian," 106.

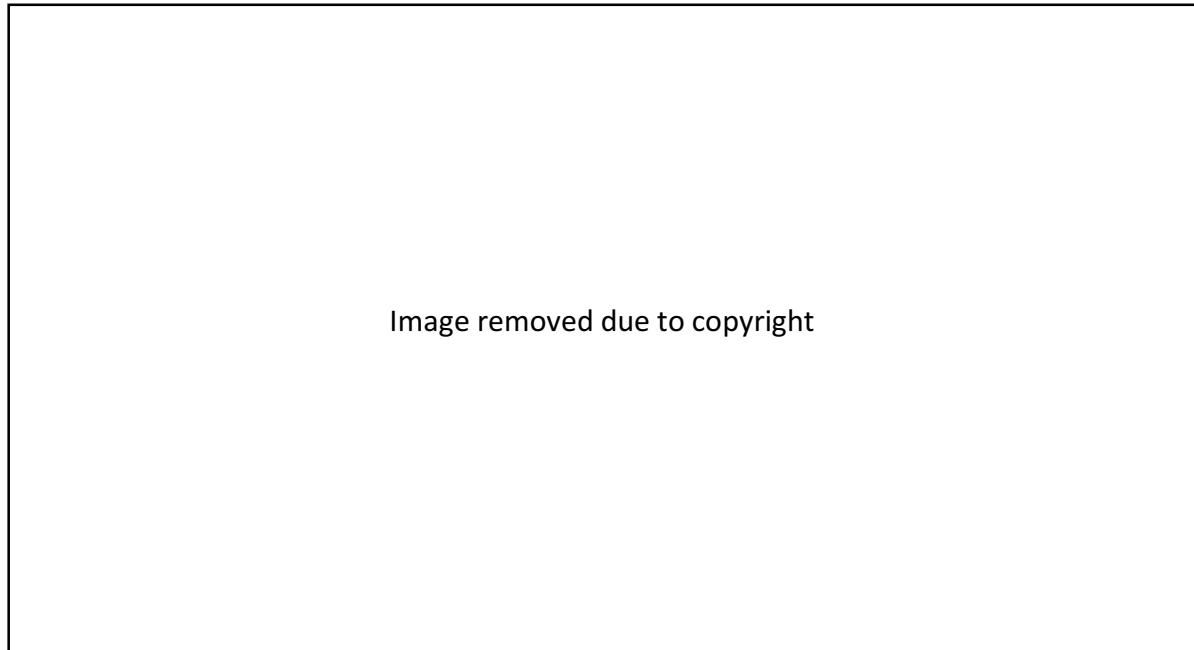


Fig. 43 Aleksandr Rodchenko, Drawing for *Workers' Club* speaker's platform (circa 1925)

In Khan-Magomedov, *Rodchenko*, 180.

Rodchenko's multi-function – movement and change creating a functional correlative system field

Rodchenko's *Workers' Club* and the student's multi-functional furniture activated movement to create a new logic of the everyday based in art. These artworks were not passively received as an aesthetic experience in the "special" sphere of bourgeois art that drew on compositional techniques. Rather, Rodchenko's utilitarian artworks were constructed, literally activating movement in the form's themselves and in the body of the comrade that used the objects, simultaneously destroying this sanctioned space of contemplation.

Function in the use-readiness of Rodchenko's utilitarian artworks was not conceived as satisfying a pre-perceived specific "needs" of "users." As Victor Margolin, the architectural historian noted, there was never any discussion by the Productivist artists and theorists of "user needs."⁴⁰⁵ Rather they focused on the generative and practical effect and action in the world, rather than the concept of success or failure in satisfying a user need from an

⁴⁰⁵ Margolin, *The Struggle for Utopia: Rodchenko, Lissitzky, Moholy-Nagy, 1917-1946*, 85.

object.⁴⁰⁶ Utility was understood as use – as exercising “the logic of everyday life.”⁴⁰⁷ The social purpose, for Rodchenko and his students’ work was the utilitarian object’s functional actions prompting movement, that was charged with an agency to facilitate change.

As established by the Constructivists, movement was the central principle of construction, where objects were organised to generate new movements.⁴⁰⁸ This concept of movement for Rodchenko was not simply a one-way directional causal relationship. In Khan-Mogodev analysis, the central principle for Rodchenko’s work and that of his students was: “that the world of objects constitutes a system of correlated equipment.”⁴⁰⁹ In this conceptualisation, utilitarian objects framed as equipment, refers to Adolf Behne and Le Corbusier’s house as a “tool” where the object enacts a purpose, they “work.”⁴¹⁰ However, for Rodchenko, the movement was not singular or directional – thus not about serving the needs of the individual, like Le Corbusier’s car to facilitate an individual’s bourgeois life.⁴¹¹ Rather as correlated equipment, in its functional performance, one object would work to effect change and move another object within a potentially expansive field encompassing the “world of objects.”

This world of correlated objects is a multi-dimensional functional system. It is, I would argue, akin to the description of Preston’s “containing system” which is an inclusive, “orderly arrangement of interacting things.”⁴¹² Seen in this context of a containing system, Rodchenko’s *Workers’ Club* can be conceived as a dynamic schema of inter-related objects in the space of the room, where key elements: the speaker’s platform, the pull-out wall, the

⁴⁰⁶ Margolin, 1997 #525@85} As discussed in chapter one, the consideration of user needs, locates function with the concept of use that did not become prominent until the mid-twentieth-century. See p. 64.

⁴⁰⁷ Stenberg brothers and Medunetskii, from a manuscript used to prepare a paper they delivered at INKhUK 4 Feb 1922, “Tezisy po dokladu ‘konstruktivizm,’” 1. This document is conserved in a private archive in Moscow. Cited in Lodder, “Towards a Theoretical Basis: Fusing the Formal and Utilitarian,” 97, 282n125.

⁴⁰⁸ Hubertus Gassner, “Analytical Sequences,” in *Rodchenko and the Arts of Revolutionary Russia* ed. David Elliott (New York: Pantheon Books, 1979), 110.

⁴⁰⁹ Khan-Magomedov, Quilici, and Rodchenko, *Rodchenko: The Complete Work*, 179.

⁴¹⁰ See p. 18.

⁴¹¹ Constructivists criticised Western contemporaneous movements in the West such as the Bauhaus and Le Corbusier’s *Esprit Nouveau* as they were seen to produce “aesthetic” versions of applied decorative art that were a result of capitalist industry. Kiaer, *Imagine No Possessions: The Socialist Objects of Russian Constructivism*, 37.

⁴¹² See p. 72. Beth Preston, *A Philosophy of Material Culture: Action, Function, and Mind*, Routledge Studies in Contemporary Philosophy (Hoboken: Taylor and Francis, 2013), 141.

screen and the moving roll-screen for slides and slogans, were easily collapsed and carried to the location where required.⁴¹³ If one element was needed for a particular function, such as a meeting or a theatre production, or a reading room, objects would change to accommodate this need. Here the movement of one thing would activate the movement and change in another.

Rodchenko's multi-functional utilitarian objects would activate the principle of function to produce a predetermined effect that would sequence a series of movements in time to produce multiple forms in the one object. This concept of function embodied by Rodchenko's utilitarian objects recalls Aristotle's definition of function associated with movement and action. In "Parts of Animals," Aristotle says: "By attributes and functions I mean the movements of these and of all other things in which they have power in themselves to cause movement, and also their alterations and reciprocal transformations."⁴¹⁴ This proposal of Aristotle does not locate function as endless change alone,⁴¹⁵ but necessarily defines function as action with a teleological end-point. This end-point is a goal in mind, and as Aristotle would phrase it: "We deliberate not about ends but about what contributes to ends."⁴¹⁶ It is towards the great "sake of" necessity and life. Rodchenko notion of function, also conforms to this Aristotelian conception. In Rodchenko's approach the effect of the utilitarian art object would be pre-determined. This did not mean that Rodchenko would anticipate the form of the object as a part of this teleological end-goal of its function, but rather its effect – what it should do – that would then result in the form.⁴¹⁷ As Rodchenko identifies: "Construction is a system which realises an object by using materials functionally and predetermining the effect."⁴¹⁸ In this context, Rodchenko's

⁴¹³ Stepanova, "The Workers' Club: Constructivist A. M. Rodchenko," 180.

⁴¹⁴ Aristotle, *On the Heavens*, Aristotle: The Complete Works. Volume 1, ed. J. L. Stocks and Jonathan Barnes, (1984 edition; Princeton, New Jersey, USA: Princeton University Press, 1992). 298a23-98b10.

⁴¹⁵ See p. 22. *Parts of Animals*, Aristotle: The Complete Works. Volume 1, ed. W. Ogle and Jonathan Barnes, (Princeton, New Jersey, USA: Princeton University Press, 1992). 1.5.645b15-45b20.

⁴¹⁶ *Nicomachean Ethics*, Aristotle: The Complete Works. Volume 2, ed. W. D. Ross, J. O. Urmson, and Jonathan Barnes, (Princeton, New Jersey, USA: Princeton University Press, 1992). 3.3.1112b12-13a2.

⁴¹⁷ Stepanova noted that for Rodchenko's pedagogical model, he focussed on the functional processes and materials to in the making of the objects not the outcome. V. Stepanova, "O rabotakh konstruktivistskoi molodëzhi," (On the works of the young Constructivists), *Lef* 3 (1923): 53-56. Cited in Khan-Magomedov, Quilici, and Rodchenko, *Rodchenko: The Complete Work*, 174n12.

⁴¹⁸ Rodchenko as cited in Gassner, "Analytical Sequences," 110. No source given.

concept of functionalism,⁴¹⁹ would predetermine the multiple effects required of the object, performing to the changing needs and purposes at various points of time. This would then generate an object with multiple forms: Bykov's kiosk, could also transform into a box with the capacity to transport books; platforms could emerge in the *Workers' Club* to provide a speakers' podium, or the same platform could be turned vertical into a wall for displays, and then removed; or an object could be converted, such as a reading table – where leaves of the table could be inclined or expanded to make more space. For Rodchenko time as a coefficient of function enabled the concept of one art object as having multiple forms.

Holding true to the criteria of function, the movement of these multi-dimensional dynamic schemas proposed by Rodchenko and his student's utilitarian art objects was to be efficient, reducing time and wasted effort and to fulfill life. The alternative forms of the singular object, such as the podium, the reading table with the *Workers' Club*, enabled multiple functions to be performed in order to facilitate ease and comfort. In a 1927 review of the potential of the *Workers' Club* it was perceived as not only fulfilling the needs of the workers, but would make it more "cheerful" where "an object of this type, playing a promotional role, would be able to enter, given its convenience and functionality, into the daily life of the worker."⁴²⁰ Rodchenko would prioritise functional movement to determine, like Aristotle, what was best and most convenient and for the sake of life.⁴²¹

Rodchenko's conception of the multi-functional utilitarian art object was its generative capacity. By activating time as a coefficient to predetermine the teleological end point required of the multiple movement and effects of the utilitarian art object, the possibility emerged that one object could evolve into multiple forms. Yet he would also apply the standard criteria for function: efficiency, reduction of wasted effort for the sake of life and comfort.

⁴¹⁹ The art historian Leah Dickerson, refers Rodchenko's multi-functionality as hyper functionalism! Leah Dickerman, "The Propagandizing of Things," in *Aleksandr Rodchenko* ed. David Frankel (New York, N. Y.: Museum of Modern Art, 1998), 75.

⁴²⁰ I. Chranikov and N. Serov, "Klubnaya model" (The model club), in *Rabochyi Klub* (The Workers' Club) 2, (1928): 32. Cited in Khan-Magomedov, Quilici, and Rodchenko, *Rodchenko: The Complete Work*, 187.

⁴²¹ Aristotle, *Nicomachean Ethics*. 3.3.1112b12-13a2.

This application of function in Rodchenko's use-ready utilitarian art object with multiple forms would exist not only within a functional containing system, as discussed by Preston⁴²² such as a room, to produce the happy cheerful worker. It could further be conceived in a broader correlated function system field generating movement of other objects things, including the life of the comrade. Here the use-ready art object operates toward the greater teleological forming of society.

Rodchenko – producing the comrade through movement

Producing the comrade as an ideal, active, socialist individual was for Rodchenko and others such as Arvatov an agenda of the functionalist utilitarian art object. The comrade, like the utilitarian art object, was an equal and reciprocal participant in Rodchenko's utilitarian objects. Moreover, the utilitarian object activating the comrades' movement operated within a greater context of the project's alternative category of function as forming. This broader context of forming could be considered as a containing system. However, in Rodchenko scheme, the concept of a containing system seems too limited, and rather, should be considered as a system "field" – where the boundary lie at the edges of social formation. Within this schema, the comrade, like the objects, would be mobilised and through this movement be produced as an active socialist individual. In Sobolev's bed-cum-chair the body of the student comrade is activated in the private space of their living quarters; in Bykov's kiosk it is in the public space of the theatre; in the *Workers' Club* it is the body of the comrade in their communal quarters of leisure.⁴²³

According to Margolin, Rodchenko fostered a belief in the ideal "user" of these objects who would be "alert, purposeful, and precise . . . [where their interest in objects] . . . required a creative intelligence to manipulate."⁴²⁴ The new socialist individual would develop an active relationship to the utilitarian art object, in contrast to the consumption of the passive object of the bourgeoisie.⁴²⁵ In his letter's home when exhibiting the *Workers' Club* in Paris,

⁴²² See p. 72.

⁴²³ For author discussion of the bodily control of the utilitarian objects of the *Workers' Club* see Dickerman, "The Propagandizing of Things," 75.

⁴²⁴ Margolin, *The Struggle for Utopia: Rodchenko, Lissitzky, Moholy-Nagy, 1917-1946*, 89.

⁴²⁵ Kiaer, *Imagine No Possessions: The Socialist Objects of Russian Constructivism*, 36-37.

Rodchenko would identify the role of the object as a co-worker in this liberation. He wrote: “The light that comes from the East is not just the liberation of the workers, the light from the East is a new rapport with man, with woman, with objects. Even the objects in our hands should be true comrades and not black and mournful slaves like here.”⁴²⁶ In Rodchenko’s conception, the object would be liberated to enact its own active potential effect, not only on other objects but on the users of these objects themselves.

For Rodchenko and others such as Arvatov, the creation of the individual through these functional object relations was a method of creating a new utopia. The *Workers' Club* was conceived in order to activate an active proletarian leisure as an adjunct to collective labour. This was the antithesis to the passive, contemplative relaxation of the bourgeois in private space.⁴²⁷ Rather, informative lectures, reading and chess, would construct the effective comrade, with a new consciousness that and consequently the emancipation of the masses.

Boris Arvatov – the Culture of Things producing the comrade and the world

In 1925 Arvatov⁴²⁸ would parallel the functional consequences of Rodchenko and his students’ utilitarian objects and further explain how these new types of objects would create the new psyche of the communist comrade. In his essay, “Everyday life and the Culture of the Thing (Toward the Formulation of the Question),” (1925), Arvatov identifies the most central social relation as being the productive relationship between the Thing,⁴²⁹ the individual and the collective. The “world of things” is nothing other than, as Arvatov says: “the material form-creating basis of culture.”⁴³⁰ Like Rodchenko, Arvatov

⁴²⁶ Aleksandr Rodchenko, “Rodchenko in Paris. From letters home,” *Novyi Lef* 2, (1927): 9, 21. Cited in Khan-Magomedov, Quilici, and Rodchenko, *Rodchenko: The Complete Work*, 183n20.

⁴²⁷ Dickerman, “The Propagandizing of Things,” 73, 76.

⁴²⁸ Arvatov had a Bolshevik pedigree par excellence. He was an educated intellectual that had renounced his class status and zealously worked for the Marxist revolution. By 1923, however he was committed to a mental asylum, where his intellectual capacity seemed unhindered and continued to expound the Marxist agenda of transformation through Constructivist and Productivist reconstruction of the role of art. Christina Kiaer, “Boris Arvatov’s Socialist Objects,” *October* 81 (Summer 1997): 106-7.

⁴²⁹ The concept of the “Thing” has been most notably developed by the philosopher Martin Heidegger in his essay “The Thing,” (1971). Arvatov’s concept of the Thing, bears some similarities and many differences to Heidegger conception. See p. 239.

⁴³⁰ Boris Arvatov, “Everyday Life and the Culture of the Thing (Toward the Formulation of the Question),” *October* 81 (Summer 1997): 121.

acknowledges, the utilitarian things active agency in constructing the new material culture and makes a case that this is a new type of socialist object that would combat the division between life, production and the object that the bourgeois object sought to separate and commodify.⁴³¹ With a description that embodies the ambition of Rodchenko's students and the *Workers' Club*, Arvatov speculates on how these object human relations would produce the new person in an imagined and idealised world.⁴³² As Arvatov would speculate: "The thing was dynamized. Collapsible furniture, moving sidewalks, revolving doors, escalators . . . and so on constituted a new stage in the evolution of material culture. The Thing became something functional and active, connected like a co-worker with human practice."⁴³³ Here Arvatov's conception of the "the world of things," is the new egalitarian relation of objects and people, practicing life together. This is a vision of the future which has eradicated the separate spheres of the bourgeois object and the means-ends rationality of everyday life. The object-thing and life interact through mutual action, where the agency of the things function produces the bodies actions and psyche of the individual and hence the collective. As Arvatov would further say:

The new world of Things, which gave rise to a new image of person as a psycho-physiological individual, dictated forms of gesticulation, movement, and activity. It created a particular regimen of physical culture. The psyche also evolved, becoming more and more thinglike in its associative structure. . . .

*. . . The mechanism of a thing, the connection between the elements of a thing and its purpose, were now transparent, compelling people practically, and thus also psychologically, to reckon with them and only with them.*⁴³⁴

⁴³¹ Arvatov would describe the problem of the bourgeois art object which was framed as a "commodity" that it was cut off from Things and "suspended in midair" from these "Things" of the world. Ibid., 120-21.

⁴³² Writing this essay from within the asylum walls, he ironically imagined an idealised world that was America, rather than Soviet Russia, where the reality was poverty and a poor state of industry. See p. 238.

⁴³³ Arvatov, "Everyday Life and the Culture of the Thing (toward the Formulation of the Question)," 126.

⁴³⁴ Ibid.

This was the agenda of proletarian art – of the utilitarian object, as Arvatov had conceived earlier: “To build not according to form, but according to social objective.”⁴³⁵ Here objects, things and comrades would exist in a correlative functional system field mutually producing one another through the action of function to produce the new comrade and their world.

Summary – Rodchenko and Arvatov’s use-ready utilitarian object within the broader function as forming of a correlative system field

The multifarious generative nature of Rodchenko’s multifunctional objects, in addition to Arvatov’s conception of the correlative functional system field, continue to position use-ready function of objects and things within a broader scope of function as forming, in their case as a type of correlative function system field. In Rodchenko’s conception the utilitarian object could have multiple forms at various points in time establishing the agency to produce the ideal comrade and hence society. Like Aristotle, and others in architecture (discussed in the prior chapters), Rodchenko and Arvatov brought function’s values, of efficiency, standardisation, convenience, rationalisation, organisation, practicality, convenience to drive the alert comrade and their intellectual emancipation to enact the teleological and ideological end-point of communism for the sake of life.

Summary – function at the use-ready and effect-ready end of the reprogrammed avant-garde art object

Building on chapter two, this chapter has extended an understanding of function at the use-ready or effect-ready position of art. This chapter has investigated an example from the history of art that positively embraced function in contrast to the commonly understood functionlessness or dysfunction of art. In the case study of the Productivists and Unists, it was shown that they reprogrammed the art object towards a use-ready and effect-ready ready function. Toward this goal the Productivists disclosed the ideological function of the autonomous bourgeois art object as the production of society itself. This was despite the autonomous art object’s claim of functionlessness, outside the everyday sphere of life. In

⁴³⁵ "The Proletariat and Leftist Art, 1922," in *Russian Art of the Avant-Garde: Theory and Criticism, 1902-1934* ed. John E. Bowlit (New York: Viking Press, 1976), 228.

both the Productivist and Unist examples, the teleological aspiration of the avant-garde artwork was to facilitate the building a new social utopia after the revolution. This would also include the eradication of the bourgeois art object, embodied in easelism, perceived as reinforcing bourgeois society itself. In the case of the Productivists, the aspiration to reprogramme the art object into a utilitarian object was to actively engage in the comrade's everyday life. This would activate the alert and creatively intelligent comrade to construct the new socialist utopia.

The Unists were also re-orientating art's function toward the same ultimate end of a new utopia that, in Kbro's terms, would bring a new psychic calm. By comparison, however, Kbro and Strzemiński insisted on art's autonomous laboratory. Where the Productivist's utilitarian object could be considered in the project's use-ready terms, the Unist's laboratory artwork by comparison extended this term to include the effect-ready. Here the effect-ready art object in art's laboratory, is one step removed from the "actual" everyday world of life. It would be through the art object's supreme influence that new objects in the everyday would be inspired. These new innovative forms would facilitate the creation, as Kbro aspired, of a new world embodying a psychic calm.

Concluding: abfunctional speculations toward the use-ready or effect-readiness of the artwork

This chapter offers precedents for how function at the use-ready or effect-readiness could be perceived within the contemporary artwork enabling an anchor for abfunction to move away from. In both avant-garde examples, the reorientation of art toward a functional role was identified as operating within the broader category of function as forming toward the ideological construction of a socialist utopia. Rodchenko's multifunctional utilitarian objects, in addition to Arvatov's theory of the culture of things, provides a concrete example of how this was understood to occur. Here the art object's activation of the actions and behaviours of the "alert comrade" would contribute toward the Productivist's teleological agenda. The generative effects of the art object on the physical movement and actions of people, with its associated functional values of efficiency in terms of time and energy reveals the

consequences of the use-ready or effect ready potential. This offers a precedent for how the use or effect-ready function could occur in the contemporary artwork. The performance sculpture, *Help a Sculpture* example as discussed in the previous chapter, once again comes to mind.⁴³⁶ This opens up a space for an incursion by abfunction. Here, it is conceivable that the actions and behaviours of people, such as the artist, participator or viewer could be activated by the use-ready or effect-ready object or artwork that could then be redirected away from the implicit values of function and moreover, away from an artwork's broader teleological agenda. This now expands a foundation for abfunction at the use-ready or effect-ready that will facilitate the investigation in Part III.

The next phase of the project is to expand the role of function as forming within the production of the art work. Chapter four will ask: In what ways has function as forming been used in the production of the art object? Building on the groundwork established for this category in chapter one, chapter four will address specific Constructivist art works of Rodchenko and Karl loganson and Unist sculptures of Kobro. This is with the aim of consolidating the role of function in forming an art object that abfunction may be seen to depart from in the case study artworks.

⁴³⁶ See p. 91.

Chapter four: The forming of function in the Constructivist and Unist avant-garde laboratory art object

Introduction

Chapter three discussed the use-ready and effect-ready function of art in two avant-garde movements: the Unists and Productivists. The question now follows: can function also be located within the forming process – the production – of the artwork? Have the principles of “form follows function” infiltrated into art as it was in architecture? It is this chapter’s contention function does exist in the forming of art. Here, I continue to investigate how the definition of function in art compares with function in architectural discourse. The aim of this chapter is to provide a basis for speculating on how abfunction might move away from the processes of function in the making of the artwork. Once this is established, it will be possible to speculate on the role of abfunction in the case study artworks discussed in Part III.

As previously discussed, Aleksandr Rodchenko’s *Workers’ Club* offers an indication how an artwork operates with a “use-ready” function. Rodchenko, himself also suggested how function operates within the forming of the artwork: “Construction is a system which realises an object by using materials functionally and predetermining the effect.”⁴³⁷ Here, Rodchenko locates the driving attributes of function within both the forming process of the artwork and its subsequent use-ready effects. His “laboratory” artworks produced prior to the *Workers’ Club*, such as the *Spatial Constructions* of 1920–21, provided him with the foundation for establishing his specific understanding of the role of function within construction.⁴³⁸

In this chapter, I continue the discussion of the two avant-garde movements, Constructivism and Unism. The focus is on Constructivist artists Rodchenko and Karl Ioganson prior to the

⁴³⁷ Rodchenko as cited in Hubertus Gassner, “Analytical Sequences,” in *Rodchenko and the Arts of Revolutionary Russia* ed. David Elliott (New York: Pantheon Books, 1979), 110. No source given.

⁴³⁸ Christina Lodder, “Non-Utilitarian Constructions: The Evolution of a Formal Language,” in *Russian Constructivism* (New Haven: Yale University Press, 1985), 26-27.

period of Productivism, and the Unist artists Katarzyna Kobro and Władysław Strzemiński. It was established in chapter three that the ultimate aim (the use-ready and effect-ready function) of art was the building of a new utopia. In this chapter, function will not be discussed from the end-point of the art object; the focus will be with how function drives the internal forming of the artwork. The first example will focus on Rodchenko and loganson's specific conceptualisation of "construction." In this context, construction is understood as a method of artistic forming. Both Rodchenko and loganson located function specifically within the material and structural forming of their laboratory artworks. The driving momentum of function within the internal structure of the laboratory artworks can be seen to equate with concepts and values of rational construction and the assimilation of function into the processes of production. This investigation will be followed by a discussion of the Unist proposition of functionalism as expressed by Kobro in her laboratory sculptures and collaborative writings with Strzemiński after she fled Russia for Poland. I argue that her sculptural laboratory works offer an extension of function and functionalism as a spatial organisational methodology of space – a space shared by sculpture and the real world – that integrates the body's movement in space and time as a durational, rhythmic phenomenon.

Revealing function within the Constructivist self-sufficient art object – Aleksandr Rodchenko and Karl loganson

Rodchneko's Constructivism

In 1919, Rodchenko commenced a series of sculptures titled *Spatial Object* and *Spatial Constructions* (Fig. 44). The first series ranging until 1921, appear in photographic documentation to be table-top in scale and were produced using standard lengths of wood. Leading up to these works Rodchenko experimented with systems of construction that he believed could provide a solution to artistic form as a real object in space.⁴³⁹ These works expanded a method of using modular units and standardised repetitive systems in order to simplify a structure in the construction of a mass.⁴⁴⁰

⁴³⁹ Ibid., 22.

⁴⁴⁰ Ibid.

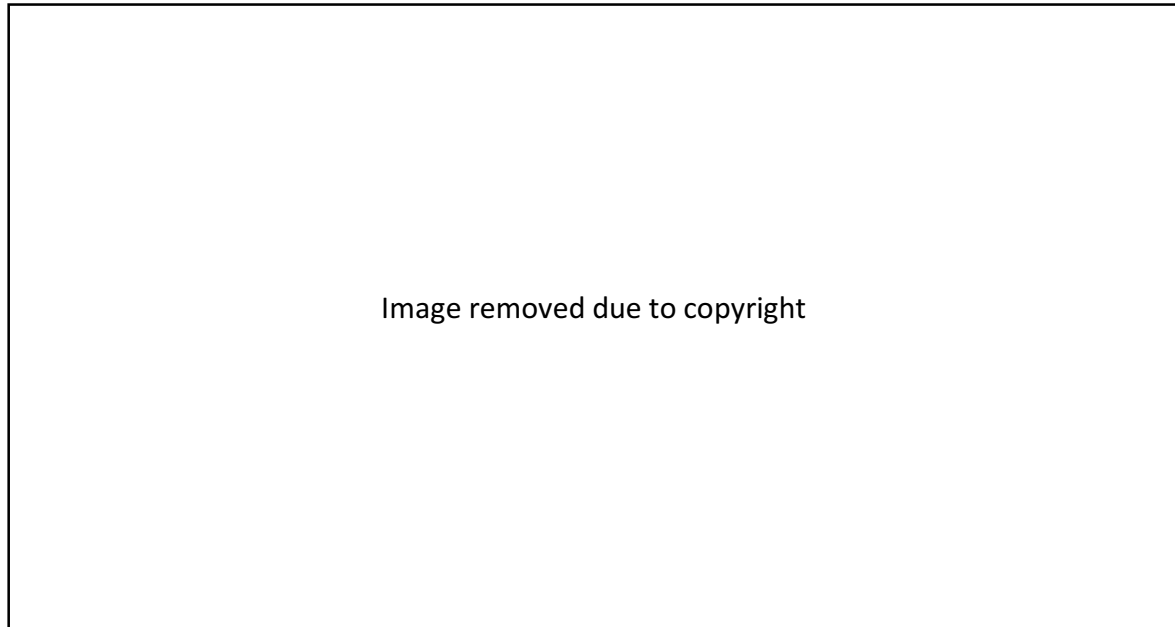


Fig. 44 Aleksandr Rodchenko, *Spatial Constructions*, (1920-21)

In Lodder, *Russian Constructivism*, 25.

A second series of works, also titled *Spatial Object* and *Spatial Construction* and *Spatial Construction/Spatial Object* (1920–21), were exhibited in May 1921 at the exhibition of OBMOKhU (Society of Young Artists) in Moscow (Fig. 45). Five different geometric shapes – a circle, hexagon, ellipse, triangle and square – were each constructed from plywood and painted silver (Fig. 46, Fig. 47). Each geometric shape was cut as a series of concentric shapes from one single sheet of plywood. Wire held the separate shapes together in various configurations, which were then hung from the ceiling. Using this construction method, each concentric shape would automatically pivot to establish a three-dimensional spatial form. Currents of air would dynamize and shift the form of the object in space. These objects were not formed using compositional techniques determined by the subjectivity of the artist; rather, they were generated using the internal logic of the artwork's construction. Only the first cut was determined by the artist; the rest followed suit according to the system. The only tools required were the compass, ruler and cutting device. Once cut and hung, the system and factors external to the artist, such as the air currents, automated and transformed the shape of the object in space. After being exhibited, the *Spatial Constructions* were designed to transform shape again—the wire would be removed,

returning the artwork to a flattened state and placed into storage.⁴⁴¹ After the event of making these works Rodchenko developed his slogan: "Nothing accidental, nothing not accounted for."⁴⁴²

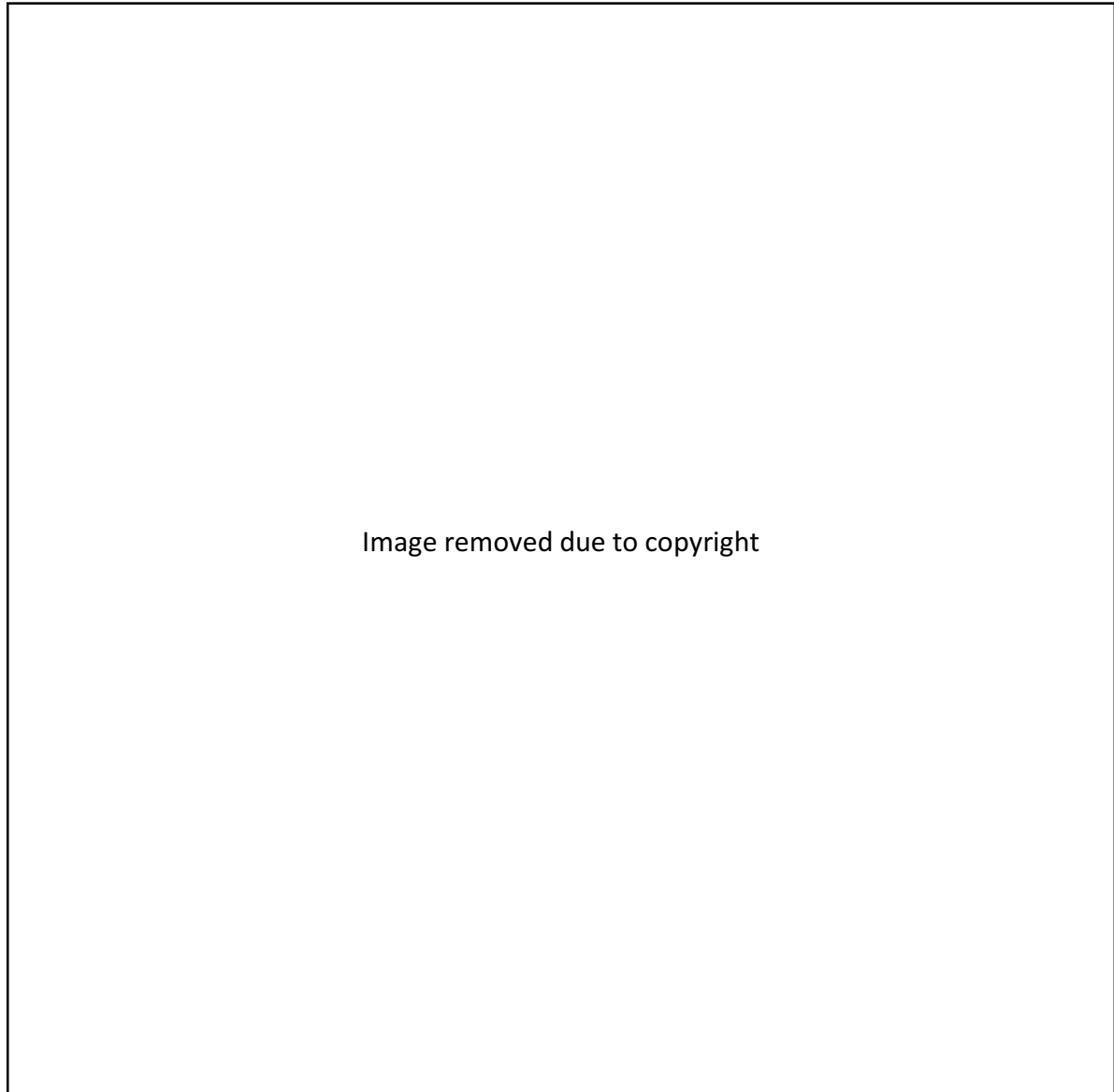


Fig. 45 Two views of the Second Spring Exhibition of the OBMOKhU, (Society of Young Artists), (May 1921)

Top view: Showing artworks by Ioganson and hanging structure of Rodchenko. Bottom view: Showing artworks by Stenberg. In Gough, Maria. *The Artist as Producer: Russian Constructivism in Revolution*. (Berkeley: University of California Press, 2005), 76.

⁴⁴¹ Maria Gough, "Faktura: The Making of the Russian Avant-Garde," *RES: Anthropology and Aesthetics*, no. 36 (1999): 55.

⁴⁴² Ibid.

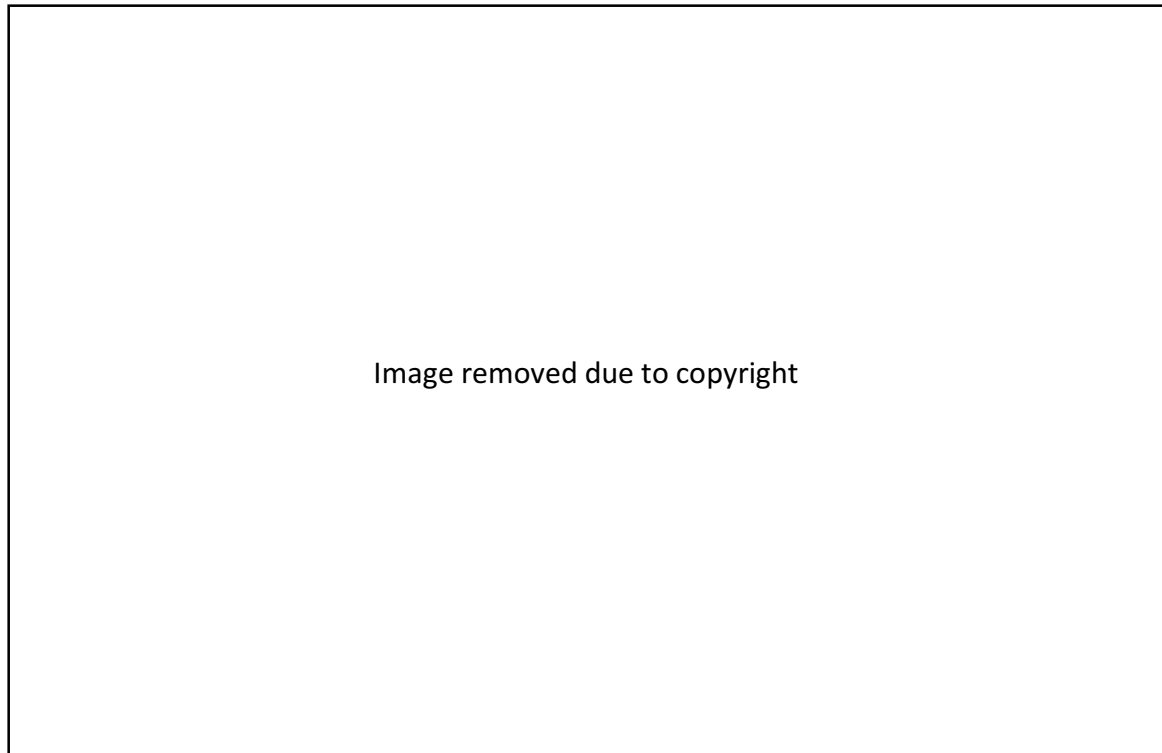


Fig. 46 Aleksandr Rodchenko, *Spatial Construction no. 9* (suspended), (1921)

In Khan-Magomedov, Selim. O., Vieri Quilici, and Aleksandr Mikhaïlovich Rodchenko. *Rodchenko: The Complete Work*. Edited by Vieri Quilici. (London: Thames and Hudson, 1986), 96.

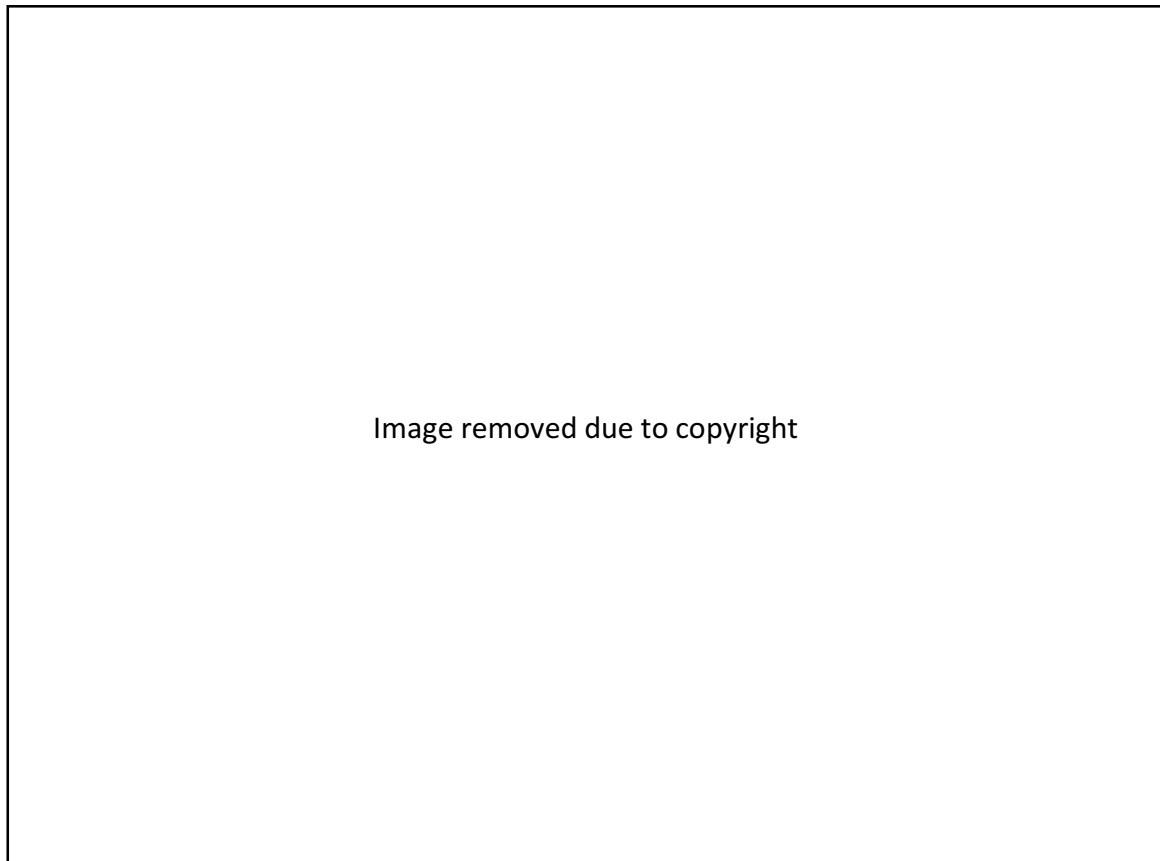


Fig. 47 Aleksandr Rodchenko, *Spatial Construction no. 10*, (1920-2)

In Khan-Magomedov, *Rodchenko*, 97.

Rodchenko's *Spatial Constructions* provided the foundational logic for his particular concept of construction, where the principles of function would systemise the internal forming of the objects. He was experimenting with standard shapes, simple materials, and economical means of construction. Rodchenko's *Spatial Constructions* were developed during the early period of Kandinsky's leadership at INKhUK, when the Working Group for Objective Analysis,⁴⁴³ led by Rodchenko, debated the issue of "Construction" versus "Composition".⁴⁴⁴ Composition had come to be understood as symptomatic of passive contemplation and the sanctity of the autonomous bourgeois artwork. In contrast, according to Stepanova, "experimental cognition as 'active thinking' – not the contemplation of the present age, but its action – leads in art to the analytical method, which destroys the sacred value of the

⁴⁴³ The Working Group for Objective Analysis was established in November 1920. Rodchenko had a leading role in this group. Kiaer, 2005 #195@7-8}

⁴⁴⁴ Christina Kiaer, *Imagine No Possessions: The Socialist Objects of Russian Constructivism* (Cambridge, Mass.: MIT Press, 2005), 7-8.

work of art as a unique object.”⁴⁴⁵ Construction became the active agenda for arts transition forward into the new world where function, for Rodchenko, was the agent.

Construction – the e of Constructivism’s “intellectual production”

In March 1921, the First Working Group of Constructivists⁴⁴⁶ was established to formalise the objective motion of construction. The group consisted of Rodchenko, Stepanova, Konstantin Medunetskii, brothers Vladimir and Georgii Stenberg, Ioganson and Aleksei Gan, a theorist and former organiser of mass revolutionary events. Gan proceeded to write the group’s program⁴⁴⁷ whose first decree of Constructivism, the “Program of the Constructivist Working Group of INKhUK”, nominated the task of the group as “THE COMMUNIST EXPRESSION OF MATERIAL CONSTRUCTIONS.”⁴⁴⁸ This document established that this phase of artistic experimentation was a transition from the laboratory towards practical, real life activity. The aim was in art to use the materials of real life to produce art that was real life itself. It was the industrial processes and production that they saw as the material of life to be used by artists.

Gan proposed in his thesis that “Intellectual production” would be the method of achieving this new agenda. Three essential elements would constitute intellectual production and the “effectiveness” of the formal attributes of the new laboratory art object: *tectonika* (tectonics), *konstruktsiia* (construction), and *faktura* (facture). Gan’s lexicon of terms was in part an expansion on prior art debates within the Russian avant-garde, that also added his unique idiosyncratic inflections. These new terms, particularly tectonics and *faktura*, brought considerable consternation to and disagreement among the members of the

⁴⁴⁵ Vavara Stepanova, “V. Stepanova: On Constructivism (Framentary Notes toward a Paper to Be Given at Inkhuk),” in *Art into Life: Russian Constructivism, 1914-1932* ed. Nicholas H. Allison (Seattle Henry Art Gallery, University of Washington, 1990).

⁴⁴⁶ Also referred to as the Working Group.

⁴⁴⁷ This document was published in 1922 in Gan’s book *Constructivism*. Lodder, “Towards a Theoretical Basis: Fusing the Formal and Utilitarian,” 94.; Kiaer, *Imagine No Possessions: The Socialist Objects of Russian Constructivism*, 10.

⁴⁴⁸ “Program of the Constructivist Working Group of Inkhuk,” in *Art into Life: Russian Constructivism, 1914-1932* ed. Nicholas H. Allison (New York, NY: Rizzoli, 1990). Emphasis in quoted document.

group.⁴⁴⁹ Well understood was the concept of construction, based on the recent debate. Gan defined construction as organisation where “communism” and material would structure its content. Far more perplexing for the INKhUK members was the new term tectonic, which for many had misleading literary tendencies with its geological associations. In his thesis, Gan defined tectonics within the ideology of communism and the “appropriate use of industrial materials.”⁴⁵⁰ The term *faktura* also caused problems. The concept was first used by the Russian vanguard around 1912 to mean the surface finish of material in the artwork.⁴⁵¹ Gan’s proposal to continue using *faktura* in the Constructivist lexicon caused controversy among the INKhUK members, particularly because the material surface finish of the artwork was associated with individual artistic subjectivity.⁴⁵² In Constructivism, however, the definition of *faktura* shifted from surface finish to an emphasis on the objectivity of the whole material, its industrial origins and purpose.⁴⁵³ In Gan’s schema, *faktura* was “material that is consciously selected and appropriately used for a particular purpose, without arresting the motion of the construction and without constraining its tectonics.”⁴⁵⁴ Despite the debates surrounding these terms, Rodchenko resolved the indispensable link in the production of art between the three terms: *faktura*, construction and tectonics. As he stated during the debate at INKhUK after Gan launched his thesis: “We must begin with the material. Its qualities and the purpose for which it will be used lead us to construction. Taken as a whole it gives us tectonics.”⁴⁵⁵ Like Gan, Rodchenko specified that the use of material in construction was determined by its purpose: “construction is the system by which an object is realised from the utilisation of material together with a predetermined purpose.”⁴⁵⁶ In Rodchenko’s conception there was a particular order to

⁴⁴⁹ See: Gough, “Faktura: The Making of the Russian Avant-Garde,” 56-58.; Kiaer, *Imagine No Possessions: The Socialist Objects of Russian Constructivism*, 10-11.; Khan-Magomedov, Quilici, and Rodchenko, *Rodchenko: The Complete Work*, 92n14, 93n15n16, 94n16, 94-95n17.

⁴⁵⁰ “Program of the Constructivist Working Group of Inkhuk.”

⁴⁵¹ For a comprehensive discussion on the history of *faktura* see: Benjamin H. D. Buchloh, “From Faktura to Factography,” (1984): 85-89.; Gough, “Faktura: The Making of the Russian Avant-Garde.”

⁴⁵² For debated controversy over *faktura* see: Khan-Magomedov, Quilici, and Rodchenko, *Rodchenko: The Complete Work*, 93n14.; Varvara Fedorovna Stepanova, “Aesthetics,” in *The Future Is Our Only Goal* ed. Peter Noever (Munich; New York, NY, USA: Prestel; Distributed in the USA and Canada by te Neues Pub. Co., 1991), 145.

⁴⁵³ Gough, “Faktura: The Making of the Russian Avant-Garde,” 58.

⁴⁵⁴ “Program of the Constructivist Working Group of Inkhuk.”

⁴⁵⁵ Khan-Magomedov, Quilici, and Rodchenko, *Rodchenko: The Complete Work*, 94n17.

⁴⁵⁶ Rodchenko, “Liniya,” 1921. Cited in Lodder, “Non-Utilitarian Constructions: The Evolution of a Formal Language,” 27.

these conditions. Material is first linked inextricably to purpose (its function), which determines construction (the forming of the artwork), which then leads to the end object of art, the ideological function (use-readiness) of which is to produce communist culture, identified by Gan as tectonics.

Function and intellectual production

In Rodchenko and Gan's position, the agency of function was woven through all three elements of intellectual production: tectonics, construction and *faktura* (ideology, material, organisation and structure). Gan identified that in addition to *faktura* (now aligned with purpose associated with material choice), construction also possessed this attribute of function. As he stated: "Construction should be understood as the collective function taken to its limit, to every last detail."⁴⁵⁷ The agenda of transforming art towards the utilitarian art object with its functional use-ready status was also clearly laid out. According to Gan: "In the ideological arena . . . the functional dynamicism of intellectual production. The real participation of intellectual production as an equal component in the creation of communist culture."⁴⁵⁸ Maria Gough has interpreted this shift in emphasis towards function as purely the external determination of the object, that is, the use-ready function of the art object as projected by the Productivists.⁴⁵⁹ In contrast to Gough, I will argue that the functional imperative in these transitional laboratory works was within the internal making – the forming – of Rodchenko's *Spatial Constructions* and loganson's cold structures laboratory artworks. Moreover, the clarity of this investigation of function within the forming of the artwork by Rodchenko and loganson was enabled by the self-sufficiency of the laboratory object from everyday life. To support this argument, I will also analyse definitions of function found in concepts of rational construction in architecture, paying particular attention to the German concept of *Realismus* and Carlo Lodoli's concept of the inner physics of material and structure.

⁴⁵⁷ "Program of the Constructivist Working Group of Inkhuk."

⁴⁵⁸ Ibid.

⁴⁵⁹ Gough, "Faktura: The Making of the Russian Avant-Garde," 58.

The non-objective laboratory – function driving form in the self-sufficient art object

All artists in the Working Group of Constructivists were making “nonobjective” constructions.⁴⁶⁰ They were using real materials and methods that could potentially be used for industrial processes in the real world. This reinforced Rodchenko and Stepanova’s conviction that the goal of art and “true construction” was to produce “real” things in “real space.”⁴⁶¹ In this interim laboratory period, Rodchenko’s specific focus was on producing non-objective artworks that referred to no other subject apart from themselves. The end goal of these art works was to be self-sufficient and reflective of their own inner processes of forming. This attribute of self-sufficient construction focused the process of function on the internal systems, structure and material of the art object.⁴⁶² Rodchenko makes this clear in his *Conclusions on Construction and Composition*:

*A **construction** is an objective or a task performed according to a particular system, for which purpose, particular materials have been organized and worked in a manner corresponding to their inherent characteristics, and are used for their own purpose and contain nothing superfluous.*

The practical solution of any space is a construction

Objective

System

Organisation

Construction

Material

Economy

*The purposeful creation of a new organism can take place only when there is constructive organisation.*⁴⁶³

⁴⁶⁰ Kiaer, *Imagine No Possessions: The Socialist Objects of Russian Constructivism*, 11.

⁴⁶¹ Vavara Stepanova, cited in Kiaer, *Imagine No Possessions: The Socialist Objects of Russian Constructivism*, 8-10.

⁴⁶² Hubertus Gassner, "The Constructivists: Modernism on the Way to Modernization," in *The Great Utopia: The Russian and Soviet Avant-Garde, 1915-1932* (New York: Guggenheim Museum : Distributed by Harry N. Abrams, 1992), 313. Gassner notes that the role of function within the internal organisation of material in the artwork was short-lived, before the imperative of the external function of the art object overtook the agenda. Ibid., 314.

⁴⁶³ Aleksandr Rodchenko, "Conclusions on Construction and Composition," in *Art into Life: Russian Constructivism, 1914-1932* ed. Nicholas H. Allison (New York, NY: Rizzoli, 1990). Emphasis in quoted text.

The terms of construction, as set out by Rodchenko, are driven by function's criteria and values: efficiency, objectivity, systems, organisation, and purposefulness without the requirement for anything superfluous. As discussed in Part I of this thesis, these terms are strikingly similar to those used in architectural discourse of function as a method of forming.⁴⁶⁴ For example, the values of function, associated with concepts such as *Sachlichkeit*, are nominated as efficiency, economy, the rejection of wastefulness in terms of time, human power and health. At its most doctrinaire and utilitarian, architect Hannes Meyer's rational, objective and economic functionalism defined a method of organisation that also produced form.⁴⁶⁵

Rodchenko would identify the role of function within the method of forming his *Spatial Constructions*. For Rodchenko, this would also include the artist themselves, who would become beholden to function's logic – dictating the method of the artwork's production. In the first series constructed from wooden blocks he revealed: "I experimentally developed these most recent constructions to bind the constructor to the law of functionality of forms and their relationships."⁴⁶⁶ German historian Hubertus Gassner argues that Rodchenko's *Spatial Constructions* drew on a functional system of material use in order to, to determine form and structure.⁴⁶⁷ To extend Gassner's case, this functional system also includes the artist as the constructor facilitating this rationalist logic of execution. As Rodchenko noted, the constructor – the artist – is bound to the laws of functionality and becomes a facilitator in a functional system automating production.

In his second series of hanging *Spatial Constructions*, Rodchenko deduced a system of functional construction based on the concentric pattern of modular shapes. This system generated the forms, cut from a singular sheet of plywood, followed by their hanging. Gassner claims these works have a: "systemic character: a radically economic structure of uniform elements and homogenous materials which can be arranged in various

⁴⁶⁴ See p. 60.

⁴⁶⁵ See p. 38. Hannes Meyer, "Building," in *Programs and Manifestoes on 20th-Century Architecture* ed. Ulrich Conrads (Cambridge, Mass.: MIT Press, 1971), 117.

⁴⁶⁶ Rodchenko cited in Gassner, "The Constructivists: Modernism on the Way to Modernization," 313. No source given.

⁴⁶⁷ Ibid.

combinations that are consistently functional within the system."⁴⁶⁸ Rodchenko's *Spatial Constructions* are examples of an internal functional system structure, where the purpose of every material and its form is to determine for the artist/constructor every other material and form. The artwork can only come into being through this system. The inherent condition of the material (the plywood's flatness) generates the modular planes of each concentric shape and also determines the method of its forming through cutting. The geometry of its form necessitates the artist's action of using a compass and the ruler. The hanging wire, necessary to keep the shapes together, enables the silhouetted planes to move on their own accord to create a three-dimensional shape. There is no illusion relating to the artist's making: the cutting, the hanging and the logic of its deductive generation are transparent. There are no hierarchies of material or decisions regarding the composition of putting parts together.⁴⁶⁹ The artist is not placed above any process or material; they are all equal constituents in this functional system. In this schema, Rodchenko's *Spatial Constructions* are non-objective. They refer to nothing other than their own functional methodology and production. The emphasis is on systematisation, the module and the functionality of the material. As Gassner explains: "a form is functional because it defines the other forms in the system and determines their function, not because it can be used to fulfill tasks outside the system."⁴⁷⁰ In these autonomous, laboratory-based artworks, the content is precisely the self-referentiality of the process. Moreover, once the system is established, the artworks become self-generating.

Victor Margolin noted that Rodchenko would focus on the functional methodology of producing objects with his student at Metfak, not the end product.⁴⁷¹ The precedent for this can be seen in the *Spatial Constructions* and can be extrapolated to the formation of the utilitarian components within the *Worker's Club* (1925).⁴⁷² Rodchenko's concern for material functionality and functionally deductive, self-generated systems and modules offered a

⁴⁶⁸ Ibid.

⁴⁶⁹ Maria Gough, "Composition and Construction," in *The Artist as Producer: Russian Constructivism in Revolution* (Berkeley: University of California Press, 2005), 50.

⁴⁷⁰ Gassner, "The Constructivists: Modernism on the Way to Modernization," 313.

⁴⁷¹ Victor Margolin, *The Struggle for Utopia: Rodchenko, Lissitzky, Moholy-Nagy, 1917-1946* (Chicago: University of Chicago Press, 1997), 89. See p. 119.

⁴⁷² See p. 122.

demonstrable methodology that could potentially be applied to the production of objects in industry. Despite misgivings about Western capitalism's driving agenda to produce commodities, Rodchenko shared Le Corbusier's and Werner Gräff's admiration for the standardised, efficient and economical modular systems inspired by the assembly line of automobiles and aeroplanes.⁴⁷³

loganson's cold structures

In May 1921, nine of loganson's "cold structures" produced since late 1919 were exhibited at the OBMOKhU exhibition (Fig. 45) alongside Rodchenko's *Spatial Constructions*. Three can be seen in the foreground of one of the OBMOKhU photographs: two sculptures on the left (numbered VII and VII) and one on the right (numbered VI), all mounted on triangular bases.⁴⁷⁴

Like Rodchenko's *Spatial Constructions*, loganson's cold structures share a distinctive non-objective, non-pictorial or non-representational investigation, where an experimental economy of structure, material, modularity and systems communicates the content. *Spatial Constructions II, III, IV and VI* (Fig. 49, Fig. 50), are constructed only of wire bracing cable and square, sectioned wooden struts whereas *VIII and IX* (Fig. 51, Fig. 52), are composed of tubular steel struts and steel cable. Each laboratory artwork appears to be a pedagogical demonstration of the tensile relationship between contiguous struts of apparently similar length and steel cable under tension. The necessary forces exerted on each element produce a rigid whole structure with minimum expenditure. *Constructions II, III and IV* demonstrate three various solutions to the problem of how to hold three equal-length, timber cross-membered struts apart in space by bracing the external ends together by wire cable. There is a shift in approach from *Construction VI and VII* where in *VI* he dispensed with bracing wires and extends the concept of the module. Here, three equal units of four by four spaces (like a window pane) are constructed using six wooden struts adjacently interlocking together in the x, y and z plane and co-joining in the centre before being tilted

⁴⁷³ See p. 53.

⁴⁷⁴ The numbering system of loganson's sculpture adopts those established by Gough. Maria Gough, "In the Laboratory of Constructivism: Karl loganson's Cold Structures," *October* 84 (1998).

on their sides. By comparison, *Spatial Construction VIII* and *IX*, also employing tubular steel and cable or rope, are significantly more economical. They are less reliant on the contiguous structural support of the rigid timber members of the previous sculptures; the cable and the rigid member are not subject to a hierarchy of structural value in order to hold up. *Spatial Construction VIII* is also titled *Study in Balance* by Gassner.⁴⁷⁵ As Gassner explains, these works are set on a triangular base and the rope threaded through the three tubular, equal-length rods permits these rods to slide up and down the rope. When the rope is pulled, the rods move to a point where the entire structure could stand holding its position. At this moment, each element equivalently performs the tensile physics of stasis, where forces operate in equal and opposite effect. The consequence of this moment is that the three lengths of steel tubing appear to be poised at an angle in space, so demonstrating the principles of balance and dynamism of forces that holds against gravity and structural rotation.

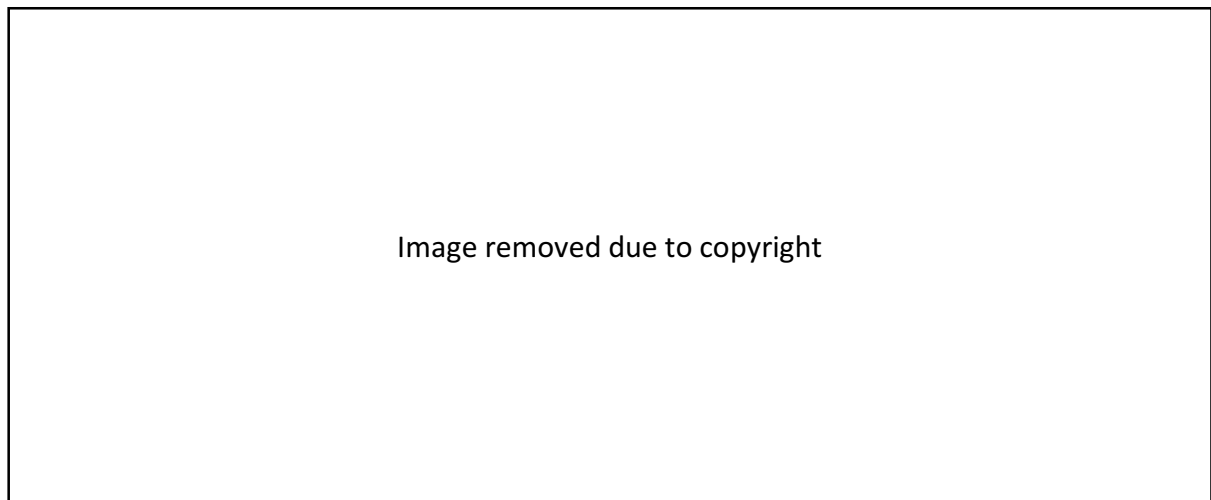


Fig. 48 Diagrammatic reconstruction of Karl Ioganson's *Spatial Constructions*, by Selim Khan-Magomedov.

In Gough, Maria. *The Artist as Producer: Russian Constructivism in Revolution*. (Berkeley: University of California Press, 2005), 65.

⁴⁷⁵ Gassner, "The Constructivists: Modernism on the Way to Modernization," 313.

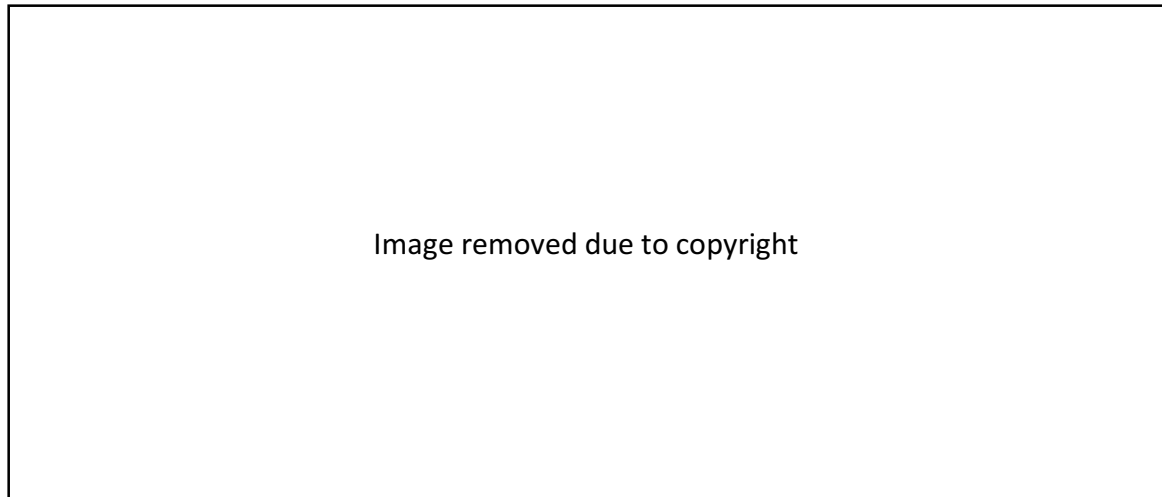


Fig. 49 Karl loganson, *Spatial Constructions (II, III and IV)*, (1920-1921)

In Gough, *The Artist as Producer*, 81.

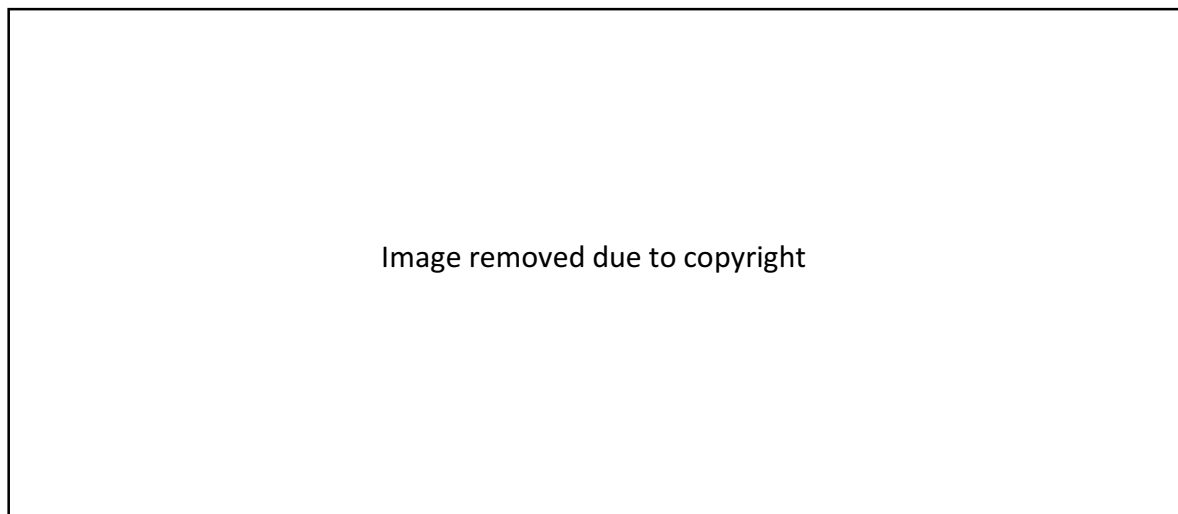


Fig. 50 Karl loganson, *Spatial Construction (VI)*, (1921)

In Gough, *The Artist as Producer*, 82.

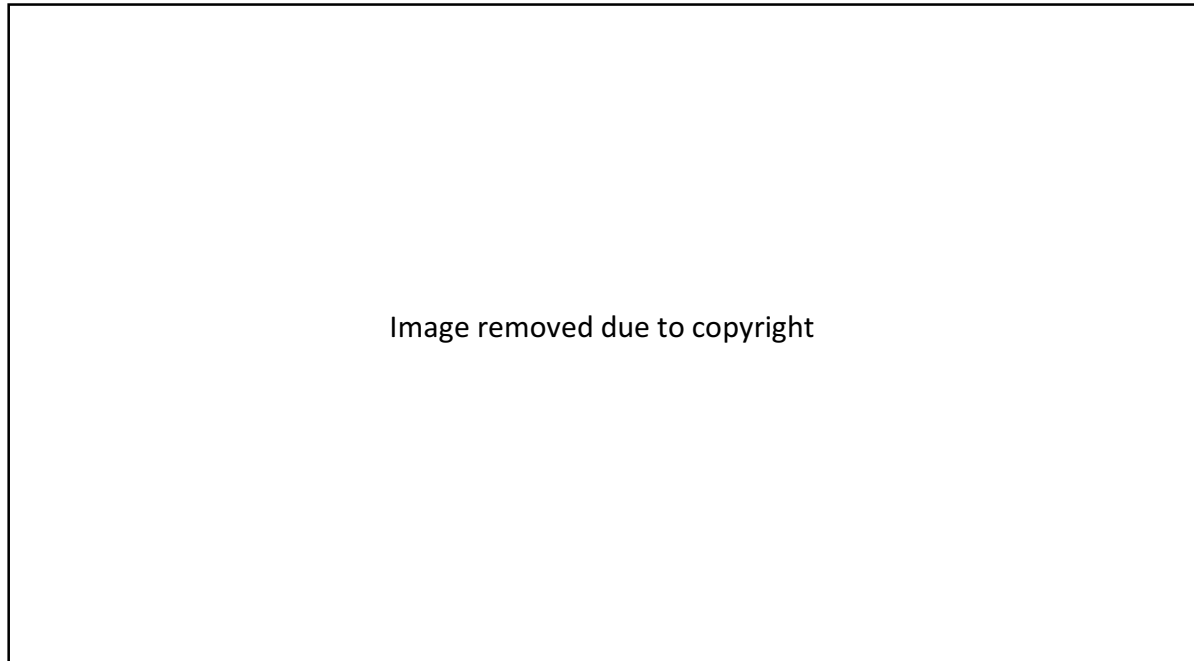


Fig. 51 Karl loganson, *Spatial Construction (VIII)*, (1921)

In Gough, *The Artist as Producer*, 89.

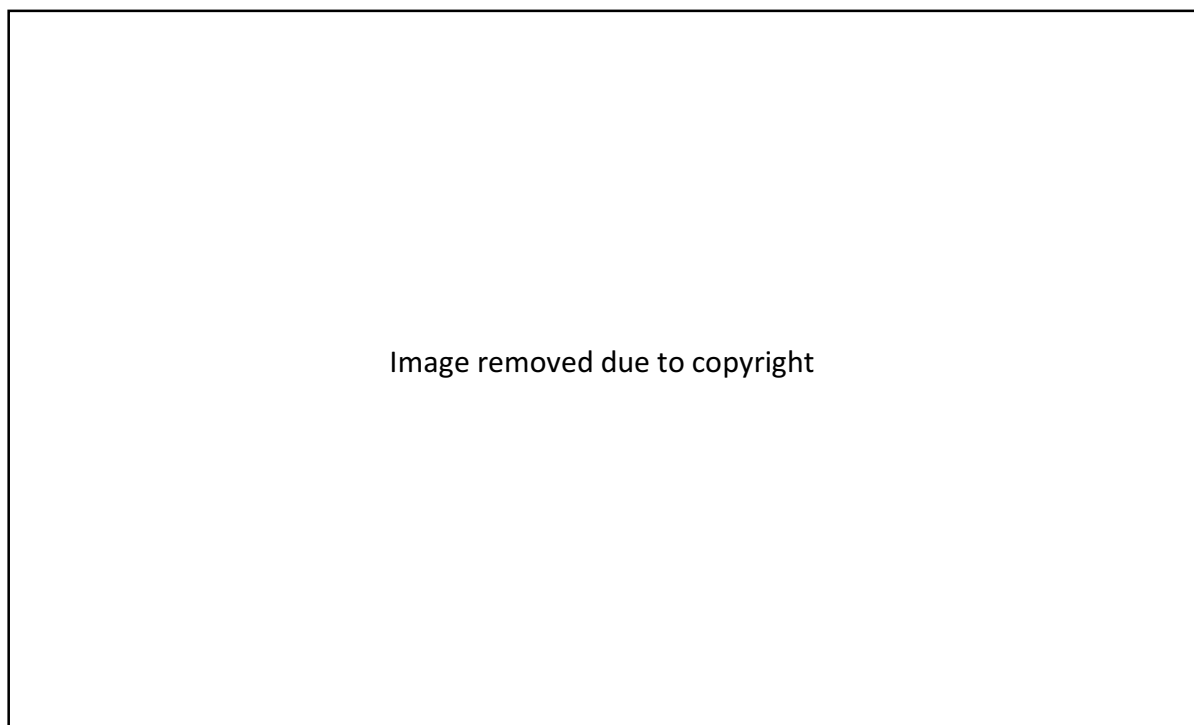


Fig. 52 Karl loganson, *Spatial Construction (IX)*, (1921), reconstruction (1991)

In Gough, *The Artist as Producer*, 90.

loganson investigated what he named a “cold structure in space.”⁴⁷⁶ loganson’s particular concept of construction had parallels with Rodchenko’s *Spatial Construction* in that both were driven by an autonomous, internal functional imperative. For loganson, the primary essential form of this cold structure was the cross.⁴⁷⁷ Gough interprets this cold structure as “a structure in which all the forces acting upon it, both internally and externally, are in a state of equilibrium.”⁴⁷⁸ In the cold structures, particularly *IX* and *VII*, forces are plotted so that nothing more and nothing less is required in the operation to hold this moment of stasis. Construction was a method for both Rodchenko and loganson. As Gough argues, it was “an activity or process (rather than as an object or end result), the goal of this activity being the production of ‘cold structures.’”⁴⁷⁹ Construction in loganson’s cold structures was the activity or process of the internal and external forces in relation to material and structure that produced the laboratory artwork.

Like Rodchenko’s *Spatial Constructions*, loganson’s non-objective artworks are self-sufficient. They are functional within the internal forming and structure of themselves. In the cold structures, each material and structural force functionally determines what other materials and forces are needed for the artwork to autonomously support itself. Here, function does not require an external utilitarian end-use. In this definition of construction, it is the functional agency of the forces within the materials as a process that then leads to production of form and its structure. This recalls the functional principles of rational construction in architecture associated with the German word *Realismus*. It also refers back to Carlo Lodoli in the 1740s,⁴⁸⁰ who believed that function operated within materials, and their physical laws of statics to produce inner and outer forces that determined form in architecture. In relation to functionalism, it can be seen that Gassner’s summation of Rodchenko’s *Spatial Constructions* as an inner functional system structure that is purely self-referential and demonstrable, can also applied to loganson’s cold structures. loganson’s and Rodchenko’s structures share a concern for standard, simple materials, an absolute

⁴⁷⁶ Gough, “In the Laboratory of Constructivism,” 75.

⁴⁷⁷ Ibid.; “In the Laboratory of Constructivism: Karl loganson’s Cold Structures,” 4 of 11.

⁴⁷⁸ “In the Laboratory of Constructivism: Karl loganson’s Cold Structures,” 4 of 11.

⁴⁷⁹ Ibid.

⁴⁸⁰ See p. 47.

economy of expenditure and modularity. However, what loganson's cold structure adds to the inventory of the functional imperatives within the forming of the artwork is—the absolute economy of the physical distribution of forces and tension between material and structure.

Summary – function's internal forming in loganson and Rodchenko's self-sufficient art objects

Works produced by loganson and Rodchenko in the short period from 1919 to 1921 demonstrate how the concept of function was integrated into the internal forming of the artwork. Function determined the material, structural and physical forces of form within a non-hierarchical function system, which included among its constituents the artist as constructor. These demonstrable manifestations of function in forming through construction were enabled by the non-objective parameters of the experimental laboratory artwork. In this context, the artworks were exempt from having to perform a function or task (this would be realised later in Productivism) and to experiment independently with the materials of the real world (in particular industry). The experimentation of the laboratory artwork facilitated the potential of function as a methodology of forming the inner structure of the artwork within construction.

The examples of Rodchenko and loganson have established that function can exist within the forming of the artwork through materials, structures, systems and forces. The following section will outline the work of Katarzyna Kobro. In redefining sculpture as space, her laboratory sculptures extended the definition of functionalism to incorporate the rhythmic movement of the body in space and time to shape space itself.

Katarzyna Kobro's functionalism – modeling space and time through the body

In 1936 Kobro published the article "Functionalism" in Polish avant-garde journal *Forma*.⁴⁸¹ The concepts in the article⁴⁸² were based on her sculptural laboratory experiments from 1925 and also on her collaborative writings with Strzemiński, which formulated a radical re-conception of sculpture as space. Kobro posited functionalism as a method of "forming", not with regard to utilitarian objects or the structures of materials, but rather, in relation to the rhythmic modelling and distribution of space, time and the movement of the human body.⁴⁸³ This would not only inform her sculptural works, but act as a model for the construction of all space in the world. In Kobro's view, functionalism was searching for an art form that would enable this organisation of space, time, human movement and human emotions in the most economical way. In her analysis, art had been evolving towards the aim of functionalism since Cubism⁴⁸⁴ and her radically reconceptualised notion of sculpture as space represented its solution.

In this section, I argue that Kobro's reconceptualisation of sculpture as space provided a model for the greater consideration and promise of functionalism in the creation of a new world reality. Moreover, Kobro's functionalism formulated a method for the shaping of space, form and the movement of the body through time. The artwork was the laboratory for this enquiry, which produced a model for how functionalism could be activated in the spaces, cities and the architecture of the world.

Kobro's sculptural laboratory of functionalism

Sculpture as a laboratory for functionalism, was for Kobro a methodology of forming that could lead to functionalism's solutions for living. The key to this experimentation lay in her polemical redefinition of sculpture as space. In 1929, she declared in her essay, *Sculpture*

⁴⁸¹ *FORMA* was one of the many avant-garde journals that emerged in Poland over the 1920s and 1930s.

⁴⁸² See introductory remarks in "Katarzyna Kobro "Functionalism"," in *Constructivism in Poland 1923-1936* ed. Ryszard Stanisławski, et al. (Federal Republic of Germany: Museum Sztuki, Łódź, 1973), 117.

⁴⁸³ Yve-Alain Bois posits Kobro's definition of functionalism as phenomenological. See Yve-Alain Bois, "Strzemiński and Kobro: In Search of Motivation," in *Painting as Model* (Cambridge, Mass.: MIT Press, 1990), 134.

⁴⁸⁴ Katarzyna Kobro, "Functionalism by Katarzyna Kobro," in *Katarzyna Kobro, 1898-1951* ed. Elżbieta Fuchs, et al. (Leeds, England: The Henry Moore Sculpture Trust, 1999), 165-66.

and Solid: "Sculpture is the shaping of space."⁴⁸⁵ She based these claims on her series of experimental sculptural laboratory works, produced since 1925, that investigated the conditions of space. These sculptures, variously titled *Spatial Sculpture* and *Spatial Composition*, (Fig. 54, Fig. 57, Fig. 58) were made of painted steel plate and were modest in scale. They were shown mounted on plinths in photographs of exhibitions and in the art journals of the Polish avant-garde, such as *BLOK*, *FORMA*, *Abstraction-Creation* and *Głos PLASTYKÓW*. (Fig. 53) Remarkable for their open articulation of space within the internal structure of the sculpture, they also give a sense of their extension into space, but without a definitive edge defining the sculptural object's boundary. Furthermore, the binding of space by the steel plates within the internal structure appears to transform and to model and shape space.

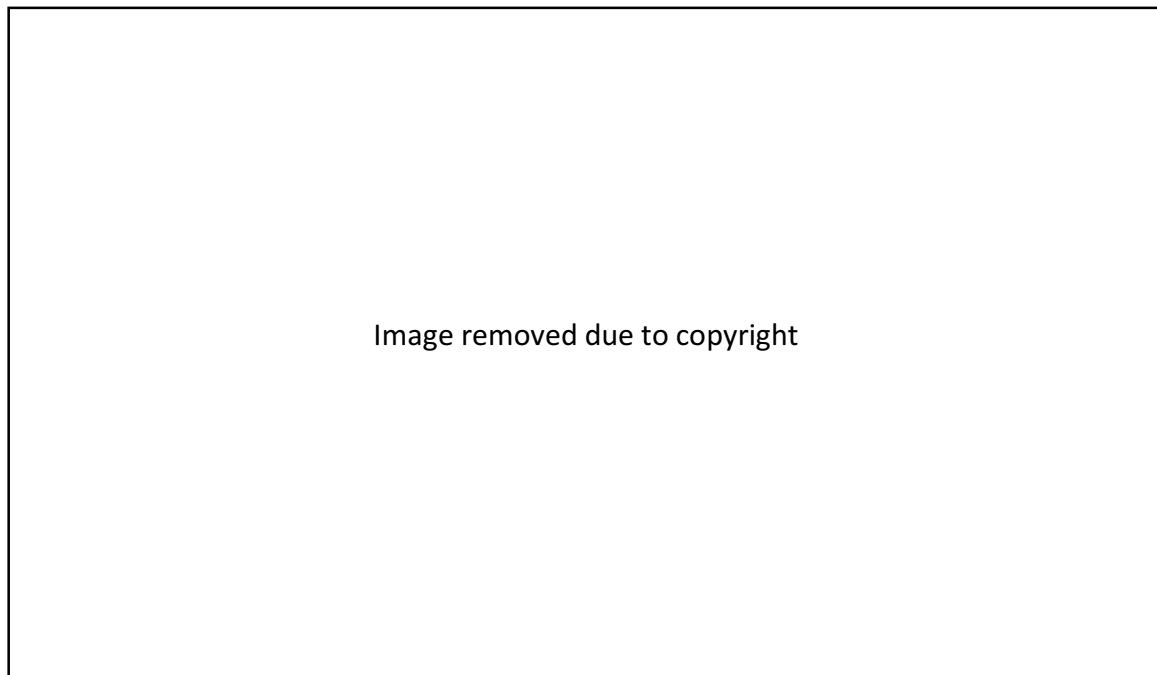


Fig. 53 Exhibition of Kobra's *Spatial Constructions* amongst paintings by Stazewski and Strzeński at the Exhibition of the Group of Modern Artists, IPS, Warsaw, 1933

Accessed February 2, 2015.

https://monoskop.org/File:Katarzyna_Kobro_spatial_constructions_at_the_exhibition_of_ar_group_at_IPS_Warszawa_1933_among_paintings_by_Stazewski_and_Strzeminski.jpg#mediaviewer/ñ>Katarzyn a Kobra spatial constructions at the exhibition of ar group at IPS Warszawa 1933 among paintings by Stazewski and Strzeminski. Via null.

⁴⁸⁵ Katarzyna Kobra-Strzeńska, "Sculpture and Solid," *ibid.*, Vol. no. 182/99, 155.

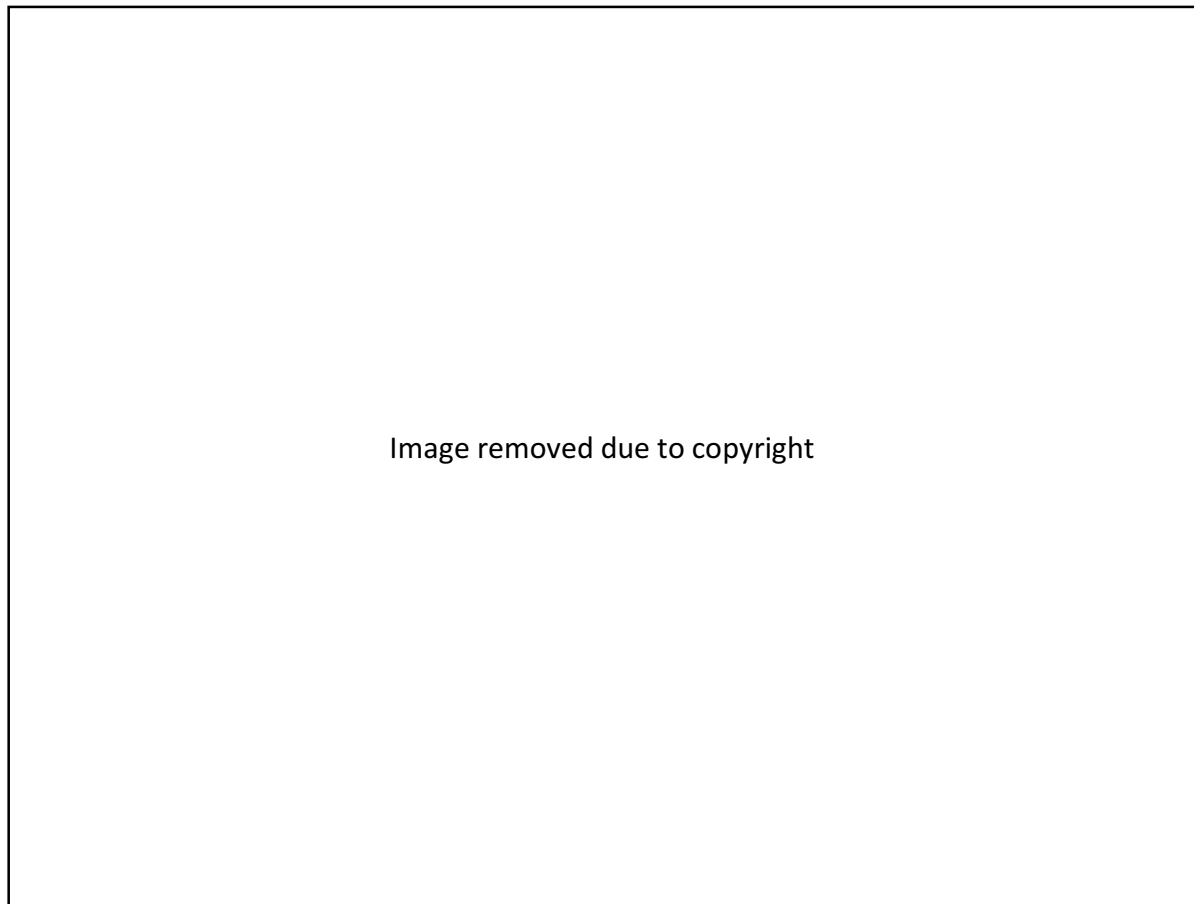


Fig. 54 Katarzyna Kobro, *Spatial Composition 4*, (1929)

In *Katarzyna Kobro, 1898-1951*. Translated by Jerzy Jarniewicz et al. (Leeds, England: The Henry Moore Sculpture Trust, 1999), 103.

Unism's proposition – space defined as sculpture's essential medium

Kobro developed the concept of Unist sculpture as space, through her laboratory artworks and ongoing collaborative writing with Strzemiński. To frame how her spatial research informed her thinking of functionalism, it is important to briefly outline Strzemiński's theory of Unism, in which Kobro partly collaborated. Strzemiński began to develop his theory in Poland around 1924. Building on the legacy of the Russian avant-garde debates that flared between UNOVIS and INKhUK,⁴⁸⁶ he conceived of Unism as the proper progress of art, which would overcome the shortcomings of the Futurist, Cubist and Suprematist projects.⁴⁸⁷ The first manifestations of Unism emerged in his essay "B=2; to read . . ." (1924), which was

⁴⁸⁶ See p. 113.

⁴⁸⁷ Władysław Strzemiński, "B=2; to Read . . ." in *Constructivism in Poland 1923-1936* ed. Ryszard Stanisławski, et al. (Federal Republic of Germany: Museum Sztuki, Łódź, 1973).

published in the avant-garde journal *BLOK*. Here Strzebiński advocated Unism's principle of the work of art having its own internal unity, autonomous and not reliant on any external representational influence; in this respect, he was following the non-objective trajectory of Malevich's Suprematism.

This insistence on the artwork's autonomy from any external influence also had its inheritance in the Suprematist belief in the profound, supreme organising force of art.⁴⁸⁸ Conceiving their work as an independent laboratory of creation, by 1931 Kbro and Strzebiński asserted the independent definition and specificity of each different medium of sculpture and painting.⁴⁸⁹ In their collaborative text, "Composition of Space; Calculations of a Spatio-Temporal Rhythm," (1931),⁴⁹⁰ the inherent qualities of each medium specificity was established in relation to the environment that the art would inhabit. Painting, for example, located on the wall would define itself as separate from its surroundings by its flatness and opticality. Sculpture, by contrast, existed in space and should aim to unify with that space. The defining attribute of sculpture was no longer its mass or volume, but its space.

*Unism in painting tends to the flat optical unity, closed in itself and indifferent to its environment. A unistic sculpture aims at the unity of the sculpture with the surrounding space, a spatial unity. The general assumption of unism is the unity of a work of art with the place in which it arises, or with the natural conditions that had already existed before the work of art was made. . . .*⁴⁹¹

⁴⁸⁸ See p. 115.

⁴⁸⁹ See: Hal Foster et al., "1928," in *Art since 1900: Modernism, Antimodernism, Postmodernism* (London: Thames & Hudson, 2004), 230. As Strzebiński would say in 1924: "A work of art must be built according to laws which are its own. It can have no model, neither in the exactitude of photography, nor in the samples of industrial products, nor in any other thing whatsoever. A work of plastic art does not express itself. A work of art is not a sign of anything. It is (exists) all by itself." Władysław Strzebiński, "What Is Legitimately Called New Art..." in *Constructivism in Poland 1923-1936* ed. Ryszard Stanisławski, et al. (Federal Republic of Germany: Museum Sztuki, Łódź, 1973), 75. There is not the scope in this paper to discuss this here, however to mention that the parallels of Strzebiński's prescient thesis with Clement Greenberg's concept of medium specificity, is striking. As Bois claims: "Strzebiński and Kbro were perhaps the only modernist artist to isolate and define four different arts (painting, sculpture, architecture, typography), without making any one of them dependent upon any other." Bois, "Strzebiński and Kbro: In Search of Motivation," 127.

⁴⁹⁰ "Composition of Space; Calculations of a Spatio-Temporal Rhythm," was first published in the second volume of the *a.r. library, Łódź* (1931). An English excerpt is found in Katarzyna Kbro and Władysław Strzebiński, "Composition of Space; Calculations of a Spatio-Temporal Rhythm," in *Constructivism in Poland 1923-1936* ed. Ryszard Stanisławski, et al. (Federal Republic of Germany: Museum Sztuki, Łódź, 1973).

⁴⁹¹ *Ibid.*, 107.

And furthermore:

*A work of sculpture, arising in space unlimited by any frontiers, should make up a unity with the infinity of the space.*⁴⁹²

Kobro's and Strzemiński's aim for sculpture was unity with the space surrounding it.⁴⁹³ For them, space was the defining attribute of sculpture as a medium. Moreover, this space of sculpture was the very same space of the everyday world of cities and architecture. As Kobro wrote in the magazine *FORMA*, in 1935:

*The essential basis of sculpture is space and the manipulation of this space, the organisation of the rhythm of proportions, the harmony of form, bound with space. Sculpture should reflect the organisational and technical possibilities of its time. . . . Sculpture should become an architectural issue, a laboratory experiment into methods of resolving space, into the organisation of traffic, an urban planning that sees the city as a functional organism, using the possibilities offered by contemporary art, science and technology. It should reflect the desire for the supra-individual organisation of society.*⁴⁹⁴

Kobro's research laboratory artworks modelled the same spatial principles in sculpture that would be considered and utilised in the forming of space in the world. In Kobro's terms, they shared the same space. This modelling of space in sculpture simultaneously established the principles for functionalism. Functionalism was understood by Kobro as being the optimum method for organising space and society in order to resolve the chaos and

⁴⁹² Ibid.

⁴⁹³ Ibid.; Kobro-Strzemińska, "Sculpture and Solid," 155. This position was a continuation of the work she understood as being commenced by the Italian Futurist sculptor Umberto Boccioni, followed by Malevich, who had made similar achievements in painting. Kobro would argue that: "A solid is a lie about the essence of the sculpture." *ibid.*

⁴⁹⁴ "For People Unable to Think....." in *Katarzyna Kobro, 1898-1951* Vol. no. 182/99 ed. Elżbieta Fuchs, et al. (Leeds, England: The Henry Moore Sculpture Trust, 1999), 159.

paradoxical conditions of the current state of the world that they found themselves. As Kobra expressed it:

*If society were founded on the principle of functional fulfilment of its needs, we should be able to free ourselves from the condition of "over-refined flutter."*⁴⁹⁵

It would provide the resolution of what she saw as:

*Our psyche . . . in a tangle, being over-complicated. Its entanglements are to a large extent due to the condition of the surrounding world – chaotic and disorganised. Being shaped by contradictory forces, society consequently produces a psyche that is uncoordinated and paradoxical in its various effects.*⁴⁹⁶

The spatial sculptural laboratory provided a means of testing the possibilities of functionalism. Considered in the original UNOVIS terms,⁴⁹⁷ this artistic laboratory was seen to offer a manifestation of multiple functional outcomes in the world. In the model of the laboratory artwork, functionalism would generate a method of forming the inner spatial structure of the artwork, as it would space in the world. For Kobra, the answers to how space in sculpture could be modelled, organised and "establish a rhythm of proportions" in view of functionalism, lay in the universal laws of space: number and geometry. Spatial division based on geometry was the key to activating the rhythmic movement of the body in space and time.

⁴⁹⁵ "Functionalism by Katarzyna Kobra," 166.

⁴⁹⁶ Ibid.

⁴⁹⁷ See p. 116.

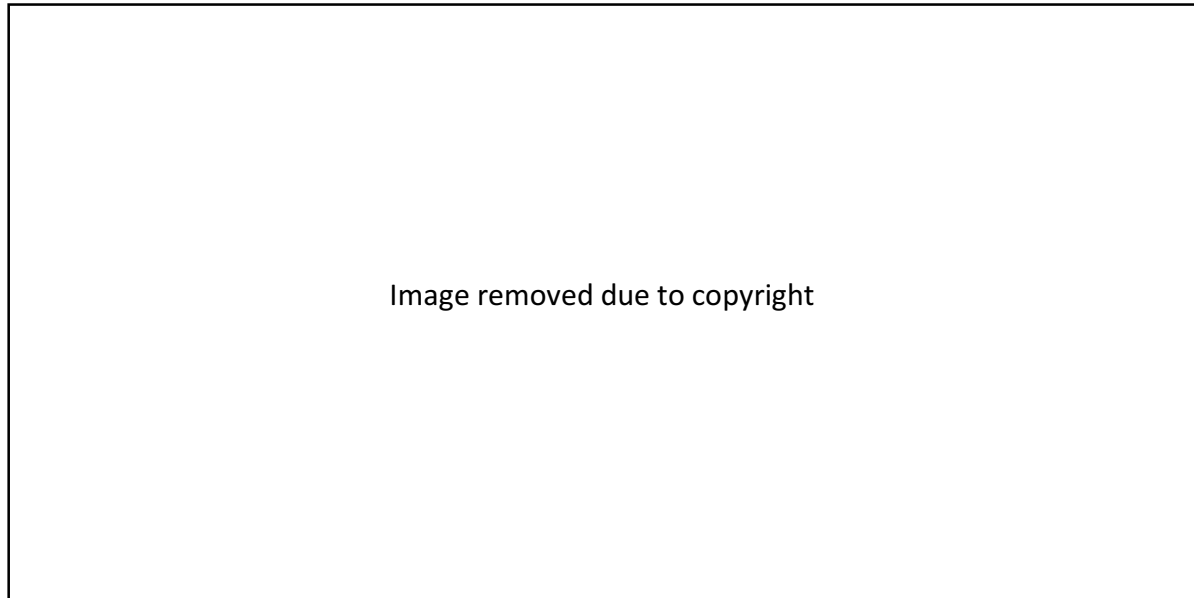


Fig. 55 Detail from K. Kobra, "Funkcjonalizm"[Functionalism], FORMA, no.4, (1936): 12

In *Katarzyna Kobra, 1898-1951*, 163.

Modelling space numerically – the rhythmic spatio-temporal conditions of movement

As early as 1924, Kobra began modelling space within the field of sculpture's "plastic experimentation" by using numerical systems of proportion.⁴⁹⁸ By 1925 she had developed a modular system that included a proportional system of 2:3, as demonstrated in *Spatial Sculpture* (1), 1925 (Fig. 56) Later, up until 1928, she used systems based on the Pythagorean theorem and also the Fibonacci series multiplied by 3. This developed a series of numbers: 6, 9, 15, 24, 39, 63 (she amended the last three numbers to 25, 40, 64), to evolve a system of 5:8 proportions that would automate an infinite number of linear and spatial divisions to determine both the form of the steel planes and the space between them (Fig. 55).⁴⁹⁹ As Kobra and Strzemiński explained in their book, *Composition of Space; Calculations of a Spatio-Temporal Rhythm*, the first stage in developing a spatial structure was to commence with a single projected plane and establish its uniform rhythm of component parts through the same numerical formula. This was followed by a second

⁴⁹⁸ Janusz Zagrodzki, "Reconstruction of Katarzyna Kobra's Sculptures," in *Constructivism in Poland 1923-1936* ed. Ryszard Stanisławski, et al. (Łódź: Museum Sztuki, 1973). Using numerical systems avoided any subjective or arbitrary system of composition attributable to bourgeois or academic art that she condemned as a "narcotic anaesthetic." Katarzyna Kobra, "Functionalism," *ibid.* (Federal Republic of Germany: Museum Sztuki, Łódź), 118. It also, as she and Strzemiński saw it, accessed an internal universal law applicable to a "direct realism," rather than the "imitative realism" of the bourgeoisie. Strzemiński, "Object and Space," 104.

⁴⁹⁹ For a discussion on how numerical systems generated Kobra's sculptures, see: *ibid.*

phase, which applies the same numeric formula onto the other planes that have a range of different shapes.⁵⁰⁰ The last phase of the work's development, in their view, was to create rhythmic transitions between these various projected planes into:

*. . . the higher order rhythm – to the spatio-temporal one which is constituted by the sequence of the consecutive potential rhythms . . . This sequence of the projected planes ought to be constructed according with the same numerical formula . . . If we succeed to embody the same numerical formula into all the parts . . . we shall attain a wholly uniform spatio-temporal rhythm.*⁵⁰¹

Together, the numerical division of space and form would produce “incalculable diversity”, literally activating the viewer's body to move around the sculptural work. This is evident when we consider four different views of *Spatial Composition 4* (1929), (Fig. 54). Every view of this work is constantly in flux, forming and dissolving into the next view, which is activated through the movement of the body circling the object. Spaces that are empty appear to become solid, lines that are straight in one moment become curves in the next. It is impossible to grasp the wholeness of the object in just one moment. Through the movement of the body, a rhythm of unfolding spatial shapes and forms emerge; the sculpture is in a constant state of flux through time. The sculptural object resists any solid formation as a singular instantaneous image or a mass – the experience is durational. As explained by Stremiński and Kobro in *Composition in Space*:

The spatiotemporality of the work of art is related to its variability. We call spatiotemporal the spatial changes produced in time. Those variations are functions of the third dimension, of depth, which, although momentarily hidden, nevertheless reveals its existence while transforming the appearance of the work of art . . . when

⁵⁰⁰ Katarzyna Kobro and Władysław Strzemiński, "Composition of Space; Calculations of a Spatio-Temporal Rhythm," *ibid.* (Federal Republic of Germany: Museum Sztuki, Łódź), 108.

⁵⁰¹ *Ibid.*

*the spectator moves, certain forms present themselves, others hide; the perception of these forms changes constantly.*⁵⁰²

In these “sculptures as space,” Kobro created dynamic time-space structures⁵⁰³ that activated the physiology of the body’s movement around them. This gave functionalism a method of organising and distributing space rhythmically by using geometry and numerical systems that activated the movement of the body through the space-time field. Kobro’s spatio-temporal rhythmic division contributed to functionalism an aesthetic experience of space that could establish a unifying order. As Kobro viewed it, this could be applied to everyday life, resulting in psychic calm for the individual and society. The scientific and rational method of geometry and numerical systems enabled the fluidity of space, movement and time to be sequenced into component parts and moments. This would allow Kobro to define the nature of functionalism as:

*Functionalism searches for the particular moments in the course of everyday life. Its objective is such a simplification and sequence of them, as to get a whole that facilitates life. Any sequence of moments of life has juxtaposed to it a corresponding sequence of utilitarian objects properly arranged. . . . The scientific organisation of work regulates the productive process and its effect or output.*⁵⁰⁴

In Kobro’s definition of functionalism, once the flow of life and the body’s movement is articulated into simplified segments, its actions can then be aligned with the associated utilitarian objects and all these moments “properly” organised and sequenced. This conception of functionalism as a series of bodily actions in time and space parallels that of

⁵⁰² Władysław Strzemiński, "Composition in Space," in *L'espace Uniste: Écrits Du Constructivisme Polonais* ed. Antoine Baudin and Pierre Maxime Jedryka (Lausanne: L'Age d'homme, 1977), 115. Cited in Bois, "Strzemiński and Kobro: In Search of Motivation," 151.

⁵⁰³ As many have noted interest in space and time had occurred through Cubism and Futurism. Kobro’s concern for space and time draws parallels with German scientist Hermann Minkovsky who first developed space-time concepts in science proposing the fourth dimension, elaborating on the theory of relativity. See: Janina Ladnowska, "Katarzyna Kobro — an Outline of Her Life and Work," in *Katarzyna Kobro, 1898-195*, Vol. no. 182/99 ed. Elżbieta Fuchs, et al. (Leeds, England, Łódź, Poland: Muzeum Sztuki, The Henry Moore Sculpture Trust, 1999), 63.

⁵⁰⁴ Kobro, "Functionalism," 120.

Paul Frankl, the German architectural historian, discussed in Part I of this thesis. In 1914, Frankl identified that the form of architecture is generated by an orderly sequence of events in space. As Frankl explained: “When I speak of purpose in architecture, I mean that architecture forms the fixed arena for actions of specific duration, that it provides the path for a definite sequence of events. . . . [It] presupposes a definitely ordered activity, and the spatial form is completely dependent upon the particular type of activity.”⁵⁰⁵ While Frankl’s functionalism resulted in the form of architecture, for Kobro the output of functionalism was two-stepped; commencing with the artwork as a laboratory, which then generated tangible effects by producing forms and spaces in the world.

This generative effect of the artwork maintained a fidelity to the Suprematist and UNOVIS origins of Unism, in which the artwork was conceived as a supreme organising force, above the everyday reality of the world. There were two key areas in Kobro’s and Strzemiński’s agenda that were mobilised by the functional spatial research into the forming of the laboratory sculpture. One was a method for the scientific organisation of work and the other was the architecturalisation of all space. These two areas in the forming agenda of functionalism (within sculpture’s laboratory and subsequently in the scientific organisation of labour and architecture) were both orientated to the ultimate aim – the utopian reorganisation of the world. The next two sections will outline how Kobro and Strzemiński saw the lessons sculpture offered functionalism as a method in forming the scientific organisation of work on the production line of industry, and further its implications for architecture.

Creative organisation, scientific division of labour – moving the body through geometry

Kobro based some of her concepts on the science of organisation from the Polish economist and management scientist, Karol Adamiecki. Like Henry Ford and Frederick Winslow Taylor in America,⁵⁰⁶ Adamiecki invented methods and theories of representing production processes and systems. To maximise efficiency, he extrapolated from what he understood

⁵⁰⁵ Frankl, *Principles of Architectural History: The Four Phases of Architectural Style, 1420-1900*, 157-58. See p. 45.

⁵⁰⁶ See p. 55, 186.

to be universal scientific systems and laws that could be seen in nature, including the human organism.⁵⁰⁷ Like Kobro, Strzemiński specifically nominated Henry Ford's assembly line as the promised outcome of functionalism. Kobro and Strzemiński would most likely have been familiar with the debates surrounding the scientific division of labour in mechanised manufacturing and production as a method for increasing profitability and hence wealth.

These debates were active in Soviet Russia before Kobro and Strzemiński left for Poland. As art historian Maria Gough points out, there was a mixed response in early Soviet Russia to the concept of the division of labour. On the one hand, Marxists initially condemned the artificial division of tasks in the mechanisation of production because it led to the worker becoming alienated from the entire process of production and its outcomes. The Productivist Nikolai Tarabukin and others regarded division of labour as the root cause of the obscene production of the applied decorative art that, in their view, fed the construction of the bourgeoisie.⁵⁰⁸ On the other hand, while Lenin initially rejected this "Western" concept that created the "alienated" worker, he revised his position in light of the financial crisis in Russia. Policies were developed in Soviet Russia, known as NOT (Scientific Organisation of Labour), based on the studies of Taylor, Ford, and Frank and Lillian Gilbreth⁵⁰⁹ into the efficiencies of the body's work on the production line.⁵¹⁰ In addition, Productivists such as Osip Brik developed an idealised notion of integrated "artistic production" in the assembly line, where the artist as worker would be cognisant of the entire process of the object's production.⁵¹¹

Despite the diverse opinion in Soviet Russia on the scientific division of labour, both Kobro and Strzemiński clearly had utopian aspirations for the promises of the scientific division of labour that could be activated through art and functionalism. In the opening sequence of his first essay on Unism, "B=2:to read . . ." Strzemiński optimistically cites Ford's assembly line

⁵⁰⁷ Kobro, "Functionalism," 118.

⁵⁰⁸ Maria Gough, "Red Technics," in *The Artist as Producer: Russian Constructivism in Revolution* (Berkeley: University of California Press, 2005), 154.

⁵⁰⁹ See p. 55, 185.

⁵¹⁰ Gough, "Red Technics," 156-57.

⁵¹¹ *Ibid.*, 155.

as embodying new form of creativity possessing an ideal of production as an automated system of creativity:

creation + system

The car factory of Ford: each worker performs only one sort of movement (differentiation of labour): each car is gradually constructed by several thousands of workers, and each of them carries out a single function, most simple and strictly determined. Each worker does his part of work at the car during one minute (mechanisation of labour). The machine transporting the car in production from one worker to the next, moves automatically every minute. In this way, every minute the factory turns out a car, formerly driven between thousands of hands. Due to a good organisation, economy of movements resulting from the most strict division, simplification and mechanisation of labour – the rate of performance is the greatest possible. The task of the engineers controlling the sections of the flow of work is to be inventive, to simplify the movements of each individual worker . . . (by an appropriate change = improvement . . .). The result: a continuous creative effort. Creation can be supported on a preexisting system . . . (= improvement).⁵¹²

Strzemiński predicted that the next phase in the new art would incorporate creative process and the construction of productivity within a new organisational culture.⁵¹³ This system of organisation had much in common with Kobra's definition of functionalism. As she stated: "Any sequence of moments of life has juxtaposed to it a corresponding sequence of utilitarian objects properly arranged."⁵¹⁴ In Kobra's view, the principles of scientific management relating to the organisation of bodies in time and space, particularly as theorised by Adamiecki, were the same as the laws of functionalism. Both Kobra and Strzemiński conceived that the "moments of life" and the body are sequenced into incremental, simplified actions distributed in time and space. The aim was for these actions to be efficient and standardised in order to increase productivity. Kobra's solution for how

⁵¹² Strzemiński, "B=2; to Read . . ." 80. Emphasis in quoted document.

⁵¹³ Ibid.

⁵¹⁴ Kobra, "Functionalism," 120.

functionalism could lead to rationalised and standardised efficiency had been implicit in her numerically devised sculptural laboratory works dating back to 1925. It lay in the division of space and movement based on geometry and numerical system. She argued that these laws of shape and line through geometry would enable functionalism to produce rationalised and standardised efficiency. She made this case in the essay, "Functionalism":

Each human action consists of several elements or moments. And each action corresponds to a set of plastic shapes, which govern that particular action. A straight line marks the shortest way to a production result. Which is why the way of proceeding from one action to another must be along the straight line and its corresponding geometrical shape. The law of the division of work comes to be fulfilled through geometric form.

Human actions are rendered most productive after we have regarded each action separately . . . The law governing the segregation of actions corresponds to the principle of the contrast of forms.

Each set of actions ought to correspond to another in a co-ordinated manner. The smooth manner of proceeding from one set to another depends on the right method of co-ordinating those sets. . . . Which is why there ought to exist a law that controls the process of shifting from one set of shapes (the governing set) to the following one. The appropriate law would envisage the form in terms of a calculated spatial-temporal rhythm which regulates the dimensions of shapes.⁵¹⁵

In Kobro's schema, the governing laws of geometry and numerical systems re-envisage the body as a bio-mechanical enacting actions fused with space and time, functioning as a producer of creative activity within the scientific organisation of labour. As Polish art historian Andrezej Turowski suggests, Kobro had a "belief in the deep harmony between subject and object, spirit and body, producer and product, function and work, creating in

⁵¹⁵ Kobro, "Functionalism by Katarzyna Kobro," 165.

their totality the intellectual-material unity of a world fully accessible through productive and creative activity.”⁵¹⁶ The generative potential of Kobro’s functional paradigm was that it could be used to shape the organisation of labour within production, where based on the geometry of spatial division, the body would be physically activated to a bio-mechanical rhythm through time. These principles of functionalism, modelled within her sculptural laboratory, would also provide the methodology for the forming of architecture and indeed, of all urban life.

Sculpture’s space-time functional laboratory – forming the architecture of all of life

Recalling some of Kobro’s laboratory sculptures, such as *Spatial Sculpture 3*, (1926) (Fig. 57), *Spatial Composition 1* (1925), *Spatial Sculpture* (1928) (Fig. 58), *Spatial Composition 5*, 1929, (*Spatial Composition 8*, 1932 (Fig. 59), what is notable, is that they evoke a space through which we enter cerebrally.⁵¹⁷ As the body literally moves around these sculptures, the mind re-scales our body to accommodate the spaces, as might also occur with a model or maquette. We imagine an image of our body physically moving in time and space through the sculpture’s numerical, modelled internal corridor spaces. This is consistent with both Kobro and Strzemiński’s position that the sculptures are a laboratory, akin to a model: a proposition of the implied potential application of the rhythmic, phenomenological⁵¹⁸ movement of the body in time and space. Yet, simultaneously, they are also real concrete space. As stated in *Composition in Space*: “The arrangement of the sculpture’s forms determines intersections that make space concrete and ‘corridors’ that give to the sculpture the internal unity of the spatial phenomenon, linking it to space.”⁵¹⁹ From this perspective, we can understand how these sculptural experiments into space and the body’s movement are associated with function. However, these sculptural propositions are not literal

⁵¹⁶ Andrzej Turowski, "Theoretical Rhymology, or the Fantastic World of Katarzyna Kobro," in *Katarzyna Kobro, 1898-1951* Vol. no. 182/99 ed. Alina Kwiatkowska Elżbieta Fuchs, Penelope Curtis, Stephen Feeke (Leeds, England: The Henry Moore Sculpture Trust, 1999), 83.

⁵¹⁷ Janusz Zagrodzki also discusses this attribute of Kobro’s sculptures as space-time models created in one’s mind. See: Janusz Zagrodzki, "Inside Space," in *Katarzyna Kobro, 1898-1951* Vol. no. 182/99 ed. Elżbieta Fuchs, et al. (Leeds, England: The Henry Moore Sculpture Trust, 1999), 76-77.

⁵¹⁸ Bois notes Unism’s prescience in the implied phenomenology associated with the movement of the body as a key attribute of space and functionalism. As he said it would take until the 1960s for minimalism develop the full implications of this in art. See Bois, "Strzemiński and Kobro: In Search of Motivation," 154.

⁵¹⁹ Strzemiński, "Composition in Space," 107-08. Cited in Bois, "Strzemiński and Kobro: In Search of Motivation," 151.

demonstrations of functionalism. Here, there are no properly organised utilitarian objects according to the scale of the “real” world, where scientific management has regulated the production lines that create order for the new society. Nevertheless, the sculptures establish the principle of spatial geometrical divisions that then activates the body’s movement through time using the real space of sculpture. In this sense, these sculptures are in the real present, where they demonstrate the principles of functionalism that activate the body, and also in the mind, where they project the possibility of these actions in relation to utilitarian objects in a new, imagined architectural and social world.

The sculptures function in the true sense of the Suprematist art object and laboratory object when they generate the possibility of other functional utilitarian objects in the world. For example, Kobro used *Spatial Composition 8* as the basis for her *Design for a Functional Nursery* (1932–34) (Fig. 60).⁵²⁰ Both Kobro and Strzemiński had been actively involved with and established various avant-garde groups of artists and architects. From 1926 to 1929 they belonged to a collective, headed by the architect Szymon Sykruś, that published the journal *Praesens*, which was mostly concerned with architectural problems of functionalism.⁵²¹

⁵²⁰ Katarzyna Kobro, *Katarzyna Kobro, 1898-1951*, ed. Elżbieta Fuchs, et al., trans. Jerzy Jarniewicz Joanna Holzman, Alina Kwiatkowska, Axel Lapp, Sophie Lefèvre, Piotr Szymor, Maciej Świerkocki (Leeds, England: The Henry Moore Sculpture Trust, 1999), 152.

⁵²¹ Andrzej Turowski, "Periodicals of the Constructivist Movement," in *Constructivism in Poland 1923-1936* ed. Ryszard Stanisławski, et al. (Federal Republic of Germany: Museum Sztuki, Łódź, 1973), 48.

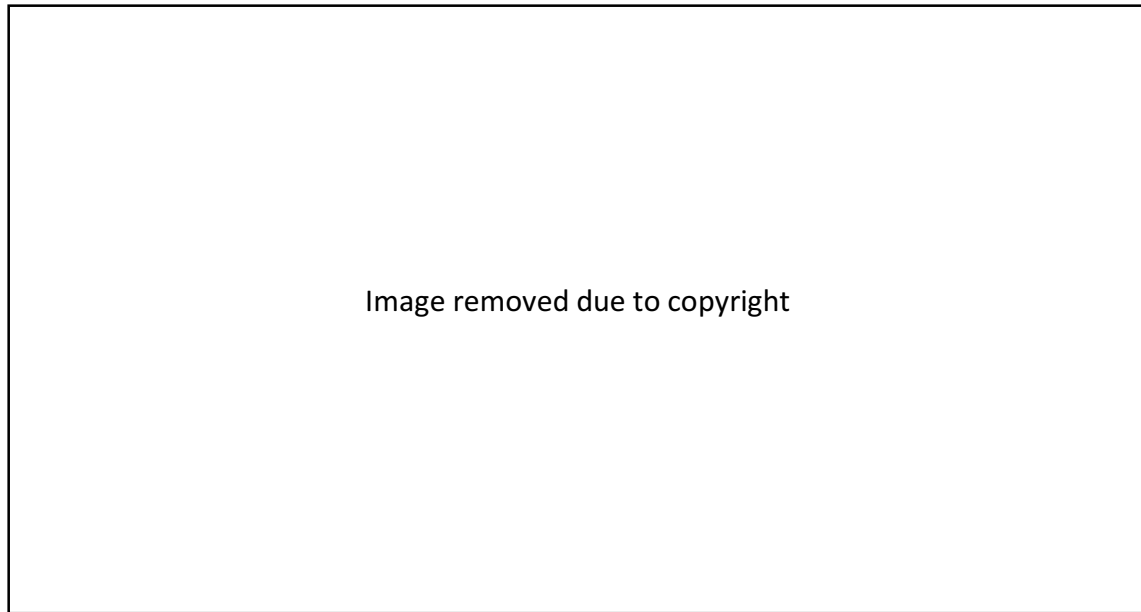


Fig. 56 Katarzyna Kobro, *Spatial Sculpture 1* (1925), partial reconstruction (1967)

In *Katarzyna Kobro, 1898-1951*, 95.

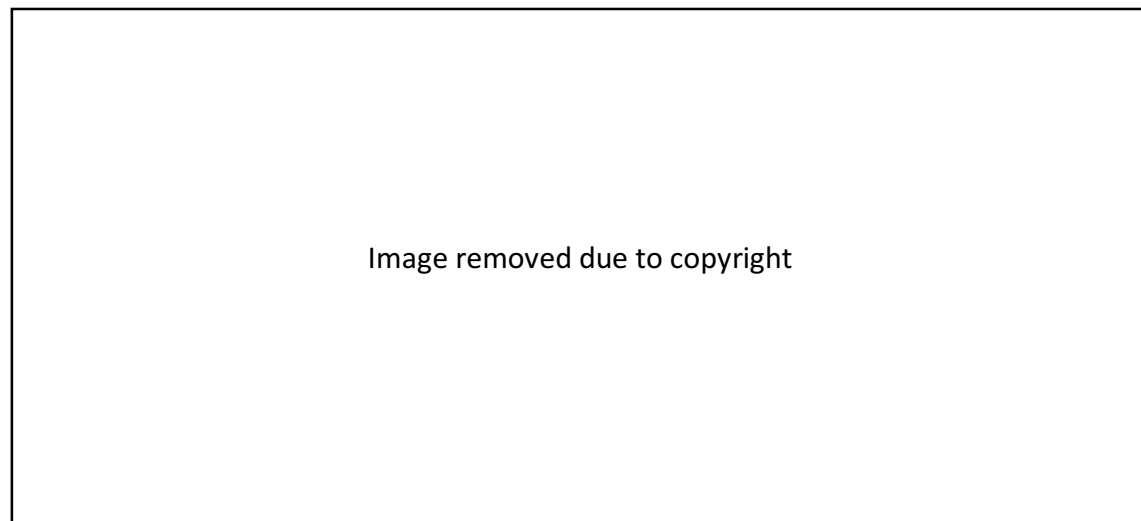


Fig. 57 Katarzyna Kobro, *Spatial Sculpture 3*, (1926)

In *Katarzyna Kobro, 1898-1951*, 96.

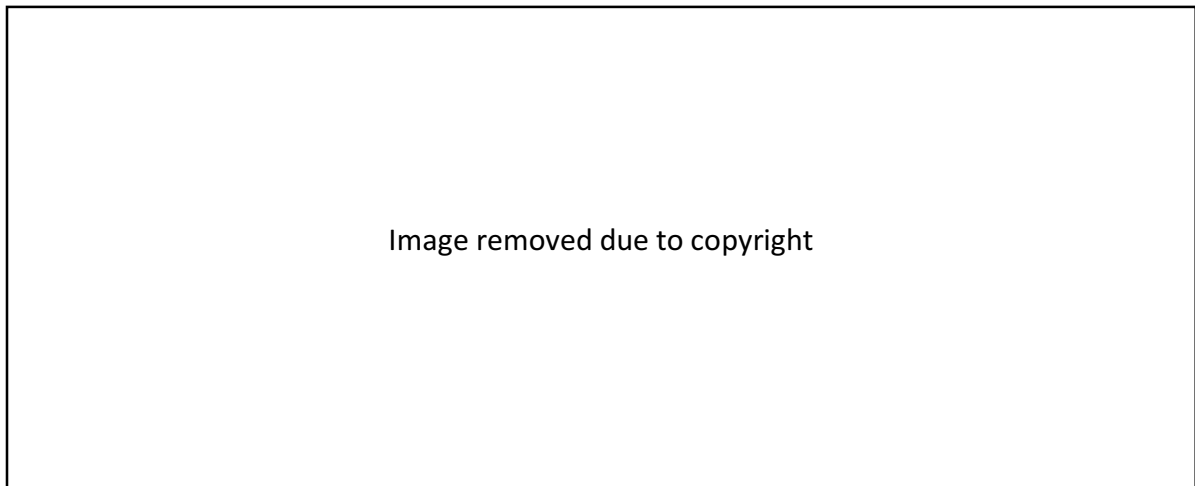


Fig. 58 Katarzyna Kobro, *Spatial Sculpture*, (1928)

In *Katarzyna Kobro, 1898-1951*, 99.

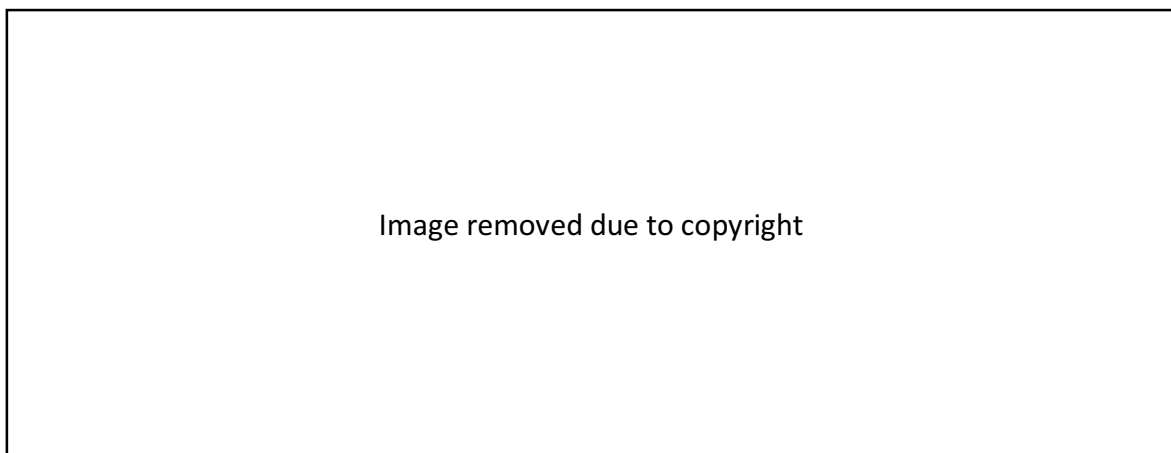


Fig. 59 Katarzyna Kobro, *Spatial Composition (8)*, (1932)

In *Katarzyna Kobro, 1898-1951*, 107.

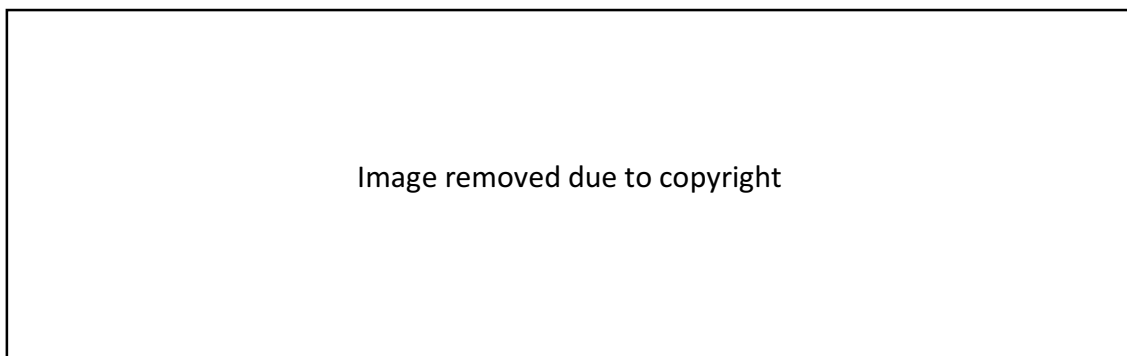


Fig. 60 Katarzyna Kobro, *Design for a functional nursery (maquette)*, (1932-1934)

In *Katarzyna Kobro, 1898-1951*, 152.

In 1928, Strzemiński, with Sykrus, wrote: "The functionalism of the space penetrating a piece of architecture is a kind of a musical score. In each house, during the time which is assigned to it, everyday life is played according to this score."⁵²² The specific contribution made by Kobro to a theory of the methodology of functionalism was rhythm, which she developed with Strzemiński. This appears to have informed Sykrus formulation of functionalism and architecture. Before this, in the first edition of *Praesens* in 1926, Sykrus identified functionalism with the construction elements of the building. In this respect he held the same views as other Western European architects. Sykrus, like Kobro, also acknowledged that functionalism is a coefficient of space and time. As he wrote:

*Functionalism consists in co-ordinating composition in space and time. A functional work of architecture is a composition of a period of time which becomes divided into unequal, yet balanced, parts that function in a limited space at periodic intervals. [and then:] . . . in order most economically to control the three elements of the material world: time, space and energy.*⁵²³

However, Strzemiński later considered the concept of function in architecture as more than the simple division of space. In 1931, he wrote in *The Principles of New Architecture*:

1. *The elements of architecture are:*
 - a) *places where a man stops during any activity;*
 - b) *motion when he passes from one activity to another.*
2. *The aim of architecture is an organisation of the rhythm of consecutive motions and stops, and thereby the forming of the whole of life.*⁵²⁴

Strzemiński's proposition for architecture was organised through the functional principles of rhythmic, geometrical spatial regulation that activated an economy of human bio-

⁵²² Strzemiński and Sykrus, "The Present in Architecture and Painting," 106.

⁵²³ From S. Sykrus Preliminarz architektury [The Estimates of Architecture] *Praesens*, no. 1 (1926): 14,15,16. Cited in Ladnowska, "Katarzyna Kobro — an Outline of Her Life and Work," 66.

⁵²⁴ Strzemiński, "The Principles of New Architecture," 109.

mechanical movement and actions. Like Kobra's propositional sculptures, Strzemiński's scheme had the potential to extend to all of space and all of life.

Summary – Kobra's functionalism – the forming of sculpture / the forming of life

Kobra's and Strzemiński's contribution to the definition of functionalism involved their method of organising and distributing space rhythmically. They used geometry and numerical systems to activate the movement of the body through the space-time field. Their interpretation of functionalism was phenomenological. Key characteristics of their conception of functionalism were efficiency and economical movement and action established through geometry and numerical systems, together with a set of "utilitarian objects properly arranged." These attributes would deliver the goals of functionalism. On a pragmatic level, these goals comprised the spatial and temporal organisation of space in the world, which would enable the rational organisation of labour, the development of architecture in the cities and the organisation of life in its entirety. Transcendentally, the ultimate aim for functionalism would be the bringing about of a new social utopia⁵²⁵ bearing the hallmarks of a universal psychic and emotional calm.

Summary – function as forming within the Unist and Constructivist artwork

This chapter argues that concepts of function were used as a method of forming during Rodchenko's Constructivist phase and in Logan's art works and Kobra's laboratory sculptures. Kobra's sculptures, particularly the *Spatial Compositions*, in addition to her theory that redefined sculpture as space, offered functionalism a methodology of "forming" space. True to its metaphysical origins in Suprematism, Kobra's Unist testing of functionalism via her sculpture laboratory was conceived of as demonstrating a supreme organising force that was above everyday reality. Kobra employed the universal laws of geometry and mathematics to form the rhythmic space of the artwork that would activate the movement of the body through space and time. This was, for Kobra, functionalism's "methodology of forming." In this respect, Kobra extended functionalism's generative

⁵²⁵ Jaraoslaw Suchan, "Early Abstraction in Poland," in *Inventing Abstraction, 1910-1925* ed. Leah Dickerman (New York: The Museum of Modern Art, New York 2013), 325.

potential to form the same space of sculpture, that was in architecture, cities and the production line, in order to maximise wellbeing and organise life through the scientific division of labour.

By comparison, the Constructivist phase of Rodchenko's *Spatial Constructions* and loganson's cold structures harnessed function within the concrete methodology of forming the artwork. In Rodchenko's work, function can be seen to automate the system of making through construction and use of material. loganson's cold structures added to this repertoire the functional action of tensile forces within the very structure of the artwork. Despite the philosophical differences between the Constructivist and Unist propositions, at that point in time they shared an understanding of autonomy of the artwork and its relative self-sufficiency in the everyday world of things. This permitted the principles of function to be made manifest within the very internal forming of the artwork.

Concluding: abfunctional speculations toward the forming of the artwork

It has been argued that concepts of function were used as a method of forming the artwork, and that the sharing parallels with the role and definition of function in the forming of architecture. In the use-ready function of the art object, as discussed in chapter four, the artwork itself could be conceived as contributing to the broader context of function as forming. The Constructivists, Productivists and Unists reprogrammed the artwork as use-ready and effect-ready and they conceived it as functionally contributing to the formation of a new type of comrade and a new socialist world. In these examples, function in art shared characteristics and values with function in architectural discourse. These included honesty, rationality, economy, efficiency, standardisation, systemisation, objectivity and universal principles, such as laws governing numerical and geometrical ordering devices.

Given that the role of function as forming has been established in these examples of avant-garde artwork, it is now possible to address the issue of abfunction within the production of the artwork. Are the methods, characteristics and values of function evident in avant-garde artworks also relevant to the making of contemporary artwork, such as those produced for

this project? If so, in what ways can abfunction reveal and move away from function in the making and the effect of the contemporary art work? Here I will propose (returning to the proposition in chapter two) that the making of the artwork could be regarded as a “containing system.” In this concept, many constituent components can be understood as being driven by a functional imperative within the overall system. Is it possible that constituents of the artwork, such as the action of the body or the materials and structure, commence their operations with the values of function in the forming of the artwork, such as efficiency or standardisation, before diverting away to resist the teleological expectations implicit within these components? I intend to argue that this does occur through abfunction.

Parts I and II of this thesis established the ground work for how function can be understood to operate within the forming of the art object and also in its use-ready position. I have also outlined some strategies for how abfunction could be conceived as moving away from function during the process of the forming of the artwork. In Part III I will ask: In what ways can abfunction be seen to reveal and move away from function in the case study artworks produced for the project? These include *How long* (2008–ongoing), *Houses that are happy to help with at least one of the possible problems of art* (2010–ongoing) and the *Hold UP* series (2013–15). I will also investigate how revealing the presence and action of abfunction in these artworks might further clarify its definition.

Part III Looking for abfunction – the case studies

Overview

Part II of this thesis asked: Can function from the “use-ready” and “forming” position be found in art? As discussed in Part I, the formulation of these two opposing positions in relation to function draws on a definition of function based on Aristotle, architectural discourse in the early twentieth-century and those broadly associated with function theory since the 1970s. The proponents of the Russian and Polish avant-garde identified that function could not only be conceived of in the use-ready and effect-ready end-point of the art object, but that it could also be used in the forming of the artwork. Moreover, when art activated the use-ready function, it was also seen to operate in a broader context of forming both culture and the individual. Building on these early avant-garde examples, the role of function can now be considered in relation to the three case studies produced for the project in order to investigate the potential of abfunction. The three case studies are: *How long*, (Fig. 2, Fig. 61, Fig. 62), *Houses that are happy to help with at least one of the possible problems of art* (Fig. 12, Fig. 13, Fig. 14, Fig. 69, Fig. 70, Fig. 71), and lastly, the *Hold UP* series (Fig. 8, Fig. 9, Fig. 10, Fig. 11).

Part III asks: In what ways can abfunction in the three case studies both reveal and generatively divert away from function within contemporary artworks? The methodology in Part III involves looking for processes of function in the forming of the artwork, processes that have been generatively departed from in order to produce something that does not adhere to the criteria of function. This has proven to be a circuitous method—in both the looking for function in the artwork to identify the abfunctional diversion, both the abfunction and function simultaneously reveal one another. To explain this briefly: *How long*, for example, identifies the incremental actions of the body as belonging to a functional method of production. However, within this abfunctional diversion, what is produced is potentially endless action only, eclipsing the functional attribute of the determined outcome. (This will be discussed in more length in chapter five.)

In the description of the case-study artworks I have made the decision to depart from a conventional academic mode of writing and instead employ the first person. This is intended to open up a space for the reader to identify with and embody the context of the forming of the artworks. In the discussion of the function revealed in the artwork, I have drawn from the investigation of avant-garde artworks in Part II, and supported this with examples discussed in Part I in order to substantiate the identification of function. Other precedents and theories are introduced to consolidate these claims where the scope allows. Potential for further research could include exploring further the viability and definition of the concept of abfunction.

The first case study, *How long*, (chapter five) proposes that abfunction is the surplus actions of the body only, divorced from the logical teleological outcomes conventionally associated with the function of “doing things.” Moreover, I argue that the inclusion of the photographic apparatus into its method of making, not only brings with it the historical relationship of the camera to the understanding of the role of the body in functional production. The argument is also made that the inclusion of the camera in the case study of *How long* is in itself an abfunctional diversion in the process of making. Here, abfunction’s processes offer an account of the alternative material outcome of the artwork, which enables a revision of the commonly understood “dematerialised artwork.”

The second case study, *Houses that are happy to help with at least one of the possible problems of art*, (chapter six), draws on the concept of “truth to materials” as a value within functional methods of sculptural and architectural modernist production. This case study proposes that rather than materials being mute or behaving as required for expected teleological end-points, that in the personal rendezvous with materials an abfunctional situation can erupt. Here, materials can speak back, be happy or unhappy, or plain misbehave, and this activates us to behave in non-normative fashions. Recent developments in new materialism contextualise this independent willfulness of materials and offers potential for further research into the role of materials generating abfunctional behaviours.

The final case-study examined, the *Hold UP* series—builds on the understanding of the role of function within my own art practice from chapters five and six. In chapter seven, I elaborate on the case of abfunction enlisting non-normative behaviour in objects and things and also on the logic of the camera apparatus' insertion into the artwork's production. In the *Hold UP* series of works I aim to demonstrate how abfunction resists the release of the output of the sculptural assembly, which would be the teleological endpoint of a functional process of "forming." In doing this, abfunction stalls the clock time associated with functional production and in the various *Hold UP* works inserts and a range of temporal conditions, including endless duration.

Chapter five: *How long* – abfunction case study #1

Introduction

In this chapter I ask: where and what is the abfunctional diversion within the case study *How long* (2008–ongoing)? (Fig. 61, Fig. 62, Fig. 63) Based on the definitions of function in Part I as well as the role function within the production of the artwork in Part II, what attributes and methods of function are revealed and identified in the production of the artwork *How long*? Furthermore: how does abfunction divert away from these identified methods and attributes of function? In this chapter I will also investigate how the abfunctional status of the artwork might offer an account of the alternative materialisation of the artwork's outputs, beyond the conventional definition of the dematerialised art object – a term coined by Lucy Lippard in the early 1970s to name artworks that did not conform to the understood conventions of the autonomous art object.⁵²⁶

How Long, (2008-ongoing)

In *How Long*, I stand in a public space, where I happen to be, and hold up a white placard with the question handwritten on it: “how long can I hold this up?” I am doing what the placard tells me to do. With the act of holding this white placard, with my arms stretched above my head, my upper body is blanked out. To me, it seems funny that a question of duration, usually associated with action of endurance holding up a weight, is attached to something as light as a piece of card with the instruction penned on the front. Sometimes I am in a public urban space, with lots of bypasses. Other times I am in the landscape, by a road, in front of a pier, on a tram. Sometimes it is winter. Sometimes it is night, other times day. For each act of holding it up, in each specific location where I happen to be, there is an image that witnesses this event. It has been going on since 2008. In some ways it probably started before. There is only the singular action of the artist, “me,” holding it up, reiterated, multiple on multiple times, from the past and into the future.

⁵²⁶ See Lucy R. Lippard, *Six Years: The Dematerialization of the Art Object from 1966 to 1972* (London: Studio Vista, 1973).

Part III Looking for abfunction – the case studies

Chapter five: *How long* – abfunction case study #1



Fig. 61 Simone Slee, *How long*, (2008-ongoing)

Part III Looking for abfunction – the case studies

Chapter five: *How long* – abfunction case study #1



Fig. 62 Simone Slee, *How long*, (2008-ongoing)



Fig. 63 Simone Slee, *How long*, (2008-ongoing) installation in *Propositions for an Uncertain Future: five responses, through art, to a fountain without water*, (2010)

Exhibition curated by Lyndal Jones at the Melbourne City Square.

Locating the abfunctional deviation: surplus action only – photography and the body's action in diverting the teleological imperative of production

In *How long*, I propose that the abfunctional condition is the action of the body, continually holding-it-up, divorced from the teleological outcomes associated with the instruction implicit in the artwork that asks the question: “how long can I hold this up?”. In this artwork, the abfunctional deviation occurs in the moment that the artwork refuses to deliver the obligatory penned message on the white placard. This imperative establishes an “instruction,” for me to hold up, to find out the answer to this question. It specifies a process of delivering a product, through the actions of the body, to produce a teleological outcome. In this work, the body of the artist interacts with the “use-ready” object – the placard – in the process of producing the work. However, there is no answer that produces

an outcome in this work. Instead, it is the multiple continual singular actions of holding-it-up, caught in the image captured by the camera witnessing these moments. In this way, abfunction becomes a solitary action – holding-it-up only – without the teleological endpoint that is the delivery of the answer to the question. It is surplus action, as it is ongoing without an end in sight. As this artwork deviates from the endpoint of function, it reveals the incremental actions of the body of the producer (that is, my body, the body of the artist) in time (daytime, night-time) and space (here, there, Melbourne, the beach, the farm, Frankfurt, New Delhi) as integral to the system of forming the artwork. Here, the actions of the body are registered as belonging to the system of function.

The first part of this chapter consolidates the argument that *How long's* abfunctional status reveals the incremental actions of the body as it moves toward an anticipated endpoint-specified by the instruction associated with a functional action. Extending Parts I and II, it will commence with a discussion of the architects Louis Sullivan and Paul Frankl, who both conceived of the body's actions as function. It will follow with an explication of the developments in photography, particularly in relation to French physiologist and physician Étienne-Jules Marey's invention of chronophotography. I show how these developments facilitated the functional role of the body as incremental movement and action within a system of production, activated on industrial assembly lines, before returning to how these systems infiltrated the processes of art.

The second part of this chapter explores how these residues of function in *How long* are diverted from the teleological end point implied by the instruction in the artwork. I will propose that photography's incursion into the making of *How long*, while registering function, is also the mechanism that establishes the artwork's abfunctional status. In particular, I will argue that *How long* operates between three categories of photography, the "indexical," "performative" and then the "performed photograph." It is this particular photographic diversion in the making of *How long* that enables the abfunctional offering, divorcing the actions of the body with the teleological end-point implied by the instruction. Moreover, I will show how the incursion of the indexical, performative and performed

photographic logic into this case study accounts for the alternative materialisations of outputs, which counters the conventionally understood dematerialised artwork.

Revealing function in the forming of How Long (the body's action towards the instruction of the teleological output)

The body's action as function – Louis Sullivan and Joe Doe

In the early formulation of modernist functional thinking, Sullivan⁵²⁷ considered the actions of the human body as function and form in itself. Informed by German Romanticism, Sullivan conceived of a constant folding and transferring between the role of function and form.⁵²⁸ For Sullivan, the relationship between form and function was the principle that governs all within nature and what he describes as “human-life.” To explain human-life, Sullivan uses the example of the life and sequential series of events of the individual “Man,” “John Doe”:

*And so does the form, man, stand for the function, man; the form, John Doe, means the function, John Doe; the form, smile, makes us aware of the function, smile; so, when I say: a man named John Doe smiles,—we have a little series of functions and forms which are inseparably related . . . If I say, John Doe speaks and stretches out his hand, as he smiles, I add a little to the sum of the functions and the forms . . . if I say, that, as he smiled, and stretched out his hand, and began speaking, with a lisp . . . his lip trembled and a tear formed in his eye, — are not function and form moving in their rhythm . . . John Doe lived the life of John Doe, not of John Smith: that was his function and such were his forms.*⁵²⁹

Sullivan was establishing the specificity of what makes John Doe not John Smith, through the unique form–function relationship. However, what is relevant here is the sequentialising and compartmentalising of the body's movements into ever-smaller increments of action in

⁵²⁷ See p. 43.

⁵²⁸ Louis H. Sullivan, "Kindergarten Chats," in *Kindergarten Chats (Revised 1918) and Other Writings* ed. Isabella Athey (New York 22, N.Y.: George Wittenborn, Inc., 1947), 43.

⁵²⁹ Ibid., 43-44.

time and space. The body's actions are function and consequently also the form. And what makes the final form of John Doe and John Smith's life is the composite series of ongoing actions and gestures of the body in time and space.

Paul Frankl also makes a claim for function as a sequence of actions and events in time and space.⁵³⁰ In addition, he identifies the reciprocal relationship of actions and events as the determining factor of the forms in architecture.

*When I speak of purpose in architecture, I mean that architecture forms the fixed arena for actions of specific duration, that it provides the path for a definite sequence of events. Just as these have their logical development, so the sequence of spaces . . . the spatial form is completely dependent upon the particular type of activity.*⁵³¹

For both Frankl and Sullivan, function is constituted by the actions, duration and events that dictates the logic informing the shape of space and forms. The endpoint of these processes for Sullivan is the essentialist character of John Doe, and function allows this to be revealed. For Frankl, however, function's teleological end point is form in architecture through the spatialisation of the sequence of the body's actions in time and space.

Chronophotography the body and functional industrial production

Developments in the late nineteenth century in photography and chronophotography (literally – the photography of time) significantly expanded the understanding of the body in motion through time and space, which in turn informed functional systems of production. By 1882, Marey developed the technique of chronophotography,⁵³² which led from his

⁵³⁰ See p. 45.

⁵³¹ Paul Frankl, *Principles of Architectural History: The Four Phases of Architectural Style, 1420–1900*, trans. James F. O'Gorman (Cambridge, Mass.: MIT Press, 1968), 157–58.

⁵³² Herbert Molderings, "Lens Based Sculpture. The Contribution of Photography to Sculptural Experimentation," in *Lens-Based Sculpture: the Transformation of Sculpture through Photography* ed. Bogomir Ecker, et al. (Köln: Verlag der Buchhandlung Walther König, 2014), 28.; Anson Rabinbach, *The Human Motor: Energy, Fatigue, and the Origins of Modernity* (New York: Basic Books, 1990), 108.

research in the 1860s on animal and human bodily motion.⁵³³ Using a gun mechanism, Marey was able to capture, on a single plate and at previously unattainable speeds, incremental moments of the body's movement. Parallel developments were also taking place in California, where the English painter and photographer Eadweard Muybridge developed a technique for sequentially firing cameras to produce individual photographs of bodies in motion in time and space. These developments shifted the consideration of photography from a mechanical system of representation that could make the invisible visible to an instrument that could also produce scientific data. Muybridge's studies of horses and people in various actions: running, climbing stairs, kissing (Fig. 64); Marey's studies of human bodies: men fencing, pole vaulting, and birds in flight; and Charles Fremont's 1894 work in Marey's laboratory, such as the *Hammerers Striking a Blow* 1895 (Fig. 65);⁵³⁴ enabled the body's motion to be segmentally mapped on individual frames. These frames provided previously unseen evidence of the multiple individual gestures of the body that would comprise an action. Moreover, these mapped body gestures would represent incrementally small and standard units of time showing flux and motion through space.⁵³⁵ This enabled the relationship of individual actions to be scientifically analysed with potential for improved efficiency of human movement in time and space.

⁵³³ *The Human Motor: Energy, Fatigue, and the Origins of Modernity*, 92.

⁵³⁴ *Ibid.*, 116-17.

⁵³⁵ *ibid.*, 108-10.

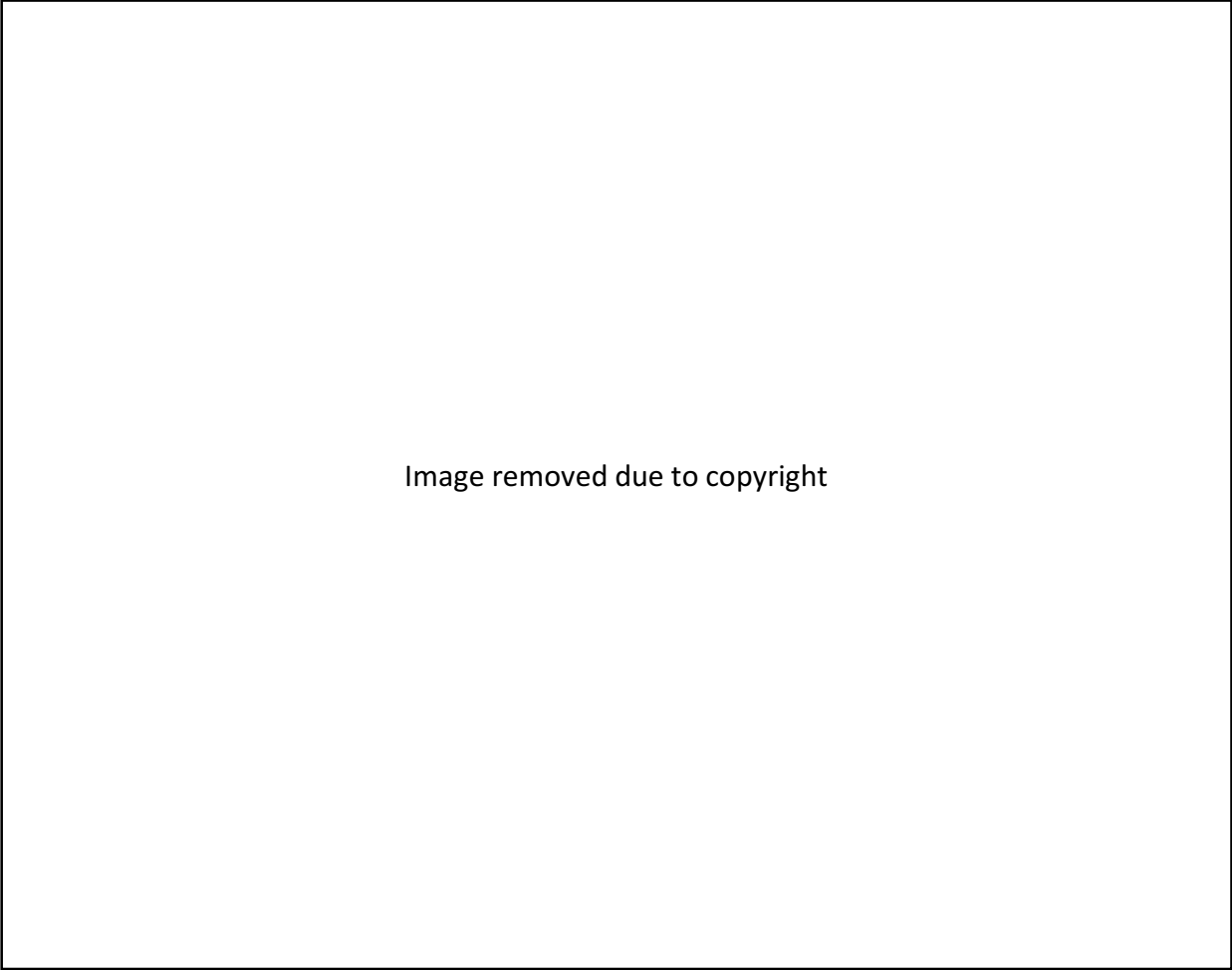


Image removed due to copyright

Fig. 64 Eadweard Muybridge, *Animal Locomotion*, Volume 1 Plate, 444, (1887)

Accessed May 18, 2016. <http://www.muybridge.org/Art/First-Filmed-Kiss/i-29v43H3/A>

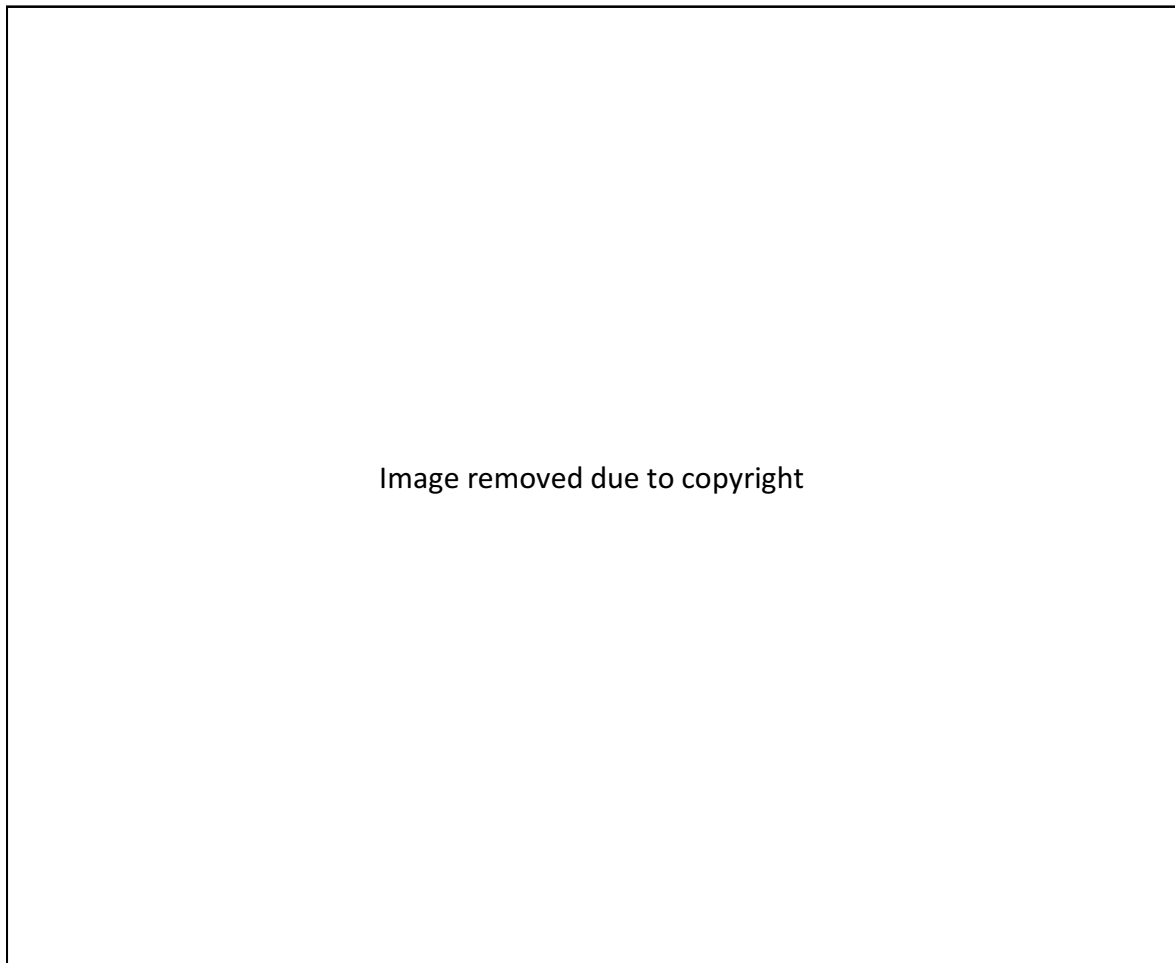


Fig. 65 Charles Fremont, *Hammerers striking a blow*, (1895)

Accessed May 18, 2016. <https://au.pinterest.com/pin/245164773437751948/>

Marey was actively concerned with the application of this scientific research for utilitarian applications in everyday life,⁵³⁶ extending the influence of function. The potential of the body's capacity as muscular energy and an efficient movement machine, was seen as having economic and production applications in modernising industrial labour, building military power and increased sporting prowess. His final publications advocated an "economy of motion," which argued that animal and human "motors" are, by their nature, capable of improvement and increased efficiency.⁵³⁷ Marey's research was also being paralleled in America by the mechanical engineer, Frederick W. Taylor. The issue of whether lost time during production could be reduced by the elimination of inefficient bodily and object

⁵³⁶ Ibid.

⁵³⁷ Ibid., 118.

movement in space was a preoccupation for both Marey and Taylor.⁵³⁸ By 1883, Taylor was developing his theory of the scientific management of factory labour⁵³⁹ based on his analysis of workers shovelling material at the Bethlehem Steel Company.⁵⁴⁰ Husband and wife collaborators, American engineers Frank B. and Lillian Gilbreth were also involved in motion studies, initially in the field of bricklaying, where they applied Taylor's principles to space and production.⁵⁴¹ Like Marey, the Gilbreths developed photographic methods using the motion picture camera to produce chronocyclegraphs, which enabled the study of bodily motion within one thousandth of a minute.⁵⁴²

Taylor and the Gilbreth's research into the incremental actions of the body had fuelled Henry Ford's assembly line developments.⁵⁴³ Ford articulated how an economic system could be produced through the rationalised actions of the body appropriately sequenced into divisions of labour types. Advancements in the technology of photography reconstructed the body as bio-mechanical, articulated through infinitesimally small incremental units of movement within the universal time of the clock, which was then scientifically measurable. It established the principles for the rational mechanisation of functional space, where complex manual tasks could be automated within the machine of this industrial revolution.

Industrial production into art – the precedent of Henry Ford's assembly line

The developments on the assembly line, which were premised on the bio-mechanical actions of the body, provided foundational principles for Katarzyna Kobro and Władysław Strzemiński's formulation of Unism in the 1920s. As discussed in Part II,⁵⁴⁴ Kobro's definition

⁵³⁸ Ibid., 115–16.

⁵³⁹ Stephen Kern, *The Culture of Time and Space 1880–1918* (Cambridge, Mass.: Harvard University Press, 1983), 115.

⁵⁴⁰ Fredrick Winslow Taylor, "The Principles of Scientific Management," in *The Industrial Design Reader* ed. Carma Gorman (New York: Allworth Press, 2003).

⁵⁴¹ The Gilbreths were disciples of Taylor, yet unlike Taylor, they worked to reduce fatigue and believed in introducing a number of "Happiness Minutes" for workers to overcome the drudgery of repetitive tasks. Rabinbach, *The Human Motor: Energy, Fatigue, and the Origins of Modernity*, 117.; Kern, *The Culture of Time and Space 1880–1918*, 116–17.

⁵⁴² Kern, *The Culture of Time and Space 1880–1918*, 117.

⁵⁴³ See p. 55.

⁵⁴⁴ See p. 160.

of functionalism reveals the influence of scientific management of work that had previously informed Ford's assembly line as well as the contribution made by the developments in photography, both of which enabled an understanding of the body as a series of actions toward an end point. As Kobro stated in her essay "Functionalism":

*Functionalism searches for the particular moments in the course of everyday life. Its objective is such a simplification and sequence of them, as to get a whole that facilitates life. Any sequence of moments of life has juxtaposed to it a corresponding sequence of utilitarian objects properly arranged. . . . The scientific organisation of work regulates the productive process and its effect or output.*⁵⁴⁵

For Kobro, function informed by the scientific organisation of work, provided the premise by which to form art as well as the world's cities and architecture. It was underpinned by the articulation of the body's actions as moments in time, distributed sequentially in space with "utilitarian objects." This method as Kobro would say: "would envisage the form in terms of a calculated spatial-temporal rhythm which regulates the dimensions of shapes."⁵⁴⁶ This temporal rhythm of forms and space would be articulated as sculpture, architecture or cities in the world and ultimately the final end-goal of function: a psychic calm for all.⁵⁴⁷

Preceding Kobro's definition of function, Strzemiński outlined Ford's production line as a system of singular actions of the body, distributed in time and space with objects and materials framed within the teleological expectations of car production. This was the new premise for creativity. As he wrote in his seminal essay on Unism, "B = 2; to read . . .":

The car factory of Ford: each worker performs only one sort of movement (differentiation of labour): each car is gradually constructed by several thousands of workers . . . Each worker does his part of work at the car during one minute. . . . every

⁵⁴⁵ Katarzyna Kobro, "Functionalism," in *Constructivism in Poland 1923–1936* ed. Ryszard Stanisławski, et al. (Federal Republic of Germany: Museum Sztuki, Łódź, 1973), 120.

⁵⁴⁶ Katarzyna Kobro, "Functionalism by Katarzyna Kobro," in *Katarzyna Kobro, 1898–1951* ed. Elżbieta Fuchs, et al. (Leeds, England: The Henry Moore Sculpture Trust, 1999), 165.

⁵⁴⁷ See p.117. Kobro, "Functionalism," 120; Kobro, "Functionalism by Katarzyna Kobro," 166.

*minute the factory turns out a car . . . good organisation, economy of movements . . .
The task of the engineers controlling the sections of the flow of work is to be
inventive . . . The result: a continuous creative effort.*⁵⁴⁸

With this observation, Strzemiński links functional efficiency to the organisation of incremental human actions within the regulation of production processes.⁵⁴⁹ In this Fordist system, the human body belongs to the “mass of unskilled workers” that is systematised and regulated into specific actions. These undifferentiated, singular bodies of the masses in turn have their actions automated within this functional system as determined by the specification – the instruction – to produce the end-goal of the car and, ultimately, an economical output.

Like Kobro and Strzemiński, the German architect Adolf Behne also looked to Ford’s assembly line for a model for how the sequenced and timed activities of the body in relationship to rationalised processes could generate specific spaces and forms, such as industrial or hospital buildings.⁵⁵⁰ However, in contrast to Strzemiński’s view that Ford’s assembly line activated the undifferentiated bodies of the masses, Behne identified the individual “will” of the client as an activity to be considered by the architect within a functional model of production.

The architect can only grasp and carry out his truly artistic work, that is, the creative work, when he addresses questions of his client’s attitude to life, way of living, business methods . . . “being a client” is not just buying a piece of land, some bricks, and an architect. The client must be an activity, whose taking possession of the acquired space is so definite, clear, rich, and organic that it can be transformed into

⁵⁴⁸ Władysław Strzemiński, "B=2; to Read . . ." in *Constructivism in Poland 1923–1936* ed. Ryszard Stanisławski, et al. (Federal Republic of Germany: Museum Sztuki, Łódź, 1973), 80.

⁵⁴⁹ Ibid.

⁵⁵⁰ Adolf Behne, "The Modern Functional Building," in *The Modern Functional Building* ed. Julia Bloomfield, Thomas F. Reese, and Salvatore Settis (Santa Monica, CA: Getty Research Institute for the History of Art and the Humanities, 1996), 103–04.

*the relationships of masonry walls, indeed relationships governed not by convention or mere custom but by necessity and a living sense.*⁵⁵¹

Here, Behne identifies the “will” of the client as a motivating force,⁵⁵² suggesting an intentionality that drives the activities and actions of the body in a functional system of producing the space and form of architecture. This intentionality is what establishes the “brief” for the architect; it is the “instruction” that not only specifies actions distributed in space and time, but also the “purpose” of the instruction – the end point of function.

The instruction – specifying functional production’s teleological output

How long

So, to return to *How long*. I am in the public space where I happen to be. I am activating the action, the incremental movements of my body to hold up the placard – that “utilitarian object.” I am doing what the “utilitarian object” tells me to do, instructed by the question penned on the front: “How long can I hold this up?”

In *How long*, the “instruction” penned on the placard (like Behne’s client), establishes the “will” of the “artist,” (me), that specifies and automates my body’s actions in space. However, unlike Sullivan, the artwork does not share his metaphysical interest, where the simultaneous folding of physical actions of the body is both form and function, in and of itself. I am not John Doe, nor John Smith and this functional gesture is not about me. Rather, *How long* draws on the functional production of the incremental actions of the body, in relation to a utilitarian object, the placard. I am doing as I am told in the instruction, which leads to the possibility of delivering the teleological end-point of this instruction: the answer to the question: “How long can I hold this up?”

The concept of the instruction automates the production of the artwork; it shares with the history of function in the forming of the object, the agenda of bypassing the subjective and

⁵⁵¹ Ibid., 120.

⁵⁵² Adrian Forty, *Words and Buildings: A Vocabulary of Modern Architecture* (London: Thames & Hudson, 2000), 184.

arbitrary processes of composition. The imperative of function in architecture by architects such as Horatio Greenough or Adolf Loos, discussed in Part I,⁵⁵³ provided a solution against the nineteenth-century tyranny of form and subjective composition in architecture with “fitness to purpose.” This can also be seen to parallel the Constructivists, Alexandr Rodchneko and Karl Ioganson as discussed in Part II,⁵⁵⁴ who turned to the principles of construction that embodied the values of function in order to combat the subjective and arbitrary processes within the composition advocated by the bourgeois art object.

Rodchenko’s *Spatial Constructions* (1920–21) (Fig. 44), for example, offered an automated functional system with which to generate the artwork. Here, only one decision was required by the artist – where to commence the first cut in the plywood – the remaining process would follow-suit, based on the system.⁵⁵⁵ In her *Spatial Sculptures and Spatial Compositions* (1925–32) (Fig. 54, Fig. 58) Kobro likewise sought an automated method by which to generate the artworks, using numerical systems of proportions to establish scale and location of the steel component parts in space.⁵⁵⁶ While these artworks by Rodchenko and Kobro do not fully comply with what would be considered an instruction artwork; however, they set up the possibility of a set of procedures that dictates the forming of the artwork – the premise by which the instruction artwork operates.

Marcel Duchamp could be considered one of the first artists to establish the concept of the instruction artwork. Duchamp had an ongoing concern with the potential of chance as a method for establishing the outcome of an artwork (a play on the subjective decision of the artist). In his notes and projects for *The Large Glass*, (1915–23),⁵⁵⁷ compiled in *The 1914 Box*, Duchamp makes several references to artworks that could be considered instruction works with specifications for a set of procedures that would automate the artwork’s making.⁵⁵⁸ For

⁵⁵³ See p. 33.

⁵⁵⁴ See p. 143, 146.

⁵⁵⁵ See p. 144.

⁵⁵⁶ See p. 158.

⁵⁵⁷ The collection of notes and projects associated with *The Large Glass* (also called *The Bride Stripped Bare by Her Bachelors, Even*) are published at different times in *The Box of 1914* (1914), *The Green Box* (1934). Arturo Schwarz, *Notes and Projects for the Large Glass* (London: Thames & Hudson, 1969), 1–12.

⁵⁵⁸ *Notes and Projects for the Large Glass*, 86.

example, one proposal was called “The barrel game,” identified as a “‘sculpture’ of skill.”⁵⁵⁹ Here, he advocates that the popular early twentieth-century French provincial fairground game (*jeu de tonneau*) is enacted to produce an artwork. Duchamp specifies the action of throwing tokens into the frog’s mouth while being recorded by a systematic photographic process of three shots.⁵⁶⁰ The outcome of the artwork would be the three photographs produced of the body’s action based on chance. These sets of instructions and specifications parallel those one may encounter in establishing a functional process of production. Both involve the breaking down of processes into incremental steps including a series of actions of the body, objects in time and the framing of the possible outcome.

There is not the scope in this discussion to fully outline a history of the instruction artwork. However, *How long* can trace its lineage through this history of instruction pieces. For example, there are clear links between my practice and the work of Ben Vautier, the Fluxus artist who also held up placards, in public streets of Nice, where he enacted gestures written on signs (circa 1962); these works include *Regardez Moi Cela Suffit* [Look at me that is enough], (Fig. 66).⁵⁶¹ More recently, David Shrigley’s *Cat* (2007), continues this trajectory; his dead cat enacts the sign (Fig. 67).

⁵⁵⁹ Michel Sanouillet and Elmer Peterson, *Salt Seller: The Writings of Marcel Duchamp* (New York: Oxford University Press, 1973), 23.; Schwarz, *Notes and Projects for the Large Glass*, 86.

⁵⁶⁰ Molderings, "Lens Based Sculpture. The Contribution of Photography to Sculptural Experimentation," 39.

⁵⁶¹ Kristine Stiles, "Between Water and Stone: Fluxus Performance, a Metaphysics of Acts," in *In the Spirit of Fluxus* ed. Elizabeth Armstrong and Joan Rothfuss (Minneapolis: Walker Art Center, 1993), 67.

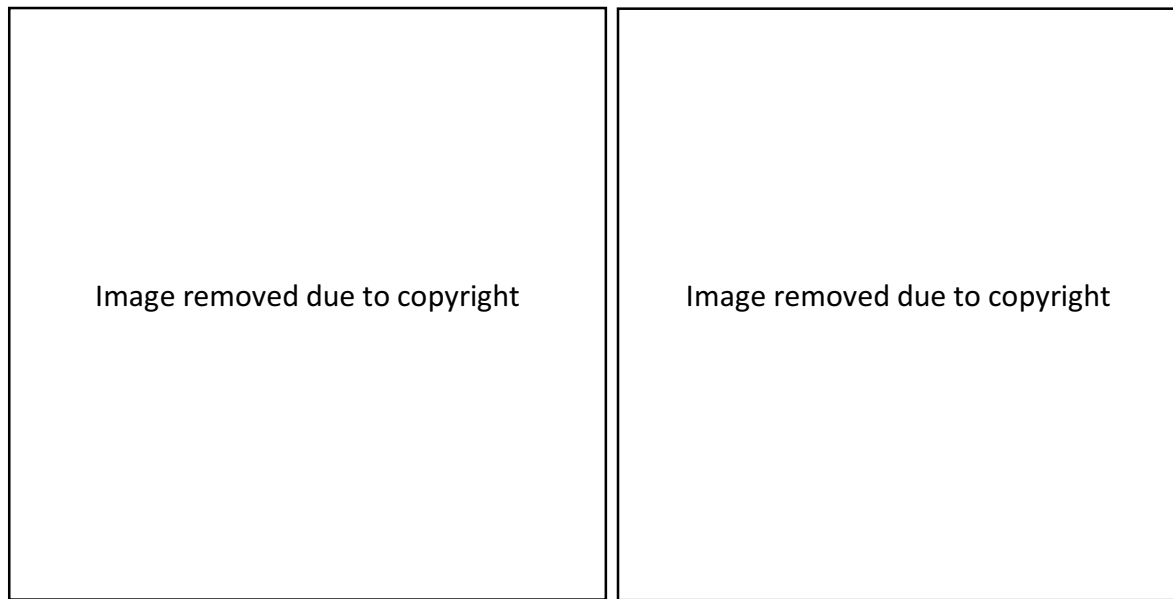


Fig. 66 Ben Vautier, *Regardez Moi Cela Suffit* [Look at me that is enough], Nice, (circa 1962)

In *In the Spirit of Fluxus*, edited by Elizabeth Armstrong and Joan Rothfuss. (Minneapolis: Walker Art Center, 1993), 67. (left)

Fig. 67 David Shrigley, *I'm Dead*, (2007)

Accessed May 20, 2016. <http://withreferencetodeath.philippocock.net/blog/shrigley-david-im-dead-2007/> (right)

How long

Returning to the public space where I happen to be. I am holding up the placard – doing what I am told. For each act of my body holding it up – that lightweight piece of card with the instruction penned on the front – in each specific location, the camera apparatus snaps a shot to witness the event.

Photography's incursion into art's system of production and the dematerialised artwork

In *How long*, the camera enters the production of the artwork and halts the process of the instruction. This is the moment in *How long* when the abfunctional diversion arrives – when the artwork refuses to answer the question: “How long can I hold this up?” The first part of this chapter established that it is the instruction of the question, specifying the incremental actions of the body toward an anticipated answer, which establishes the origins of a functional logic in the forming of the artwork *How long*. However, before discussing the

ways in which photography enacts the abfunctional diversion in this case study, it is important to identify how the camera apparatus and its processes have historically entered into the production of the artwork and how this led to an understanding of the dematerialised art object. Following, the mechanisms in the photographic logic that produces the abfunctional diversion in *How long*, which can then be seen as producing alternatively materialised outcomes, will then be discussed.

Marey and Muybridge's photographic systems influencing the internal production of art

Since the late 1960s, photographic systems involved in the making of art have often been associated with the idea of the dematerialised art object. However, prior to this, Marey and Muybridge's influence has seen photography infiltrated into the production of the artwork, particularly sculpture. Developments such as chronophotography's functional mechanical apparatus brought about an explosive reconceptualisation of the body as incremental actions in space and time in art. For instance, the French sculptor Augustus Rodin, informed by Muybridge's *Animal Locomotion* (1887), used photography in his working studio process from 1887. In 1911, the Italian Futurist Umberto Boccioni saw Marey's chronophotographs in Rome, influencing his *Technical Manifesto of Futurist Sculpture* (April 11, 1912, Milan) and artworks such *Muscoli in velocità*, (Muscles in Movement) 1913. Marey's works would drive Boccioni to open up his artworks to the actual space and action of the body that could also include the dynamism of machines⁵⁶² and by inference the mechanism of the camera.

In a 1967 interview, Duchamp also acknowledged that Marey's chronophotographic images informed the mechanised *Nude Descending the Staircase*, (1911–12).⁵⁶³ For Duchamp, the photographic apparatus was integral to his experimental practice.⁵⁶⁴ In addition to the *Barrel Game*, mentioned above, where the body's actions would be documented through the insertion of the camera into the "process of making the artwork," other examples of the use of the camera apparatus appear frequently throughout his propositions collated in *The*

⁵⁶² Molderings, "Lens Based Sculpture. The Contribution of Photography to Sculptural Experimentation," 32.

⁵⁶³ Cabanne and Duchamp, *Dialogues with Marcel Duchamp*, 34-35.

⁵⁶⁴ Molderings, "Lens Based Sculpture. The Contribution of Photography to Sculptural Experimentation," 39.

Box of 1914.⁵⁶⁵ While there are many other examples that could be cited, such as artworks by Man Ray and Brassai, it is not the purpose of this chapter to fully scope this trajectory.⁵⁶⁶ However, as curator and art historian Matthew Witkovsky argues, these early twentieth-century developments would “unwittingly” underpin experimental-expanded artwork practices from the 60s and 70s onwards,⁵⁶⁷ when the functional apparatus of the camera led to what would be considered a dematerialised art practice.

Photography's functional instruction system and the “dematerialised art object”

The conceptual artist Douglas Huebler announced in 1969 that he was utilising: “the camera as a ‘dumb’ copying device that only serves to document whatever phenomena appear before it through the conditions set by a system. No ‘aesthetic’ choices are possible. Other people often make the photographs. It makes no difference.”⁵⁶⁸ Like Rodchenko and loganson before him, Huebler aspired to establishing an objective system by which to automate the art object's production, in order to resist the subjective and tasteful decisions associated with composition in producing the art object. Heubler decided to bring to the internal system of production of the artwork the functional machine camera apparatus and its “snap-shot” logic in order to automate this set of instructions to be followed.⁵⁶⁹ Moreover, the artist could be anyone who made the photographs. All they had to do was follow the instruction. This system would produce many of his *Variable* and *Durational Pieces*, which often comprised a typed text describing the incremental steps in the work's production. This was accompanied by a series of black-and-white photographic documents,

⁵⁶⁵ See notes numbered: [20], [27], [49], [59] in Schwarz, *Notes and Projects for the Large Glass*, 58, 66, 86, 98.

⁵⁶⁶ For a discussion of the relationship between sculpture and photography see two excellent books: Roxana Marcoci, Geoffrey Batchen, and Tobia Bezzola, *The Original Copy: Photography of Sculpture, 1839 to Today* (New York: Museum of Modern Art, 2010).; *Lens-Based Sculpture: the Transformation of Sculpture through Photography*, ed. Bogomir Ecker, et al., trans. John Brogden (Köln: Verlag der Buchhandlung Walther König, 2014).

⁵⁶⁷ Matthew S. Witkovsky, “The Unfixed Photograph,” in *Light Years: Conceptual Art and the Photograph, 1964–1977* ed. Matthew S. Witkovsky (New Haven: Art Institute of Chicago, Yale University Press, 2011), 16.

⁵⁶⁸ Douglas Huebler, “Catalogue exhibition statement,” in *Prospect 69*, (October, 1969): 26. Cited in Jack Burnham, “Alice's Head,” in *Great Western Salt Works: Essays on the Meaning of Post-Formalist Art* (New York: G. Braziller, 1974), 56.

⁵⁶⁹ Liz Kotz, “Image + Text: Reconsidering Photography in Contemporary Art,” in *A Companion to Contemporary Art since 1945* ed. Amelia Jones (Hoboken: Blackwell Publishing Ltd., 2008), 512.

which appeared as the outcome of the text's instruction.⁵⁷⁰ *Duration Piece #4, Paris France, 1970, (1970)*, for example, activated this type of system facilitated by the actions and movement of the body through time and space. Movement in space and time, and the use of the trivial and quotidian device of the “snap-shot” photograph, established the structural conditions for the making of this work.⁵⁷¹ In this work, Huebler nominated varying times that he would walk, stop to take a photograph, change direction based on the geometry of ninety degrees, and then walk for a period of time that was mathematically halved by the previous time. Using this method, he determined photographs over a period of nearly an hour.⁵⁷² Huebler's *Variable* and *Durational Pieces* demonstrate that the functional construction of the artwork makes explicit the functional mechanism of the photographic.

In the late 1960s, Huebler and other artists associated with movements including conceptual art, post-minimalism, land-art, performance art, *Arte povera* and body art were frequently identified as making dematerialised or immaterial artworks. In his 1969 essay *Situational Aesthetics*, photographer and art theorist Victor Burgin articulated that these artists made “aesthetic systems . . . designed, capable of generating objects, rather than individual objects themselves.”⁵⁷³ Burgin further explained that these systems were often conceived as instructions that could generate a range of outcomes that he termed “immaterial objects.”⁵⁷⁴ A system could itself be a photographic apparatus (such as Huebler's example), or the process and actions of an artwork, where photography offered a method to document and recording these processes. Many other artists emphasised that text was also a valid medium for the making of art. In her canonical book *Six Years: The Dematerialisation of the Art Object from 1966–1972* (1973),⁵⁷⁵ Lucy Lippard referred to these proliferating practices, many of which engaged photographic procedures and systems,

⁵⁷⁰ Mark Godfrey, “Across the Universe,” in *Light Years: Conceptual Art and the Photograph, 1964–1977* ed. Matthew S. Witkovsky (New Haven: Art Institute of Chicago, Yale University Press, 2011), 62.

⁵⁷¹ David Green and Joanna Lowry, “From Presence to the Performative: Rethinking Photographic Indexicality,” in *Where Is the Photograph?* ed. David Green (Maidstone, Kent; Brighton: Photoworks; Photoforum, 2003), 49.

⁵⁷² Godfrey, “Across the Universe,” 77. See also: *ibid.*, 61–64.

⁵⁷³ Victor Burgin, “Situational Aesthetics, Victor Burgin, 1969,” in *Situational Aesthetics: Selected Writings by Victor Burgin* ed. Alexander Streitberger (Leuven; [Ithaca] Leuven University Press; distributed in North America by Cornell University Press, 2009), 7.

⁵⁷⁴ *Ibid.*, 8.

⁵⁷⁵ Lippard, *Six Years: The Dematerialization of the Art Object from 1966 to 1972*.

as "dematerialising the art object."⁵⁷⁶ Some years later, Rosalind Krauss, in her equally seminal essay, *Sculpture in the Expanded Field*, (1978),⁵⁷⁷ confirmed these tendencies in art from the mid-1960s for creating artworks beyond what was known as the modernist sculptural object. Both Lippard and Krauss claimed that these new practices were a provocation against the prevailing orthodoxy of the modernist art object as advocated by the American critics Clement Greenberg and Michael Fried.⁵⁷⁸ In fact, Krauss made the claim that these new artworks, which belonged to an expanded field of sculpture, provided a paradigmatic break from modernism and could be termed postmodern.⁵⁷⁹

It is in the context of Greenberg's concept of the "medium-specific" modernist art object that the idea of the dematerialised art object can be clearly understood. Medium-specificity, which is widely attributed to Greenberg, was developed in his essays between 1939 and 1969.⁵⁸⁰ In many of his essays, including the "Avant-Garde and Kitsch" (1939)⁵⁸¹ and "Towards a Newer Laocoon" (1940),⁵⁸² Greenberg establishes that the trajectory of art led from the mid-nineteenth century towards a "pure" medium-specific art. For Greenberg, each art form, such as painting or sculpture, would become uniquely itself by reducing its focus to the specific medium's parameters.⁵⁸³ In Greenberg's view, art should not imitate the external world, have illusory or literary associations, or communicate ideas.⁵⁸⁴ Rather, it should imitate its own internal processes and methods.⁵⁸⁵ Only then would art be self-sufficient and achieve a greater, more immediate, "concretely felt" physical expression of

⁵⁷⁶ Some artists from the 1960s included the photographic system in the artwork in order to resist and critique the market's commodification of the art object and the institution of art. Jon Erickson, "Performing Distinctions," *PAJ: A Journal of Performance and Art*, no. 3 (1999): 99–100.

⁵⁷⁷ Rosalind Krauss, "Sculpture in the Expanded Field," *October* Vol. 8 (Spring, 1979).

⁵⁷⁸ See Lippard, *Six Years: The Dematerialization of the Art Object from 1966 to 1972*, 6. For a discussion of Greenberg's specificity of the medium and Michael Fried's equally canonical essay "Art and Objecthood," (1967). See p. 225, 270.

⁵⁷⁹ Krauss, "Sculpture in the Expanded Field," 44.

⁵⁸⁰ Rosalind E. Krauss, *A Voyage on the North Sea: Art in the Age of the Post-Medium Condition*, The Walter Neurath Memorial Lecture (London: Thames & Hudson, 2000), 6.

⁵⁸¹ Clement Greenberg, "Avant-Garde and Kitsch," in *Clement Greenberg, the Collected Essays and Criticism*, Vol. 1: Perceptions and Judgments, 1939–1944 ed. J. O'Brian (Chicago, London: University of Chicago Press, 1986).

⁵⁸² "Towards a Newer Laocoon," in *Clement Greenberg, the Collected Essays and Criticism*, Vol. 1: Perceptions and Judgments, 1939–1944 ed. J. O'Brian (Chicago; London: University of Chicago Press, 1986).

⁵⁸³ *Ibid.*, 32.

⁵⁸⁴ *Ibid.*, 24–25, 31–32.

⁵⁸⁵ "Avant-Garde and Kitsch," 17.

sensation and certainty.⁵⁸⁶ Consequently, painting must express its flatness and sculpture should be defined by its material and its resistance to the artist's will.⁵⁸⁷ By contrast, artists such as Huebler produced dematerialised art objects or sculpture in the expanded field and prioritised the systems and production from the quotidian everyday world. This was in stark contrast to Greenberg's aestheticised "materialised" medium-specific modernist art object. In an exhibition curated by Seth Seiglaub, in 1969, Huebler announced he would no longer make objects: "The world is full of objects, more or less interesting: I do not wish to add any more."⁵⁸⁸ Lawrence Weiner, would later reinforce Huebler's strategy in his *Untitled Statement* (1970), declaring that the artwork need not be built.⁵⁸⁹

This concept of the dematerialised art object now frames and dominates the reception of artworks that do not produce the discrete, self-sufficient medium-specific art object. These artworks frequently employ photographic production systems in their processes of making amongst other methods that included the use of language, drawing on linguistic or social theory. This is particularly associated with conceptual art or relational aesthetics.⁵⁹⁰

However, the concept of the dematerialised art object has recently been questioned and even considered misleading⁵⁹¹ by writers such as Russian-born art critic Boris Groys and German art theorist Dorothea von Hantelmann.⁵⁹² Both consider that a truly dematerialised

⁵⁸⁶ "The New Sculpture," in *Clement Greenberg, the Collected Essays and Criticism*, Vol. 2: *Arrogant Purpose 1945–1949* ed. John O'Brian (Chicago, London: University of Chicago Press, 1988), 314.

⁵⁸⁷ "Towards a Newer Laocoon," 34.

⁵⁸⁸ Douglas Huebler, "Douglas Huebler, *Untitled Statements* (1968)," in *Theories and Documents of Contemporary Art: A Sourcebook of Artists' Writings* ed. Kristine Stiles and Peter Howard Selz (Berkeley: University of California Press, 1996).

⁵⁸⁹ The *Untitled Statement* is as follows: 1. The artist may construct the piece; 2. The piece may be fabricated; 3. The piece need not to be built. Each being equal and consistent with the intent of the artist the decision as to condition rests with the receiver upon the occasion of receivership. Tried and True.

Lawrence Weiner, "Lawrence Weiner: *Untitled Statement* (1970)," *ibid.* Cited in Kristine Stiles and Peter Howard Selz, *Theories and Documents of Contemporary Art: A Sourcebook of Artists' Writings*, California Studies in the History of Art: 35 (Berkeley: University of California Press, 1996).

⁵⁹⁰ The identification of relational aesthetics as a movement in art is commonly attributed to the French curator and critic Nicolas Bourriaud in the 1990s. These art works privileged the role of human relations, the social and the viewer, as material in the making of the artwork, where the artist is often conceived as a facilitator in this social network. See Nicolas Bourriaud, *Relational Aesthetics* (France: Les presses du réel, 2002).

⁵⁹¹ The "material turn" for example has critiqued the previous emphasis on linguistic and social structures as a method of constructing the world and its resultant effect of the "'dematerialisation' of the world." See p. 217.

⁵⁹² Dorothea von Hantelmann, *How to Do Things with Art: The Meaning of Art's Performativity*, trans. Jeremy Gaines and Michael Turnbull (Zurich: JRP Ringier, 2010), 144.

artwork is not possible. Groys claims that conceptual art, with its “linguistic turn,” is not immaterial but rather represents a shift away from the static object to a set of relations in time and space.⁵⁹³ Hantelmann argues that it has never been possible for any artwork to be without a material support of some kind, even if the artwork was intended to be a “trigger” to information or communication beyond the actual form itself. For Hantelmann, Lippard’s use of the term “dematerialized” as one that questions the authority of the discrete art object is misleading and does not necessarily imply an immaterial form.⁵⁹⁴ As Hantelmann says, the shift that the dematerialized art object represented was, rather, “a fundamentally new definition of the formal, aesthetic and material properties of art,”⁵⁹⁵ not its lack of material form or support.⁵⁹⁶

The abfunctional photographic incursion – abfunction’s action only – diverting the logical output of production via the photographic system

In *How Long*, I propose that the insertion of the photographic process is not only an abfunctional diversion, but also accounts for the re-materialisation of the artwork in the form of multiple installation iterations of photographic prints. In this section I discuss how the photographic system halts and diverts the functional process implied by the imperative of the instruction in *How Long*. I argue that this occurs through the particular operations specific to photography: the indexical, performative and performed. Following will be a discussion of abfunction’s account of the alternatively materialised outcomes of the artwork in *How long’s* making.

It may be useful to reiterate the functional logic (which is then diverted) of the work *How Long*. The “instruction” of the penned imperative on the placard, although established by me (the artist), operates to instrumentalise the directive. It dictates to me the actions I must enact. The placard with its imperative is the use-ready object ready to be activated by my body. I do what it tells me to do. My body performs the functional actions in time and space

⁵⁹³ Boris Groys, “Introduction – Global Conceptualism Revisted,” *e-flux Journal* # 29, no. 11/11 (2011), <http://www.e-flux.com/journal/introduction%E2%80%94global-conceptualism-revisited/>.

⁵⁹⁴ Hantelmann, *How to Do Things with Art: The Meaning of Art’s Performativity*, 144.

⁵⁹⁵ Ibid.

⁵⁹⁶ Ibid.

with the weight of the placard of holding it up— an action that can also be understood as fundamental to the medium of sculpture. According to artist Robert Morris, the values of sculpture include weight (amongst other things such as, density, mass, scale). Moreover, our body identifies the relationship to these values through its kinaesthetic, haptic actions. Morris states: “With the sense of weight, for example, goes the implicit sense of being able to lift.”⁵⁹⁷ In *How long* the imperative is to lift or hold up, no matter the weight of the placard. In this action of holding up, the photographic apparatus is inserted into the internal structure of the work – to witness the event. Akin to the work of Huebler, the photographic witnessing of the event establishes a system orchestrated by the machine of the camera apparatus, which then dictates the output of the work—the photographic document. The photographic document produced by *How Long* isolates the singular action of the body—my body—in one digital shutter-speed moment of the act of holding it up. It freezes it. It holds the action and locks it into the document itself. As the action is diverted and held within the document, it is taken out of real time and space where time can be measured and an answer given to the question on the placard that dictates my behaviour. A new system is now established. It deviates from the original functional drive of my body performing its actions in space with the placard. This is the abfunctional deviation. It drives further repetitions of the photographic apparatus that witnesses the event in the multiple locations where I happen to be, and diverts the action into the capsule of the photographic document. No longer a durational sequence of actions in time that enacts the process of holding up the placard; it is now just action only, divorced from the outcome of the answer to the question.

This abfunctional diversion into the photographic, which isolates the action, can be understood through the intersection of three conditions of the photographic operation: the indexical, the performative and the performed. In this section I give a brief overview of each in order to account for the abfunctional diversion instigated by photography’s incursion in *How long*.

⁵⁹⁷ Morris, "Some Notes on the Phenomenology of Making", 4 of 5.

Photographic operations – the indexical, the performative and the performed document

It has been frequently acknowledged that there is a complex relationship of the photographic operation in the making of artwork in body art events, happenings, performance and live actions. For example, the American feminist art historian, critic and curator Amelia Jones makes the case that the photographic document has both a reliant and interdependent role in live action works. Jones argues that the artwork is not only ontologically present in the live action of the body, but is equally present within the photographic document that is produced by the process of making the work. The document acknowledges the live artwork's existence and vice versa. As Jones says: "The body art event needs the photograph to confirm its having happened; the photograph needs the body art event as an ontological 'anchor' of its indexicality."⁵⁹⁸ This elucidates the complex operation of the photographic document that is couched in terms of the indexical, which refers back to the original site in the past of the act "in the world," and simultaneously brings forth and makes present the action to the viewer.

The writings of American philosopher and semiotician Charles Sanders Peirce and French literary theorist Roland Barthes can usefully contribute to this discussion. Barthes' essay *Rhetoric of the Image* (1964),⁵⁹⁹ explains the enigma and conundrum of the simultaneous effect of the past and present in the photograph.⁶⁰⁰ As identified by Barthes, this "enigma" and illogical conundrum of photography is not that the object or event was simply there in the past. The photograph brings to our awareness, not only the "been-there" but the "having-being-there" of an object or event, the "here-now and the there-then"⁶⁰¹ of the object or event. Furthermore, the witnessing indexical photographic document establishes the data or "information," or "proof" of these occurrences or, at the very least, as the photographic historians David Green and Joanna Lowry have argued, "points to" the fact that the action has been "done" by the artist and is a "gesture" in itself.⁶⁰² This gesture of

⁵⁹⁸ Amelia Jones, "Temporal Anxiety/'Presence' in Absentia: Experiencing Performance as Documentation," in *Archaeologies of Presence* ed. Gabriella Giannachi, Nick Kaye, and Michael Shanks (Hoboken: Taylor and Francis, 2012), 212.

⁵⁹⁹ Roland Barthes, "Rhetoric of the Image," in *Image, Music, Text* (New York: Hill and Wang, 1977).

⁶⁰⁰ Ibid., 44. See also discussion in Green and Lowry, "From Presence to the Performative: Rethinking Photographic Indexicality," 57.

⁶⁰¹ Barthes, "Rhetoric of the Image," 44. Barthes' italics.

⁶⁰² Green and Lowry, "From Presence to the Performative: Rethinking Photographic Indexicality," 48.

“pointing to” is the performative act of the photographic system. In the next section, Peirce’s concept of the index will be briefly outlined followed by a discussion of the notion of the performative.

Charles Sanders Peirce and the index

Peirce’s essay, *What is a sign?* (1894), proposes that there are three forms of signs that form the basis of our reasoning: the icon, index and symbol. While a photograph may appear to be a “likeness” to something outside of itself (like a picture that has a qualitative resemblance to something), which is Peirce’s definition of the icon, it is in fact an index. An index has a direct connection to the original source that it images. The camera apparatus is positioned in a particular geometrical point in space and “correspond[s] point by point to nature.”⁶⁰³ In this situation the physics of light reflecting off the object in the world casts an image onto the film (or a digital record) within the apparatus of the camera.⁶⁰⁴ The photographic image brings in the world through the camera lens and has a physical tie to the origins of the image, which is then reproduced as a photograph. Krauss elaborates on the distinction of the index as a type of “sign which arises as the physical manifestation of a cause, of which traces, imprints, and clues are examples.”⁶⁰⁵ This brings us to the point where the photograph as a document or record of this moment operates as evidence or information or proof; as Krauss says: “the having-been-there satisfies questions of verifiability at the level of the document.”⁶⁰⁶ In *How long*, it proves that I commenced the functional logic of the work – enacting the imperative in the question “How long can I hold this up?”

The performative act – “pointing to” the photographic apparatus

Green and Lowry propose that the physical act that occurs before the camera shutter opens and closes on the event is a significant decision that complicates the indexical. This

⁶⁰³ Charles Sanders Peirce, “What Is a Sign?,” Philosophy Archive @ marxists.org, accessed October 11, 2015, <https://www.marxists.org/reference/subject/philosophy/works/us/peirce1.htm>.

⁶⁰⁴ See Rosalind E. Krauss, “Notes on the Index: Part 2,” in *The Originality of the Avant-Garde and Other Modernist Myths* (Cambridge, Mass.: MIT Press, 1985), 215.

⁶⁰⁵ Krauss, “Notes on the Index: Part 2,” 211.

⁶⁰⁶ Ibid., 218.

“pointing-to,” signifies the intention of the artist that this action or event in the world can be brought into the image of the photograph and therefore can be declared as “art.”⁶⁰⁷ In the photographic document that operates within the logic of the indexical, the location of the “art” act is within the “there-then” of the world and is transported and made present to the viewer through the portal of the image. Green and Lowry identify this initial gesture of “pointing to” the art within the world as “performative,” and it is this that problematises the logic of the indexical.

Green and Lowry draw on the concept of the performative as developed by British philosopher John Langshaw Austin’s in his theory of speech. Austin developed his ideas in a series of lectures “How to Do Things with Words,” (1955).⁶⁰⁸ For Austin, the function of language was not to describe or represent a reality but to manage, control and shape it.⁶⁰⁹ The foundation of this theory was the concept of the “performative” in contrast to the “constative” utterance. The “constative” is understood to be a description, a statement that explains a set of circumstances that can be verified as true or false. As Green and Lowry point out, the indexical documentary photograph can be compared with the constative that describes and reports reality, bringing with it a proof of truth or otherwise.⁶¹⁰ Returning to Huebler’s *Variable Pieces*, one can see not only the reportage of information presented in the black and white photographs, but also in the text works, that literalise the constative description.⁶¹¹ The performative utterance is not a descriptor; rather, it both accounts for an act and is simultaneously the act itself. The examples given by Austin are the “I do,” when a couple are married, or when something is named, or something is promised. The speech act “is a part of the doing of the action”⁶¹² and changes the conditions of reality, where “saying

⁶⁰⁷ Green and Lowry, “From Presence to the Performative: Rethinking Photographic Indexicality”, 48, 53.

⁶⁰⁸ J. L. Austin, *How to Do Things with Words: The William James Lectures Delivered at Harvard University in 1955*, ed. J. O. Urmson and Marina Sbisa, 2nd ed. (Oxford; New York: Oxford University Press, 1990).

⁶⁰⁹ Richard Begam, “How to Do Nothing with Words, or “Waiting for Godot” as Performativity,” (2007), 142.

⁶¹⁰ Green and Lowry, “From Presence to the Performative: Rethinking Photographic Indexicality,” 52.

⁶¹¹ For a discussion on the role of the “caption,” text and the photograph, see Krauss, “Notes on the Index: Part 1,” 205. and Kotz, “Image + Text: Reconsidering Photography in Contemporary Art.”

⁶¹² Austin, *How to Do Things with Words: The William James Lectures Delivered at Harvard University in 1955*, 5.

it makes it so";⁶¹³ they are utterances that act upon the world.⁶¹⁴ For Green and Lowry, the action that occurs before the shutter is pressed, the decision and act of "pointing to" "art" is performative. The doing of this action nominates and transforms the reality of the events from a quotidian everyday status into the status of "art." In this way, the photographic document can be both constative and performative – both describing and denoting what is there.⁶¹⁵ It is therefore both indexical and performative.⁶¹⁶

English artist Keith Arnatt's, *Trouser – Word Piece* (1972–89) (Fig. 68) is discussed by Green and Lowry as a useful example of the performative gesture, as it points to the artwork in order to create a new reality.⁶¹⁷ Arnatt's practice focused on the opening up of the sculptural problems that emerged from minimalism and was informed by conceptual art's concern with how language established reality.⁶¹⁸ In the 1989 version of this work two photographs sit side by side. The photograph on the left shows the typed title of the artwork, the artist's name and a quote from John Langshaw Austin's *Sense and Sensibilia*, which refers to how the real is established by what it is not. On the right is a photograph of the artist with a sandwich board hung from his shoulders with the statement in large printed text stating: "I'M A REAL ARTIST." Green and Lowry argue that the performative gesture of the artist pointing to himself through the device of the camera establishes, confirms and names the "real situation"—that he is a "real artist."⁶¹⁹ As is acknowledged in the Austin text as photographed by Arnatt, there is a two-fold operation that occurs. In the claim of "being an artist" there is a prior assumption that the man within the sandwich board is not an artist. It calls into question the arbitrariness of language asserting its

⁶¹³ Austin, *How to Do Things with Words: The William James Lectures Delivered at Harvard University in 1955*, 7. For Austin's discussion on the relationship of the utterance to the new situation it creates see *ibid.*, 7–11. Cited in "How to Do Nothing with Words, or "Waiting for Godot" as Performativity," 141.

⁶¹⁴ Green and Lowry, "From Presence to the Performative: Rethinking Photographic Indexicality," 52.

⁶¹⁵ *Ibid.*

⁶¹⁶ Hantelmann also refers to Austin's concept of performative as "reality-producing." She makes the distinction between the generic use of the term performative in the art world to mean anything performance-like. Dorothea von Hantelmann, "Performativity," in *Sculpture Projects Muenster 07* ed. Brigitte Franzen, Kasper König, and Carina Plath (Köln: W. König, 2007), 415. This is because every artwork is reality producing. *How to Do Things with Art: The Meaning of Art's Performativity*, 17.

⁶¹⁷ Green and Lowry, "From Presence to the Performative: Rethinking Photographic Indexicality," 53–56.

⁶¹⁸ Elizabeth Manchester, "Keith Arnatt, *Trouser - Word Piece* 1972–1989," Tate, accessed June 18, 2016, <http://www.tate.org.uk/art/artworks/arnatt-trouser-word-piece-t07649/text-summary>.

⁶¹⁹ Green and Lowry, "From Presence to the Performative: Rethinking Photographic Indexicality," 55.

concrete relationship to the real (the arbitrary relation of the sign to the signifier), yet simultaneously discloses the structural capacity of the performative utterance.

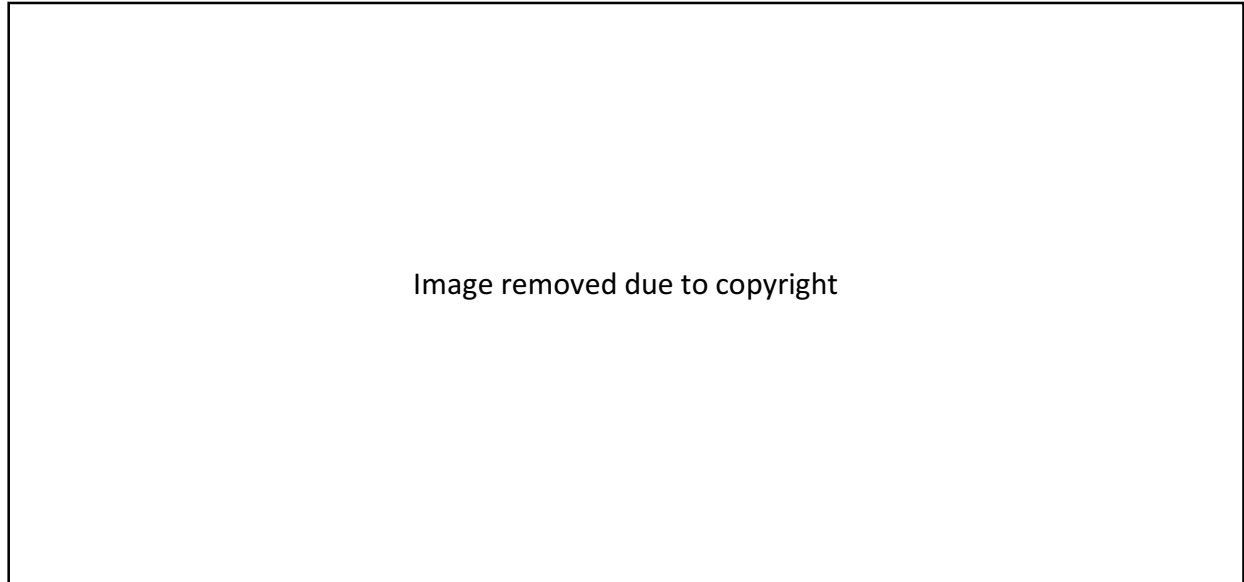


Fig. 68 Keith Arnatt, *Trouser – Word Piece*, (1972-1989)

Accessed May 20, 2016. http://www.tate.org.uk/art/images/work/T/T07/T07649_10.jpg

How long's performative – becoming the holder-up-erer

In *How Long*, the printed photographic image of me, the artist, holding up the placard in the street, in the dark, by the pier and in all of the locations, clearly functions within the realm of the indexical, yet it is also performative. The image operates as a portal, taking the viewer to a past moment of the site of the action, yet simultaneously bringing this moment – by the beach, in the bush, in Hong Kong, in India – into the present viewing of the installation – into a here-then-now. At the same time (in the way Green and Lowry explain), the work is performative, identifying the moment of the action of me, the artist, “holding it up” as the act of the art occurring in the street or public space. This creates a new situation and claims the new reality that I must become, I must become and be a “holder-up-erer.” Moreover, this automates the ongoing and potentially endless nature of this work. From now on in, I am, and must continue to be, the holder-up-erer.

The performed document

The art historian Philip Auslander identifies an alternative category of the photographic image: the “theatrical” or more specifically, the “performed photograph.”⁶²⁰ This is in contrast to the “documentary” photograph that functions within the indexical. In this alternative category of the performed photograph the location of the “art,” where the “performance” occurs, is not within the world itself. It is within the architecture of the photographic document. Giving the example of artist Yves Klein’s, *Leap into the Void* (1960), Auslander explains that the leap as it is shown in the photograph never actually occurred. Two photographs were taken and merged in the photographic darkroom. As Auslander points out, the performance in Klein’s work took place within the structure of the document itself.⁶²¹ This brings us back to the issue of truth – the verifiability of the photographic evidence of the performance within the indexical. It also highlights Jones’ warning of the danger of simply taking a photograph of a performance event, as “proof” of the Barthesian “having-been-there.”⁶²²

How long – activating the indexical, performative and performed complex in the abfunctional moment

In *How long*, the performed conditions of the photographic operation play out, complexifying its indexical and performative register, which together enable the abfunctional deviation. The performance of *How long* is not constructed in the dark room, (as was Klein’s *Leap into the Void*), or within digital software; rather, the act of “holding-it-up” is set up and performed within and for the geometry and triangulation of the camera apparatus. It is not an incidental capture of an indexical fleeting moment like Huebler’s photographs of *Variable Piece 4, Paris, France, 1970*. Rather, it is akin to Huebler’s *Variable Piece #34, 1970* (1970), where the accompanying text reads: “During November, 1970 forty people were photographed at the instant exactly after the photographer said, “You have a beautiful face!””⁶²³ Huebler’s work is both performative and performed. Each person’s beauty is

⁶²⁰ Philip Auslander, "The Performativity of Performance Documentation," *PAJ: A Journal of Performance and Art* 28, no. 3 (2006): 1–2.

⁶²¹ Ibid., 2.

⁶²² Jones, "Temporal Anxiety/'Presence' in Absentia: Experiencing Performance as Documentation," 212. As previously mentioned.

⁶²³ John McKinnon, "Everyone Alive: Douglas Huebler's Reason and Pleasure," *Art Papers* 35, no. 4 (2011): 30.

confirmed, now no doubt can now be entertained. They perform this revelation for the artist within the camera's triangulation. Like Huebler's people with beautiful faces, I am clearly facing the camera, I am performing the action of holding-it-up with my body and placard parallel to the camera lens and its portal, through to the digital capture that is downloaded as a file and sent to print.

This performed action drives the internal logic of the work towards the next action. Each time I know what I have to do – it is automated. I hold it up wherever I happen to be within the architecture of the camera apparatus. That the work is performed for the document shifts the site where the concept of "truth" must be judged. The action must now only occur for the frame and the bracketing of time by the camera shutter. The concept of the "truth" of the performance has to be based on the location where the performance occurred and that site in *How long* is no longer the real site of the street, rather it is the site of the camera apparatus and its resulting photographic document. Like Klein's *Leap into the Void*, where the performance occurs in the construction of the actual document, this is where truth must reside and be judged. Yet, the truth effect of the artwork in *How long*, jostles in the mind of the viewer between the indexical and the performed document which is also reflects its abfunctional condition. The indexical references the "real" site of the street and its durational impetus, which harkens to the functional drive of answering the question, the "real" site of the camera apparatus, its document and the truth of being an endless holder-up-erer.

An important point to make here is that while *How long's* abfunctional gesture is activated by the performative and performed attributes of the photographic operation, these attributes will not necessarily always lead us down the abfunctional route. Rather, it is the deviation and reference back to the origins of function in the artwork that makes for abfunction. Take for example, Shrigley's *Cat*, where his central protagonist, despite being taxidermied, holds the sign "I am dead." This work is a sculpture, and while there is no photographic incursion (except for the endless repetition of its image on the internet), it nonetheless follows the logic of the performative gesture. The cat, holding the sign points to the new reality we and the cat must now become – the cat must be dead. Of course, this

was not always the case. The new reality of the cat being dead – let's face it – is a harder reality for the cat than for us. This recalls Arnott's statement: "I AM A REAL ARTIST," as he too became what the statement says. Neither of these instances are abfunctional because they follow through the logical output and instruction of the sign – the cat is dead, Keith Arnott is an artist. This can also be applied to the performed attribute in Klein's *Leap into the Void*, the truth of the leap, while not in the "real world" of its action, is the truth held within the architecture of the photographic document. Klein delivers what he promises – he leaps into the void. *How Long*, through the performative and performed photographic operations, by comparison, refutes the instruction in the work that refers to the functional actions of the body in time to deliver the teleological end-point of the answer to the question, producing endless action only.

To briefly summarise *How long's* abfunctional rerouting through the photographic apparatus, its operations and its outputs: The indexicality, within *How long* registers the point-to-point moment of the functional action of holding up the use-ready object of the placard. It registers the truth – I am holding-it-up – and prompts the next question of truth: How long? However, in doing so, it freezes the action and takes it from the flow of everyday life, disabling the full teleological delivery of the question. It is at this moment of the photographic capture that the process of production of the artwork (in the real world with real action in real time) is diverted into the photographic operations. It is also the moment where abfunction slides in and divorces the action from the logical temporal process that will achieve the functional end-point: in this case, the answer to How long? The artwork now produces action only. However, *How long* is not simply an indexical image transformed into a printed document, referring back to the past event, but a complex of performed and performative gestures that continue the obstinate refusal to the answer of the question. The performative gesture of pointing to the action of "holding up," claims the new reality that I must become – I must be a holder-up-erer – and in this status there can be no how long?, because in the new reality there will be no end to the holding up. This also provides the imperative for the performed, where the logic of the photographic apparatus – the triangulation of the camera with the site and me becoming the ongoing holder-up-erer and the site of the document – becomes the system which must be continually iterated. The

new truth and new reality is reiterated from each new site where I am holding it up performed in the triangulation of the camera apparatus and the document it will produce, to the next site and system of performance. The parameter of the document where this staging is enacted is then outputted as multiple photographic images. In the installation of the artwork each image recording the new truth promptly fast-forwards to the next, above or below, of me, holding-it-up, wherever I happen to be.

Rematerialisation rather than dematerialisation

How Long, (Fig. 2, Fig. 16, Fig. 63)

Installed in the gallery or alternatively in a public space, each image of me holding up the white placard with its question is printed out. The images are at least street-poster size. Printed, they are not black and white, but coloured. Depending on where it is installed, the paper each image is printed on changes – sometimes it is a bill-poster, other times it is matt paper with a type of grit on the surface that is like the street. Never has it been a seamless, glossy “photographic” image – a window where one could slip into and through. In the public context they are bill-posted up, in the gallery they are attached to the wall as prints.

In *How long*, the output is not the delivery of the outcome of the question, but rather the abfunctional alternative of the digital image output. The multiple images that present to us the numerous and surplus states of this frozen state of holding-it-up only.

To return now to the issue of the dematerialised art object, *How Long* is a type of artwork that would be historically identified with this concept because of the photographic system in its production. However, I would argue that the abfunctional diversion of the output of the image that is holding-it-up only, in fact does not produce a dematerialised art object in *How Long*. It produces an alternative output, or object, that is the printed photograph. A photograph that does not purely comply with the indexical reference back to a point in time and space, but an image that has within its structure the performance of the art act and its performativity, which then focuses the primacy of the photographic document as the output.

The theorist Jon Erickson has noted that the black-and-white photograph of the indexical document, commonly utilised as a “supplement” to the object or action that it recorded, functions as a “reminder.” In this sense, associated with memory, he argues that the photograph did not pertain to “object” qualities. Rather he claims that the colour photograph becomes more object-like, a thing in itself.⁶²⁴ While the photograph in the indexical operation signifies the past, in the present, on a material support, it still activates that memory. Since the 1990s, Green has also acknowledged that the insertion of the photographic system into sculptural production has not necessarily dematerialised the art object, but rematerialised it into the alternative form.⁶²⁵ Taking an alternative position, Weiner questions the hierarchy of outputs that would identified some as objects and others as not. In 1967, before Lawrence Weiner made his *Untitled Statement* (a proposition that an artwork may not need to be made for it to be art), he acknowledged the diversity of what could be constituted as an object: “Everything is a physical object. . . . It sets up something in space; it occupies space for a given time . . . Therefore it’s an object. . . . It’s just the idea of realising and accepting the fact that one object is not necessarily better than another.”⁶²⁶ In *How long*, the abfunctional tracks the rerouting of the artwork’s production from the real site of functional action into the photographic operations and the logic of the photographic document production. Acknowledging this rerouting enables the artwork to engage the new expectations of the medium or material support of the photographic document: its paper, its surface, its scale, the relationship of the edge that the work performs within, the relationship of each image to every other, the relationship of the work to the site it is installed.

How Long

In every new site that *How Long* is installed, new images are added, some removed. Each image is butt-jointed, one above, one below, nearly always with one on either side. There is

⁶²⁴ Erickson, "Performing Distinctions," 98–99.

⁶²⁵ David Green, "Between Object and Image: David Green (June/July 1996)," in *Creative Camera: Thirty Years of Writing* ed. David Brittain (Manchester: Manchester University Press, 1999), 262–63.

⁶²⁶ Patsy Norvell, *Recording Conceptual Art: Early Interviews with Barry, Huebler, Kaltenbach, Lewitt, Morris, Oppenheim, Siegelau, Smithson, and Weiner*, ed. Alexander Alberro and Patsy Norvell (Berkeley: University of California Press, 2001), 109

no space to create a discrete autonomous image. Each image defers directly to another. There is no chronological order, no sense of where it may have begun or where it might end.

Moreover, in each new site that the installation is installed the scale and form mutates. In India, it wallpapered the interior of the art fair booth. At the Centre for Contemporary Photography and at the Margaret Lawrence Gallery, the series of images ran down the length of a passage and wrapped around a corner into a larger gallery space. The installations both occupied a type of external circulation space of the gallery that led to the utilities, bathrooms, kitchens, the next gallery. At the city square, the images were pasted up, changing at least weekly with new images piling on top of the others, following the logic of the street billboard. In all, the viewer brushes by the images in a transversal manner, the images being taken in from the periphery of their vision, as they walked, like the passers-by in the image.

The artwork *How Long* is made anew for each new installation. These are not dematerialised artworks but new materialisations that assert their uniqueness, contingent on each new space they are installed. In the various installations, each image promptly abuts the next. In doing so, it continues the refusal of the answer to the question, short-circuiting the teleological output of production; circling between the image, the mind of the viewer, and the possibility of it occurring in the past and where it might in occur the future. Groys proposes that when the form of the artwork comprises the documented image and when it changes and adapts every time it is re-installed, the status of the “document” loses its sense of being a copy (pointing to an original “art moment” outside itself) and becomes in each iteration a new original. As he says: “In the installation the documentation gains a site – the here and now of a historical siting. . . . all of the documents placed in the installation become originals . . . If reproduction makes copies out of originals, installation makes originals out of copies.”⁶²⁷ In *How Long*, the diversionary tactics of abfunction do not dissolve the material presence of the object but acknowledge the material object-ness of an alternative output, not only of the photographic image but also its various installation formats, where each install becomes anew. Abfunction acknowledges the implicit diversion from the implied logical output in the work, previously termed as the dematerialised art

⁶²⁷ Boris Groys, “Art in the Age of Biopolitics: From Artwork to Art Documentation,” in *Perform, Repeat, Record: Live Art in History* ed. Amelia Jones and Adrian Heathfield (Bristol; Chicago: Intellect, 2012), 217.

object. By doing so, it enables the material conditions of an alternative output of the art object to recognise resisting the collapse into the immaterial discourse of the dematerialised art object.

Concluding abfunction case study #1 – How long: short-circuiting the teleological endpoint to produce surplus action with alternative materialised outputs

The case study of the artwork *How Long* facilitated the definition of the first example of abfunction. In this instance, abfunction could be seen as an outcome that is a diversion away from the functional system of production within the internal structure of the artwork. In *How Long*, the expected outcome of the system of production was established by the imperative of the question: “How Long can I hold this up?” Here, the inclusion of the photographic apparatus into the structure of the making of the work establishes the abfunctional short-circuit, which enables the isolation of the action of the body as surplus holding-it-up only divorced from the teleological functional output that would deliver the answer to the question. In this particular case study, the photographic operations of the indexical, performative and performed complex enabled abfunction’s re-routing into the photographic logic. Furthermore, this abfunctional diversion that tracks the alternative output counters the totalising tendency of the dematerialised art object. Abfunction recognizes the multiple material conditions of the photographic image within the document and the numerous installations it has and will find itself in. The photographic operation in *How long* facilitated the abfunctional condition in this art work. However, abfunction is not necessarily contingent on the photographic incursion into a process. What defines abfunction is its disclosure of the internal process of function within the artwork that it is also departing from.

A series of new questions are now raised for this type of abfunction, identified as the surplus action of the body divorced from the teleological endpoint of function. For example, what other artworks could demonstrate abfunction as action only? Is the activation of the photographic incursion always necessary? Also, to what degree is action only, divorced from the function’s teleological outcome, contingent on the body? Is it possible that this could be

excess action of non-human bodies? There is not the scope here for this investigation, however initial artworks that come to mind that would be useful to test, such as Richard Serra's *Verb List* (1967–68), Duchamp's *Bicycle Wheel* (1913), or Erwin Wurm's *59 Positions* (1992). This chapter has investigated the body's actions within the internal functional system of production of the artwork. The following chapter asks what is the potential for abfunction with the materials and objects manipulated by the body within this process of functional production.

Chapter six: Abfunction case study #2 – *Houses that are happy to help with at least one of the possible problems of art*

Introduction

In chapter five, the artwork, *How long*, located abfunction as the possibility of action only. In this instance, I became the endless “holder-up-er”, divorced from the teleological expectations implied in the instruction of the work that would deliver the answer to the question: How long can I hold this up? This chapter addresses the second case study, *Houses that are happy to help with at least one of the possible problems of art* (2010–ongoing) (Fig. 12, Fig. 13, Fig. 14, Fig. 69, Fig. 70, Fig. 71). It activates the question: in what ways does abfunction reveal the processes and function in the forming of the artwork associated with materials, objects and things, in relation to the human body’s actions with them? And subsequent to this: what is the abfunctional situation that derails these expectations of function to produce something that generatively moves away from function’s outcomes?

Houses that are happy to help with at least one of the possible problems of art

I drive around Melbourne’s northern suburbs, where I live. I am looking for houses that present themselves to me. They are particular kinds of houses. There is no doubt that I am looking for the “modern” ones, the ones built in the 1950s and 1960s, sometimes the 1970s or even more recently. But they have certain criteria. They embody the idea of a functional life, efficiency of time saved, more leisure, more work, more chance of social agency. They were often built on green field sites for a new suburban world.

I also have the question of truth to materials in my mind, except I have muddled it all up. I forgot the order of it – truth to material(s). I have it back-to-front. “Are your materials honest?”: it is the materials that are performing the act of truth or honesty, not me at all. I have to be forgiven. It’s a thought bubble. I ask the house which has just presented itself to me. It’s just a quick question – a slight imbroglio. I ask it. The sign is quickly stuck into a milk bottle full of sand in front of the house. And kindly the house allows a photograph. I make it quick. The event (a survey?) is done. The question is hurried away, until the next generous house chooses to presents itself to me for the asking. Now with the image framing and

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freezing the situation, the sign faces out, with the house loyally standing behind it, with the question: “are your materials honest?”



Fig. 69 Simone Slee, *Houses that are happy to help with at least one of the possible problems of art*, (2010) Series of 23 images.

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Fig. 70 Simone Slee, *Houses that are happy to help with at least one of the possible problems of art*, (2010). Series of 23 images.



Fig. 71 Simone Slee, *Houses that are happy to help with at least one of the possible problems of art*, (2010)

Series of 23 photographic images, variable size. Installation view of the exhibition at Sarah Scout Presents, Melbourne.

Locating the abfunctional deviation: the unexpected agency of materials, objects and things enlisting our non-normative behaviours

The case study, *Houses that are happy to help . . .* proposes that abfunction can account for materials, objects and things, diverting and going off on their own tangent, enlisting non-normative behaviour in human beings and things, irrespective of functional imperatives. In *Houses that are happy to help . . .* it is the materials and the object of the house that are activating non-normative behaviours in me, the artist. This case study reveals and draws on the tradition of “truth to materials,” as a value within functional methods of sculptural and architectural modernist production. To reiterate briefly, in “function as forming,” sequences of actions with materials, objects and things produce pre-meditated outcomes within the parameters of efficiency, economy, time and honesty. This case study into abfunction

proposes that materials, objects and things may not remain mute or behave as required in a strictly two-way dialogue between our actions with these non-human elements to produce expected teleological end-points. Rather in the personal rendezvous with materials, an abfunctional situation can erupt, where materials can speak back, be happy or unhappy, or plain misbehave that can then activate us to behave in non-normative fashions.

In this chapter, arguments from two different discursive fields are discussed. Where abfunction reveals the origins of function in the artwork, the tradition of the human subject as the source of agency and sovereignty is located. However, when abfunction diverts and materials, objects and things begin to demonstrate an autonomous agency, the discussion delves into new materialism(s).⁶²⁸ The key difference between these two is the shift in location of agency from the “human” to the “non-human.” I have grouped materials, objects and things as non-human. The differences and defining characteristics of these three non-human elements have been the focus of much philosophical enquiry since Martin Heidegger’s seminal essay, “The Thing” (1971).⁶²⁹ However, the focus in this chapter is not the distinguishing features in relation to abfunction. Rather, it is what they offer as a group of non-human entities in terms of their autonomous agency in affecting non-normative behaviour.

As the concept of agency is a key term in this discussion I will foreground it briefly. In traditional philosophy, agency is equated with the intentional actions of human beings, possible only because of our conscious mental state,⁶³⁰ where the human subject, “I,” is

⁶²⁸ Since the 1990s, new materialism, along with other terms associated with the “material turn,” have gained traction. These developments have critiqued the previous emphasis on linguistic and social structures as a method of constructing the world and its resulting effect of the “‘dematerialisation’ of the world.” Serenella Iovino and Serpil Oppermann, “Material Ecocriticism: Materiality, Agency, and Models of Narrativity,” *Ecozon@: European Journal of Literature, Culture and Environment* 3, no. 1 (2012): 76. New materialism’s alternative methodology acknowledges that materials, matter, objects and things may be understood as non-human and have in themselves an agency. For a useful overview, see *ibid.* and Barbara Bolt, “Introduction,” in *Carnal Knowledge: Towards a ‘New Materialism’ through the Arts* (London; New York: I.B. Tauris, 2013).

⁶²⁹ Martin Heidegger, “The Thing”, translated by Albert Hofstadter, in *Poetry, Language, Thought*, (New York: Harper & Row, 1971) 161–180. It is beyond the scope of this thesis to discuss the distinguishing attributes of objects and things as formulated by Heidegger, however for a brief discussion in relation to Arvatov’s concept of a culture of things. See p. 239. For a useful overview see; Graham Harman, “Heidegger on Objects and Things,” in *Making Things Public: Atmospheres of Democracy*, ed. Bruno Latour and Peter Weibel (Cambridge, Mass.; Karlsruhe, Germany: MIT Press; ZKM/Center for Art and Media in Karlsruhe, 2005), 268–27.

⁶³⁰ Markus Schlosser, “Agency,” *The Stanford Encyclopedia of Philosophy*, accessed June 24, 2016, <<http://plato.stanford.edu/archives/fall2015/entries/agency/>>. In this conception, matter is often considered

sovereign. Agency clearly operates within the model of function as forming, where the intentional actions (conceived by humans) in relation to objects, materials and things, occur within the framework of a teleological outcome. However, as the following discussion will show there is evidence to suggest that the relationship between people and materials, particularly in relation to truth to materials, is not so simplistic.

In recent philosophical discourse, the idea that agency can only be attributed to humans has been understood as restrictive. The material turn since the 1990s, for example, has critiqued these previous conceptions of agency.⁶³¹ In new materialist terms, non-human matter can also be understood as having an agency independent of human intentionality and intelligence.⁶³² The artist and theorist Barbara Bolt interprets this revised relationship proposed by new materialism as a new configuration between humans and non-humans, where it is not just the sovereign “I” associated with humans that has agency and does things.⁶³³

This chapter will argue that abfunction as activated by the case study, *Houses that are happy to help* . . . reveals function to be associated with truth to materials. It will show how the idea of truth to materials can be placed historically in relation to architecture and art, particularly sculpture, within a model of function as forming. William Morris’ principle of truth to materials will be discussed, followed by the adoption of this concept by modernist sculptors such as Henry Moore and the art critic Clement Greenberg’s proposal for medium specificity in art. It will be shown how the concept of truth to materials established a model of conduct for actions on material within the forming of architecture and art.

In some concepts of modernist art established by Moore and Greenberg, I will argue there is a two-way dialogue operating in the actions of the artist in relation to material. Rather than being mute, the material in fact resists the artist’s will and it is this “battle” with material

as mute and a passive recipient of the human idea and the intentions that deliver form into the object. This is the premise, as the philosopher Tim Ingold points out, of the western development of the Aristotelian concept of hylomorphism. See p.30.

⁶³¹ Ibid.

⁶³² Serenella and Serpil, "Material Ecocriticism: Materiality, Agency, and Models of Narrativity," 77.

⁶³³ Bolt, "Introduction," 3.

that defines and produces art. While this might begin to identify matter as having its own integrity, it nevertheless privileges the sovereignty of the human. I will outline examples of this modernist approach to truth to materials and other objects and things, where a greater value and agency is given to these non-human constituents. For example, the German–American architect Ludwig Mies van der Rohe elevates the humble brick to be our teacher, and an investigation of the avant-garde German artist Hans Richter’s film, *Die neue Wohnung* (New Living) (1930),⁶³⁴ demonstrates the havoc that materials, things and objects can wreak when we refuse to learn from Mies’ brick.

I will then return to Alexandr Rodchenko and Boris Arvatov who, remarkably, proposed the independent agency of objects, things and material in a functional model for the production of architecture, cities and art. In their conception, these non-human elements are promoted to the same status as humans and become co-workers with equal expectations and responsibilities to effect change in people and society. Mies’ brick and Rodchenko and Arvatov’s theories were ideas produced in the context of the first decades of the twentieth century; however, they anticipated the new materialism and the proposition that objects, things and materials may indeed have an agency of their own.

The second part of the chapter argues that the abfunctional moment, prompted by the case study *Houses that are happy to help . . .* is the acknowledgement that materials, objects and things may have an agency of their own, allowing them to act up and go off on their own accord beyond the expectations of function. Parallels can be drawn with those associated with new materialism who argue that materials have their own set of conditions extrinsic to their conceptualisation by us. Moreover, as physicist Karen Barad famously said: “Matter feels, converses, suffers, desires, yearns and remembers.”⁶³⁵ This implies that the non-human matter of the house and its materials may indeed have feelings and integrity, be happy or honest. Conversely, materials might be unhappy or plain mischievous. It will be

⁶³⁴ Hans Richter, *Die Neue Wohnung* (New Living), 1930. B/W, silent, 35 mm, approx. 20min. Praesens-Film, Zurich, first screening: August 16, 1930, Basel, 1930, accessed July 21, 2016 <https://www.youtube.com/watch?v=gAUhQHRANj4>. Note: Sound tracks on Youtube are not from the original film.

⁶³⁵ Karen Barad, Rick Dolphijn, and Iris van der Tuin, "Interview with Karen Barad," in *New Materialism: Interviews & Cartographies* ed. Rick Dolphijn and Iris van der Tuin (Mich. : Ann Arbor, Open Humanities Press, 2012), 59.

shown that like the houses, other artworks such as, some of Duchamp's readymades, also have feelings. They have been unhappy and, at times, frankly cranky.

The final question raised in this chapter is: what is the consequence of this abfunctional moment that recognises material and by inference, objects and things, as not only having agency but feelings? In addition to *Houses that are happy to help . . .* I will also turn to Richter's film, *Vormittagsspuk* (Ghosts before Breakfast) (1927),⁶³⁶ to propose that the abfunctional diversion is the enlisting of our non-normative behaviour, which produces something outside the expectations of function itself.

Revealing function in the forming of Houses that are happy to help . . . – Truth to material(s)

The relationship of the concept "truth to material(s)" has been entwined with concepts of function in the making of objects and architecture, at least since the mid-nineteenth century. It has also played a central role in the thinking and making of twentieth-century modernist sculpture. In this following brief discussion I will establish the association of truth to material(s) with function as forming architecture and sculpture. I will then outline the parameters of the engagement between the actions of the body on matter associated with truth to materials and materials more generally, within a functional system of forming. This aims to clarify the dialogue of agency attributed to the human actions in relation to matter, and by inference to objects and things, in order to establish how abfunction may depart from these functional parameters.

Architectural truth to material(s)

The concept of truth to material(s) is commonly associated with the English Arts and Crafts movement and in particular with William Morris.⁶³⁷ The movement sought to reestablish a

⁶³⁶ Hans Richter, *Vormittagsspuk* (Ghosts before Breakfast) 1927. B/W, Original Score by Paul Hindemith (lost). Hans Richter, Paul Hindemith, Wernee Graeff. July 14, 1928 Baden Baden (German Chamber Music Festival, Kurhaus), 1927, accessed July 21, 2016 <https://www.youtube.com/watch?v=vCwkWgnzh-Q>. Please note: sound tracks on Youtube films are not original.

⁶³⁷ Jonathan M. Woodham, "Truth to Materials", in *A Dictionary of Modern Design*, Oxford University Press, 2005.

connection with authentic respect for the “nature of materials,” and “honest” working processes in order to develop form.⁶³⁸ Reacting to the rapid industrialisation of England’s nineteenth century economy the Arts and Craft movement attributed the de-humanization of mass production to the fabrication of objects en-mass. In their view these objects used “sham materials and sham techniques”⁶³⁹ and had “abominable” aesthetic quality.”⁶⁴⁰ Seeking to activate craft’s methods that once produced skillfully craft objects, Morris aimed to use these principles to build a new socialist utopia, where the actual production of art and objects would maximise pleasure in life and produce art for all.

The architectural historian Nikolaus Pevsner believed that Morris’ doctrine, including truth to material, laid the foundation for modernism⁶⁴¹ and hence the methods of function as forming. Pevsner argued that there was a direct line from the English Arts and Crafts movement’s principles to Europe and Germany, in particular the collectives of the Deutsche Werkbund and the Bauhaus. In fact, as the architectural historian Colin Amery notes, Pevsner actively advocated that the modernist functionalism imbued with this concept of “truth to materials” that came from Germany and the Bauhaus be applied as an agent for change in England. Pevsner was coupling “fitness for purpose,” a *Sachlichkeit* and a “functionalism, technological competence and truth to materials,” as the method for simplicity of form and beauty.⁶⁴²

The values of honesty and respect associated with truth to material shared the same principles as those that emerged in functional thinking. Edward de Zurko (as previously discussed) would identify function as establishing the virtues in architecture and should, like

<https://ezp.lib.unimelb.edu.au/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsoro&AN=oro.9780192800978.013.0795&site=eds-live&scope=site>.

Jonathan M. Woodham, “William Morris” in *A Dictionary of Modern Design*, Oxford University Press, 2005.

<https://ezp.lib.unimelb.edu.au/login?url=https://search.ebscohost.com/login.aspx?direct=true&db=edsoro&AN=oro.9780192800978.013.0795&site=eds-live&scope=site>.

⁶³⁸ Nikolaus Pevsner, *Pioneers of Modern Design: From William Morris to Walter Gropius*, 4th ed. (New Haven, Conn.: Yale University Press 2005), 42–43.

⁶³⁹ Ibid., 14, for Pevsner’s framing of Morris’s perspective.

⁶⁴⁰ Ibid., 37.

⁶⁴¹ Pevsner, *Pioneers of Modern Design: From William Morris to Walter Gropius*, 27. Also as noted in Peter Faulkner, “Pevsner’s Morris,” *The Journal of William Morris Studies* (Winter 2006), 49–72.

⁶⁴² Colin Amery, “Nikolaus Pevsner’s ‘Pioneers of the Modern Movement’, 1936,” *The Burlington Magazine* 151, no. 1278 (September, 2009): 617.

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“men,” “be true, not dishonest.”⁶⁴³ Forms should honestly express what they were, and materials and structures should be put into service with integrity.⁶⁴⁴ Despite Morris’ abhorrence of technology, the machine and new materials,⁶⁴⁵ his truth to materials principles would service the new technology and new materials of the time within the processes of function. In fact, Walter Gropius would acknowledge his debt to Morris in the formulation of his initial Bauhaus pedagogy.⁶⁴⁶

Later, in 1938, the third and final director of the Bauhaus, architect Ludwig Mies van der Rohe, would also advocate for the truth to materials. Mies van der Rohe’s concern for the essential properties of materials and their proper use in relation to form was embedded within the principles of function. As he remarked during his dinner speech on the acceptance of his new directorship of the Armour Institute in Chicago:

Therefore let us guide our students over the road of discipline from materials, through function, to creative work. . . . Thus each material has its specific which we must understand if we want to use it. . . . We must be as familiar with the functions of our buildings as with our materials. . . . The long path from material through function to creative work has only a single goal . . . “Beauty is the splendor of Truth.”⁶⁴⁷

For Mies van der Rohe, the respect for the specific character of material would build form through function in order to establish the origin of architecture’s meaning, beauty and truth.

⁶⁴³ Edward Robert De Zurko, *Origins of Functionalist Theory* (New York: Columbia University Press, 1957), 11–12.

⁶⁴⁴ Ibid. See p. 37.

⁶⁴⁵ Pevsner, *Pioneers of Modern Design: From William Morris to Walter Gropius*, 16–17.

⁶⁴⁶ Walter Gropius, “The Theory and Organization of the Bauhaus,” in *Bauhaus 1919–1928* ed. Walter Gropius, Ise Gropius, and Herbert Bayer (Boston: C.T. Branford Co., 1952), 21. In addition, for an outline of the pedagogical principles see *ibid.*

⁶⁴⁷ Ludwig Mies van der Rohe, “Mies Van Der Rohe, Inaugural Address, 1938,” in *America Builds: Source Documents in American Architecture and Planning* ed. Leland M. Roth (New York: Harper & Row, 1983), 505–07.

Sculptural truth to material(s)

Truth to material(s) also became a mantra embedded in western modernist sculpture, notably in the work of English sculptor Henry Moore from the 1930s.⁶⁴⁸ Moore adopted the term from his predecessor, Romanian sculptor Constantin Brancusi.⁶⁴⁹ In 1933, Moore joined the modernist group, Unit One,⁶⁵⁰ established by the painter John Nash, which included architects, painters and sculptors such as Ben Nicholson and Barbara Hepworth. In the Statement for Unit One released at the only exhibition ever held by the group, Moore outlined his five principles for sculpture. The first principle was “truth to material”, followed by the four other principles: “full three-dimensional realisation,” “observation of natural objects”, “vision and expression” and “vitality and power of expression.”⁶⁵¹ With regard to truth to material, he wrote:

*Every material has its own individual qualities. It is only when the sculptor works direct, when there is an active relationship with his material, that the material can take its part in the shaping of an idea. Stone, for example, is hard and concentrated and should not be falsified to look like soft flesh – it should not be forced beyond its constructive build to a point of weakness. It should keep its hard tense stoniness.*⁶⁵²

In her essay “‘Truth’ and ‘Truth to Material’: Reflecting on the Sculptural Legacy of Henry Moore” (2003), artist and anthropologist Susan Hiller identified the colonial inheritance implicit within the concept.⁶⁵³ Moore and others, including English painter and art critic Roger Fry, sought out artworks produced by indigenous cultures across the Oceania, Africa,

⁶⁴⁸ The legacy of Moore is ubiquitous throughout western modernist sculpture and pervasive influence on the pedagogy of art schools around the world. See Susan Hiller, “‘Truth’ and ‘Truth to Material’: Reflecting on the Sculptural Legacy of Henry Moore,” in *Modern Sculpture Reader* ed. Jon Wood, David Hulks, and Alex Potts (Leeds: Henry Moore Institute, 2007) 492–99.

⁶⁴⁹ John Hedgecoe, *Henry Moore: My Ideas, Inspiration and Life as an Artist* (London: Elbery Press, 1986), 201.

⁶⁵⁰ Unit One was established the same year Moore joined, in 1933 and was disbanded by 1935.

⁶⁵¹ Henry Moore, “Unit One.” In *Henry Moore: Writings and Conversations*, ed. Alan G. Wilkinson, Aldershot, England Lund Humphries, 2002, 191–93.

⁶⁵² “Statement for Unit One,” in *Henry Moore: Sculptural Process and Public Identity* (Tate Research Publication, 2015).

⁶⁵³ Hiller’s critique acknowledges the overt racism inherent in the colonialist objectification of indigenous cultures crudely classified as “primitive” that were prevalent at the time. This concepts fueled the aspirations of modern sculpture and the concept of “truth to material”. Hiller, “‘Truth’ and ‘Truth to Material’: Reflecting on the Sculptural Legacy of Henry Moore,” 495. Equally, she acknowledges that the principle of truth to material still forms a condition that operates in her own practice. See *ibid.*, 493.

and North and South America as exemplars of the relationship of truth to material in the production of three-dimensional form. In his essay, "Negro Sculpture," (1919),⁶⁵⁴ Fry described these indigenous artworks as possessing a: "disconcerting vitality." In his opinion, this was a consequence of their understanding of three-dimensional form as well as their "exquisite . . . handling of material."⁶⁵⁵ Like Fry, Moore also believed that artworks by indigenous cultures provided the foundations for the production of art. In 1941, Moore wrote: "One of the first principles of art so clearly seen in primitive work is truth to material; the artist shows an instinctive understanding of his material, its right use and possibilities. Wood has a stringy fibrous consistency and can be carved into thin forms without breaking."⁶⁵⁶ Here, Moore acknowledged the relationship of material, structure and form that would provide the foundation for modernist sculptural practice.

Paralleling the principles he found in artworks by indigenous cultures, Moore aimed to reveal the inherent qualities of materials along with a direct relationship with the making that determined the appearance of the form. The appearance of the sculptural form would be determined by the materials' inherent structural capacity. As he wrote in 1932: "The material used for carving should not be forced beyond its natural constructive build, or weakness is the result. At the completion of the work the material should retain its own inherent qualities. Sculpture in stone should look like stone, hard and concentrated."⁶⁵⁷ This draws some similarities with the functional concept of rational construction as nominated by the term *Realismus*.⁶⁵⁸ Both are concerned with the physical and structural properties of the material to generate appropriate form without the need for ornamentation or illusion. This relationship between the direct, active making and the material's essential properties,

⁶⁵⁴ Roger Fry, "Negro Sculpture," in *Vision and Design* ed. J. B. Bullen (London, New York: Oxford University Press, 1981), 70–73.

⁶⁵⁵ Ibid., 72. In his essay "Negro Sculpture," Roger Fry reveals his overwhelming admiration of what he termed "negro sculpture." Demonstrating his implicit assumption of colonial superiority and racial prejudice, much of the essay articulates his bewildered lack of comprehension regarding "negro" (Fry's term) culture and how they could produce such fine examples of art. A more interesting and nuanced enquiry into indigenous art, which also offers a critique of the west's slavish appropriation and disrespectful generalisations, is a 1915 essay by German Jewish art historian, writer and anarchist Carl Einstein, also titled "Negro Sculpture." See Carl Einstein, "Negro Sculpture," *October* Vol. 107 (12/1/2004).

⁶⁵⁶ Moore, "Primitive Art," 104.

⁶⁵⁷ "On Carving," in *Henry Moore: Writings and Conversations* ed. Alan G. Wilkinson (Aldershot, England: Lund Humphries, 2002), 190.

⁶⁵⁸ See p. 46.

including its structural capacity, also aligns with Morris's Arts and Crafts agenda of "honesty" in form as opposed to "falsification." Stone looks like stone, not flesh. As Moore would elaborate: "To make stone look like flesh and blood, hair and dimples, is coming down to the level of the stage conjuror."⁶⁵⁹

While not couched specifically in the mantra of truth to material, the art critic Clement Greenberg's concept of "pure" art privileged the specificity of each art's medium. For sculpture, this was specifically in terms of materials. Moreover, Greenberg expressed this in terms of function. In Greenberg's schema, each art form would become uniquely itself by narrowing its focus to the specific medium's parameters.⁶⁶⁰ Painting would express its flatness and sculpture would be defined by its material and its resistance to the artist's will.⁶⁶¹ As he further elaborated: "Sculpture, on its side, emphasises the resistance of its material to the efforts of the artist to ply it into shapes uncharacteristic of stone, metal, wood, etc."⁶⁶²

Greenberg was quite aware of the functional imperative when the artist works with materials to form the production of radically pure art: "Painting and sculpture can become more completely nothing but what they do; like functional architecture and the machine, they *look* what they *do*." In this model of the functional production of forming through economy and directness, Greenberg emphasised the visually transparent relationship between what matter is and what it does. This is equivalent to the architect Richard Streiter's functional concept of *Sachlichkeit*, discussed in chapter one, where the function's production of form aimed to "purify" architecture of all excess, including pompous material expression, illusion and ornament.⁶⁶³ For Greenberg, to produce pure art, the artist must be in dialogue with the material and aim to draw out nothing more or nothing less than the unique and essential attributes of the material, without reference to anything outside the parameters of art, such as narrative, ideas or illusion.

⁶⁵⁹ Moore, "On Carving," 190.

⁶⁶⁰ Clement Greenberg, "Towards a Newer Laocoon," in *Clement Greenberg, the Collected Essays and Criticism*, Vol. 1: Perceptions and Judgments, 1939–1944 ed. J. O'Brian (Chicago; London: University of Chicago Press, 1986), 32.

⁶⁶¹ *Ibid.*, 34.

⁶⁶² *Ibid.*

⁶⁶³ See p. 34.

One of the possible problems of art – how to be true to material(s)?

I do this every time. I look, and think about my materials. I want to be true to them – I do. I want to get to the limits of the truth of the situation. That is, the situation of the relationship between “me” the artist and the “not-me,” the “other” of the “material.” In *Hold UP*, the third body of work produced for the project, I am doing the same. I am in the studio. I am in the workshop. There are bits of wood, plywood. I want to find out how far this wood can bend. Wood is straight. How true is that? I bend it. It cracks, and snaps. Mostly.

Hiller relates her own truth to material experience while she was at art school in America in the 1950s and 1960s. Following Moore’s lead, friends would stand around contemplating this problem of truth to materials for hours on end: “looking at blocks of wood trying to decide what figure dwelt inside, waiting to be let out.”⁶⁶⁴

This returns us to my problem – in post-justifying my misinterpretation of the question In *Houses that are happy* . . . “Are your materials honest?”; or, is it “truth to material(s)”. If one was being true to material(s), it is clear that a relationship is developing between us – the “me” of myself, and the “not-me,” the “other” in the action with the material, that one is being “true” to.

Now it has been established: there is a relationship developing between the actions of the human and the “other” of the non-human – materials, objects or things – within this model of function as forming. In this situation, where is agency located in this exchange? It follows that in order for “me” to be “true” to the material, I must have formed a connection with the “not-me,” the “other” of the materials. One must listen, observe, care to know. Being true to something means that you are acting in good faith to represent the truth of something or someone else. It suggests integrity of the “other,” the material must be in some way revealed to “me” the artist.

⁶⁶⁴ Hiller, "'Truth' and 'Truth to Material': Reflecting on the Sculptural Legacy of Henry Moore," 493.

Louis Sullivan's sympathy

In Sullivan's *Draft Notes for the System of Architectural Ornament*, (1922–24),⁶⁶⁵ he acknowledges the relationship that must develop between the "I/me" of the artist and the "other/not-me" of the material. With the legacy of German Romantic metaphysics,⁶⁶⁶ Sullivan bases this relationship on the concept of sympathy, and tilts the power of the relationship toward the "I/me." For Sullivan, there is the organic and inorganic. The organic are things that have life, such as the plant-seed. This provides the foundation for the core principle associated with Sullivan's definition of function. Sullivan explains that the seed's kernel is the "germ" that has the "will" and "identity," "the function which is to seek and eventually to find its full expression in form."⁶⁶⁷ "Man" also has this "germ" and more. He has a "spiritual power,"⁶⁶⁸ that is his "creative will" that not only "commands as well the realm of the organic"⁶⁶⁹ but potentially also the inorganic. For Sullivan, the material is the "not-me" in the relationship, commonly understood to be inorganic, "lifeless or appears to be so: as stone, the metals, seasoned wood, clay or the like."⁶⁷⁰

As in Aristotle's concept of hyloplasm, ⁶⁷¹ Sullivan's matter is mute. However, Sullivan has a redemptive strategy for the inorganic. In his relationship with material, the power of "man's will" through his imagination transmutes an "image of his passion" into the inorganic, so that it may "live in forms."⁶⁷² For Sullivan, this is achieved through sympathy. It is, for him, the greatest of man's powers, enabling him to identify both the organic and inorganic within himself. Furthermore, "it [sympathy] implies exquisite vision; the power to receive as well as to give; a power to enter into a communion with living and with lifeless things."⁶⁷³ This is what generates the "creative will," the imagination that can liberate the inorganic material from its lifelessness. Sullivan's concept of sympathy in this "truth to

⁶⁶⁵ Louis H. Sullivan, "Sullivan's Manuscript Draft of the System of Architectural Ornament," in *Louis H. Sullivan: A System of Architectural Ornament* ed. Lauren S. Weingarden (New York: Rizzoli, 1990).

⁶⁶⁶ See p. 43.

⁶⁶⁷ Sullivan, "Sullivan's Manuscript Draft of the System of Architectural Ornament," 46.

⁶⁶⁸ For Sullivan, spiritual power was not mystical nor based on religion but he saw this as "nature" and congenital and that this formed the "solitary Ego." Louis H. Sullivan and Lauren S. Weingarden, *Louis H. Sullivan: A System of Architectural Ornament* (New York: Rizzoli, 1990), 52.

⁶⁶⁹ Sullivan, "Sullivan's Manuscript Draft of the System of Architectural Ornament," 48.

⁶⁷⁰ Ibid.

⁶⁷¹ See p. 30. "The Textility of Making," *Cambridge Journal of Economics* 34, no. 1 (2010): 92.

⁶⁷² Sullivan and Weingarden, *Louis H. Sullivan: A System of Architectural Ornament*, 48.

⁶⁷³ Sullivan, "Sullivan's Manuscript Draft of the System of Architectural Ornament," 54.

material” scenario weights this two-way directional relationship between “man” and matter. It is based on the centrality of “man” with “his” “clear vision” accessing the latency of his inner power to generate his creative will that acts on the lifeless matter of the inorganic in order to liberate it.⁶⁷⁴

Moore and Greenberg’s battle

Moore acknowledges there has to be “an active relationship” and this can only occur when the sculptor works directly with the material in order to shape an idea. This conforms to a model of function, where the action of the body works on mute matter to project forward the teleological outcome of the production that is compelled and embodied in the idea. Like Sullivan, Moore understood the role of the artist as injecting life into inorganic material. As he stated: “unless a sculptor adds life to his material, whether stone, wood or bronze, in my opinion he has failed no matter what his aesthetic theories.”⁶⁷⁵ Moreover, in this active relationship between materials and us, the humans, Moore authorises the liberation of “his” materials in his possession, thus enabling them to speak: “Instead you wanted the material to have its say. So a thing in stone should look different from a thing in bronze . . . This truth to material became a tenet.”⁶⁷⁶ As Moore later acknowledged, he shifted in his position on the concept of truth to materials, granting more power to himself as the artist – his vision became more important than the material.⁶⁷⁷ At this later point in his career he believed letting the material be what it should be, would not result in artistic form of any significance, and in fact revealed a weakness in the person and the artist:

*. . . but afterwards I realised that unless you had some tussle, some collaboration and yet battle with your materials, you were being nobody. The artist must impose some of himself and his ideas on the material, in a way that uses the material sympathetically but not passively. Otherwise you are only behaving like the waves.*⁶⁷⁸

⁶⁷⁴ Ibid. This is situated in the humanist tradition of “I” in contrast to the position of new materialism.

⁶⁷⁵ Moore, “On Carving,” 190.

⁶⁷⁶ Moore, “Truth to Material,” 202.

⁶⁷⁷ Ibid. Hiller questions the actual validity of truth to material as a driving concern of Moore’s work. Hiller, “‘Truth’ and ‘Truth to Material’: Reflecting on the Sculptural Legacy of Henry Moore,” 493.

⁶⁷⁸ Moore, “Truth to Material,” 202.

For Moore, to be an artist meant the action with materials was a battle. While it was necessary to be sympathetic, material nonetheless required the imposition of the artist's will. Moreover, in this "battle" he acknowledged that an energy and force emanated independently from the resistance of materials and bolstered the agency of the artist's power. As he revealed in a 1973 interview: "The hardness of stone, and the resistance it gives you, can give you a kind of force and a power because you are fighting the material. And the material gives back some strength, like a kettle with a lid on will give you a feeling of power."⁶⁷⁹ For Moore, this power is associated with the imposition of his ideas – his vision towards a teleological end-point of the artwork.

According to Greenberg, this dialogue between the artist and the matter of the material also involved artistic will and intention responding to material resistance. While matter offers "resistance," that is, some degree of power in the relationship, the artist is nonetheless central. As Greenberg said: "Emphasise the medium and its difficulties, and at once the purely plastic, the proper, values of visual art come to the fore. Overpower the medium to the point where all sense of its resistance disappears, and the adventitious uses of art become more important."⁶⁸⁰ For Greenberg, the artist determines to what degree the medium is enabled to be expressed, and this becomes a criterion in judging the quality of the artist and the artworks produced. Like Sullivan, Greenberg locates the centrality of the human subject at the fore in this dialogue with matter. What produces the form of the object is the intention (that is, the anticipation of the teleological outcome) that drives the artist's actions, which clash against the resistance of the material. This tussle produces a direct and honest outcome (the values of function) that, as Greenberg puts it, escapes the adventitious; the external, arbitrary influence that could lead to illusion, falsification or even ornament.

Summarising how to be true to materials, within a model of function as forming

I will briefly summarise the model of function in relation to Sullivan's concept of sympathy, Moore's truth to material and Greenberg's medium specificity. In each of these contexts,

⁶⁷⁹ Ibid., 201.

⁶⁸⁰ Greenberg, "Towards a Newer Laocoon," 34.

“inorganic” materials are acted on by the intentional actions and movement of bodies in space and time to produce a teleological outcome – the vision and idea of the artwork, or in Sullivan’s case, architecture. Unlike Sullivan, who assumes matter is mute and given life only by “man’s” recognition of the inorganic within himself, in Moore and Greenberg’s conception, matter resists. Moreover, matter is enabled, so that it provides the terms of the action with these materials – the “battle” – in a mode of production that produces the artwork as an honest outcome. These examples elevate the role of material beyond that attributed by Sullivan; however, the power and agency of this dialogue remains with the artist subject – it is the artist’s discretion and skill that will enable the material to “speak.” Nonetheless, this relationship maintains two polar positions: the intentionality of the “I/me” subject of the artist and the matter of the material, the “not-me/you/other. It operates within a strictly dualistic and linear relationship that reinforces the sovereignty of the human “I” as the higher order of the two.

In Sullivan, Moore and Greenberg’s model of production, the human sovereign “I” is privileged over matter and maintains the criteria of function through the teleological outcome and “vision” of the artist. It has been established that a criterion of function is the authority of the human sovereign “I,” and his or her intentions over materials (acknowledging matter may also have agency in the form of resistance). The next question is: What opportunities does this afford abfunction to move away from the sovereignty of the human intention in function’s paradigm? Specifically, in what ways can abfunction be diverted from the criterion of function when materials, objects and things are not necessarily dominated by human intention? As I proposed earlier in the chapter, this would occur when materials, objects and things demonstrate an autonomous agency, independent of the human subject. This line of thinking commences a discussion associated with new materialisms – the antithesis of the model of function and its teleological projection.

However, before embarking on this discussion I would like to present three early modernist examples within functional paradigms that can be understood to shift the power relation from matter that is enabled to resist to that which affects the human subject. The first example relates to architecture and discusses Mies van der Rohe, who identified the brick as

our teacher. This will be followed by analysis of avant-garde artist Richter's *Die neue Wohnung* (New Living) film – also associated with architecture. Finally, the ideas of Soviet avant-garde artists and theorists are discussed, in particular, Rodchenko and Arvatov's democratisation of the relationship between humans and non-human objects and things.

More than resistance

Learning from a brick to get well behaved materials, objects and things – Mies van der Rohe and Hans Richter, Die neue Wohnung (New living) 1930

I return to Mies van der Rohes' 1937 speech to the Armour Institute, Chicago, in which he argued for the proper use of materials. He also argued that materials can, in fact, be our teachers and by implication, materials can provide guiding moral principles. Mies explains the humble brick (what would be in Sullivan's terms, the "inorganic"), can not only teach us, but can provide a certain discipline:

*We can also learn from brick. How sensible is this small handy shape, so useful for every purpose! What logic is in its bonding, pattern, and texture! What richness in the simplest wall surface! But what discipline this material imposes! Thus each material has its specific which we must understand if we want to use it.*⁶⁸¹

According to Mies, in this modernist model, "truth to material" associated with the delivery of function establishes an agency of the material and objects that allows the material to act on us and consequently to inform and change our actions. This is in contrast to Greenberg, Moore and Sullivan, where we, in the end, maintain authority. While it is still incumbent on us, as human, to make the most of this situation, it also requires listening and learning and being prepared to be disciplined by the rigour of matter – even from a humble brick. The film by Richter, *Die neue Wohnung* (New Living) 1930, (Fig. 72),⁶⁸² demonstrates what can happen to us if we do not heed this lesson.

⁶⁸¹ Mies van der Rohe, "Mies Van Der Rohe, Inaugural Address, 1938," 506.

⁶⁸² Richter, *Die Neue Wohnung* (New Living). 1930. B/W, silent, 35 mm, approx. 20min. . Praesens-Film. Zurich. First Screening: August 16, 1930, Basel, 1930: Pages accessed July 21, 2016, <https://www.youtube.com/watch?v=gAUhQHRANj4>. Note: Sound tracks on youtube are not from the original film.

In 1930, Richter, an avant-garde painter, film maker and writer produced the film *Die neue Wohnung* (New Living). It was commissioned by the Swiss Werkbund for WOBA, the first exhibition of housing in Basel, as a propaganda film to promote the virtues of the new modern home.⁶⁸³ The film showed the promise of a shining, functional domestic world, where houses made of new materials were designed not only as efficient spaces but incorporated objects and elements in the home – windows, walls, doors, furniture – as enabling elements that maximised the utilitarian aims of adaptable and modern living.

In stark relief to this utopian view, the dark, cluttered, dusty, pretentious and impractical homes of the middle and upper classes were also shown, as well as the squalor of the homeless and the disease-ridden homes of the underprivileged. The film is a didactic exposé of the lessons in functionalist building that would reward inhabitants with light, air, hygiene, and an unencumbered life for all: the middle and working class, the downtrodden and homeless. By using exemplary housing examples from Le Corbusier and Pierre Jeanneret, Richard Neutra, Max Haefeli, Rudolf Steiger and Flora Steiger-Crawford⁶⁸⁴ the film plays out Corbusier's proposition of "the house is a machine for living in."⁶⁸⁵ In the film there are scenes of young wives efficiently moving around well-designed kitchens; happy, healthy and well-fed babies and children playing on terraces and lawns with satisfied husbands relaxing in spacious living rooms away from the hectic urban schedule of work. And if by magic, windows, doors, furniture and lighting move of their own accord, facilitating and fulfilling the promises of the flow and adaptability of the new functionalist home. Large windows framed by the seamless new material of aluminium slide open to let the sun, air and nature into the room; sliding doors on interior cabinets also open and close independently (using stop-frame animation); desk lamps move back and forth from the wall on their concertinaed arms.

⁶⁸³ Edward Dimendberg, "Avant-Garde Filmmaker for Hire," in *Hans Richter: Encounters* ed. Timothy O. Benson (Los Angeles: Los Angeles County Museum of Art, Del Monico Books, 2013), 90.; Andres Janser and Arthur Rüegg, *Hans Richter: New Living: Architecture, Film, Space* (Baden: Lars Muller Publishers, 2001), 16–17. For a detailed account of how the film was commissioned and when it was shown: *ibid.*, 16–27.

⁶⁸⁴ Andres Janser and Arthur Rüegg, *Hans Richter: New Living: Architecture, Film, Space* (Baden: Lars Muller Publishers, 2001), 108–23.

⁶⁸⁵ Le Corbusier, *Towards a New Architecture* (Burlington: Elsevier Science, 2014), 4.

Richter's *Die neue Wohnung* (New Living) presents "truth to material" delivered in the detailing and object of the new house. For example, in this new house the fabrication and technology of the light material of aluminium, (as opposed to the "old" and heavy material of wood), frames glass with the functional aim of permitting windows to slide open seamlessly so as to transform a wall into a large opening for air. It demonstrates the principles of "sympathy" with the material, as advocated by both Sullivan and later Moore and Greenberg, enabling the material to "speak," engender life into and facilitate the object to perform.

Like Mies' brick, these materials teach the architects how to appropriately form and then use these new objects. In return, these objects and things can teach them how to live – how to be hygienic and happy. Richter presents these materials, now made into objects, as having their own agency, independent of us but certainly in service of us and with the potential to change our lives. Although the objects are presented as having autonomy, as if "willful" beings in their own right, they are behaving within this functional model. It is, after all, a propaganda film, where the desired teleological outcome is the creation in people of a new normative behaviour that will then produce a new society. The forming of function within truth to material that produced these "seemingly willful" objects does not only involve the objects themselves, but the culture of a new modernist utopia.

Richter's *Die neue Wohnung* (New Living) also demonstrates what happens if we do not heed the lessons of materials and objects as they are identified by Mies. When things, materials and objects are positioned outside the framework of the "well-designed" or "functional," disaster and dysfunction prevail, potentially making our lives a misery (Fig. 72). Among the pretentious petite bourgeoisie and in the elegant aristocratic parlour, sentimentality breeds ornament, clutter and bad design. It leads to things, matter and objects becoming clumsy and inoperable, creating domino effects of disaster. The teapot lid continually drops into teacups; tablecloths become tangled, spilling hot tea; tables are bumped, knocking ornaments that cascade and knock others until the whole Sunday afternoon tea arrangement ends in tears. In Richter's *Die neue Wohnung* (New Living) this is a state of dys- and malfunction where the "seeming" agency of materials and objects outside a functionalist order wreaks disaster.

Part III Looking for abfunction – the case studies

chapter six. Abfunction case study#2 – *Houses that are happy to help with at least one of the possible problems of art*

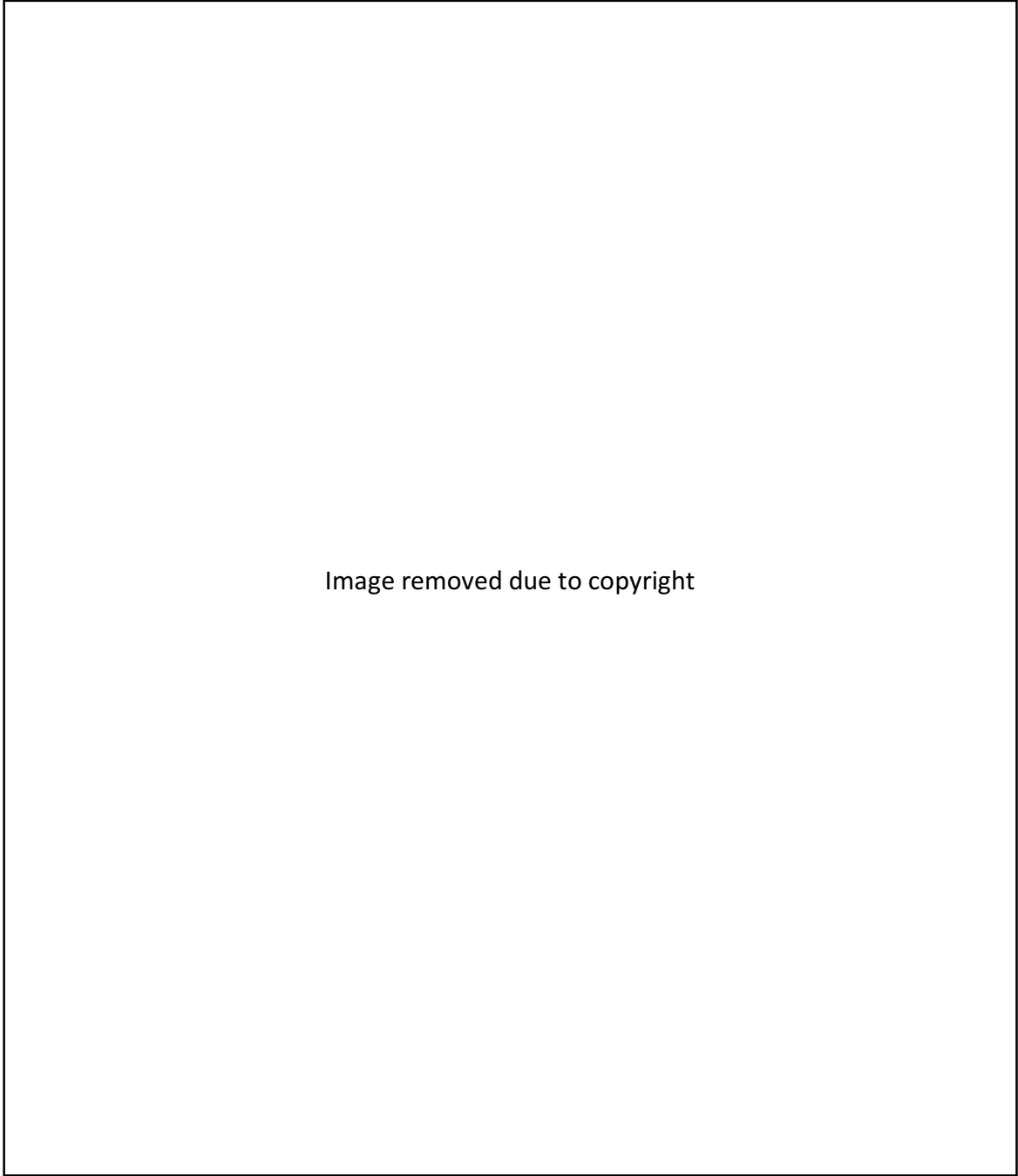


Image removed due to copyright

Fig. 72 Hans Richter, *Die Neue Wohnung* (New Living), (1930)

Selected Screen Shots from the film, 28 minutes and 17 seconds. Accessed September 26, 2015.
<https://www.youtube.com/watch?v=gAUhQHRANj4>

While it appears that these objects and things are reacting and enjoying agency, it has to be remembered that it is entirely within a functional model. This is not yet the opportunity for abfunction. This is because the inverse of malfunction, identified as "proper function,"⁶⁸⁶ is an outcome of intentionality, whether willful, through belief or by just plain hoping.⁶⁸⁷ This is a propaganda film which aims to fulfil the Swiss Werkbund's well intentioned aspirations for a new improved world.

The responsibility of object and things – Rodchenko's and Arvatov's co-workers

The granting of additional agency to materials, objects and things by Mies van der Rohe and Richter's animated modernist homes is extended by the thinking and artwork of the Soviets, Rodchenko and Arvatov. For them, objects and things were given not only agency to change us, but were granted equality with the comrades, effectively becoming co-workers with equal expectations and responsibilities in producing the new Soviet utopia. I argue that while this conforms to teleological expectations of function, it nonetheless offers a considerable move toward the understanding of the autonomous agency of objects and things. This profoundly shifts the definition of matter and inanimate objects away from being commonly understood as mute. As previously discussed, in 1925 Rodchenko noted that "the light from the East is in the new relation to the person, to woman, to things. Our things in our hands must be equals, comrades, and not these black and mournful slaves, as they are here."⁶⁸⁸ In the construction of a new egalitarian socialist modernity, Rodchenko's "things in our hands" were utilitarian objects that had an emotionally affective role, equal with not just "man", but notably also "woman." In Rodchenko's view, the capitalist object in the west was denied its potential agency. Worse, it was identified as a "mournful slave," trading on desire, pleasure and possession. Moreover, Rodchenko's expectation of the

⁶⁸⁶ Ruth Garrett Millikan, "Direct Proper Functions," in *Language, Thought, and Other Biological Categories: New Foundations for Realism* (Cambridge, Massachusetts: The MIT Press, 1984), 17.; Beth Preston, *A Philosophy of Material Culture: Action, Function, and Mind*, Routledge Studies in Contemporary Philosophy (Hoboken: Taylor and Francis, 2013), 143. See p. 68.

⁶⁸⁷ Millikan, "Direct Proper Functions," 17.

⁶⁸⁸ Aleksandr Rodchenko, "Rodchenko v Parizhe. Iz pisem domoi," *Novyi Lef* no. 2 (1927): 20 (letter of May 4, 25). Translated by Christina Kiaer. Cited in Christina Kiaer, *Imagine No Possessions: The Socialist Objects of Russian Constructivism* (Cambridge, Mass.: MIT Press, 2005), 1. See p. 129.

“object-as-comrade” was not only its social responsibilities but its role as a weapon to fight capitalism.⁶⁸⁹

In 1928 this urgent responsibility of objects in the construction of a new socialist material life was made clear in an anonymous published newspaper article, “What Do We Want from a Plate?”:

*The cultural revolution, like the bugler’s trumpet, is summoning for examination and revaluation everything which mobilises or poisons our consciousness, our will and our readiness for battle! In this “parade” of objects there are no non-combatants – nor can there be! Plates and cups, i.e. things we see daily, several times a day, which can do their bit for the organising of our consciousness – these occupy an important place. We demand that a plate should fulfil its social function.*⁶⁹⁰

This “attribution” of power and agency to objects, things and matter that can activate change in the individual comrade and hence culture was also elaborated on by Arvatov, in his essay, “The Everyday Life and the Culture of the Thing (Toward the Formulation of the Question)” (1925).⁶⁹¹ Here Arvatov specifically formulated a new and complex set of relationship between “Things,” comrades, and production in seeking to critique and eliminate the bourgeois capitalist commodity.⁶⁹² Arvatov attributes the mute object and thing, in subject–object relations as intrinsic to capitalism. Most surprisingly, the foundation of this essay’s proposal was based on his imaginings of an “Americanism” and its offspring,

⁶⁸⁹ Ibid., 1.

⁶⁹⁰ “What Do We Want from a Plate?,” in *Art into Production: Soviet Textiles, Fashion and Ceramics 1917–1935* ed. David Elliott and James Ryan (London: Museum of Modern Art, Oxford: Crafts Council Gallery, 1984).

⁶⁹¹ Boris Arvatov, “Everyday Life and the Culture of the Thing (toward the Formulation of the Question),” *October* 81 (Summer 1997) For an overview see: *Imagine No Possessions: The Socialist Objects of Russian Constructivism*, 30–34.; Christina Kiaer, “Boris Arvatov’s Socialist Objects,” *October* 81 (Summer 1997).

⁶⁹² Christina Kiaer notes, Arvatov’s position, provided at the time, an unusual emphasis on the capacity of the object to form the individual and everyday life, that could, moreover establish a new set of social relations that would subsume the fetishised commodity that was seen to keep capitalism alive.” Boris Arvatov’s Socialist Objects,” 107.

the new capitalist city. Written from inside the sanatorium walls,⁶⁹³ this new capitalist city was a model of technology that he understood as “interconnected thing-systems.”⁶⁹⁴

In Arvatov’s advocacy of materialism, he identified the human relation (the individual and the collective) to the Thing as the most fundamental agent in social construction.⁶⁹⁵ He argued that up until this time the bourgeoisie had only conceived two types of relations to Things: the technical and the everyday, and this was also the inheritance of Marxism.⁶⁹⁶ In this conception, Arvatov articulated the difference between everyday objects, things and material. In his view, the Thing in a capitalist society was translated as an object of commodity⁶⁹⁷ and as such was disabled from expressing its Thingness or material to the individual or the collective. This was for two reasons. First, the individual and the collective were separated from the object’s whole production.⁶⁹⁸ This was because of the new conditions associated with industrialisation, where the rationalisation of labour created divisions on the production line. In these cases, workers were only responsible for one small part of the object’s construction; no one individual would see the entire process involved in making the object from beginning to end.⁶⁹⁹ As a consequence, the bourgeoisie was connected to the thing transformed into an object, through desire for its consumption and by buying and selling it as private property.⁷⁰⁰ As Arvatov writes about the object-thing in bourgeois culture:

*The Thing as an a-material category, as a category of pure consumption, the Thing outside its creative genesis, outside its material dynamics, outside its social process of production, the Thing as something completed, fixed, static, and, consequently, dead – this is what characterises bourgeois material culture.*⁷⁰¹

⁶⁹³ By 1923, Arvatov was committed to a mental asylum where he continued to expound the Marxist agenda of transformation through Constructivist and Productivist reconstruction of the role of art. Ibid., 106–08.

⁶⁹⁴ Arvatov, “Everyday Life and the Culture of the Thing (toward the Formulation of the Question),” 125.

⁶⁹⁵ Ibid., 120.

⁶⁹⁶ Ibid.

⁶⁹⁷ Arvatov, “Everyday Life and the Culture of the Thing (toward the Formulation of the Question),” 120–21, 122.

⁶⁹⁸ Ibid., 124.

⁶⁹⁹ Maria Gough, *The Artist as Producer: Russian Constructivism in Revolution* (Berkeley: University of California Press, 2005), 154–55.

⁷⁰⁰ Arvatov, “Everyday Life and the Culture of the Thing (Toward the Formulation of the Question),” 122.

⁷⁰¹ Ibid.

In this status of the bourgeois commodity, agency only occurs in the hands of the consumer. The life brought into matter to produce the object (as Sullivan or Moore would describe), in Arvatov's view is evacuated through the object's diversion into the conduit of the market place and private property. Furthermore, for Arvatov, the bourgeoisie maintain their agency through the arrangements and display of their agent-less objects as a signifier of fashion, "style-ism," taste and class that underpins capitalism.⁷⁰² In Arvatov's argument, capitalism maintains complete agency and authority with the subject – the human and sovereign "I," – over the mute object, thing or material in order to reinforce the very conditions required to propagate the bourgeoisie capitalist conditions.

For Arvatov, the technical provided an alternative type of relation to the everyday object commodity of the capitalist. In Arvatov's terms, the technical relation reconnected not only the individual but the collective with matter and things within the production of labour. To make this argument, he astonishingly uses a fantastically imagined world, which he refers to by the "buzzword 'americanism.'"⁷⁰³ In this world he imagines that there are organised and centrally managed American technocratic intelligentsia who produce the interconnected thing-systems of the capitalist city.⁷⁰⁴ Spaces produced in these cities would be collective, large and public, with "enormous offices, department stores, factory laboratories, research institutes, and so on."⁷⁰⁵ Here, mutual resources such as transport, heating, lighting and architecture, as well as labour and production all supersede the private into the collective spaces of the everyday. In Arvatov's imagined world, organising things is valued over possessing things. Value in this system is based on objects', things' and matters' functional qualities of durability and utilisation, with attributes of convenience, portability and comfort.⁷⁰⁶

⁷⁰² Ibid., 123–4.

⁷⁰³ Ibid., 125.

⁷⁰⁴ While, Bolsheviks were opposed to the capitalist bourgeoisie, they recognised the value of their education and technical skills and framed this as "technical intelligentsia," giving them a legitimacy. Ibid., 125n4.

⁷⁰⁵ Ibid., 125.

⁷⁰⁶ Ibid., 125–26.

It is worth making a brief detour here to compare Arvatov's Thing and objects with Heidegger's notion of these terms.⁷⁰⁷ Arvatov's distinction between things and objects (as discussed) is situated within a Marxist polemic of binary opposites. For Arvatov, things become objects and are fetishised because of their commodification in bourgeois society. Things, and thing-systems, for Arvatov are consciously constructed through technology, which in turn produce the new socialist utopia. Heidegger's distinction between objects and things is based on the conscious awareness of our relationship with them and the autonomy they assert independently of us. In Heidegger's conception, things remain hidden from us;⁷⁰⁸ they are in relation to other things that co-opt and, as Heidegger says, "gather" elements together.⁷⁰⁹ For Heidegger, things are relational, we exist within and inside their operations⁷¹⁰ and moreover, they tend to remain invisible and consequently move away from our perception.⁷¹¹ In Heidegger's terms, however, when a thing becomes visibly apparent to us, its thingness disappears and they become objects.⁷¹² Objects, for Heidegger, present themselves, as he says, in their "over-againstness," their capacity to stand forth.⁷¹³ In Heidegger's account, objects appear to us, we can represent and observe them,⁷¹⁴ we exist outside of objects,⁷¹⁵ and they can be studied by science.⁷¹⁶ By contrast, Things and thing-systems for Arvatov are aligned to scientific organisation.⁷¹⁷ Arvatov's thing-systems, while sharing Heidegger's relationality, are actively constructed through the science of

⁷⁰⁷ Heidegger, "The Thing."

⁷⁰⁸ Ibid., 164–69.

⁷⁰⁹ Ibid., 171. Harman points out that this gathering reaches beyond our perception. Harman, "Heidegger on Objects and Things," 270.

⁷¹⁰ Ingold's interpretation of Heidegger's thing explains that we are not outside of it, like an object; we are inside and a part of this. Tim Ingold, *Bringing Things to Life: Creative Entanglements in a World of Materials*, Working Paper #15, Realities: ESRC National Centre for Research Method. University of Aberdeen; The University of Manchester; ESRC Economic and Social Research Council, 2010, 4. Accessed June 30, 2016. http://eprints.ncrm.ac.uk/1306/1/0510_creative_entanglements.pdf.

⁷¹¹ Harman, "Heidegger on Objects and Things," 270.

⁷¹² As Heidegger says: "We suddenly lost sight of it – at the moment, in fact, when the illusion intruded itself that science could reveal to us the reality of the jug". Heidegger, "The Thing," 169.

⁷¹³ Ibid., 164–65.

⁷¹⁴ Ibid.

⁷¹⁵ Ingold has interpreted and extended Heidegger's understanding of the object as presenting itself to us for our observation. It is distinguished by its edges and surface and its separation from the world of other things and us that we observe from the outside. Ingold, *Bringing Things to Life*, 4.

⁷¹⁶ Heidegger, "The Thing," 167–68.

⁷¹⁷ For Arvatov, the bourgeois object falls outside of science, whereas the organisational attributes of the thing-system associated with the capitalist city evolves out of scientific experimentation. Arvatov, "Everyday Life and the Culture of the Thing (toward the Formulation of the Question)," 120, 125.

technology. Arvatov's thing-systems become visible, harness labour and, moreover, are atic and instrumental in creating who the comrades should become.

Arvatov's thing-systems are active elements that reciprocally activate gesticulation, movement and activity, giving rise to a new "psycho-physiological individual" and collectivity in the construction of the social practice of life.⁷¹⁸ Strikingly, this world he describes is the world animated by Richter in his film – the world of functionalism – but it is not the domestic private world of the home, but of the public and the city. In an astonishing passage he describes these thing-systems:

*Glass, steel, concrete, artificial materials, and so on were no longer covered over with a 'decorative' casing, but spoke for themselves. The mechanism of a thing, the connection between the elements of a thing and its purpose, were now transparent, compelling people practically, and thus also psychologically, to reckon with them, and only with them. Form as a ready-made pattern could no longer be considered here. Coordination with form ceded its place to coordination with a thing's function and its methods of construction. The thing was dynamised. Collapsible furniture, moving sidewalks, revolving doors, escalators, automat restaurants, reversible outfits, and so on constituted a new stage in the evolution of material culture. The Thing became something functional and active, connected like a co-worker with human practice.*⁷¹⁹

Arvatov's interconnected thing-system establishes an equality of agency and dynamic reciprocal action between objects, matter, things, people (comrades). Objects and things in his conception would act to motivate people physically and psychologically to produce a new type of individual – the teleological end point of the "psycho-physiological individual" and a socialist utopia. This interconnected thing-system is a world based on functional production. It is not, however, a simple causal human agent acting on mute matter to produce form. It is a prescient conception of a system function, which Larry Wright and

⁷¹⁸ Ibid., 126.

⁷¹⁹ Ibid.

Robert Cummins would propose fifty years later, where casual relationships of things relate to a whole system and where all parts have capability.⁷²⁰

Summary – an extended reciprocal action of objects, materials and things producing a teleological output of an alternatively imagined socialist utopia

In the socialist object-as-coworker in a thing-system, as imagined by Arvatov and Rodchenko, or in Mies's expectations of the humble brick and Richter's automated components, the place of materials, objects and things in functionalism was not limited to the singular directive relationship, where mute inorganic base matter could be instilled with life by the artist (as Sullivan suggests). Nor was it a battle between the will of the artist and the resistance of the material as proposed by Greenberg and Moore, where the agency of matter is to be imposed upon by the sovereign human's intention. Rather, framed within the mode of functional production where humans act on objects, materials and things to produce a teleological outcome, Arvatov, Rodchenko and Richter offer a significant expansion and complexity to this linear model. For them, objects, materials and things are granted equal agency and responsibility in this process of action between the human and non-human entities. Moreover, there is reciprocal action, where these non-human objects, material and things also compel people to act, and as a consequence construct them anew in their alternatively imagined modernity. No doubt, the non-human in the scheme of Arvatov and Rodchenko and in Richter's film is always bracketed by the key criteria of function and that is the teleological expectation of the new utopia they were producing. In Richter's *Die neue Wohnung* (New Living), when the "matter" of electricity activates the roller door to open, allowing the Mercedes to roll on in, and when windows and doors seamlessly open and close, it is evident that the materials are behaving, conforming to normative expectations and to the intentionality of the broader ideological or even localised agendas.

Materials and object and things can have agency to affect humans. Why would these non-human entities necessarily be bound to any human teleological aspirations for them?

⁷²⁰ See p. 56, 73. Robert Cummins, "Functional Analysis," *The Journal of Philosophy* 72, no. 20 (11/20/1975): 760.

Indeed, what if they are autonomous, independent of us, inclined to go off on their own way with their own separate agenda? As Arvatov, Mies and Richter understood, these non-human conditions activate our behavior, compelling us to reckon with them. If these non-human entities have an agency and integrity of their own, outside our teleological aspirations, what non-normative behaviour might this compel in us? This is not a dead-end of dysfunction. It is potential for an abfunctional situation. As an imbroglio, it could represent an excess of non-normative behaviours displayed by both materials and humans, which establishes another state of being outside the efficiencies of the functional.

Locating the abfunctional deviation from truth to materials – Materials going their own way (speaking back, being creative, or plain misbehaving) – Houses and other artworks that are happy to help . . .

It is when we acknowledge non-human entities' independent agency within functionalism that the potential for abfunction becomes apparent.

To once again return to *Houses are happy to help . . .*; the misunderstanding of "truth to material" that came to be "are your materials honest?"; is not so wrong after all. The question staked into the milk bottle full of sand in front of the house happy to help, acknowledges the abfunctional diversion of the houses' materials as having their own agency and their own integrity. This is whether or not they are behaving, going off on their own direction, being "creative," or plain misbehaving. It is their agency that has activated me to ask the imbroglio, it is certainly not premeditated nor normative situation – it is not where we expected to end up. It leaves us in the hilarious situation of the seeming wrongness that the shift in agency registers in the signs persistent question, bringing into focus all that we assume is normative.

This is the abfunctional moment, which shifts one of the constituents of the functional system of production – materials– outside of the human-centric intentionality of function's teleological criteria. And as Arvatov recognised, objects, matter and things compel us. If these non-human things are going off on their own way, it begs the question, what might this compel us to do? This is the potential for an abfunctional diversion, activating non-normative behaviour in people, to produce something beyond function's expectations.

Before embarking on the possible abfunctional diversion of non-normative behaviour, I would like to contextualise the possibility of materials, objects and things having their own independent agency, by using Bruno Latour's understanding of matter that resists the "idealist materialism." Having established that matter, objects and things can be autonomous and independent of us, this will be followed by the proposition that these non-human entities cannot necessarily be excluded from having feelings. This is because the houses in the case study are happy. Happy to help with at least one of the possible problems of art, the problem of the honest agency of materials.

Slipping out of idealist materialism to feelings of matter

In his essay "Can we have our materialism back please?" (2007), Bruno Latour identifies materials or "matter" as having their own set of conditions external to their technological conceptualisation through geometry and mathematics.⁷²¹ The history of technology is seen by Latour as the bastion of "idealist materialism" that requires a "sleight of hand" to misconstrue matter as behaving and appearing as identical to its geometrical technical representations that produce these functional systems⁷²²(he gives the example of the tradition of mechanical technical drawing, such as James Watt's drawings for the steam engine, to demonstrate how we assume matter will behave as predicted according to the drawn specification).⁷²³ For matter to operate and work within this model of functionality, as intended by the technical drawing (with prediction and clarity), it has been conceived by us that matter must perform within idealist materialist parameters.⁷²⁴ This is the context of the functional system of space and production as already discussed and embodied by Taylorism; the conveyor-belt production of Ford; the modernist dream home machine with its automated innovations in our service as propagated by Richter; or the "thing-system" of the capitalist city and object-as-coworker of Arvatov. Yet, as Latour argues, we equally

⁷²¹ Bruno Latour, "Can We Get Our Materialism Back, Please?," *ISIS: Journal of the History of Science in Society* 98, no. 1 (2007): 140. To quote Latour: "we are now faced with two different definitions of 'matter': one (the idealist one) in which the reproduction of the parts through geometry is confused with the reproduction of the parts themselves, and another in which those two pathways are clearly distinct. The first gives way to *objects* . . . the second gives way to things . . . Thin objects, on one hand, with an *ideal* definition of matter; thick things, on the other, with a *material* definition of matter." Ibid.

⁷²² Ibid.

⁷²³ Ibid.

⁷²⁴ Ibid.

understand (although this has been overlooked by Idealist materialist thinking) that matter and things produced by it in a functional system must also work in the world, where matter has a habit of going its own way and in the machine, for example, can only resist rust and decay for so long.⁷²⁵ This conundrum inherent in our reception of matter represents a schism between an “idealist materialism” (that we have inherited through the history of technology), and the actuality of matter that he terms and advocates for as “material materialism.”⁷²⁶ In this instance matter can be what Latour calls “thick”⁷²⁷ and surprising.⁷²⁸

The political theorist Jane Bennett, like Latour, has also rejected the technocratic idealisation of matter as passive and advocates for: “a vitality intrinsic to materiality . . . absolving matter from its long history of attachment to automatism or mechanism.”⁷²⁹ In new materialist terms, matter, objects and things are understood to possess agency.⁷³⁰ Although, according to the feminist and quantum physicist Karen Barad’s conceptualisation, agency “is not something possessed by humans, or non-humans for that matter. It is an enactment. And it enlists, if you will, ‘non-humans’ as well as ‘humans.’”⁷³¹ For Barad, matter in and of itself is energised and enlivening.⁷³² Moreover, in new materialist thinking, matter is independent of the intentionality of human and human intelligence⁷³³ and implicit in this new materialist conception is the acknowledgement that humans are also matter.

Barad also famously notes that “feeling, desiring and experiencing are not singular characteristics or capacities of human consciousness. Matter feels, converses, suffers, desires, yearns and remembers.”⁷³⁴ Noela Davis, in her overview of Elizabeth Wilson’s study of Sigmund Freud’s case of Fraulein Elisabeth, identifies interwoven-ness of intimate

⁷²⁵ Ibid.

⁷²⁶ Ibid., 139, 140–41.

⁷²⁷ Ibid., 142. This is in contrast to ideal materialism where Latour conceives of matter as being thin. Ibid., 140.

⁷²⁸ Ibid., 141.

⁷²⁹ Jane Bennett, *Vibrant Matter: A Political Ecology of Things*, A John Hope Franklin Center Book (Durham: Duke University Press, 2009), 3.

⁷³⁰ Serenella and Serpil, “Material Ecocriticism: Materiality, Agency, and Models of Narrativity,” 77.

⁷³¹ Barad, Dolphijn, and Tuin, “Interview with Karen Barad,” 55.

⁷³² Ibid., 59.

⁷³³ Serenella and Serpil, “Material Ecocriticism: Materiality, Agency, and Models of Narrativity,” 77.

⁷³⁴ Barad, Dolphijn, and Tuin, “Interview with Karen Barad,” 59.

emotions with the physical matter of the body.⁷³⁵ While Wilson's example attributes feelings to the physical matter that belongs to humans, those involved in ecocriticism, such as the theorist Serpil Oppermann, have argued that non-human matter cannot be excluded from the possibility of also having feelings.⁷³⁶ While she acknowledges that human and material agency are "radically different," the intersubjective relations involve both.⁷³⁷ At the core of Oppermann's argument is the premise of what constitutes "aliveness." Oppermann draws on Edward E. Hunter's position that "What makes something alive is not what it *is*, but what it *does*."⁷³⁸ Matter is a process, rather than a fixed substance (as Ingold also argues).⁷³⁹ For Oppermann, the process philosopher Charles Hartshorne offers a case for the feelings of matter at the level of molecules and atoms. In Hartshorne's view, the evidence that molecules and atoms respond to stimuli is also evidence for them sensing and responding. For Hartshorne, there is no basis that feelings and creativity are limited only to humans or even vertebrates.⁷⁴⁰ To further her case, Oppermann presents Jeffrey Cohen's examination of rocks and stones. Cohen contends that matter that would conventionally be considered as inorganic and lifeless, such as a stone, is more organism than substance, and exhibits processes of liveliness.⁷⁴¹ Moreover, Cohen regards rocks and stones as expressive, claiming that "'feeling stone' conveys the sensations, intensities and excitations."⁷⁴² Cohen also claimed that the stones chose him;⁷⁴³ as was the situation in my case, when the houses called themselves out to me to have the question asked. They were happy to help with my

⁷³⁵ Noela Davis, "New Materialism and Feminism's Anti-Biologism," *European Journal of Women's Studies* 16, no. 1 (2009): 71. For the case of Fraulein Elisabeth see: Elizabeth A. Wilson, *Psychosomatic: Feminism and the Neurological Body* (Durham: Duke University Press, 2004), 9–11.

⁷³⁶ Serpil Oppermann, "From Ecological Postmodernism to Material Ecocriticism: Creative Materiality and Narrative Agency," in *Material Ecocriticism. [Electronic Resource]* ed. Serpil Oppermann and Serenella Iovino (Bloomington: Indiana University Press, 2014). For a more specific reference see *ibid.*, 24–5.

⁷³⁷ *Ibid.*, 34.

⁷³⁸ Lawrence Hunter, *The Processes of Life. [Electronic Resource]: An Introduction to Molecular Biology*, Books at Jstor Demand Driven Acquisitions (Cambridge, Mass.: MIT Press, 2009), 2. (Hunter's italics.) Cited in Oppermann, "From Ecological Postmodernism to Material Ecocriticism: Creative Materiality and Narrative Agency," 34.

⁷³⁹ Ingold, *Bringing Things to Life*, 2–3, 8.; Oppermann, "From Ecological Postmodernism to Material Ecocriticism: Creative Materiality and Narrative Agency," 24–5. This definition is also encompassed by Jane Bennett's concept of "vibrant matter". *Ibid.*, 25.

⁷⁴⁰ Charles Hartshorne, *Creative Synthesis and Philosophic Method*, The Library of Philosophy and Theology (London: S.C.M. Press, 1970), 6. Discussed in Oppermann, "From Ecological Postmodernism to Material Ecocriticism: Creative Materiality and Narrative Agency," 24.

⁷⁴¹ Cohen, "Stories of Stone," 60.

⁷⁴² Jeffrey Jerome Cohen, "Geophilia," in *Stone: An Ecology of the Inhuman* (Minneapolis, MN: University of Minnesota Press, 2015), 58.

⁷⁴³ Cohen, "Stories of Stone," 58.

problem of what to do when materials have their own integrity outside of my aspirations. In our rendezvous, the houses were helping.

Abfunctional rendezvous with willful matter, objects and things with feelings

Me, materials, and the Houses that are happy . . .

So here I am in the northern suburbs with this thought-bubble question. I am asking the houses that so generously present themselves to me to be questioned. Houses that are happy to help. It's just a quick question. A thought bubble – a quick question placed for a moment on a stick in a milk bottle full of sand in front of the house. "Are your materials honest?" The house kindly allows a quick photograph. The event (a survey?) before the question is hurried away to the next generous house.

Twenty-three kind houses. Each house and question poses and becomes an image. Photographed in the hard light of day, the image is printed with the colour sitting on top of paper that is provisionally attached to a piece of cardboard of equal dimension with a spring clamp attached to an aluminum pole that stretches between the ceiling and the floor. The four corners of the print are cropped with a generous radius, offering a vignette of the situation of this exchange between the quickness of the thought-bubble question and the house. The vignette turns and presents the question back to us while viewing into the window of this past situation. And each sculpture becomes one character in a field of others, which the viewer meanders through to re-witness the situation that now turns and faces the viewer in the gallery. I recognise in the house its matter and its happy-to- help. And it reacts and asks the question back.

One aspect of the abfunctional imbroglio has been established: the possibility that the materials of the house could have agency in and of themselves—could or possibly could not be honest. With the question returned to us in the installation, where the house stands behind the question, there seems to be a shift in who is asking the question. In the beginning, it was "me" and the recipient was the non-human house. Now, in the image, the house becomes the "I" asking the question of the viewer, of "me," who, like the house, is full of matter. This follows through the abfunctional attribution of agency to the object. To

recall Bolt's interpretation of new materialism at the commencement of this chapter, this is a configuration that acknowledges it is not only the sovereign human "I" that does things.

Knocked-out by a cranky painting – Ad Reinhardt

The attribution of a moral agency to the houses in *Houses that are happy to help . . .* establishes their status of being characters with the potential of individual feelings. This shift, where the "I" is now identified with what is commonly understood as a non-human object and material participant in these exchanges is also apparent in Ad Reinhardt's cartoon of 1946 from "How to Look at Art, Arts & Architecture".⁷⁴⁴ Here, his painting is a character, and it is cranky. Reinhardt sketches a cartoon of a regular gallery-goer having a shot at the abstract painting, laughing: "HA, HA, WHAT DOES THIS REPRESENT?",⁷⁴⁵ only to have the comment rebounded by the painting with the same dismissive cynicism, pointing back at the gallery-goer yelling: "WHAT DO YOU REPRESENT?" The gallery-goer is laid out cold by the blow of the statement. The caption under the exchange outlines the codes of behaviour when dealing with art. It squarely locates the responsibility of the engagement with the viewer and furthermore, emphasises the responsibility and respect for the inanimate work that art requires of the active participant. By swinging the underpinning logic of Reinhardt's abstract painting back at the viewer, the inanimate object is granted equal agency, acknowledging the full weight of the ethical conditions required to bring to this relationship. For there are implications if you do not: a black eye at the very least. And so, back to the houses. They become the "I", the character (like the painting in Ad Reinhardt's cartoon), that asks the raw question about the raw truth to and of the materials.

⁷⁴⁴ I am grateful to my friend, German artist Andreas Exner, for bringing this association with the "*Houses that are happy to help . . .*" to my attention. See Andreas Exner, "Sculpture: Questions (Houses That Are Happy to Help with at Least One of the Possible Problems of Art)" Translated by Zylvia Auerbach. Melbourne: Sarah Scout Presents, 2010.

⁷⁴⁵ Emphasis in cartoon.

Rendezvous with unhappy and sick readymades, objects and matter – Marcel Duchamp

The abfunctional engagement with the house and how it presents itself to me for the question suggests parallels with Duchamp's readymades.⁷⁴⁶ Duchamp also recognised that shifting of agency to the inanimate object could occur in the readymade rendezvous, not just in association with us but also with the other elements in the world. Some of Duchamp's readymades had feelings and this included the concepts of wellness and happiness. In 1919, on learning of his sister Suzanne's wedding to his close friend Jean Crotti, Duchamp sent them a present: directions for a *Readymade malheureux* (Unhappy readymade).⁷⁴⁷ This was a geometry book that he specified was to be hung from their apartment balcony, out in the wind, where, as he says in an interview with Pierre Cabanne, "the wind had to go through the book, choose its own problems, turn and tear out the pages."⁷⁴⁸ Duchamp continued: "It amused me to bring the idea of happy and unhappy into readymades, and then the rain, the wind, the pages flying, it was an amusing idea . . ."⁷⁴⁹ In Duchamp's *Readymade malheureux*, the inanimate geometry book's exposure to the decisions of another inanimate element – the rain – certainly generated feelings. The book was not happy.

In his *Green Box* jottings Duchamp wrote (in what we would now understand as an instruction piece): "Make a sick picture or a sick Readymade."⁷⁵⁰ In this proposition for a "sick readymade", the decision for something to be un-well is clearly positioned with the

⁷⁴⁶ There is not the scope here to elaborate, however the selection of the houses in this case study follows the logic of the readymade. This is based on the indebtedness of the photographic procedure inherent in the readymade. See Rosalind E. Krauss, "Notes on the Index: Part 1," in *The Originality of the Avant-Garde and Other Modernist Myths* (Cambridge, Mass. : MIT Press, 1985), 205-06. As Duchamp says is: "this matter of timing, this snapshot effect . . . at such and such an hour. It is a kind of rendezvous." (Duchamp's underline). Marcel Duchamp, *The Bride Stripped Bare by Her Bachelors, Even: A Typographic Version by Richard Hamilton of Marcel Duchamp's Green Box*, trans. George Heard Hamilton, *The Documents of Modern Art*: (New York: Jaap Rietman Inc., 1976), 14, under "Specifications for 'Readymades'". Hilla and Bernd Becher in their *Anonyme Skulpturen* (Anonymous Sculptures), 1970, also treat the architectural object in the world as a readymade.

⁷⁴⁷ Roxana Marcoci, "Marcel Duchamp's Box in a Valise: The Readymade as Reproduction," in *The Original Copy: Photography of Sculpture, 1839 to Today*, ed. David Frankel (New York: Museum of Modern Art, 2010), 114.

⁷⁴⁸ Pierre Cabanne and Marcel Duchamp, *Dialogues with Marcel Duchamp* (London: Thames and Hudson, 1971), 61.

⁷⁴⁹ Ibid.

⁷⁵⁰ Duchamp, *The Bride Stripped Bare by Her Bachelors, Even: A Typographic Version by Richard Hamilton of Marcel Duchamp's Green Box*, under Make a Sick Picture.

author of the artwork. Yet the object (the readymade or picture) in this instruction was not understood to be static or immune to the action – it has the potential for its status to change from being “well” to “sick.” For Duchamp, it seems that not only the inanimate machine-made object of the readymade, for example, the geometry book, could be made to “feel” things: happy; unhappy; wellness; sickness; the wind and the rain are assumed to have decision-making capabilities. The wind decides which mathematical problem to choose and rip out of the book as a method of destroying it.

In *Houses that are happy to help with at least one of the many possible problems of art*, the character of the houses is to be happy. They are not unhappy or sick, like Duchamp’s readymades, but “happy to help.” Helping is an act of generosity that facilitates agency in others. To help by allowing the question of their materials and the agency of their materials’ integrity to be asked of them and for them, and then to return the question, acknowledging that we, too, are matter. Continuing this concept is the project’s exhibition title: *Help a Sculpture*. Here, sculpture is understood to be conglomerations of matter speaking to me/us and having been heard. I care. It activates us/me to behave. Returning to Arvatov, he acknowledges the “emotionality” of things, in his theoretical premise of the Productivist technocratic thing-system to which the co-worker object belongs. He makes a case that the Thing is engaged in a human relationship and when this connection is divorced, such as in the capitalist commodity, the object or thing loses its emotional status.

*There exists the opinion . . . that the course toward expediency [tselesoobraznost’] murders the so-called humanity of things, deprives things of “emotionality” or, what’s the same thing, of their harmonious sociality. Such an opinion can only be maintained by those for whom the thing in and of itself, in its rational functioning, cannot be the embodiment of human thought, of the human relation to the object world and to his social existence.*⁷⁵¹

⁷⁵¹ Boris Arvatov, “*Segodniashnie zadachi iskusstva v promyshlennosti*” (The Tasks Today of Art in Industry), *Sovetskoe iskusstvo* no. 1 (1926): 86. Included in Kiaer, *Imagine No Possessions: The Socialist Objects of Russian Constructivism*, 35.

In this quote, Arvatov maintains a humanist and utopian framework while advocating for the object as an independent co-worker, as an emotional entity.⁷⁵² By contrast, Barad makes the claim that matter in its ability to excite and enliven does this on its own terms; it “feels, converses, suffers, desires, yearns and remembers.”⁷⁵³ She argues that matter is not an object or thing, “but a doing” in a constant state of stabilising and destabilising.⁷⁵⁴ Furthermore, in her conception, matter as established through her research into the smallest material units known as relational “atoms,” is not a substrate or medium where desire flows through as a separate force – it is “a doing.”⁷⁵⁵ For her, “materiality itself is always already a desiring dynamism.”⁷⁵⁶ So, if matter is not an object but an active process of doing and undoing, motivated by its own dynamism such as the impetus of feelings, then it follows that bodies, our own and others, such as objects or things known as a houses, composed of matter, can find themselves acting emotionally in unpremeditated ways. Furthermore, according to Arvatov the action of matter must enlist other matter from other bodies, which compels themselves and myself to respond.

Materials and objects and things enlisting abfunctional non normative behaviours

the Houses that are happy to help . . .

It is the matter of the houses that is activating me. With its own matter behaving, the character of the house takes on its own authority to be happy to help with the question of one of the possible problems in art. In this artwork, the problem is how to be true to material. With the slip-up, “are your materials honest?,” the actual problem is acknowledging the agency in the materials themselves and their “codes of behaviour” that may then activate the possibilities of enlisting the matter in my own body – compelling me to “do”. This doing is the abfunctional behaviour of asking the questions of these houses that present themselves to me as I run around the northern suburbs with the sign in the back of the car. It is a surplus activity – this asking questions of the material – the questions of the matter of our everyday lives.

⁷⁵² "Boris Arvatov's Socialist Objects," 117, 17–18 n.20.

⁷⁵³ Barad, Dolphijn, and Tuin, "Interview with Karen Barad," 59.

⁷⁵⁴ Karen Barad, "Posthumanist Performativity: Toward an Understanding of How Matter Comes to Matter," no. 3 (2003): 822.

⁷⁵⁵ Ibid. Barad's italics.

⁷⁵⁶ Barad, Dolphijn, and Tuin, "Interview with Karen Barad," 59.

Hans Richter, *Vormittagsspuk* (Ghosts Before Breakfast) 1927

Let us return again to Richter. In contrast to his “magical” yet well-behaved windows and furnishings in the modernist home in *Die neue Wohnung* (New Living), the earlier film *Vormittagsspuk* (Ghosts Before Breakfast) 1927⁷⁵⁷ (Fig. 73) witnesses the objects behaving outside of normative expectations. This behaviour precipitates the time-wasting actions of adults who behave like playful, indulged, pre-socialised babies and children. However, this does not create scenarios of disaster. The excesses of non-normative behaviours from both materials and humans establish another state of being outside the efficiencies of the premeditated functional or non-functional expectations.

⁷⁵⁷ Hans Richter, *Vormittagsspuk* (Ghosts before Breakfast) 1927. B/W, Original Score by Paul Hindemith (lost). Hans Richter, Paul Hindemith, Wernee Graeff. July 14, 1928 Baden Baden (German Chamber Music Festival, Kurhaus), 1927. Accessed July 21, 2016 <https://www.youtube.com/watch?v=vCwkWgnzh-Q>. Please note: sound tracks on Youtube films are not original.

Image removed due to copyright

Fig. 73 Hans Richter, Vormittagspuk (Ghosts Before Breakfast), (1927)

Selected Screen Shots from the film, 6 minutes and 28 seconds movie. Accessed September 27, 2015.
<https://www.youtube.com/watch?v=vCwkWgnzh-Q>

The film commences with the clock comically fast-forwarding from 10am to 11am, at which point bowler hats (according to Richter, the type worn by “bourgeois bankers on Wall Street or in London”) start flying around the swish middle-class villa and garden like a flock of pigeons; a breakfast tray of cups and saucers flies up and smashes to the ground; the business man’s bow-tie, in the process of being looped and secured, starts swirling around the shirt collar and flying off on its own accord; French windows open and close independently; heads and body parts of people (men) appear to fly off and rotate, reduced to paper cut-outs; a pistol rotates independently, begins multiplying, the barrel going off spontaneously; grown men crawl like babies in unison and then climb up and down ladders with quickened and staccato movements; men mechanically laugh with repeated and exaggerated smiles; time is fast-forwarded and then reversed; attempts are made to catch

hats before they fly off again, and then are elevated up with the squirting of an out-of-control fire hydrant hose. Finally, four men in mechanical synchronicity sit down at the garden breakfast table, with bowler hats in place while coffee is automatically poured, before the clock strikes 12 and splits open.

While the objects function as protagonists independent of the men and woman in Richter's film, they also activate the humans to blunder and revert to child-like, even baby-like antics. In this situation, these objects not only decisively resist the behaviour that establishes a civilised domestic routine, but act-up, play, and create overall havoc. This scenario is a time-waster. Instead of facilitating domesticated routines that lead to work in finance and the global money market it stalls, enables fun, pleasure and reciprocal mischievousness in people, even in bourgeois bankers and their "lady-friend."

Timothy Benson points out that Richter saw a type of rebellion in this misbehavior of objects who wished to liberate themselves from the normative behaviour of their "daily routines."⁷⁵⁸ In a 1972 interview with Cecile Starr, Richter recalled his desire to play and have a conversation with these objects. He wanted to "denaturalise the natural movement of the objects. And we studied their movement, in other words we got into the swing of the thing, into the swing of their lives, and we studied their lives and we conversed with them, so to say. And in playing with them, in conversing with them, and letting them do what they want, suddenly a kind of rhythm developed."⁷⁵⁹ This abfunctional instance of materials and objects speaking back, of gaining unexpected agency in being mischievous and indulging in non-normative behaviour activates a further aberrational divergence, as witnessed by the grown mens' antics.⁷⁶⁰

Richter's film is underscored by the potency of objects when they choose to take on agency to infect the people in their lives. Of course, this is constructed within the magic of film. Yet, as this film demonstrates, abfunctional behaviour establishes an alternative status of being,

⁷⁵⁸ Timothy O. Benson, "Hans Richter: Encounters," in *Hans Richter: Encounters* (Los Angeles: Los Angeles County Museum of Art, Del Monico Books, 2013), 28.

⁷⁵⁹ Hans Richter, interview by Cecile Starr, 1972, film. Transcribed by myself.

⁷⁶⁰ The relationship of play to the economy of labour and production could offer considerable opportunity for further research in regards to abfunction. See Duchamp's *Trap* (1917), p. .

which has the potential to lead to another form of un-preordained knowledge. Herein lies the danger of disrupting normative behaviour. This was not lost on the Nazis. According to Richter: “The Nazis took it as a political satyr, they said, ‘the rebellion of the object is a (stress?), an invitation for the rebellion of the people,’ and they forbade to (determine?). They destroyed the soundtrack of [Paul] Hindemith, it was never found again and he didn’t have the score.”⁷⁶¹ In the opening credits of the English sub-titled version of the film, it also acknowledges the Nazi’s labeled the work as “degenerate art” and it is noted that “It shows that even objects revolt against regimentation.”⁷⁶² In Richter’s film the domino effect of abfunction has the potential to create a new social status – a new status that the Nazis were not prepared to see unfold.

Concluding abfunction case study #2 – the agency of materials activating non-normative behaviour

In *Houses that are happy to help* . . . the imbroglio of the question “are your materials honest” revealed abfunction to be activated through the unexpected agency of materials, objects and things, compelling people’s non-normative behaviour to produce outcomes away from the teleological expectations of function. Furthermore, abfunction reveals function within the artwork. In this case study, it was located through the place and role of the truth to material(s) concept, in addition to the other non-human objects and things within the category of function that forms the artwork. One of the most surprising revelations of abfunction in this case study was that matter was not always conceived of as mute when acted on by human intention within the model of function. (This accusation is often pitted against Aristotelian hylomorphism, by critics such as Ingold, where mute matter is formed by human intentions in order to produce form.) As was demonstrated in theoretical examples by Arvatov and artworks by Richter, these non-human constituents did more than resist human intention, they compelled people to act, and this equally formed and produced people and society. Establishing that agency occurs within both human and non-human constituents in the model of “function as forming” bridges two apparently

⁷⁶¹ Richter, “Richter on Film (with Cecile Starr).” Transcribed by myself. Words indicated by the question mark were difficult to decipher.

⁷⁶² Ibid.

disparate discursive fields: that of function and new materialism. This significantly extends the limited perception of matter as mute in a relationship where the human position is sovereign. It has been shown in this chapter that while a requisite of function is the sustained hierarchy of human intention, the agency of matter and things is active; matter, objects and things can do more than resist people, they can also inform and shape us.

The concept of abfunction revealed within *Houses that are happy to help . . .* and *How long* tracks an alternative mode of production in the art object away from the teleological expectations of function. In the first case study of *How long*, abfunction offered an acknowledgement of the alternatively materialised outcome of the art object and countered the case for the dematerialised art object. In the *Houses that are happy to help . . .* case study, abfunction offers a mode of production that although commencing with the constituents of function – us, materials, objects and things – is now positioned within the full potential of the “truth” of materials, objects and things that the discursive field of new materialism offers. The non-human elements in this process of production can be released from the grip of the teleological end-point aspired within the model of function. Their uprising of autonomy, their feelings, their want to misbehave, act up, then enlists us to start behaving in non-normative fashions. This is not dysfunction, malfunction or even functionlessness, but rather offers a new and unexpected generative state of affairs.

This leads us to the last case study, based around the series of *Hold UP* artworks produced for the project. In these artworks, I argue that the non-normative behaviours with objects and things resist the release of the output of the object, which would represent the teleological endpoint of a functional process of “forming.” Furthermore, as a result, abfunction stalls the clock-time associated with functional production and inserts endless duration.

Chapter seven: Abfunction case study #3 – The *Hold UP* series

Introduction

In the previous two case studies, abfunction emerged as a useful concept for both revealing and tracking the diversions from function that occur in the internal process of forming the artwork. In chapter six, the case study *Houses that are happy to help* . . . established that abfunction could be activated by the autonomous agency of materials, matter and things, enlisting the body and other materials and things to act in unexpected ways to create a situation outside the teleological expectations of function. In chapter five, the artwork *How Long*, found that the insertion of the photographic medium into the production of the artwork facilitated the abfunctional diversion from the expected output of production comprising the actions of the body only. In the following case study, further abfunctional strategies are investigated through the revelation of function within the forming of the artworks.

The previous chapters argued for abfunction through a single artwork. This chapter, however, focuses on the *Hold UP* series of artworks. The series includes *Hold UP (being a prop – being a pole)* (2013), (Fig. 80, Fig. 1), *Hold UP* (2013–2015), (Fig. 81, Fig. 82, Fig. 74); and *Hold down* (2015), (Fig. 85).⁷⁶³ The discussion asks: in what ways do these *Hold UP* artworks reveal and move away from functional characteristics of time in the production and forming of the artworks. Two areas will continue to be investigated: the autonomous agency of materials and objects enlisting of non-normative behaviours; and the incursion of the camera apparatus and its logic into sculptural production. The question that will be explored is: in what ways do these two incursions facilitate abfunction's diversion away from the functional attributes of time to produce something outside of the teleological expectations of function?

⁷⁶³ The *Hold UP* series, include many that were exhibited in the *Help a Sculpture* exhibition, (2015), These works include: *4 people and a dog that are happy to help with at least one of the possible problems of making a shape* (2013); *Hold UP* (2013-2015); and *Hold down* (2015), *Hold up light weight* (2013-2015), *Light Hold* (2015), Not all of these works are discussed in this chapter with the same level of detail. A work developed in the project and a foundation work for the *Hold UP* series is discussed at length and is called *Hold UP (being a prop—being a pole)* (2013).

How I arrived at having to hold up

Hold UP (2013), (Fig. 74)

To begin: A looped lozenge-shaped ply-wood band, kerfed around its perimeter, holds its own tension without snapping or cracking within the limits of its own weight and measure of its circumference. I am in my studio at home. I am in production – producing a sculptural assembly – a series of actions in time to organise and distribute components. It started with the ply-wood band. However, there are other materials, objects and things: wood, ply-wood, bricks, poles, polystyrene blocks, fabrics, fluorescent light tubes, cardboard, paper. The wooden band goes up towards the ceiling. I have the pole – actually it is a brass curtain rod from Bunnings. I steadily push it up. The rod, only about 12mm in diameter and about 2400mm long, presses into the centre of the band's base; the top profile now pressing flat against the ceiling. There is the floor. The pole is too short. There are some bricks. I chock it up. I steady it. There is enough pressure. It holds itself together. The pole pushing up the wooden lozenge band projects its base up in the centre, intensifying the tension in the form and its pressure to the ceiling. Simultaneously, the tension forces down; the pole taut between the band and the bricks. The floor and the ceiling are enlisted. The action of each material and object's internal forces and agency are activated. The materials and objects are reciprocating in order to perform. They are holding up.

Hold UP (being a prop-being a pole) (2013), (Fig. 78, Fig. 79, Fig. 80)

I am back in the studio. The pole, chocked up with bricks, presses the wooden band up against the ceiling. A pole can do it – so – we swap places. I edge my body, legs bent between the wooden band on the ceiling and the ladder I am standing on. The top of my head presses hard against the base of the ply-wood lozenge-shaped band. I feel its downward pressure scratching where my hair parts. I straighten my knees slowly, my head moves up, exerting more tension into the wooden band, and I wonder if it will snap as the pressure deforms the shape further to spread across the ceiling. It holds. I am a prop. I am a pole. I am holding up. I am locked into the sculptural assembly – bracketed between ladder, ply-wood lozenge, floor, ceiling. The time of producing is over, where in normal circumstances the product is completed and then released into the world. However, now the producer (me/the artist) is conscripted into the sculpture. It is at standstill. I cannot release the output of the work as an autonomous object into the world. We are the sculpture, but we are going nowhere. We take a snapshot.



Fig. 74 Simone Slee, *Hold UP*, work in progress in the studio, (2013)

Locating the abfunctional deviation: holding up production – holding up time

In the *Hold UP* series, I argue that abfunction once again enlists non-normative behaviour into the process of sculptural production. This behaviour is activated by materials, objects and things in addition to the logic of the camera apparatus. In this artwork abfunction sets

in motion a deviation that holds up time, which leads to the resistance of what functional production aims to produce – its output. In these various *Hold UP* case studies I aim to show how abfunction reveals and diverts away from what is known as “clock time” – a category of time that has been used to describe the standardisation of time into universal, mathematical and quantifiable increments – and which has been instrumental in the formulation of the concept of functional production. This chapter will also consolidate the case of chapter five, where I argued that abfunction offers an understanding of the rematerialised output in contrast to the commonly understood dematerialised art object. It will also identify the shifting of temporal conditions in the artwork as an abfunctional effect in the artwork. Furthermore, I will show that a defining attribute of abfunction, as it moves away from the expectation of the medium’s output, is the disclosure of that medium’s system of production.

This chapter is divided into two parts. Commencing with a discussion of *Hold Up (being a prop – being a pole)*, the first section focuses on the relationship between the concept of time and the functional production inferred by these artworks. It draws on the history of the formalisation of clock time as a measurable, quantifiable system of time in the development of efficient, functional industrial production. I discuss the controversial consideration of time in art and sculpture, where historically time was excluded from painting and sculpture by the eighteenth-century German philosopher Gotthold Ephraim Lessing and also by critics Clement Greenberg and Michael Fried in the twentieth century. However, the critic Rosalind Krauss claimed that it was not possible to exclude time from a history of sculpture. Similarly, artists such as Robert Morris actively sought to retrieve time within art, particularly in sculpture through the process of production in the artwork – a process of forming that can also be seen to be influenced by the conditions of function.

The second part of this chapter focuses on the abfunctional deviation from functional production’s clock time within the various *Hold UP* works. This produces a range of different outcomes as diversions from the teleological expectation of function’s output. I will show how the enlisting of non-normative behaviour activated by materials, objects and things in the *Hold UP* series acts as the moment that holds up time and triggers the abfunctional

diversion. In these cases, the necessity of the camera apparatus or its logic – both photographic and video – is activated and inserted into the process of the artwork's making. In chapter five, it was argued that the photographic apparatus brought with it the understanding of the incremental actions of the body. In this chapter, I use the case studies to argue that the camera apparatus and its logic brings with it attributes of time. Further, I argue that in the *Hold UP* series, including *Hold UP (being a prop – being a pole) and Hold down*, the introduction of the photographic procedure abfunctionally diverts the outcome of the work and continues the case for alternatively materialised outcomes as opposed to those of the dematerialised art object. In regards to the *Hold UP* work exhibited in the *Help a Sculpture*, the German sociologist Niklas Luhmann concept of the medium is discussed in order to facilitate an understanding of how abfunction, in its very definition, reveals the expectations of the medium itself. The chapter ends with a discussion of *Hold down*, where the abfunctional diversion shows that the concept of clock time in the production of the work is eclipsed by an ongoing and endless duration, ever-resisting the release of the sculptural object into the world.

Revealing time in functional production – actions with materials, objects and things in time and space

Commencing with *Hold UP* there is a series utilitarian objects, materials and things: the plywood kerfed band, bricks, the brass rod, the floor and the ceiling. They are enlisting a sequence of paced and timed actions by myself (the artist as producer), to help enact the system of production that will make a sculpture hold up and stand. To return to Katarzyna Kobro's definition of functionalism: "Functionalism searches for the particular moments in the course of everyday life. . . . Any sequence of moments of life has juxtaposed to it a corresponding sequence of utilitarian objects properly arranged."⁷⁶⁴ Like Kobro's system, the production of *Hold Up*, is a series of moments in the event of making a sculpture stand. In this case, "these moments," according to Kobro, are actions that occur in the everyday space of the studio: the space subject to production and the movement and actions of the body. The actions of my body in time, in the studio, are steady sequences of perfunctory

⁷⁶⁴ Katarzyna Kobro, "Functionalism," in *Constructivism in Poland 1923-1936*, ed. Ryszard Stanisławski, et al. (Federal Republic of Germany: Museum Sztuki, Łódź, 1973), 120. See p. 160.

actions that move step by step towards making the sculpture stand without my help in the studio. It is a model of production, evoking Kopro's definition, using time and articulated units of activities that parallel a functional paradigm of forming an object. Yet, it could not be said that my materials and objects are properly arranged, like Kopro's aspirations. It is my studio, after all (Fig. 75, Fig. 76). In addition, the production of the sculpture standing in the studio is not at all close to the mass production of the Fordian conveyor belt, which was derived from the Taylorist scientific management of efficient bodily actions as labour in time.⁷⁶⁵ Irrespective, *Hold UP* nonetheless draws on the expectations of production, particularly those associated with time efficiency. What I did not reveal before:

Hold UP again

The ply-wood band goes up towards the ceiling. I have the pole. I push it up – steady. There is the floor. The pole is too short. There are some bricks. I chock it up. I steady it. There is enough pressure. It holds itself together. A second. It's gone. The ply-wooden band springs out and the assembly crashes to the floor. I start all over again.

Every time the sculpture fails, I become acutely aware of the inefficiencies of time, of my labour within production that this malfunction frustrates. As previously discussed, Beth Preston identifies malfunction as bringing to our attention "proper function" – what something is supposed to do or be.⁷⁶⁶ In Martin Heidegger's terms, when something does not work, he says it is un-ready-to-hand, and this brings to our awareness what that thing is in-itself:

Anything which is un-ready-to-hand in this way is disturbing to us, and enables us to see the obstinacy of that with which we must concern ourselves in the first instance before we do anything else. With this obstinacy, the presence-at-hand of the ready-to-

⁷⁶⁵ See p. 55, 185.

⁷⁶⁶ Beth Preston, *A Philosophy of Material Culture: Action, Function, and Mind*, Routledge Studies in Contemporary Philosophy (Hoboken: Taylor and Francis, 2013), 143.; Ruth Garrett Millikan, "Direct Proper Functions," in *Language, Thought, and Other Biological Categories: New Foundations for Realism* (Cambridge, Massachusetts: The MIT Press, 1984), 17. See p. 68.

*hand makes itself known in a new way as the Being of that which still lies before us
and calls of our attending to it.*⁷⁶⁷

Here, a sculpture is meant to autonomously stand up and moreover should not frustrate the value of efficiency in its production by plain illogic or, ridiculousness. This is the proper function of sculpture, and it is its Being that is revealed. Moreover, it is the problem I must deal with. In *Hold UP* there are two functional attributes revealed. One is the normative expectations of the medium, in this case sculpture, and the other is the efficient time associated within production. The normative expectations of the medium will be discussed in relation to *Hold UP* later in the chapter. However, I will first focus on the efficiency of time associated within functional production.



Fig. 75 Simone Slee, Work in progress in the studio, (2013)

⁷⁶⁷ Martin Heidegger, *Being and Time*, trans. John Macquarrie and Edward Robinson (New York: Harper & Row, 1962), 103-04. See p. 84.



Fig. 76 Simone Slee, Work in progress in the studio, (2013)

Introducing clock time to functionalist production – linking time's efficiency with the body's action in space versus Bergson's subjective lived time

Attention to the precision of a standardised and universal time emerged simultaneously with the development of efficient labour practices within industrial production at the end of the nineteenth century. In 1890, a machine was profiled in *Scientific American* that recorded on a piece of card when an employee arrived and left work. The punch-card determined the pay of the particular worker based on time. During the same decade, twelve million pocket watches (for a population of fifty-two million) were imported into Germany.⁷⁶⁸ On an individual level, the wearing of time with the pocket and then the wrist watch facilitated the experience of time in the everyday to become an incremental series of units that could be divided up into ever smaller parts.⁷⁶⁹ German sociologist Georg Simmel observed a connection between the proliferation of the pocket watch with the money economy.⁷⁷⁰

⁷⁶⁸ Stephen Kern, *The Culture of Time and Space 1880-1918* (Cambridge, Mass.: Harvard University Press, 1983), 110.

⁷⁶⁹ Ibid., 110-11.

⁷⁷⁰ See Mary Ann Doane, *The Emergence of Cinematic Time: Modernity, Contingency, the Archive* (Cambridge, MA: Harvard University Press, 2002), 4. and Kern, *The Culture of Time and Space 1880-1918*, 111.

On November 18, 1883, the United States Railroads established a uniform standard time to overcome the vagaries created by eighty different railroad times across the country.⁷⁷¹ A year later, in order to globally fix the length of a precise universal day, Greenwich Mean Time was determined as the zero meridian at the Prime Meridian Conference in Washington.⁷⁷² The standardisation and rationalisation of time linked the body with time and the machine⁷⁷³ and was simultaneously developed with the technologies of the railroad, the telegraph, photography⁷⁷⁴ and industrialised production. Time and labour became the key coefficients in manufacturing commodities on the industrialised assembly-line. This linked the monetary value of the commodity with the value of time. As theorist Mary Ann Doane points out, Karl Marx developed the most thorough analysis of time as the measure of value or money in a capitalist system of production.⁷⁷⁵

Efficiency is a key criteria in a functional system of production. The efficiency of the body – machine and human – in time – brings speed, quantity and value in a money-based economy. In functionalism, time is teleological, linear and progressive, tied to purpose, intent and outcomes. This is clock time, a universal time that is standardised, mathematical and geometrically divisible into ever-smaller increments that can then be measured, analysed and evaluated. It was this measuring device that enabled scientific management research by Fredrick W. Taylor and Lillian and Frank Gilbreth., to mitigate against lost time.

The concept of clock time dates back to Aristotle's notion of common-sense time, known as Chronos time. Philosopher Paul Good identifies Aristotelian Chronos time as defined by "a measurement of movement in relation to an earlier and a later."⁷⁷⁶ Time in this conception is always linked to space, where motion is conceived of as travelling in a straight line

⁷⁷¹ *The Culture of Time and Space 1880-1918*, 12.

⁷⁷² Ibid.

⁷⁷³ Doane, *The Emergence of Cinematic Time: Modernity, Contingency, the Archive*, 4-10. and Kern, *The Culture of Time and Space 1880-1918*, 10-20.

⁷⁷⁴ For a discussion on the role of photography's development in understanding the conceptualisation of space as universal and measurable units of time see: Anson Rabinbach, *The Human Motor: Energy, Fatigue, and the Origins of Modernity* (New York: BasicBooks, 1990), 104-10.

⁷⁷⁵ Doane, *The Emergence of Cinematic Time: Modernity, Contingency, the Archive*, 7.

⁷⁷⁶ Paul Good, *Zeit-Skulptur: Roman Signer's Werk Philosophisch Betrachtet (Time Sculpture: Roman Signer's Work in Philosophical Perspective)*, trans. Stephen Reader (Zurich, Köln: Unikat, Verlag der Buchhandlung Walther König, 2002), 26.

between points in space.⁷⁷⁷ According to Good, this is “repetition of the same,”⁷⁷⁸ where time is measured through incremental units and then expressed in quantities.⁷⁷⁹ Isaac Newton’s development of calculus enabled further atomisation of time into infinitesimal units, with the potential for increased quantifiable precision, ever-present – audible in the ticking of the clock.⁷⁸⁰ According to Stephen Kern, in 1687, Newton stated that: “Absolute, true, and mathematical time, of itself, and from its own nature, flows equally without relation to anything external.”⁷⁸¹

This autonomous sense of time is widely acknowledged as differing from our lived human experience within and through time. Kern highlights Immanuel Kant’s rejection of Newtonian time, on the grounds that Newton’s concept of time was objective and could not be experienced. Rather, time for Kant was the foundation of subjective experience.⁷⁸² Good identifies this human-lived time with the concept of “event-time” or Aeon time, where, in contrast to clock time, lived time is indivisible. Good draws on the French philosopher Henri Bergson when he says: “Time is duration of the mutable. Time is that which does not cease to change. . . . It is the paradox that *change endures*.”⁷⁸³ Time in this context is enduring, yet ever-changing.

In the early twentieth century, Bergson articulated these two seemingly incompatible senses of time, and defined their difference as *temps* – time that can be measured technically and “duration,” *la durée* – human time of retrospection, memory and subjectivity.⁷⁸⁴ “Pure” time for Bergson was duration, an inner conscious state that we live through: “inner duration, perceived by consciousness, is nothing else but the melting of

⁷⁷⁷ Ibid., 26-28.

⁷⁷⁸ Ibid., 28.

⁷⁷⁹ Ibid., 26.

⁷⁸⁰ Kern, *The Culture of Time and Space 1880-1918*, 20.

⁷⁸¹ Ibid., 11. No source given.

⁷⁸² Ibid.

⁷⁸³ Good, *Zeit-Skulptur: Roman Signers Werk Philosophisch Betrachtet (Time Sculpture: Roman Signer's Work in Philosophical Perspective)*, 28. His italics.

⁷⁸⁴ Friedemann Malsch, “Avant-Garde as Anticipation. Futuristic Experiments between Photography, Sculpture, Space and Media,” in *Lens-Based Sculpture: Die Veränderung Der Skulptur Durch Die Fotografie (the Transformation of Sculpture through Photography)* ed. Bogomir Ecker, et al. (Köln: Verlag der Buchhandlung Walther König, 2014), 101.

states of consciousness into one another.”⁷⁸⁵ Time here is in flux, heterogeneous, continuous and unified. Pure time is not something that can be separated from us; it is within us, unrepresentable and indivisible. It escapes scientific knowledge.⁷⁸⁶

By contrast, Bergson defined the second type of time, clock time, as an “alloy . . . surreptitiously bringing in the idea of space.”⁷⁸⁷ In this second type of time, Bergson proposes we succumb to introducing the concept of succession. Succession, for Bergson, involves a before and after, equating to the form of a line or chain. Time is projected into space.⁷⁸⁸ Here, our immersed consciousness of time is put to the side, where we can separate it, and establish a mental image – a representation of time.⁷⁸⁹ Compared to duration, this is the homogenous time of space and movement that could be sequenced and indefinitely divided into incremental moments, observed outside of us and analysed objectively.⁷⁹⁰ Bergson considered the “absolute” time of the clock as impoverished and he was frustrated by science’s obsession with mechanical time’s distortion of the “real” *durée* of lived experience. Irrespective of the endless measuring and quantifying of time by scientists and physicists alike, for Bergson this was an illusion defined and revealed by the “intersection of time and space.”⁷⁹¹

The clock time conceived of in functionalist production is not duration, with its interior elasticity of a subjectively experience life. Rather, functionalist production operates objectively. It insists on quantifying the body clocking-in and clocking-off, measuring its labour efficiency in universal and infinitesimally small increments of time. This establishes monetary value and moral value. Scientific management methodologies could facilitate improvements that could prevent the loss of time.⁷⁹² Moreover, as Russian historian Richard

⁷⁸⁵ Henri Bergson, *Time and Free Will: An Essay on the Immediate Data of Consciousness* (Hoboken: Taylor and Francis, 2014), 107.

⁷⁸⁶ See *ibid.*, 100, 110, 120, 226-27.; Henri Bergson and Arthur Mitchell, *Creative Evolution*, Project Gutenberg: 26163 (Project Gutenberg, 2008), 337. As also discussed by Doane, *The Emergence of Cinematic Time: Modernity, Contingency, the Archive*, 45.

⁷⁸⁷ Bergson, *Time and Free Will: An Essay on the Immediate Data of Consciousness*, 101.

⁷⁸⁸ *Ibid.*

⁷⁸⁹ *Ibid.*

⁷⁹⁰ *Ibid.*, 104, 106, 107-8, 110.

⁷⁹¹ *Ibid.*, 107-10. See also: Kern, *The Culture of Time and Space 1880-1918*, 25-26.

⁷⁹² See p. 185.

Stites notes, Fredrick W. Taylor's scientific management agenda of efficiency in factory time was seen as "a moral gymnasium" for the individual's development,⁷⁹³ where subjective estimations of the labour associated with a particular task could be objectivised under the "authority of the clock."⁷⁹⁴ While the body's clock was aimed to be subsumed by the objective clock of labour and production, this clock time, as Bergson diagnosed was linked to space.

It is established that the role of time, specifically clock time in the efficiency of a functional paradigm of production. What then, is the relationship of time to art, particularly sculpture, with respect to the forming of the artwork? Addressing this question is central to exploring how abfunction can reveal the functional attributes of time and also produce an alternative output from the teleological expectation of function and the medium.

The eradication of time in art to the retrieval of time in art's production – Lessing, Greenberg, Fried, Kobra, Krauss and Morris

The inclusion of time in art was a subject of contention throughout the twentieth century. Theorists including Krauss and Juliane Rebentisch⁷⁹⁵ claim that time has been historically excluded from art because of the influence of Lessing's treatise, *Laocoön: An Essay on the Limits of Painting and Poetry*, (1766). In this work, Lessing establishes an argument for the delineation of the art's specific characteristics: poetry and the visual arts of painting and sculpture. Poetry was defined as a time-based art and painting and sculpture as spatial arts.⁷⁹⁶ In Lessing's argument, painting and sculpture are static objects, bound by their materiality, existing to be viewed through contemplation rather than in a glance. The role of the artist is to assign a single moment from a range of artistic moments as the most

⁷⁹³ Richard Stites, *Revolutionary Dreams: Utopian Vision and Experimental Life in the Russian Revolution* (New York: Oxford University Press, 1989), 146.

⁷⁹⁴ Ibid.

⁷⁹⁵ Juliane. Rebentisch, *Aesthetics of Installation Art*, trans. Daniel Dendrickson and Gerrit Jackson (Berlin: Sternberg Press, 2012), 141.

⁷⁹⁶ Gotthold Ephraim Lessing and Edward Allen McCormick, *Laocoön: An Essay on the Limits of Painting and Poetry*, trans. Edward Allen McCormick (Baltimore: Johns Hopkins University Press, 1984), 91. Krauss refers to Lessing was aiming to establish "normative" characteristics of sculpture, painting and poetry. Rosalind E Krauss, *Passages in Modern Sculpture* (London: Thames and Hudson, 1977), 3.

“pregnant moment” warranting representation.⁷⁹⁷ The aim is to optimise the viewer’s imagination for the greatest aesthetic effect, as Lessing says, to achieve: “immutable permanence from art, [it] must express nothing transitory.”⁷⁹⁸ For Lessing, objects are bodies that exist in space and the visible attributes of these are the domain of painting—and by inference, sculpture. However, bodies also exist in time; actions occur between bodies and objects that shift and change their appearance. Actions, for Lessing, cannot exist in isolation from the moments and objects that connect them. Actions are the domain of poetry and not painting or sculpture. While bodies can be described by poetry, this only occurs through the description of actions.⁷⁹⁹ Poetry exists in and through time, where one word comes after the other and is sequential, and as such is motion and action. However, the painter (and by inference the sculptor) as Lessing says: “can only suggest motion, because in reality his figures are motionless.”⁸⁰⁰ In establishing firm categories of poetry, painting and sculpture through the criteria of time, space objects (bodies) and actions, Lessing definitively excised time from the media of painting and sculpture.

By the 1920s and 1930s, Yve-Alain Bois noted that the Unist theory of Kobro and Władysław Strzemiński had specifically nominated sculpture as the medium that “mobilises *time*.”⁸⁰¹ According to Bois, this was the first time in the history of sculpture that duration was conceived of as an aesthetic experience.⁸⁰² As previously discussed in this thesis, Kobro developed a model of functionalism through the laboratory of her sculptural production. It was this measurable clock time, synonymous with abstract, homogenous space, which was the very medium of Kobro’s *Spatial Compositions* (Fig. 54). Kobro used the geometry of numerical systems in combination with the anticipation of the body’s movement through time around the sculptural work in order to determine the artwork’s production. For Kobro, this numerical logic, which included, for example, the Fibonacci series, automated the production of the sculptural arrangements and established a score for the distribution of

⁷⁹⁷ Lessing and McCormick, *Laocoön: An Essay on the Limits of Painting and Poetry*, 19.

⁷⁹⁸ *Ibid.*, 20.

⁷⁹⁹ *Ibid.*, 78-79.

⁸⁰⁰ *Ibid.*, 112.

⁸⁰¹ Yve-Alain Bois, “Strzemiński and Kobro: In Search of Motivation,” in *Painting as Model* (Cambridge, Mass.: MIT Press, 1990), 151. Bois’ italics.

⁸⁰² *Ibid.*

time that the body would experience as it moved around the artwork. As she put it: "*We call spatiotemporal the spatial changes produced in time.*"⁸⁰³ In Kobra's sculptures, clock time is experienced by the body as incremental, even and measurable within the numerical and geometrical devised space.

In contrast to Kobra's clock time within sculpture, Clement Greenberg was radicalising and consolidating the principles of Lessing's exclusion of time from painting and sculpture through modernism.⁸⁰⁴ Echoing Lessing, Greenberg identified narrative, poetry and music as temporal because they come to us over time.⁸⁰⁵ However, Greenberg argued that painting and sculpture are static, as they present themselves to us suddenly: "It's all there at once, like a sudden revelation."⁸⁰⁶ This "at-onceness", as he called it, can only be experienced through the instantaneousness of sight – a split-second glance – that delivers an instant of pure perception and apprehension.⁸⁰⁷ Moreover, as Greenberg noted, this at-onceness imposed on us by the painting or sculpture can be repeated in a succession of apprehensions; however each instant is not an experience of incremental units of time such as clock time or duration. Rather, it is bracketed and remains "at-onceness," in and of itself.⁸⁰⁸ As the photographic historian Hilde van Gelder notes, Greenberg distinguished between real time and conceptual temporality, where the immediacy of the aesthetic experience of apprehension that occurs in the split-second first glance produces a sense of timelessness.⁸⁰⁹ This timelessness is not to be identified with everyday real time, but with a transcendental moment of knowing. In Greenberg's view, the primary conduit of this aesthetic experience of the art object is the viscosity of the eye. It is the "optical flash" that

⁸⁰³ Władysław Strzemiński, "Composition in Space," in *L'espace Uniste: Écrits Du Constructivisme Polonais* ed. Antoine Baudin and Pierre Maxime Jedryka (Lausanne: L'Age d'homme, 1977), 115. Cited in Bois, "Strzemiński and Kobra: In Search of Motivation," 151.

⁸⁰⁴ Hilde van Gelder, "The Instantaneous Grace of a Split-Second Glance: A 'Modernist Myth' of Timelessness Revisited" (paper presented at the The enduring instant: time and the spectator in the visual arts (Der bleibende Augenblick: Betrachterzeit in den Bildkünsten), International Congress of the History of Art London, 2000), 128.

⁸⁰⁵ Clement Greenberg, "The Case for Abstract Art," in *Clement Greenberg, the Collected Essays and Criticism, Modernism with a Vengeance 1957-1969*, Vol. 4 ed. John O'Brian (Chicago, London: University of Chicago Press, 1993), 80-81.

⁸⁰⁶ *Ibid.*, 81.

⁸⁰⁷ *Ibid.*

⁸⁰⁸ *Ibid.* See also: van Gelder, "The Instantaneous Grace of a Split-Second Glance: A 'Modernist Myth' of Timelessness Revisited," 128.

⁸⁰⁹ "The Instantaneous Grace of a Split-Second Glance: A 'Modernist Myth' of Timelessness Revisited," 129, 31.

enables the transcendental instant of apprehension in the viewer and excises time from the art object in space.

Irrespective of Greenberg's exclusion of time from the aesthetic experience, in the 1960s minimalist artists such as Robert Morris and Donald Judd actively embraced concepts of time, both in the production of art and the artwork itself. This was famously countered by Michael Fried's essay, "Art and Objecthood," (1967) and was a direct response to Judd and Morris' writings and minimalist art – which Fried preferred to call "literalist" art.⁸¹⁰ Fried condemns this literalist art as merely theatrical⁸¹¹ on the grounds that it is inherently durational.⁸¹² To support his argument, Fried cites artworks by minimalists and recounts the well-known anecdote of Tony Smith's car ride in the night along the New Jersey Turnpike where a durational experience in real time and space extended Smith's understanding of art.⁸¹³ Fried's diagnosis of the literalist artwork's fallacy is that it: "*persist[s] in time*, and the presentment of endlessness that, I have been claiming, is central to literalist art and theory is essentially a presentment of endless, or indefinite, *duration*."⁸¹⁴ Fried owed much to the intellectual legacy of Greenberg, when he argued that⁸¹⁵ literalist art was a deferral away from the primacy of the object.⁸¹⁶ In modernist art, the entire aesthetic experience does not occur through everyday time, but instantaneously, or as Fried says: "at every moment the work itself is wholly manifest"⁸¹⁷ For Fried, modernist art has no duration, because everything is present at once – in an instant. Like Greenberg, Fried considered that instantaneousness was the form of time considered "proper" to the experience of art. As van Gelder explains, this type of temporality extends the Greenbergian distinction from real and conceptual temporality to Fried's distinction between real and intellectual

⁸¹⁰ Michael Fried, "Michael Fried (B. 1939) 'Art and Objecthood'," in *Art in Theory, 1900-1990: An Anthology of Changing Ideas* ed. Charles Harrison and Paul Wood (Oxford, Cambridge Mass.: Blackwell Publishers, 1995).

⁸¹¹ In Fried's view the survival of the arts was based on defeating theatre. See *ibid.*, 830.

⁸¹² *Ibid.*, 832.

⁸¹³ *Ibid.*, 827. See also: "Tony Smith (B.1912) from an Interview with Samuel Wagstaff Jr," *ibid.*

⁸¹⁴ "Michael Fried (B. 1939) 'Art and Objecthood'," *ibid.*, 832. Fried's italics.

⁸¹⁵ In "Art and Objecthood," Fried supports his argument with many of Greenberg's positions. In 1972, Krauss in acknowledged that Fried and herself were called "Greenbergers." Rosalind Krauss, "A View of Modernism," *Artforum* 11, no. 1 (1972): 49.

⁸¹⁶ Fried, "Michael Fried (B. 1939) 'Art and Objecthood'," 826.

⁸¹⁷ *Ibid.*, 832. Fried's italics.

temporality.⁸¹⁸ It is in this intellectual temporality bracketed away from everyday time that Fried describes as: “a continuous and perpetual *present*.”⁸¹⁹ Moreover, this instantaneous experience of continuous and entire presentness grants us the aesthetic moment – the transcendental flash of perception that Fried argues will deliver “grace.”⁸²⁰ As van Gelder notes, Fried’s grace extends Greenberg’s all at-onceness to the metaphysical encounter with the transcendental Creator.⁸²¹

Despite Greenberg and Fried’s insistence that time and space should be separate in the visual arts, in the introduction to her book, *Passages in Modern Sculpture*, (1977), Krauss claims that time and space cannot be kept apart.⁸²² For her, intrinsic to any spatial arrangement is the movement of the body and hence time and these are folded into its meaning. According to Krauss, a history of modern sculpture must address the temporal implications of any “arrangement of form.”⁸²³ Her position had been building from 1972 when Krauss was attempting to reconcile the emergence of artwork conceived outside of the Greenbergian modernist principles such as minimalism – works Fried himself had railed against.⁸²⁴

In the early 1960s, Morris was also setting out to retrieve time, turning his concerns to the artwork’s production. This was a response to what he saw were deficiencies in the static reductive modernist object and also within minimalism itself.⁸²⁵ In his essay, the *Phenomenology of Making* (1970), Morris stated: “Whatever else art is, at a very simple level it is a way of making.”⁸²⁶ Here, Morris was identifying the means of producing artwork

⁸¹⁸ van Gelder, “The Instantaneous Grace of a Split-Second Glance: A ‘Modernist Myth’ of Timelessness Revisited,” 131.

⁸¹⁹ Fried, “Michael Fried (B. 1939) ‘Art and Objecthood,’” 832.

⁸²⁰ Ibid.

⁸²¹ van Gelder, “The Instantaneous Grace of a Split-Second Glance: A ‘Modernist Myth’ of Timelessness Revisited,” 131.

⁸²² This view of Krauss is cemented in an earlier essay: Krauss, “A View of Modernism,” 50. Despite this, she identified as a modernist critic. Ibid., 49, 51.

⁸²³ Krauss, *Passages in Modern Sculpture*, 4-5.

⁸²⁴ Krauss, “A View of Modernism.”

⁸²⁵ Hilde van Gelder, “*The Fall from Grace*. Late Minimalism’s Conception of the Intrinsic Time of the Artwork-as-Matter,” *Interval(le)s--1*, no. 1 Automne (2004): 84.

⁸²⁶ Robert Morris, “Some Notes on the Phenomenology of Making,” *Artforum Magazine* 9 (April 1970), <http://artforum.com/archive/id=34191>.

– its production – as being significant within art.⁸²⁷ This form of production of the “new” sculpture and art that was emerging at this time was informed by the broader cultural infrastructure of industrial production. As Morris wrote in “Notes on Sculpture Part III” (1967):

It is not in the uses of new, exotic materials that the present work differs much from past work. . . . The difference lies in the kind of order that underlies the forming of this work. This order is not based on previous art orders, but is an order so basic to culture that its obviousness makes it nearly invisible. The new three-dimensional work has grasped the cultural infrastructure of forming itself that has been in use, and developing . . . and culminates in the technology of industrial production. . . .

*The ideas of industrial production have not, until quite recently, differed from Neolithic notions of forming – the difference has been largely a matter of increased efficiency. The basic notions are repetition and division of labor: standardisation and specialisation.*⁸²⁸

While it was not specifically stated, Morris’ attributes of industrial production informing the processes of art production belonged to a functionalist paradigm. These criteria included efficiency, division of labour and repetition, and standardisation.⁸²⁹ Morris acknowledged that artists might outsource their production to the factory, paralleling (as discussed previously) Le Corbusier’s advocacy for the production of architecture on the assembly line.⁸³⁰ Moreover, as Morris notes, the pervasiveness of this type of functionalism is an order of production so obvious as to be almost invisible.⁸³¹ Later, Henri Levebvre and Jean

⁸²⁷ Moreover, for Morris, production could be “form in itself.” Production was the means to the end—the form of the artwork. Ibid.

⁸²⁸ “Notes on Sculpture Part III: Notes and Nonsequiturs (1967),” in *Theories and Documents of Contemporary Art: A Sourcebook of Artists’ Writings* ed. Kristine Stiles and Peter Howard Selz (Berkeley: University of California Press, 1996), 590.

⁸²⁹ See also the broader discussion in *ibid.*, 589-93.

⁸³⁰ See p. 53.

⁸³¹ Morris, “Notes on Sculpture Part III: Notes and Nonsequiturs (1967),” 590.

Baudrillard, would identify the very same characteristics of functional production as infiltrated by functionalism and critique its global colonising imperative.⁸³²

However, it is in this space of production for Morris that time could be retrieved. In sculpture, he saw this as the process of the body's actions with the elements of sculptural production: mass, gravity, weight, objects and things. Actions performed on an object could register time,⁸³³ as could the automating of the artwork's production.⁸³⁴ As he said: "Objects project possibilities for action as much as they project that they themselves were acted upon. The former allows for certain subtle identifications and orientations; the latter, if emphasised, is a recovery of the time"⁸³⁵ The artwork for Morris could become a "container of time," an indexical registration of its "making time."⁸³⁶ Nine years before the *Phenomenology of Making* essay, Morris made his seminal work, *Box with the Sound of its Own Making* (1961) (Fig. 77) This work is a plain, wooden, twenty-five-centimetre cube. Emanating from its interior is a three-and-a-half hour sound recording of the making of the artwork. The work releases the time of the actions of the body as it processes the materials of the artwork through its making. This is a measurable and quantifiable clock time – an index of the past real time of the wooden box's production.

⁸³² See p. 57, 65.

⁸³³ Morris, "Some Notes on the Phenomenology of Making". 4.

⁸³⁴ Ibid., 5.

⁸³⁵ Ibid., 4.

⁸³⁶ This useful phrase, "container of time," summarises how an object embodies the time it took to come into being. This phrase is used by van Gelder. See van Gelder, *The Fall from Grace. Late Minimalism's Conception of the Intrinsic Time of the Artwork-as-Matter*, 85, 92. Gelder notes that the artist Robert Smithson also identifies with this concept. Ibid., 94.

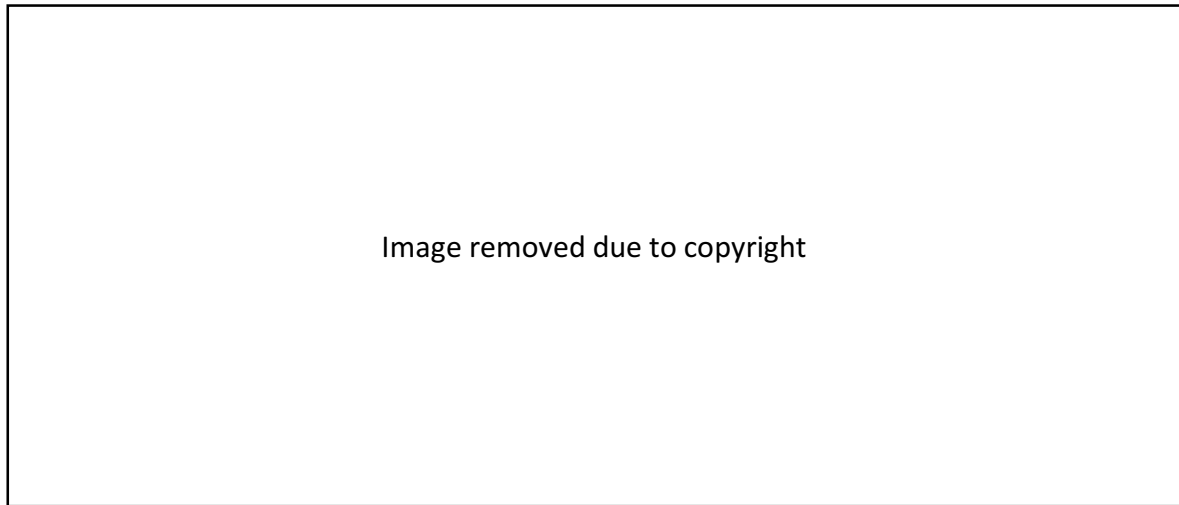


Fig. 77 Robert Morris, *Box with the sound of its own making*, (1961)

Accessed August 23, 2015.

<http://www1.seattleartmuseum.org/eMuseum/code/emuseum.asp?style=browse&currentrecord=1&page=search&profile=objects&searchdesc=Number%20is%2082.190&searchstring=Number/,/is/,/82.190/,/0/,/0&newvalues=1&newstyle=single&newcurrentrecord=1>

For Morris, the artwork's production process was simultaneously temporal and spatial. This identifies Morris' time with characteristics of clock time that is welded to space through the actions of the body with the elements of the artwork's production. Similarities can be made with Kbro's spatio-temporal division of sculpture, when Morris acknowledged: "time for us has a direction, space a near and far, our own bodies an intimate awareness of weight and balance, up and down, motion and rest and a general sense of the bodily limits of behaviour."⁸³⁷ As Morris retrieves time as a constituent in art within its production, the association with clock time of functional industrial production was a model and more than a mere cultural parallel. Moreover, like functional production he also links time with the body's actions in space.

Summary: the *Hold UP* series functional clock time of production

Although modest, the *Hold UP* series reveals the functional association of clock time within the production of the artwork. The *Hold UP* series draws on the history of time retrieved into the production of art by those such as Morris, despite the historical lineage of time's

⁸³⁷ Morris, "Some Notes on the Phenomenology of Making". 4.

banishment from the art object by those such as Lessing, Greenberg and Fried. As has been shown, a key value and attribute of functional industrial production was the historical development of clock time. This concept of time was formulated as universal, observable, measurable, and quantifiable, and linked to the body's (human or non-human) action within an equally measurable and universally homogenous space. The linking of the human body's labour with the materials, objects and things of production and clock time had the potential of maximising efficiencies in a teleological linear system producing outputs. Recognition of these relationships mitigated against the problem of lost time (and to recall Aristotle from the beginning of the thesis) – for “the sake of” life.

Non-normative behaviours activating abfunction: holding up clock time – holding up production

Returning to the case study of *Hold UP (being a prop – being a pole)* (Fig. 78, Fig. 79, Fig. 80): Here, within the process of the forming of the artwork in the clock time of production, the agency of materials activate my non-normative behaviour to hold up time. To begin, let me elaborate on the non-normative behaviours that lead to the holding up of clock time. To reiterate:

Hold UP (being a prop – being a pole)

I am in the studio. The pole, chocked up with bricks, presses the wooden band up against the ceiling. A pole can do it – so – we swap places. I edge my body, legs bent between the wooden band on the ceiling and the ladder I am standing on. The top of my head presses hard against the base of the ply-wood lozenge shape. I feel its downward pressure. I straighten my knees slowly, my head moves up, exerting more tension into the wooden band, the pressure deforms the shape further to spread across the ceiling. It holds. I am a prop. I am a pole. I am locked into the sculptural assembly – bracketed between ladder, ply-wood lozenge, floor, ceiling.

Part III Looking for abfunction – the case studies

Chapter seven: Abfunction case study #3 – The *Hold UP* series



Fig. 78 Simone Slee, *Hold UP*, (*being a prop - being a pole*), work in progress in the studio, (2013)

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Fig. 79 Simone Slee, *Hold UP*, (being a prop - being a pole), work in progress in the studio, (2013)

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Fig. 80 Simone Slee, *Hold UP*, (2013)

Here, the pole enlists my body to take its place. This is non-normative behaviour for a producer. My body is snatched from the process of activating the materials in the system of production. I can no longer labour on materials, objects and things outside of my body as a producer ought. This is a digression from the role of the artist worker in a functional system, where at the end of the working day, the worker, with their body, can detach themselves from the production line. Rather, now I am acting on the materials and objects within the object itself. I am materialised as a component in the sculptural assembly – I am its prop, its pole – now locked into the object. The clock time of production is at a stand-still, it is frozen and paused. Time is lost. There is no opportunity for progression, for as the producer I cannot withdraw my complicity with the other materials and objects, least the thing will collapse and the product – the end form of the sculptural assembly – will come tumbling down. The product has been produced, but it can never be released into the market place, not by me the producer in real time or real space. We are locked in. There can be no other production, or simultaneous production, like in a functionalist system.

This is an abfunctional diversion because the loss of clock time activated by the non-normative behaviours in *Hold UP (being a prop – being a pole)*, creates a new situation, whereby the product of its production, the sculptural assembly, refuses to be released into the world. The materials and I are complicit and we hold it together. This is the normative expectation of the function of sculpture, where a sculpture “should” stand on its own. Furthermore, it is a diversion from the logic of the functional production in which the teleological outcomes required of production must be released into the world’s market-place, in order to conform to the expectation of what Boris Groys identifies as our “product-oriented civilisation.”⁸³⁸

Like in *How long*, we are at an abfunctional stand-still and the camera apparatus is brought into the procedure of the artworks production.⁸³⁹

⁸³⁸ Boris Groys, “Comrades of Time,” Article, *Part of a special issue: What is contemporary art?*, no. 11/12 (2009), <http://www.e-flux.com/journal/comrades-of-time/>.

⁸³⁹ This also occurs in another artwork, *4 residents and a dog who are a happy to help with at least one of the possible problem of making a shape*, (2013) (Fig. 86) exhibited *Help a Sculpture*. There is not the scope within this chapter to discuss this work.

The photographic procedure is necessitated – rerouting sculptural production to an alternative materialised artwork

It is the enlisting of the non-normative role of the body that necessitates the insertion of the photographic functional procedure into the production of the artwork *Hold UP (being a prop – being a pole)*. The non-normative behaviour, in addition to the application of the architecture and logic of the camera apparatus, activates the abfunctional diversion to produce something beyond the functional teleological expectations of the medium of sculpture and its output. Like in *How long*, the camera freezes and captures the moment in *Hold UP (being a prop – being a pole)*. This acknowledges the holding up of clock time and the non-normative behaviour of the body, as well as the potential for immanent collapse of the situation if the body is released back into its normative role as producer. The photographic output in these works again diverges from the linear series of actions in a production line that produces the form of the artwork. *Hold UP (being a prop – being a pole)*, is once more like *How Long*: a “performed” photographic document where the sculptural action of holding up (as outlined by Phillip Auslander)⁸⁴⁰ is performed for the photographic apparatus to produce the document. Also like *How Long*, the photographic document rematerialises the sculpture into an alternative form that what would previously have been described as the dematerialised art object.

Time and the photographic document

This brings us to photography’s complex relationship with time.⁸⁴¹ In *Hold UP (being a prop – being a pole)*, the indexical clock time moment of the performed action of the sculpture’s production is seized and represented to us sometime in the future and somewhere in a different place. As in *How long*, the photographic apparatus brought the role of the incremental actions of the body – so, in the *Hold UP* series, the camera apparatus brings with it its various temporal states.

⁸⁴⁰ See p. 205.

⁸⁴¹ It is beyond the scope of this thesis to address the far-reaching relationship of time to photography.

As has often been observed,⁸⁴² the camera shutter's opening and closing, with the irrevocable precision of a Swiss watch, captures and isolates a unit of time from the flow of everyday life. This is a quantifiable moment of abstract, universal and divisible clock time within a measurable, quantifiable and homogenous space indexed on the photograph's surface. Nineteenth-century developments in photography also contributed to the Swiss-precision of clock time,⁸⁴³ and further contributed to the precision of functional production and the recouping of lost time on the assembly line.⁸⁴⁴

However, as Roland Barthes famously recognised, when the clock time of the camera captures a moment from the past and represents it to us, the viewers, in the form of a photograph image, two simultaneous temporal conditions occur. The past and the present come together in one frame. In his essay, the *Rhetoric of the Image*,⁸⁴⁵ Barthes claimed that this simultaneity was unprecedented. Photography established "a new space-time category: spatial immediacy and temporal anteriority, the photograph being an illogical conjunction between the *here-now* and the *there-then*."⁸⁴⁶ This conundrum, often referred to as the "enigma" of photography, is the peculiar experience of the past being brought forth into the present. Krauss also interprets this as the presence in the past.⁸⁴⁷ In their discussion of this paradox, Green and Lowry quote French writer Ann Banfield's phrase: "this was now here."⁸⁴⁸ It is photography's apparatus, constructed of the universal, immeasurably divisible time, which produces the photographic document that conflates the temporality of the past and present, in contradistinction of the clock time that produces it. In *Hold UP (being a prop – being a pole)*, the photograph seizes the indexical moment that

⁸⁴² See for example: Michel Frizot, "Sculpture, between Visual Perception and Photography," in *Lens-Based Sculpture: the Transformation of Sculpture through Photography*, ed. Bogomir Ecker, et al. (Köln: Verlag der Buchhandlung Walther König, 2014), 59-60.

⁸⁴³ For example, see: Rabinbach, *The Human Motor: Energy, Fatigue, and the Origins of Modernity*, 104-10.

⁸⁴⁴ See p. 185.

⁸⁴⁵ Roland Barthes, "Rhetoric of the Image," in *Image, Music, Text* (New York: Hill and Wang, 1977), 44. See also *Camera Lucida: Reflections on Photography* (London: Fontana Paperbacks, 1984).

⁸⁴⁶ "Rhetoric of the Image," 44.

⁸⁴⁷ Rosalind Krauss, "Notes on the Index: Seventies Art in America. Part 2," *October* Autumn, 1977, 65.

⁸⁴⁸ Ann Banfield, "L'Imparfait de l'Objectif: the Imperfect of the Object Glass," *Camera Obscura* 24, (1990): 65-87. Cited in David Green and Joanna Lowry, "From Presence to the Performative: Rethinking Photographic Indexicality," in *Where Is the Photograph?* ed. David Green (Maidstone, Kent; Brighton: Photoworks; Photoforum, 2003), 57, 57n5.

this action was performed, and through its presentation of the past in the present, the linearity of clock time and its efficiency is confounded.

In the following section, I argue that the logic of the camera apparatus, with its complex of time, co-joins with the non-normative conscription of people and other objects and things. My aim is to show that this produces the abfunctional deviation in the last two case studies from the *Hold Up* series: *Hold Up* and *Hold Down* (both exhibited in the *Help a Sculpture* exhibition). In both artworks, time is once again held up and this reveals its functional attributes, including the clock time of its functional production. In the abfunctional shift, a different status of time is enabled by the photography's time complex, as seen in the outcome of the artwork, where both artworks refute the release of the autonomous sculptural object. This delivers a deviation away from the functional expectations of sculpture's medium. In this case, I also show that in order to be present, abfunction must also reveal the expectations of the medium it is working within. The first case study to be discussed is *Hold Up* from the *Help a Sculpture* exhibition.

***Hold UP's* abfunction – the gallery helping to bracket time – refuting the output of the object**

Hold Up, (2015) in the exhibition Help a Sculpture (Fig. 74, Fig. 81, Fig. 82)

I am no longer in the studio, I am in Margaret Lawrence Gallery. *Hold UP* and I are looking for its installation site – the help it needs without my body as a prop. There is a floor, but there is no ceiling like there was in the studio, or in Sarah Scout,⁸⁴⁹ where it was previously installed. The lighting track is enlisted. Here the track takes on the unexpected function of sculpture supporter. The horizontal element exerts the point of resistance that will enable the whole sculptural ensemble to perform, to hold together. On doing so, it will establish the form that the wooden band must take as the brass rod pushes up from its bricked, chocked base. The entire lighting track abandons most of its functional aspirations as artwork-spotlighter to become appropriated into the logic of the sculptural. The multitude of usual spotlights are relegated to the storeroom, leaving one singular wall-wash. In this way, the lighting track still embodies traces of its previous, now subsidiary function while simultaneously engaged in its new, non-normative behaviour of sculpture supporter. The other sculptural objects follow

⁸⁴⁹ Hold UP, Sarah Scout Presents, Melbourne, Australia, Exhibition dates: 9th October– 9th November, 2013. <http://www.sarahscoutpresents.com/web/simone-slee/>

Part III Looking for abfunction – the case studies

Chapter seven: Abfunction case study #3 – The *Hold UP* series

suit. *Hold up light weight* presses flat to the floor under the pressure of the fluorescent batten aligned beneath the denuded lighting track. *Light hold* offers an alternative, dropping languidly to the floor where the sculptural wooden möbius strip is threaded through its fluorescent ring; dropped and collapsed.



Fig. 81 Simone Slee, *Hold UP* (2015) in the *Help a Sculpture* exhibition

Photo: Christo Crocker



Fig. 82 *Hold UP*, (2013) in the exhibition at Sarah Scout Presents, Melbourne (2013)

Photo: Phoebe Schmidt

Hold UP's non-normative behaviour revealing further functional attributes

We can now track abfunction's revelation and the deviation away from function. Offering itself as a "sculpture helper," the gallery lighting track commences *Hold UP's* abfunctional moment. This returns us to the beginning of the project and the two roles of function: the "use-ready" and the "forming." We can again cite Kobra's definition of function as comprising a: "sequence of moments of life . . . juxtaposed to it a corresponding sequence of utilitarian objects properly arranged."⁸⁵⁰ Here there are a range of use-ready utilitarian objects, ready for the production of a sculptural assembly, but they are not properly arranged. Moreover, as was revealed in part I and also in the discussion relating to Rodchenko's multifunctional furniture that conscripted the art work as a use-ready object, the use-ready can be conceived as just another step in the process of function as forming.⁸⁵¹ This behaviour of a lighting track is a new unexpected non-normative use-ready function, a "system function" to use the term by function theorists.⁸⁵² It is not just multi-functional or

⁸⁵⁰ Kobra, "Functionalism," 120.

⁸⁵¹ See p. 119, 131.

⁸⁵² See p. 72.

dysfunctional, as it is not accommodated within the conventional lexicon of function, need or utility. This is an unanticipated use from the perspective of the sculptural assembly and is idiosyncratic, non-normative behaviour from the point of view of the lighting track. In Beth Preston's terms, the lighting track would be defined as system function component co-opted into the inclusive "containing system" that is the gallery space.⁸⁵³ The agency of the generous non-normatively behaved lighting track is now co-opted into the logic of the sculpture. Or, from an alternative perspective, the lighting track was enlisted by the needs and agency of the *Hold UP* assembly, which is necessary for it to stand. This then catalyses the next sculpture insertions into the space of *Hold up light weight* and *Light Hold*. The enlisting of objects by the needs and agency of materials in the sculptural assemblage is not an end point or solution, but a moment that catalyses further action. Furthermore, with *Hold UP*, the tension is made present as the materials labour to hold themselves together: the kerfed ply-wood band, the pole, the bricks between the floor and the lighting rail. These elements all enlist me (the artist) as the viewer, and my bodily matter, with the anxiety of its possible demise, to catch it as it falls, to keep clear and to hold one's breath, least the thing collapses.

Abfunction's non-normative behaviours activating stasis and the bracketing of time

In in *Hold UP* the physical forces are working (including my anxiety), reciprocated within the components in order to establish a stasis a moment of equilibrium where forces are equal and opposing. The agency of materials is working. Moreover, not only is the lighting track complicit, but so is the floor, and this contribution is made explicit in this arrangement. In this case, the abfunctional non-normative enlisting of things reveals what is often taken for granted: what is above and below us, lying low, out of sight and invisible – the normative use-ready functions of the lighting track and of the architecture itself. This recalls Martin Heidegger's tool analysis: that it is the non-functioning hammer – its un-readiness-to-hand – that brings to our attention the things that normally remain invisible.⁸⁵⁴ As the artist and

⁸⁵³ See p. 72.

⁸⁵⁴ See p. 84.

writer Neil Cummings says: “Perfect use would render the object invisible.”⁸⁵⁵ In this abfunctional moment, the presence of what is usually invisible – the floor and ceiling – is made present, which supports the labouring of each component’s material in the assemblage. In this live status of stasis, the abfunctional condition of the reciprocal agency of materials is performing. It is not an autonomous and free-standing outcome, as a sculpture should be. The sculpture of *Hold UP* physically occurs within this stalled moment, bracketed between and contingent on the ceiling and the floor. The product, the outcome of this sculptural production, cannot be released into the world as an autonomous free-standing object, for it will tumble into a cascade of materials and things. *Hold UP*’s abfunctional diversion refutes the release of the teleological expectations of sculpture’s function because of the contingency of the architectural gift – the lighting track, its floor and more – at the time of the exhibition. It is these things that are helping the sculpture—for the time-being.

Co-opting the logic of the camera’s bracketed time

In *Hold UP*, these non-normative behaviours of objects and things establish the stalled bracketed moment of time that the sculpture occupies, and this now co-opts a logic of time analogous with the camera apparatus. However, as I argue, this abfunctional deviation that draws on camera time logic occurs despite *Hold UP* occurring in “real” time and in the “real” space of the gallery⁸⁵⁶ without an actual photographic apparatus and incumbent photographic document. The camera time logic in *Hold UP* is associated with the bracketing of time between the moment that the shutter opens and closes. This occurs on two scales. On the one scale is the opening and closing times of the gallery. On the other scale is the appearance of “frozen time” – like a snapshot – in the standing moment of the sculpture. This appears as an extended moment, frozen across the clock time of the exhibition period. Within this second bracket of frozen time is the commensurately indeterminate time⁸⁵⁷ of

⁸⁵⁵ Neil Cummings, “Reading Things: The Alibi of Use,” in *Reading Things* ed. Neil Cummings (London: Chance Books 1993), 23.

⁸⁵⁶ Real-time is noted below. See p. 296.

⁸⁵⁷ Material time and fatigue is studied and measured by engineers. From my artist perspective, material stress and time is a felt experience and always comes as a surprise, shock and sometimes frank disappointment.

the actions and forces operating within the materials themselves. In both instances of bracketed time, the efficiencies of clock time in a functional system of production is more than frustrated; it is held up and as a consequence the teleological output of the autonomous free-standing sculpture is refused.

I propose that the bracketed time of the exhibition is analogous to the opening and closing of the camera shutter. A question posed by the artist and theorist Victor Burgin helps elucidate this situation when he asked of a photograph: “How long is the photograph?” He stated that: “Photography renders a ‘moment’ in terms of space and suspends it as if out of time. . . . The photograph does not stop time, but rather suspends a moment between parentheses until the time when time returns.”⁸⁵⁸ In the case of *Hold UP*, the time of the exhibition in the gallery space that gifts its lighting track and floor to the artwork, is a time suspended from the everyday workplace time of labour and production. As artist and critic Brian O’Doherty noted in the 1970s, the white cube of the gallery space is not everyday space and time. Rather, it is rather a type of chamber akin to the sanctity of a church, courtroom or experimental laboratory, quarantined from the real clock-time world that is firmly kept out.⁸⁵⁹ The time bracketed by the opening and closing of the exhibition brings to mind the extended opening time of the camera shutter to record the duration of an entire film, as in the late 1970s photographic series of cinema halls by artist Hiroshi Sugimoto (Fig. 83). Despite the exclusion of the camera apparatus, the exhibition itself brackets time within the space of the quarantined gallery chamber. It parallels the parenthesis of the shutter within the equally quarantined dark interior of the camera body that captures time. While Burgin suggest this is suspended “out of time,” I would argue that it is not timeless in the Greenbergian sense. *Help a Sculpture’s* exhibition time conforms on the one hand to the clock time of the calendar. On the other hand, when the exhibition is on inside this gallery chamber, time is released from performing to the outside pressures of clock-time production. This is why every time I enter a gallery I feel morally caught between the pressures of two time zones. The time zone of production I have just left and the

⁸⁵⁸ Victor Burgin, “The Eclipse of Time,” in *Time and Photography* ed. Jan Baetens, Alexander Streitberger, and Hilde van Gelder (Leuven: Leuven University Press, 2010), 131.

⁸⁵⁹ Brian O’Doherty, *Inside the White Cube: The Ideology of the Gallery Space* (Berkeley; Los Angeles; London: University of California Press, 1986), 14-15.

suspended time zone of watchful noticing. In this suspended time, as Burgin says, time will return, and the exhibition will be over. It is within this suspension of time, with the gift of the gallery lighting track and floor, that *Hold Up* is both held and holds.

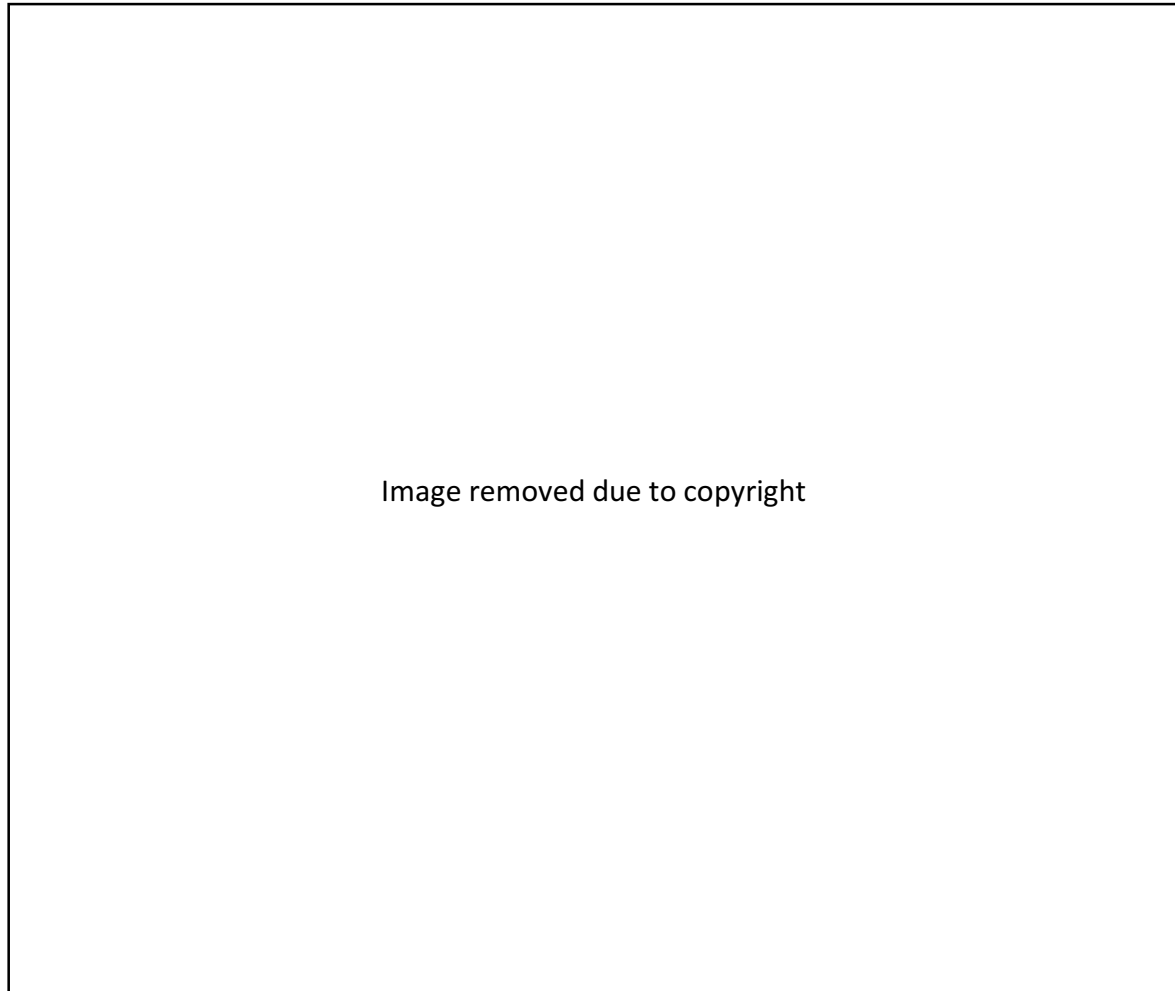


Fig. 83 Hiroshi Sugimoto, 2 images from the series of *Theatres*, (1978 –)

Top figure, Radio City Hall, New York, 1978, Bottom figure Ohio Theatre, Ohio, 1980. Accessed August 23, 2016. <https://www.theguardian.com/artanddesign/gallery/2016/mar/01/silver-screen-movie-theatres-photographs-hiroshi-sugimoto-in-pictures#img-1>

Time may be suspended in *Hold UP*, but as has been suggested, it is not eradicated. It is not the timelessness of Lessing's pregnant pause or of Greenberg and Fried's instantaneous all-at-oneness that brings grace to us, the viewers. No decision has been made to represent a particular moment in *Hold UP* or to reveal a particular point of view to the viewer, as advised by Lessing. Nor do we experience a timeless, transcendental flash of insight by viewing *Hold UP*. It is not a reductive sculptural object, despite being in the gallery chamber.

Rather, the precariousness of *Hold UP* is that it appears as an extended frozen moment of a snapshot, a moment of stasis, where the assembly of all its components (the floor, the bricks, the pole, ply-wood band, lighting track) are performing their labour to hold it together. It is the in-between moment of the sculpture performing, before the time the sculpture existed, and the time after when it returns to its individual components—or collapses.

This brings us to the second scale of bracketed time, which is the appearance of “frozen time” – like a snapshot – in the moment of the sculpture performing its stand. But we can complicate this, as Burgin does, and ask: How long is this snapshot moment of stasis? As mentioned above, Burgin questions of the length of a photograph:

*Photography renders a “moment” in terms of space and suspends it as if out of time. The material support of the spatial image however, whether silver print or digital, is itself subject to entropy, and will eventually decay. The photograph does not stop time, but rather suspends a moment between parentheses until the time when time returns.*⁸⁶⁰

Burgin identifies that the frozen moment of the photograph appears to be suspended out of time and is subject to the time of entropy.⁸⁶¹ Like the photograph, *Hold Up* is bracketed in time. Similarly, time exists within the energy and forces of *Hold UP*'s components, as it does in the material support of the photograph. In *Hold Up*, time is in the action of the materials that are equal and opposing: the upward force of the pole and the bricks, and the simultaneous downward force of the wooden sculptural band. This action keeps them labouring together to perform a stasis. *Hold Up*, while in a moment of still equilibrium, is not frozen or static. The equal and opposing forces are in a constant state of action, keeping time at bay. Moreover, the materials are working not only within themselves and with each other, but also with gravity. According to Van Gelder, Morris understood that in the retrieval

⁸⁶⁰ Burgin, "The Eclipse of Time," 131.

⁸⁶¹ Entropy is a central concern of artist Robert Smithson. There is not the scope here to extend this discussion. For a comprehensive overview of entropy in art practice see: Krauss, Rosalind. "Entropy." *October*, no. 78 (Fall, 1996): 39-42.

of time within the artwork's production, sculpture always fights with gravity and consequently also with time.⁸⁶² Morris enabled the material and object to give way to gravity, for example, in his series of *Untitled Sculptures* of industrial felt, first constructed in 1967 (Fig. 84). Here, the stripped industrial felt, were lifted up and hung, and expressed the material's temporality. As van Gelder puts it, Morris delivered the sculpture to, "to the laws of entropy that reside in it."⁸⁶³ This process of the materials and their properties occurred in what Morris would consider to be an ongoing present tense in real time and space. However, as Green argues, the work could equally be understood in terms of time arrested, where a process of actions with materials and things is brought to a halt and frozen.⁸⁶⁴ In comparison time in *Hold UP* is not stopped or frozen, it is captured within the bracketed frame of the exhibition that parallels the logic of the photographic shutter opening and closing in the suspended clock-time space of the gallery.

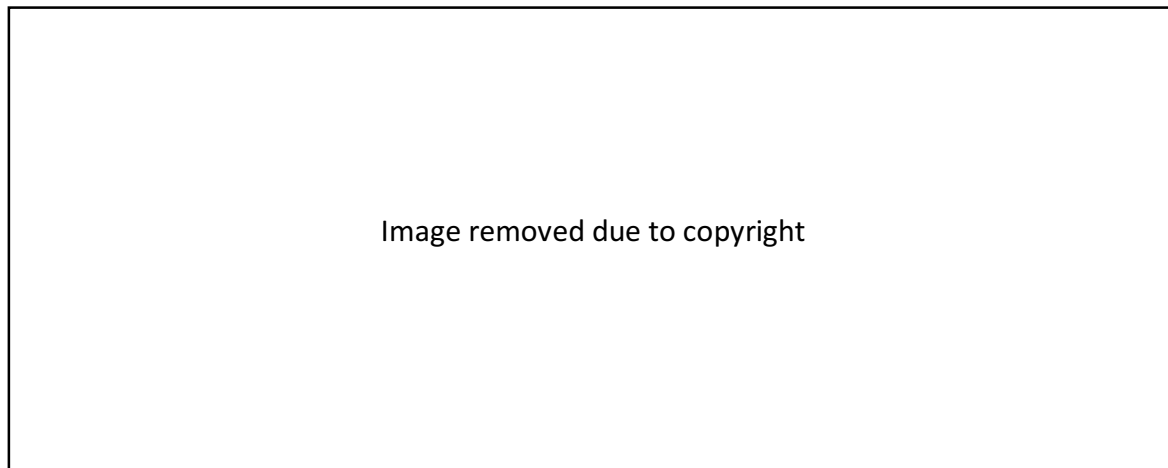


Fig. 84 Robert Morris, *Untitled Sculptures*, (1967)

In Morris, Robert, Michael Compton, and David Sylvester. *Robert Morris. [Catalogue of an Exhibition Held at the] Tate Gallery, 28 April – 6 June 1971.* (London: Tate Gallery, 1971), 104.

In the space of the gallery, we understand that the time of objects and things enlisted to work in non-normative ways will not last forever. The time held by the artwork is not clock

⁸⁶² van Gelder, "The Fall from Grace. Late Minimalism's Conception of the Intrinsic Time of the Artwork-as-Matter," 87.

⁸⁶³ Ibid.

⁸⁶⁴ David Green, "'An Image of an Image': Photography and Robert Morris's Continuous Project Altered Daily," in *Time and Photography* ed. Jan Baetens, Alexander Streitberger, and Hilde van Gelder (Leuven: Leuven University Press, 2010), 179.

time, nor is it a timeless experience of instantaneousness in the viewer. It is the palpable and felt time of the energy of the materials labouring together towards stasis. There will be, or could be, as Burgin predicts: “time when time returns” – even during the exhibition time. This could happen in an instant, when entropy makes visible its toll: The looped wooden band with its internal sprung energy, for example, could slip out between the pressure of the pole and the lighting track, or simply snap under the pressure. Until this happens, however, we hold our breath – and keep time’s suspension.

Hold UP – *abfunction* revealing the medium of sculpture’s logic

Returning to the question posed at the beginning of this chapter, we can now suggest that abfunction enables a deviation from the expectation of the teleological output of function; however, for it to operate, it must also disclose the expectation of the medium itself.

But what is this “medium” that is being revealed by abfunction? Many have sought to define the specific mediums of art, for example: painting, sculpture, architecture and poetry. Lessing, Greenberg, Katarzyna Kobro and Władysław Strzemiński were all preoccupied with this problem.⁸⁶⁵ In her critiques of both the post-medium condition and the Greenbergian modernist paradigm, Krauss also insists on the “logic of the medium.” She defines this term as the set of conceptual rules and conditions that the artwork responds, in opposition to the universal materiality promoted by Greenberg’s medium specificity.⁸⁶⁶ While Lessing, Greenberg, Krauss, Kobro and Strzemiński facilitate an understanding of the differences between these art forms, the larger question of what defines the “medium of art,” nonetheless remains. Luhmann addresses this problem in his 1987 essay “The Medium of Art.”⁸⁶⁷ Luhmann’s essay contextualises the endeavours of medium specificity and the logic

⁸⁶⁵ Yve-Alain Bois says: “Strzemiński and Kobro were perhaps the only modernist artist to isolate and define four different arts (painting, sculpture, architecture, typography), without making any one of them dependent upon any other.” Bois, “Strzemiński and Kobro: In Search of Motivation,” 127.

⁸⁶⁶ See Rosalind E. Krauss, *A Voyage on the North Sea: Art in the Age of the Post-Medium Condition*, The Walter Neurath Memorial Lecture (London: Thames & Hudson, 2000).; Hal Foster et al., “The Predicament of Contemporary Art,” in *Art since 1900: Modernism, Antimodernism, Postmodernism* (London: Thames & Hudson, 2004), 674. See p. 225.

⁸⁶⁷ Niklas Luhmann, “The Medium of Art,” *Thesis Eleven*, no. 18/19 (1987).

of the medium, as well as locating how abfunction could be conceived as moving away from and thereby revealing the nature of the medium itself.

Luhmann's essay defines the "medium of art" as an interdependent relationship between two phenomena. The first is media or what he also refers to as medium, the second is form. Underpinning Luhmann's argument is that art is a form of communication. All forms of communication occur through a media—be it air, space or light and are received aurally or optically. Optics for Luhmann, is also a media. He argues that the key attributes of media are "dissoluble" and that media have the receptive capacity to respond to shape and form.⁸⁶⁸ Moreover, media are comprised of "loosely coupled" elements or events that can also be interdependent of each other. There are many elements in media, and these can be dissolved into each other. Mediums do not have any specific form, yet they are dependent on form to be perceived and revealed.⁸⁶⁹ In comparison, form emerges through the concentration, coordination and selection of these media elements, based on what these elements offer.⁸⁷⁰ Forms reduce elements to what is possible to order,⁸⁷¹ and as Luhmann identifies, can only come into existence if there is the appropriate media.⁸⁷² This could be explained by thinking of all the possible elements and media in the world that could be organised into an object form. To give a simple example mentioned early in the thesis: if there was only chocolate in the world and not steel or wood, a hammer could not be made. As Luhmann says: "There is neither a medium without form nor a form without medium."⁸⁷³ Moreover, with the multitude of elements the combination of medial possibilities can never be, as he says: "exhausted."⁸⁷⁴

In terms of art, Luhmann argues that the medium of art is in fact a form. However, this "form" is a "higher medium," which, as he says, "is able to use the difference between

⁸⁶⁸ As Luhmann says: "higher degree of dissolubility together with the receptive capacity for fixations of shape (Gestalt)." Ibid., 102.

⁸⁶⁹ Ibid.

⁸⁷⁰ Ibid.

⁸⁷¹ Ibid., 103.

⁸⁷² Ibid.

⁸⁷³ Ibid.

⁸⁷⁴ Ibid.

medium and form itself in a medial fashion as a medium of communication.”⁸⁷⁵ This communication, Luhmann explains, can occur if someone is aware of the particular dialogue between the medium and the form. Luhmann gives the example of music. He notes that in any particular musical form there is a specific “reservoir” of selected elements of media. This could include, for example, compositional strategies, timing, notes, the tones etc. Only a person who understands these rules of communication and can communicate these conventions can actually hear the selected elements with all their nuances. Moreover, with these capacities of communication the person can then envisage the potential for all other possibilities that this form may offer.⁸⁷⁶ Art in its status of “form as medium,” establishes an ordering system, which as Luhmann says, has “its own rules of inclusion, which are served by the difference of medium and form as medium.”⁸⁷⁷ Luhmann also notes that for art to be perceived it is necessary for the medium to be considered in a more limited sense. He proposes that this must be a “symbolically generalised medium of communication.”⁸⁷⁸ Limited in a generalised context, communication can then concern itself with all the media and elements that form uses to then bring about differences and distinction. This can enable the communication of the specifics and promote awareness of that art form.⁸⁷⁹ The difference between the medium and the form activates communication and as such, produces the medium of art.⁸⁸⁰

I propose that this Luhmann’s symbolically generalised medium can be likened to Lessing, Greenberg, Kobra and Strzemiński’s medium specificity and Krauss’ logic of the medium. All sought to align the elements of media – such as, time, matter, space etc. – with sets of rules and procedures specific to each, such as the flatness of painting or the conventions of sculpture in space. In Luhmann’s terms, the perception of art occurs when an artwork activates the difference between the media and its application to the conventions established by the form that can then be comprehended and communicated.

⁸⁷⁵ Ibid., 104.

⁸⁷⁶ Ibid., 105.

⁸⁷⁷ Ibid.

⁸⁷⁸ Ibid., 108.

⁸⁷⁹ Ibid., 109.

⁸⁸⁰ Ibid., 108.

Abfunction, however, which shifts away from function and the conventional set of rules of the medium, allows for more than the perception of art in Luhmann's terms. Here, the aberration away from the rules of the medium lead to the perception of the rules themselves. This is easy enough to establish when an alternative medium, such as photography, is inserted into the process of making the artwork, such as in *How long* and *Hold UP (being a prop – being a pole)*. The two different logics of the mediums – sculpture and photography – become heightened through the differences between the form as medium and the media. However, Luhmann's schema facilitates an understanding of how abfunction can reveal the rules of the medium without comparing another medium in its system of production. I propose that this occurs in *Hold UP*. To reiterate: *Hold UP*, while activating the logic of the photographic medium through the bracketing of time, *Hold UP* does not employ its conventional output, the photograph. Rather, *Hold UP* presents itself with the physical materials of the sculptural object in the physical space of the gallery, including its borrowing of the lighting track. In *Hold UP*, the difference between the media (the parts of the sculpture including the wooden band, the pole, the bricks, the non-normative lighting, the non-normative bracketing of time) and the rules of engagement of the form established by sculpture and art's medium, reveals the tenuousness of the pinning down and holding together of the sculptural assembly. The lighting track refuses to release the assembly to stand on its own, least the thing falls apart. In this instance, the non-normative use of objects and things reveals one of the medium of sculpture's rules of engagement: the expectation of the teleological release of its output of the autonomous sculpture. This revelation, activates Heidegger's principle of the un-ready-to-hand, where the awareness of the thing itself, in this case the rules of engagement, is now revealed and made present, revealing the expectations of the medium's output of production.

Summary: *Hold UP*

In summary, abfunction in *Hold UP* is activated by the non-normative co-option of objects and things. Through their enlisting of the gallery infrastructure – its lighting track – these objects and things catalyse the photographic logic of bracketing time, which refutes the release of artwork at the last moments of its production. In this deviation, the functional attributes of clock time production are suspended; time is lost until that time returns. This

suspended time shifts the origins of clock time in production to that of a stasis, bringing with it the felt, palpable time within materials as an abfunctional effect in the artwork.

Moreover, Luhmann's concept of the medium is helpful in understanding how abfunction in *Hold UP* also reveals the expectations of the medium itself.

This now brings us to the last artwork in the *Hold UP* series, *Hold down*, where once again the sculptural assembly that is commenced in the clock time of the artwork's production is not released, and thus refutes the teleological expectations of the function of sculpture. In this case study, the introduction of the medium of video produces an alternatively materialised video object and further, an eclipse of clock time by the temporal condition of duration.

***Hold down* – the insertion of duration into the clock time of production**

This last case study, *Hold down*, (Fig. 85), draws on the abfunctional deviation away from the origins of the artwork's clock time functional production established in the previous *Hold UP* series of works. In *Hold down*, however, I argue that the insertion of the video apparatus in this artwork's production results in a durational time similar to that conceived by Bergson. Moreover, I will outline how this artwork's inclusion of video reverses the uncanny time conundrum that Barthes identifies in photography. Rather than the past being brought into the present through photography's indexical procedure, as Barthes establishes,⁸⁸¹ in *Hold down* the video establishes a durational experience of ongoing present-tenseness in the production of the sculptural assembly. This alternative abfunctional deviation once again refutes the final release of the sculptural object and instead rematerialises the artwork as an object video.

Hold down

Upside down there is an image on a flat-screened video monitor of my body, sandwiched once again. This time, my head presses down into a ply-wood band on the floor/ceiling and my feet are at the top, as if hanging from a conventional sculptural modelling stand. I am working at

⁸⁸¹ See p. 281.

being still and taut. My fingers feel the need to exercise their independence, they wriggle, I bring them back. I feel myself suddenly rolling. Its slow, for sure, but the sway is like an organic flow, with an energy generating as if on its own accord. It feels like a very low-grade earthquake I once experienced. My body registers it and automatically aims to contain it, hold it, and keep it still. I am a prop. I have another job to do. I have to hold it up, hold it together. It, the ply-wood band, equally has to hold me up.

The monitor looks like a back-lit photograph. Then it is the wriggling of the fingers that allows the viewer to perceive that this sculptural assembly is moving. The ever-so-slight rolling of the body on the modelling stand can now be seen. It activates an awareness of the head's motion against the wooden lozenge shaped band, re-profiling its form and the shape of space it holds in its outline against the white of the ceiling and the wall behind. The video captures the system of its production, the assembly of components that make the whole, in "real-time":⁸⁸² the video mechanical time of twenty-four frames per second. But there is no beginning and end – just a continuum of time. Nothing much happens except the continual holding it down, the performance of holding it together. In *Hold down*, there is no beginning or end to the action of holding it down and me being held up. It is a continual, endless motion of time.

What is revealed in this upside-down-ness are the functional expectations and the associated gravitational performance of the components in the sculptural assembly. Upside down, with my back to the front of the screen, I am defamiliarised and as such, my function is highlighted as matter exerting force within the system to keep it together. The gravitational forces of the penetrating head are surprisingly resisted by the wooden sculptural band. It performs a dual capacity: resisting the pressure of the head's penetration into its form, and simultaneously, a cushioning that holds and presses back the head, body and feet into the sculptural modelling stand. The gravitational pull is brought into sharp relief. In fact, the monitor casing is like a capsule (or to borrow a term from Morris' work, a time container), and the screen like a membrane with a view into a parallel space and time,

⁸⁸² Concept of "real-time" according to Doane, was developed in relation to computer technologies, where the capacity of the new technologies could capture time with the same durational length as occurring in the "real" world. At the same time, it also denies the mediation or presence of technology creating the illusion of immediacy and "living flux." Mary Ann Doane, "Real Time: Instaneity and the Photographic Imaginary," in *Stillness and Time: Photography and the Moving Image* ed. David Green and Joanna Lowry (Brighton: Photoworks / Photoforum, 2006), 24-25.

where this gravitational exercise observes the ongoing actions of each material (including my body – the pole) with every other material. Yet, in *Hold down* there is not the collapse of materials and forms succumbing to gravity and time, expressed by Morris as temporality in his industrial felt works. Nor does *Hold down*, fight gravity – it is already upside down and is as weightless like an astronaut in a space shuttle. Rather, *Hold down* seems to flow within gravity and time, performing the system of its assembly within the monitor capsule – like a live time-trap, not of the past, but in a continual, generating present.



Fig. 85 Simone Slee, *Hold down* (2015) in the *Help a Sculpture* exhibition.

<https://vimeo.com/180540855> PASSWORD: abfunction

Photo: Christo Crocker

Clock time of production replaced with durational and continual present-tenseness

The abfunctional deviation within *Hold down* is a consequence of the insertion of the video apparatus into its making process. On first encountering the work, the viewer might mistakenly assume *Hold down* to be a still photograph, before the ever-so-slight movement

discloses that it is, in fact, a video.⁸⁸³ This sets up the first photographic logic of time in the work, before it is recalibrated through the logic of the moving image. However, before I explain the moving image temporal shift, I will reiterate the first principles of this photographic logic as recognised by Barthes. In the photograph, the indexical record of the image takes us back to the past moment when the event that was subsequently captured by the camera occurred. As Barthes notes in *Camera Lucida*: “the Photograph always leads the corpus I need back to the body I see.”⁸⁸⁴ This past is brought into the present as we look at the photograph, but equally, we are in front of the scene as if we might have been in the past. In *Hold down*, however, the moment the fingers move and the viewer realises that this is a video operating in real time, a new temporal order is established and the past is wiped away.

It has often been acknowledged that the temporal presence of the moving image is quite different to that of the still photograph. Rather than bringing the past into the present, the moving image generates a present and in so doing sheds the past that it indexed. French film theorist Christian Metz argues that the moving image asserts and convinces us, as viewers, of its presence and hence its present-tense.⁸⁸⁵ This is in contrast to the indexical photograph, where the “real” object in the image is no longer present, as it occupies the “past-tense” via the condition of absence. For Metz, it is movement that exerts this presence in film and video. Metz explains that motion has a likeness to the experience of real time and space. This is for two reasons. The first is that motion cannot be represented like an object. Actual movement can only ever be seen, it cannot be touched and is not material and therefore is unable to be represented like an object. An object, by comparison, has a materiality and can be represented, for example, in a photograph or painting.⁸⁸⁶ The second reason, according to Metz, is that when observed by the viewer, the appearance of motion of an object creates a sense of the object’s corporeality and autonomy, which

⁸⁸³ Anecdotally, my mother on observing this work, initially thought it was a photograph. On seeing the fingers move (to her later embarrassment), she thought there was a breeze in the gallery. My sister advised her otherwise.

⁸⁸⁴ Barthes, *Camera Lucida: Reflections on Photography*, 4.

⁸⁸⁵ Christian Metz, *Film Language; a Semiotics of the Cinema* (New York: Oxford University Press, 1974), 8.

⁸⁸⁶ *Ibid.*, 8-9. This has striking parallels with Lessing, where poetry or prose, a medium that like film exists through time. See p. 268.

creates a sense of the real presence.⁸⁸⁷ As Metz says: “Because movement is never material but is *always* visual, to reproduce its appearance is to duplicate its reality.”⁸⁸⁸ This is further explained by English philosopher Gregory Currie, who argues that the moving image uses the medium of time itself to present motion to us: “it not only represents time, it uses time to represent time.”⁸⁸⁹ In “real-time” video or film, the temporal experience of the action is the same length in time as the occurrence in “real” time and space.⁸⁹⁰ This appearance of the “presence” of the action qualifies Barthes’ claim of the “projective” and “more magical” nature of film, where he says: “Film can no longer be seen as animated photographs: the *having-been-there* gives way before a *being-there* of the thing.”⁸⁹¹ This further consolidates the sense of “presence” in the real-time video or film of moving images. There are, of course, many techniques that film has used to establish various forms of past to future tenses, such as the “cut.”⁸⁹² Referencing the Italian film maker, Pier Paolo Pasolini, Doane argues that the “long take” functions in the present-tense: “reality can be perceived only as it happens and from a single point of view. The long take, duplicating this single point of view, presents us with reality as it happens. The long take is, therefore, always in the present tense.”⁸⁹³

Hold down’s abfunctional diversion via the video apparatus establishes a time shift from the clock time of its initial artwork production in the studio to the continual present-tense. *Hold down’s* present-tense cannot be quantified and measured and it is not distributed spatially. It cannot be defined as bracketed time either, for in *Hold down* there is no beginning and end in this action. Time and gravity is all in the one place and is ongoing. It is in the place of the monitor capsule where the reciprocal action of holding up and holding down while working with gravity is occurring. The upside-down body – the pole – is holding it all

⁸⁸⁷ Ibid., 7.

⁸⁸⁸ Ibid., 9. Metz’ italics.

⁸⁸⁹ Gregory Currie, “Images, Mechanisms and Time,” in *Visible Time: The Work of David Claerbout* ed. David Green (Brighton, England; Manchester, England: Photoworks; Distributed by Cornerhouse Publications, 2004), 4 of 5.

⁸⁹⁰ Ibid., 3-4 of 5.

⁸⁹¹ Barthes, “Rhetoric of the Image,” 45. Barthes’ italics.

⁸⁹² Doane, *The Emergence of Cinematic Time: Modernity, Contingency, the Archive*, 30. For other observations see Currie, “Images, Mechanisms and Time,” 4 of 5.

⁸⁹³ Doane, *The Emergence of Cinematic Time: Modernity, Contingency, the Archive*, 104.

together, just as the other components – like the wooden ply-wood band – are holding my body.

From the first momentary misidentification of it as a photograph, *Hold down* begins to co-join past and present to create the continual present-tenseness of the ever-so-subtle moving image. This ongoing present-tenseness is continually regenerated through the looped, long real-time take. Present-tenseness is not to be mistaken here for the continual presentness of Greenberg or Fried, which is defined by an all at-onceness that occurs in the optical flash of instantaneousness. This is not a transcendental out-of-time timelessness. Rather, *Hold down* is a slow up-take by the viewer and as noted by Doane, the duration of the moving image “presents us with reality as it happens.”⁸⁹⁴ In this shared time of duration the viewer’s own body identifies with the upside-down body, rolling through gravity and time while keeping the cohesion of the sculptural assembly.⁸⁹⁵ With imperceptible transitions that do not have any beginning or end, nothing much happens. In fact, its slowness, albeit in real-time, creates a stillness that suggests a moving photograph rather than a video. In this sense, time in *Hold down* is a potentially endless duration of the rhythm of enduring change. It recalls Bergson’s concept of *la durée*: an inner experience perceived by consciousness. As Bergson says, it is “nothing else but the melting of states of consciousness into one another.”⁸⁹⁶

In *Hold down*, time is an internal and elastic duration; it is indivisible and hence unquantifiable. It cannot be considered lost time, because the sculpture, the assembly of my body as the pole, the floor, the ceiling, the wooden band and the sculptural modelling stand are all constantly doing something. As with *Hold UP*, time is suspended, but in this case it is endless rather than bracketed time. The sculptural elements, including my body, are constantly active in the coming into being and present. At the same time, however, there is nothing else that can be done. No multi-tasking, no being in two places at once. Just an immeasurable, unbounded duration.

⁸⁹⁴ Ibid.

⁸⁹⁵ Anecdotally, people felt an equivalent feeling of nausea induced by the swaying motion, that I did while performing this work.

⁸⁹⁶ Bergson, *Time and Free Will: An Essay on the Immediate Data of Consciousness*, 107.

Summary – Hold down

In the case study of *Hold Down*, the diversion of the video apparatus into the process of the artwork's functional production of the sculptural assembly is the generation of durational time into the artwork. Furthermore, in the abfunctional deviation, this artwork is rematerialised in the alternative form of the endless moving image of me holding it down and it holding me up, bottled into the time-capsule of the monitor that is mounted on the I-beam column of the Margaret Lawrence Gallery. This is a rerouting away from the expectation of the output of an actual sculptural assembly that occurred in the clock time of its making. It swipes away the indexical past of its production to produce instead an ongoing generation of present-tenseness.

Concluding abfunction case study #3 – Holding up time – Holding up production

To return to the questions at the beginning of the chapter: In what ways does the enlisting of non-normative behaviour of objects, bodies and things in addition to the insertion of the camera apparatus or its logic, establish an abfunctional diversion away from the functional attributes of time to produce something outside of the teleological expectations of function?

The three case studies in the *Hold UP* series share both the clock time of the sculptural assembly's production and the same deviation away from the teleological expectations of the autonomous sculptural assembly. However, each artwork's non-normative co-option of bodies, objects and things, which activated the abfunctional deviation, effect a different variation away from the functional attribute of the efficiency of time. This is not the functional clock time that mitigates against lost time. These different temporal variations in the three case studies were activated by the various logics brought by the incursion of the various types of camera apparatus: the camera, the video and the analogous logic of bracketed camera time.

The focus of this chapter is the functional attribute of time; however, what was also revealed in *Hold UP* is the “containing system” of the extended sculpture in the gallery that was activated through the non-normative and idiosyncratic co-option of the gallery lighting track. *Hold UP* continues to reveal the use-ready function of objects and things operating within the broader context of function as forming within the artwork. In *Hold UP* it was the containing system of the gallery that contributed to the abfunctional refusal to release the teleological expectation of this case-study artwork – the sculptural assembly.

Like the other two case studies, *How long* and *Houses that are happy to help . . .* abfunction continues to offer a method of tracking the processes of forming in the artwork. These processes, which both veer away from and reveal function, also discloses the internal conventions of the medium.

What this final chapter suggests is that every artwork that demonstrates abfunction will most likely have an idiosyncratic and nuanced route. However, common to all the case studies in this project is their move away from the teleological expectation of the medium and function. This has resulted in the production of alternative rematerialised artwork outcomes (rather than the commonly understood dematerialised art object). In addition, it appears that abfunctional deviations may also inflect the criteria and values of function. In the *Hold Up* series, the deviation away from the clock time efficiency of function established an abfunctional effect in the experience of the case-study art objects. In these three works, *Hold UP (being a prop – being a pole)*, *Hold UP* and *Hold down*, time was lost, suspended and detoured into materials, where the past and the present coexisted in the ongoing generation of indivisible durational present-tenseness.

Summary and Conclusion

This research project makes a case for the neologism abfunction through the three bodies of artworks produced as case studies for the project: *How long*, *Houses that are happy to help with the possible problem of art* and the *Hold UP* series. These case studies demonstrate the various ways abfunction can be seen to both reveal and generatively divert away from concepts of function within the forming and end-effect of these artworks. It produces effects and outcomes not confined to the teleological expectations and prerequisites of function despite referencing function in its origins.

Summary of findings

In the artwork *How long*, the proposition of abfunction was identified as being the surplus action of the body only, divorced from its logical endpoint of doing things (where my act of continuously holding up the placard asking the question: “How long can I hold this up?” refuted the answer). In this artwork, the camera apparatus and the incremental actions of the body were revealed as operating within a functional system of production. Furthermore, the insertion of the camera into the system of production re-routed the logical trajectory of the artwork in order to produce alternative outputs that were materialised as printed images of the potentially endless act of continuously holding it up. By tracking this re-routing, abfunction offers a revised understanding of the “dematerialised” art object as alternatively materialised.

In *Houses that are happy to help with at least one of the possible problems of art*, the abfunctional proposition revealed the potential of the independent agency of materials, objects and things. This situation enlisted non-normative behaviour from people and other objects and things. This artwork’s abfunctional status identified the adage “truth to materials” as a central concern associated with functional propositions of production. It also represented a diversion from the linear intention of the producer dealing with materials and things as if mute.

The *Hold UP* series of artworks continued the abfunctional diversion activated by the non-normative actions of the body, objects and things, in addition to the logic of the camera apparatus. This produced situations that refuted the release of the autonomous art object inferred by the sculptural assembly and functional systems of production. In this context it was also seen that clock-time, a critical prerequisite of a functional and efficient system of production could also be diverted to produce ongoing and endless duration as an abfunctional effect of the artwork. Moreover, in this series of artworks abfunction revealed its potential to disclose the very nature of the specific medium of art itself.

Background Research that enabled the findings

In order to establish the abfunctional enquiry into the three case-studies, a significant part of this written research project firstly demanded an investigation into the nature of function that abfunction was moving away from. As function has been commonly understood as being excluded from the autonomous art object, definitions of function were sought from architectural discourse and from the more recent disciplines of the philosophy of science and material cultures. In Part I, I discussed the exceptionally diverse approaches to function and concepts of functionalism. However, the project teased out two different polar positions. The first was function from the end-point of the use of an object, thing or space – the “use-ready.” This is a widely held understanding of function today. Secondly, it was found that function could be considered as a method used in “forming” an object, thing or space.

These attributes of function, from the position of the use-ready and of forming, extended the initial definition of abfunction at the beginning of the project. This definition of “doing the wrong thing with the right thing and its inverse, doing the right thing with the wrong thing,” could be identified as the non-normative behaviour of objects, people and things. This initial definition takes the use-ready position of function – the conventionally accepted role and purpose of objects and activities – as its point of departure. However, the background research extended an understanding of function that included its role in the forming of objects, things and spaces. This established a range of values, criteria and constituents of function that could be identified in the forming of the artwork. Moreover,

the investigation into the use-ready concept of function revealed an expanded field of terms, such as proper function, idiosyncratic function and parafunction. This also suggested that the use-ready category of function could be considered in the broader scheme of function as forming. This significantly extended the commonly understood, use-ready perception of art as being functionless and indicated that abfunction has characteristics that these other terms do not. The groundwork established for these two opposing positions of function offered a broader perspective for considering function within the forming and end-effect of the case study artworks, and allowed for speculation on how abfunction may then depart from function.

Part I of the background research focused on function from the disciplines of architecture and philosophy. Part II investigated the role of function within art from these two opposing positions – the use-ready and the forming. Historically, art has not commonly been associated with function; however, early and relatively uncharacteristic examples of how artists activated function was investigated. The artists considered were the Constructivists and Productivists from the Russian avant-garde and the Unists, Katarzyna Kobro and her husband Władysław Strzemiński. The examination of the artworks and ideas associated with these avant-garde artists demonstrated that function did indeed exist in the artwork from the point of view of the use- and effect-readiness, and also played a significant role in the forming of an art object. This was also shown to have parallels with the architectural precedents. As was established in Part I, when the artwork was positioned as “use-ready” it was found to be contributing to a broader position of “function as forming,” where the teleological end-point was the construction of a new socialist utopia. These avant-garde examples demonstrated the ways in which function could be located in the artwork produced for the project and also provided the scaffolding for abfunction to be identified, both within the case studies produced for the project and other artwork precedents.

Conclusion

This project has built the case for abfunction. As a neologism, it names and identifies characteristics and processes within the artwork that at once acknowledges concepts of function at its origins and then generatively departs from it to produce something beyond

the teleological parameters of function itself. Revealed as prevalent in the artworks produced for the project it acknowledges that function can operate within the “forming” of the art work’s internal systems of production. In the case studies produced for the project, abfunction has emerged as a methodology for tracking the methods of forming in the art object, which in each artwork can take an individual and nuanced route. Moreover, abfunction can also account for the effect generated by the artwork.

Abfunction provides a compelling and significant revision of the pervasive and complex role of function, particularly within the processes of forming art. This is an area that has received scant scholarship. The concept of abfunction provides a case against the simplistic binary dichotomy of function commonly associated with everyday life versus the autonomous art object. This includes other variations of function that similarly maintain a fidelity to the ontological end-point, “use-readiness” of function, such as dysfunction or malfunction, multi-function or parafunction. Abfunction recognises that in art there is an alternative model to these other functional concepts. The process of abfunction releases the functional constituents of matter, structure and forces, actions, time, space, objects, people, and various technical apparatuses from the teleological end-point of function within the production of forming art. It offers a network of reflexive relationships that activate the constituents’ independence to produce unimagined possibilities. In this sense, abfunction accounts for the deviations from the functional expectations of the artistic medium, enabling these varying outputs as alternatively materialised, as opposed to the previously conceived “dematerialised” art objects. This alternative model is somewhat similar to Svetlana Boym’s concept of the off-modern. However, where she draws on narrative and metaphor as a “third way,” abfunction activates concrete physical actions of people’s bodies, matter objects and things in a network of reflexive connections that produce unpremeditated outcomes beyond the limits of function.

The ability of abfunction to identify the generative diversions from the constituents of function within the process of production in art offers a range of new considerations which this project has only just commenced. This opens up numerous opportunities for further research. Two different approaches could be relevant here. One relates to breadth and the other, depth. The case studies were limited to the artworks produced for this study. There

are many opportunities for an expanded spectrum of case-study artworks to be considered in relation to abfunction. These could include new artworks I would produce, Duchamp's readymades, or more contemporary examples such as Franz West's sculptures. As was shown in chapter seven, abfunction also seems to offer considerable insights into the conventions of the various mediums of art. This is an area that only commenced in the project and would be worthy of further focus. The tactics of abfunction could also be extended to encompass other disciplines such as architecture, the philosophy of material culture or any practice that is involved with forming objects in the world. To what degree could abfunction become established as a formal methodology in analysing objects or even "forming" objects – that is, artworks and other objects in the everyday world? Or as is my sense, would this formulation be an anathema, leading to the same fraught scenario as functionalism in the twentieth-century? Further research may establish the viability of these suggestions. With respect to the production of new artworks, a more specific examination of the ways in which abfunction engages with concepts of new materialism and performativity would further deepen this research. Most compelling for my own art practice is the abfunctional potential of time within the production of sculpture's logic of the medium. The opportunities for this were indicated in the last video art work produced for the project, *Hold down*. Of course, the "elephant in the room", not raised in this thesis and with great potential, is that abfunction can be funny.

Kobro, Rodchenko and Arvatov all understood that art constructs what we are and who we will become. The fundamentally important thing about abfunction in art is that it allows things to come to us of their own accord. It has the capacity to surprise us with its alternatives to the instrumentalising and teleological grip of function pervasive in the everyday 24/7 world in which that we live. What I hope for abfunction, as I believe occurred in this project, is that the original values of function are recouped with unexpected conundrums: where honesty activates surprising and non-normative behaviour; where sobriety combats indulgence and morphs into hilarity; and where time efficiency and progress stands still in duration, with the surprising pleasures and present-ness of the moment.

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Appendix – Other Figures

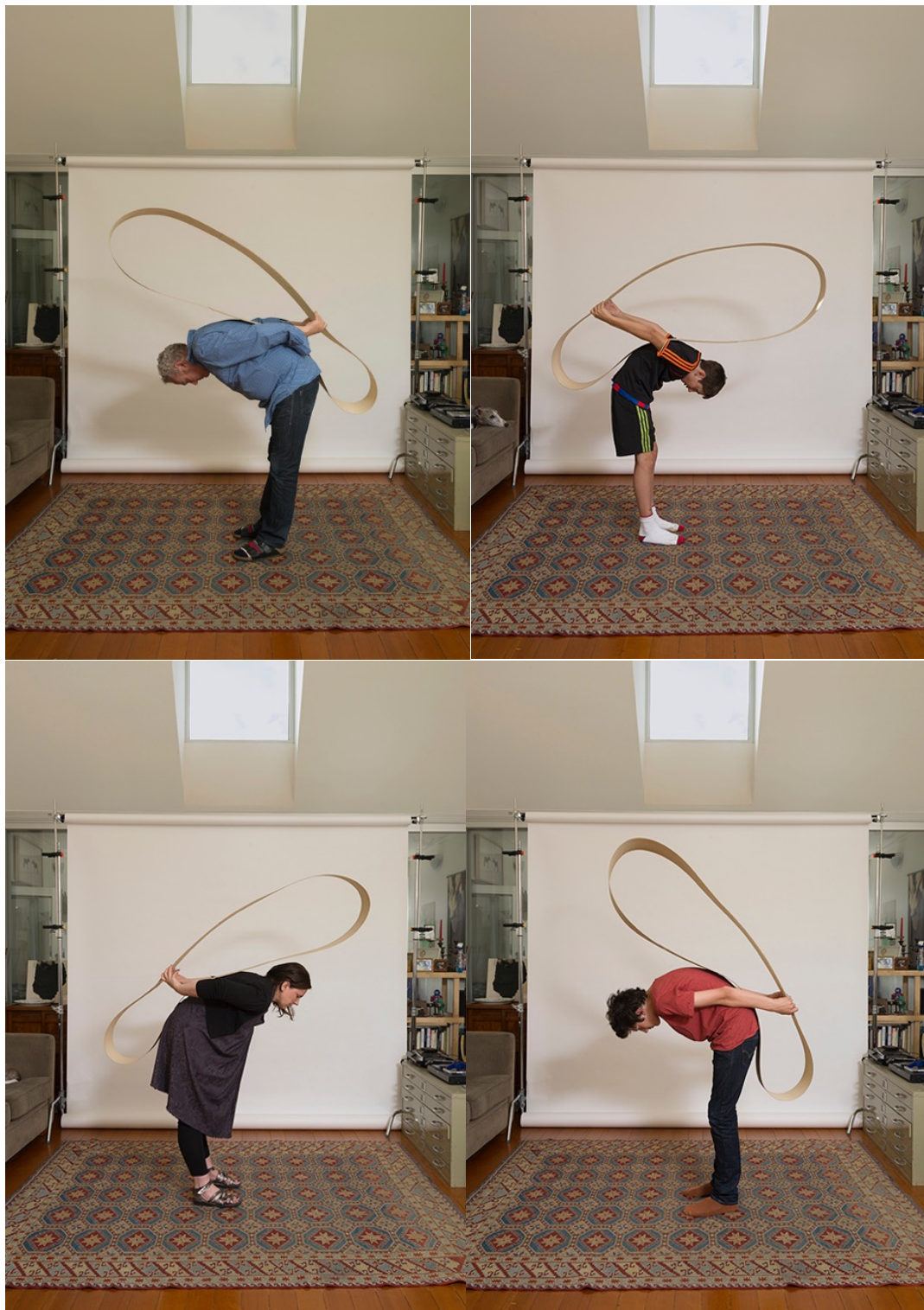


Fig. 86 Simone Slee, *4 Residents and a Dog that are Happy to Help With at Least One of the Possible Problems of Making a Shape*, (2013)

Series of 4 photographic images, variable size. From the residency, "My House is too Small", curated by Julia Powles.



Fig. 87 *Hold UP*, exhibition at Sarah Scout Presents, Melbourne (2013)

Hold UP (background), *Hold up light weight* (foreground)

Photo: Phoebe Schmidt



Fig. 88 *Hold UP*, exhibition at Sarah Scout Presents, Melbourne (2013)

Hold up light weight (foreground), *Hold UP* (being a prop – being a pole) (background)

Photo: Phoebe Schmidt

END.