MATERIALITY

Edited by Petra Lange-Berndt

Documents of Contemporary Art

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Co-published by Whitechapel Gallery
and The MIT Press

First published 2015

ISBN 978-0-85488-237-3 (Whitechapel Gallery)
ISBN 978-0-262-52809-2 (The MIT Press)

A catalogue record for this book is available from the British Library

Library of Congress Cataloging-in-Publication Data

Materiality / edited by Petra Lange-Berndt.
pages cm. (Whitechapel: documents of contemporary art)
Includes bibliographical references and index.
ISBN 978-0-262-52809-2 (pbk. : alk. paper)
1. Art, Modern 20th century Themes, motives.
2. Art, Modern 21st century Themes, motives.
3. Artists' materials. I. Lange-Berndt, Petra, editor. II. Title.
N6490.M337 2015
709.04 dc23

2015013962

Whitechapel Gallery 10 9 8 7 6 5 4 3 2
The MIT Press 10 9 8 7 6 5 4 3 2 1

Series Editor: Iwona Blazwick
Commissioning Editor: Ian Farr
Project Editor: Francesca Vinter
Design by SMITH
Allon Kaye, Justine Schuster
Printed and bound in China

Cover, front, Robert Smithson, *Asphalt Rundown* (1969), October 1969, Rome. © The Holt-Smithson Foundation/DACS, London. Courtesy of James Cohan Gallery, New York and Shanghai; *inside flap*, Santiago Sierra, *House in Mud* (2005), Kestnergesellschaft, Hannover (detail of installation). © DACS, London. Courtesy of the artist and Lisson Gallery, London.

Whitechapel Gallery Ventures Limited
77–82 Whitechapel High Street
London E1 7QX
whitechapelgallery.org
Distributed to the book trade (UK and Europe only) by Central Books
centralbooks.com

The MIT Press
Cambridge, MA 02142
mitpress.mit.edu

Whitechapel Gallery

Documents of Contemporary Art

In recent decades artists have progressively expanded the boundaries of art as they have sought to engage with an increasingly pluralistic environment. Teaching, curating and understanding of art and visual culture are likewise no longer grounded in traditional aesthetics but centred on significant ideas, topics and themes ranging from the everyday to the uncanny, the psychoanalytical to the political.

The Documents of Contemporary Art series emerges from this context. Each volume focuses on a specific subject or body of writing that has been of key influence in contemporary art internationally. Edited and introduced by a scholar, artist, critic or curator, each of these source books provides access to a plurality of voices and perspectives defining a significant theme or tendency.

For over a century the Whitechapel Gallery has offered a public platform for art and ideas. In the same spirit, each guest editor represents a distinct yet diverse approach – rather than one institutional position or school of thought – and has conceived each volume to address not only a professional audience but all interested readers.

MATERIAL MAKES MORE THAN ONE LANGUAGE POSSIBLE

I'm interested in an excess of material, an excess of interpretation

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Petra Lange-Berndt
Introduction//How to Be Complicit with Materials

As an art historian trained in West Germany, during childhood I grew up with *Die Sendung mit der Maus* (Mouse TV), with its *Lach- und Sachgeschichten*: stories to entertain and to learn from. To this day, this programme from the public service broadcaster WDR shows short films documenting workflows and working conditions in factories, their machines and the ways in which materials are transformed into consumer goods. It's all there, Harun Farocki-style, the re-materialized image of applied Marxism, but mixed in with funnies, practical jokes and fairy tales. Material generally denotes substances that will be further processed, it points to the forces of production at the time. From a critical perspective, the term 'material' describes not prime matter but substances that are always subject to change, be it through handling, interaction with their surroundings, or the dynamic life of their chemical reactions. It is therefore a political decision to focus on the materials of art: it means to consider the processes of making and their associated power relations, to consider the workers – whether they are in factories, studios or public spaces, whether they are known or anonymous – and their tools and spaces of production.[1] But traditions of empiricism are more dominant in the Anglo-American world than most scholars would like to admit, and the recent rise of technical approaches in art history subjects the category again to a positivist approach, where connoisseurship is combined with an unquestioning belief in science. Thus, to address processes of making is still associated with formalism, while materials are thought of in terms of concrete, direct and inert physicality, carrying imprinted messages. Although objects and things have been much investigated, this field has not received the attention it needs. For some, to engage with materials still seems the antithesis of intellectuality, a playground for those not interested in theory, while material studies are defined, at best, as as an auxiliary science. Materiality is one of the most contested concepts in contemporary art and is often sidelined in critical academic writing.

Get Dirty

Unsurprisingly, the most researched contemporary artworks tend to be those closest to the practice of writers: works that are often language-based, that illustrate philosophical theories or documentary approaches. And in the field of academic art-historical research, those who deal with texts and language, pens, computers and paper seem to have trouble engaging with those who deal with materials more directly connected to the everyday. Following a philosophical

tradition that privileges form over matter, design over material, drawing over paint and the spiritual over the bodily, such writings often ignore the role of materials in the visual arts, or take it for granted. This prejudice stems from the way in which modernist thinkers such as Clement Greenberg had treated the subject. As Rosalind Krauss summarized in her 1999 analysis of a 'post-medium condition', in Greenberg's Kantian notion of an advanced art characterized by its medium specificity, materials were defined as autonomous and essential, with distinct properties.[2] But what is not mentioned is that Greenberg was, like most modernists, not greatly interested in materials, the stuff of this world.[3] Even if he proclaims his investment in the medium, in this neo-platonic tradition the goal is to overcome any remnant of the everyday in order to arrive at pure *form* and transcendence. Material factuality is only a springboard for leaping into abstraction and visuality, realms understood as being less physical, as art historian Hope Mauzerall has phrased it: 'Materiality or matter here is recognized but then cancelled out.'[4] In fact, the legacy of this version of modernism is not a focus on materials, but quite the opposite: their elimination. In reaction to this, art historians such as Krauss, Yve-Alain Bois and Briony Fer have focused on art that explores processes of embodiment, touch and the materialization of thought processes.[5] However, one could argue that even in these projects materials are not valued per se. They are significant because they lead to the non-transcendent, to the submerged zone of the unconscious and the repressed,[6] but materials are not allowed to be vagabond, dirty and contagious, they are only used *to think about* or *to think with*, and again act as the indicator of something else. The societal characteristics emanating from materials that the philosopher Gernot Böhme identified,[7] and above all their histories, are largely ignored; in this respect, these discourses remain within the realm of the white cube.

It might, however, be worth mentioning that this fixation on Greenberg is not universal.[8] Let's rewind and start from a different angle. As physicist and philosopher Karen Barad, among others, has phrased it, to engage with materials also means to formulate a critique of logocentrism and the predominance of written language as a tool to generate and communicate meaning.[9] I would therefore like to propose a methodology of material complicity. What does it mean to give agency to the material, to follow the material and to *act with* the material? For a start, materials are neither objects nor things; if one considers a broom, for instance, the broom is a thing while the material might be wood or plastic. Materials are far less anthropocentric, and this is one reason why this category has been neglected. If anthropology, for example, addresses material culture, it investigates that which is human-made, and as anthropologist Tim Ingold has pointed out, even in a discourse which has produced the most elaborate theories of things, an actual focus on materials remains surprisingly rare.[10]

To follow the material means to enter a true maze of meanings, where one encounters terms such as matter, material, materiality, *Stoff*, substance or medium. As matter – according to chemist and writer Primo Levi – is hard to grasp, so are the terms associated with her.[11] The terminology differs in each discipline and is hardly clarified in art criticism. Art historian Monika Wagner, who has been researching this field since the early 1990s, provides a discussion of the etymology.[12] While 'matter' in this context points to the philosophical tradition of Plato and Aristotle, where the substances of the world are theorized as being close to the point of non-existence, only to be elevated by ideal forms, the comparatively recent term 'material' denotes instead – in more concrete ways – that which artists are working with. And in contemporary art this can include anything from blood to air or computer technology.[13] The term materiality is even younger and generally addresses the many upheavals of postmodernism and poststructuralism, what media scholars call the apparatus, or, as historian of science Hans-Jörg Rheinberger suggested, the experimental system. Materiality points to the whirling complexity and entanglement of diverse factors in the digital age, in which 'material', which like sound or language can now also be something that is not physical, is an effect of an ongoing performance.[14] And meanings multiply further when different global contexts are considered. The discourse around the Japanese Mono-ha movement, the 'school of things' of the early 1970s, offers different terminologies. As Mika Yoshitake explains in this context, the term *mono*, meaning thing, matter *and* material, was written in the Japanese phonetic script, hirangana, to distinguish it from the associations of substance or physical object implied in its Chinese character form.[15] The group's agenda was distinct from that initiated by Gutai's leader Jiro Yoshihara,[16] which identified the tactile substance of matter with the human spirit. Rather, the discussions of Mono-ha artists relied on affective sensations arising from matter, which were expressed through colloquial words such as *dokitto* (jump of heart), *zokutto* (chill in the spine), or *shibireru* (thrill), indicating a temporary discovery of and engagement with matter in the structures of daily life: 'Mono thus would constitute a passage or phase that attempted to locate the work not in its objective form, but in the structure through which things revealed their existence.'[17] And to cite just one of many other cultural perspectives, scholars such as Jessica Horton and Janet Catherine Berlo have engaged with a number of contemporary Native American artists who employ animism and intellectual traditions in 'which material agencies have historically been integrated *with* notions of the human'.[18]

Act with the Material

It is only now that the amount of research which still needs to be done in transcultural investigations of the field is becoming apparent. To broaden the

horizon further, I would like to add from my partial perspective another discourse barely present so far in the Anglo-American context. In central Europe, since the nineteenth century there has been an ongoing art-historical debate around materials as conduits of meaning. The materialist tradition, of course, is well known, but one should especially mention architect and writer Gottfried Semper, who, considering applied arts during the industrial period, with their newly invented synthetic and polymorphic substances, came up with the concept of a practical aesthetics, defined from the perspective of materials, technique and use.[19] In contrast to the Arts and Crafts movement in Britain, here the problematic and essentialist concept of 'truth to materials' was not at odds with industry and technology. In this tradition, rather than that of Kant and Hegel, and following the impulse of Aby Warburg's *Kulturwissenschaften* (cultural studies) it has been the aim of scholars like Günter Bandmann, Wolfgang Kemp, Monika Wagner, Georges Didi-Huberman and Dietmar Rübel to 'enable the material to talk', as Bandmann phrased it in 1969, already defining material complicity as an analytical tool within art practice, art criticism and art history.[20] This research into *Produktionsästhetik* (the aesthetics of production) and the changing semantics of materials discusses how content, or factuality, is produced; in short, it analyses the conditions for discourses and ideas to appear in the world. At the same time, the materiality of an artwork is never completely absorbed into representation. Material complicity is more than basic research (*Grundlagenforschung*) and has a clear political agenda. For example there is a Marxist tradition, engaged with by philosopher Dieter Hoffmann-Axthelm, which is invested in the hope for a unity of art and production, like the utopia of *Materialkultur* fostered by the Russian avant-garde, centred on revolution and a reordering of society. As literary scholar Werner Mittenzwei writes, in the early twentieth century and in post-1968 academic culture in German-speaking countries there was the hope for a left-wing *Materialästhetik* – a materialist aesthetic which would ask what revolutionary potential the contemporary materials produced by society might bear in the realm of art.[21] In this context, rather than material production leading to the fabrication of consumer goods, the possibilities of materials should be set free without turning them into commodities. Despite most of this debate being unknown due to language barriers, as Antonio Negri has written more recently, the 'materialist field is productive. And this production passes through the flesh.'[22] A sticky materiality, as Didi-Huberman has analysed, can point to psychological depth as well as the death drive; and as the philosopher and gender theorist Judith Butler has famously discussed, material has been coded feminine, which requires an analysis of gender biases.[23] The category material has also been defined as natural or subaltern. Therefore, to act with the material and to be complicit means to

investigate societal power relations. Are there languages beyond those of philosophy, beyond the official and sanctioned system of the written knowledge game?[24] Clearly materials have agency, they can move as well as act and have a life of their own, challenging an anthropocentric post-Enlightenment intellectual tradition. And those who have been listening to them, who are not intimidated by materials, have not predominantly been academics but artists, designers, architects, conservators or technicians.[25] Things are often practised long before they are written about. In order to give a voice to these practitioners, interviews have been included throughout this volume. However, this is not intended to stage the artist as an unquestioned authority in order to secure market values, as can happen in so many institutionalized interview projects.[26] To follow the material means not to discuss aesthetic issues of quality, expressiveness or symbolic content but to investigate transpersonal societal problems and matters of concern. Within this methodology it is paramount to situate artistic practices within historical perspectives and to open the meanings of the materials used to their everyday or non-art connotations: 'To understand materials is to be able to tell their histories.'[27] In order to engage critically with the meaning of gasoline in Romuald Hazoumè's installations, chocolate in the work of Janine Antoni, or garbage in the projects of Mierle Laderman Ukeles one needs a reformed set of art-historical tools. Complicity with materials means not engaging predominantly with peers who operate in the same system, but rather, becoming involved with other disciplines according to the topic: botanists, for example, if considering an art practice centred on plants; technologists, if it engages with smart materials; or if it is centred on trash one might want to interview workers in a sanitation department. The path one takes when 'following the materials' is thus not linear, not clearly divisible into avant-garde, high modernist, postmodern, and so on. Rather, one encounters entangled, anachronistic layers, incorporating references that point beyond canonical art-historical boundaries.

Experiment with Unknown Possibilities

The current debate around materials and materiality, which takes into account the upheavals of the digital revolution, was fuelled by philosopher Jean-François Lyotard and curator Thierry Chaput's influential show 'Les Immatériaux' at the Centre Pompidou, Paris, in 1985, as well as the work of the poststructuralist theorists who contributed to the accompanying publication. The exhibition displayed artworks, things and materials, such as plants or artificial skin, alongside the most advanced computer technology, with its images and texts.[28] Physical substances, odours or sounds were fused with mass media, and the intention was to question traditional dualisms and to come up with languages and practices adequate to the new situation. Jacques Derrida, for example, asks

us to experiment with the unknown possibilities we could add to the ancient Sanskrit root of the word material: '(*mât* + X)'.[29] And in their work *Mille Plateaux*, published five years earlier, Gilles Deleuze and Félix Guattari speculated about overturning the legacy of Aristotelian theory which conceives of being as a compound of matter and form, seeking instead a new relationship to matter which is characterized by motion, flux and variation, a 'matter-flow' that 'can only be *followed*'.[30] In such a scenario thoughts may become leaky or sticky, bodies may dissolve into dynamic clouds or nomadic electrons. From this perspective, the collaborative impulse does not stop at investigating non-art fields of labour, since another 'worker' to consider is the material itself. A problem with traditional Marxist and 'material culture' approaches is that most of the time they do not really follow the material: fibres, stones or synthetic polymers are largely thought of as being dead and useless unless human agency activates them. The aforementioned European art-historical debate that called for the acknowledgement of an *Eigenleben*, or 'life of its own' of materials here meets the contemporary Anglo-American discourse concerning new materialisms, as in the work on 'vibrant matter' of political theorist Jane Bennett, or the agential realism of feminist theorist Karen Barad, 'where matter is understood as a dynamic and shifting entanglement of relations rather than as a property of things'.[31] Other feminist theorists such as Elizabeth Grosz have revived evolutionary theories in order to point out how materials are always in a state of becoming, entangled in vibrant webs of relations, with their own ecologies and politics.[32]

As scholar Bill Brown has proposed, we know the world only as it is mediated by the senses. But it might prove useful in the end to avoid the discrepancy between the phenomenal and the material – to describe instead the phenomenon of materiality, or the *materiality-effect*, the end result of the process whereby one is convinced of the materiality of something.[33] To understand the languages that emanate from materials or the atmospheres connected to them one especially needs to consider what happens after the work of the artist is done, once materials are submitted to the forces of time, gravity or the elements. And as Donna Haraway has phrased it, although one cannot 'be' simultaneously in more than one subject position or identification (whether a cell or molecule, or a woman, colonized person, labourer, and so on) one can push for the 'opening of non-isomorphic subjects, agents and territories of stories unimaginable from the vantage point of the cyclopean, self-satiated eye of the master subject'.[34] If the knowing self is partial, never finished and whole, it can join with another, to see together without claiming to be another.[35] Phenomenology insists on a macroscopic, anthropomorphic view, while to be complicit with the material means, above all, to acknowledge the non-human.[36] This is not about 'a block of throbbing bodily sensations a subject might carry around in joy or anger, but

sensation of this or that substance or material, sensation embodied as and in material forms, "the smile of oil, the gesture of fired clay, the thrust of metal"'.[37] 'Sensation' here is conceived as a not quite subjective mobilizing force which the sensing subject shares in common with a sensed object, pointing to a world where human bodies and their surroundings have become porous.[38] The physical world already lost its stability at the beginning of the twentieth century, with research into the micro-world of atoms, quantum mechanics and the theory of relativity, where material becomes energy levels. Yet materiality as conceptualized by science only appears to us in elaborate experimental settings. Art history needs to catch up not only with this history but above all with advanced contemporary theories, models, simulations and experiments as they have been developed in chemistry, physics and engineering, while at the same time ensuring a critical distance that prevents the elevation of these fields to the status of unquestioned authority. This also means engagement with those rogue scientists who, like contemporary alchemists, experiment outside of the official laboratories.

Make the Materials Laugh

This volume aims to map a critical genealogy of the formation of concepts of materiality, dematerialization, immateriality, inter- and transmateriality. Focusing on the moments when materials leave behind the confines of the white cube, become wilful actors and agents within artistic processes and enmesh their audience in a network of connections, these texts for the most part avoid the palatable materials of academic art, exploring instead the substances that artists have engaged with to expand notions of process, time, contingency or participation. The texts address where and how materials obstruct, disrupt or interfere with social norms, allowing for repressed, messy or unstable substances and impure formations to surface.

Follow the Materials, the first section, draws on a broader historical and geographical perspective to open up the debate. Dominant philosophical traditions and artistic creation myths are introduced, as well as key issues that form the basis for further investigation, such as questions around hierarchies of gender or colonial constructs of race and privilege. *The Living Fire of Labour* considers Marxist approaches to the field, especially in relation to globalization. Debates around artistic labour and production aesthetics further politicize the category of material; for example, how does one liberate materials from hands or tools? Where there is work there is mess. Industrialization has also been characterized by the advent of new flexible materials such as plastics. *Formless Blobs and Trash Flows* looks into the ongoing fascination of artists with malleable substances that increasingly subvert traditional orders. Formlessness, Anti Form or softness can be described as the insurrection of material. The artistic practices

concerned with these fields do not result in eternal artworks but in temporary, procedural configurations where materials develop uncanny lives of their own and display their power to metamorphose. Especially transient conglomerates such as garbage, or indistinguishable 'stuff' can cause traditional material hierarchies to implode.[39] And with the consideration of mega materials like trash and junk one also addresses environmental issues such as recycling. At the same time, the dissident surrealist Georges Bataille's concept of *bas matérialité*, base material, points to ruins, relics, decay and decomposition, a version of material that is antithetical to the smooth surfaces of capitalist consumer goods and corresponds with our own mortality. Sticky substances let the distinction between subject and object disappear; at the same time they are connected to phobias and anxieties. *Bodies that Matter* looks more specifically at materiality as a perpetuator of gender hierarchies. Ever since Viennese Actionism, the waves of feminist body art and performance in the 1970s and 'abject art' in the 1990s artists have been using material as various as hair, urine or foodstuffs to revolt against dominant social orders. Bodily stuff can also be related to violence, war and genocide, while recent bio art analyses the racism inherent in DNA analysis. *Nature after Nature* is dedicated to the entropy and vitality of substances, their having a life-of-their-own, and to the man-made substances of a 'post-nature' nature. Materials here become traces that are entangled in the web of life, showing what the philosopher Henri Bergson termed *élan vital*, vital spirit, starting to vibrate or become unstable in their molecular structure. Nature is more than the raw material of culture in the logic of capitalist colonialism. Rather, this section deals with grown materials, questions of ecology and the web of connections that includes non-humans as well as animals as producers of material culture. *Rematerialization of the Void* discusses the upheaval that still defines the recent art-historical debate in the Anglo-American context: dematerialization. Contrary to the prevailing account Lucy Lippard and John Chandler introduced this term in 1968 in relation not only to 'art as idea' but also 'art as action'.[40] It was not their aim to dispense with materials but instead to redefine and update the category, while lively debates around the role of materials took place in the decade that saw the shift from industrial to post-industrial labour and the untethering of the dollar from the gold standard.[41] However, the works produced in this context – quite different to Lyotard's *immatériaux* – stayed predominantly within the confined realm of the art world. Yet if one follows the matter of the flow of light, for instance, one is led to the particles of dust dancing in a beam, to our *Umwelt*, or environment, and thus to social interactions. *Materialities of Media* examines the particular type of materiality, or *Stofflichkeit*, of information and communication. The role of mass media is indissolubly intertwined with materiality, since photography, film,

video and computer technologies have been used to document ephemeral events. But more specifically, the artistic strategies investigated here are connected to upheavals brought about by the popularization of computer technology as discussed by the semantic field of 'Les Immatériaux'. Additionally, in a way that is similar to the idea of intermedia, in the digital world as well as in electronic technosciences one material can be modelled by using another.[42] But instead of an imitation, one might rather describe the result of such intermateriality as hybrid, as mutant material, where a new substance appears that also critically comments on the initial components that started the experiment.[43] For example, bio art often questions how the human body interacts with technology and the socio-economic systems that support this interaction. But this final section is not intended as an apotheosis, it does not propose 'immaterials' as a higher form of being, invoking an old dualism in the idea of the immaterial conquering the physical world.[44] Feminist perspectives on digital media such as the writing of Sadie Plant reinscribe into its discourse webs of relationships to tangible networks of connection and handcraft – and furthermore, around the world, not everyone inhabits a mediascape.

This reader emphasizes those voices that are in favour of acknowledging the materials used, be they air, a pen, paper or sound. If one wants to be complicit with materials, it is not enough simply to point to the fact that some objects are made out of hair or stone, and how we react to them. The point is to understand the history of the materials used, to research other contexts in which they were applied, to follow their traces, and most importantly, to find out how, in Derrida's phrase, to 'make the *matériel* laugh'.[45] While dematerialization has been linked to 'aloofness' and 'self-containment',[46] to 'tickle' materials means to embrace the carnevalesque, the popular, the excessive – and if necessary, to embarrass oneself. How this has been done in contemporary art is documented and debated in the following pages.

1 See Monika Wagner, *Das Material der Kunst. Eine andere Geschichte der Moderne* (Munich: C.H. Beck, 2001).

2 Rosalind Krauss, *'A Voyage on the North Sea': Art in the Age of the Post-Medium Condition* (London: Thames & Hudson, 1999) 5ff.

3 Hope Mauzerall, 'What's the Matter with Matter? Problems in the Criticism of Greenberg, Fried and Krauss', *Art Criticism*, vol. 13, no. 1 (1998) 81–96.

4 Hope Mauzerall, op. cit., 85.

5 See for instance Yve-Alain Bois and Rosalind Krauss, *Formless: A User's Guide* (New York: Zone Books, 1997); Briony Fer, 'The Work of Salvage: Eva Hesse's Latex Works', in *Eva Hesse* (San Francisco: San Francisco Museum of Modern Art 2002) 79–95.

6 See Hope Mauzerall, op. cit., 91.

7 Gernot Böhme, 'Der Glanz des Materials. Zur Kritik der ästhetischen Ökonomie', in Böhme, *Atmosphäre. Essays zur neuen Ästhetik* (Frankfurt am Main: Suhrkamp, 1995) 49–65.

8 There are other modernist discourses in Europe. For instance, Max Imdahl would be the father figure to name here for the German-speaking countries, but his writings are not translated into English and therefore hardly mentioned; see Max Imdahl, *Gesammelte Schriften*, ed. Angeli Janhsen et al., 3 vols. (Frankfurt am Main: Suhrkamp, 1996).

9 See Karen Barad in this volume, pages 213–15.

10 Tim Ingold, 'Making Culture and Weaving the World', in Paul Graves-Brown, ed., *Matter, Materiality and Modern Culture* (London and New York: Routledge, 2000) 53.

11 See Primo Levi in this volume, pages 155–6.

12 See Monika Wagner in this volume, pages 26–30.

13 Monika Wagner, Dietmar Rübel and Sebastian Hackenschmidt, eds, *Lexikon des künstlerischen Materials. Werkstoffe in der Kunst von Abfall bis Zinn* (Munich: C.H. Beck, 2002); Monika Wagner and Dietmar Rübel, eds, Material in Kunst und Alltag (= Hamburger Forschungen zur Kunstgeschichte I) (Berlin: Akademie Verlag, 2002).

14 Karlheinz Barck, 'Materiality, Materialism, Performance', in Hans Ulrich Gumbrecht and Karl Ludwig Pfeiffer, eds, *Materialities of Communication* (1988) (Stanford: Stanford University Press, 1994) 258–72 (the English version does not include all the essays); Hans-Jörg Rheinberger, *Toward a History of Epistemic Things: Synthezising Proteins in the Test Tube* (Stanford: Stanford University Press, 1997).

15 Mika Yoshitake, 'Mono-ha: Living Structures', in *Requiem for the Sun: The Art of Mono-ha* (Los Angeles: Blum & Poe, 2012) 100; see also Vera Wolff, *Die Rache des Materials. Eine andere Geschichte des Japonismus* (Zürich: diaphanes, 2015).

16 See Jiro Yoshihara in this volume, pages 32–4.

17 Mika Yoshitake, op. cit., 100.

18 Jessica L Horton and Janet Catherine Berlo, 'Beyond the Mirror: Indigenous Ecologies and "New Materialisms" in Contemporary Art', *Third Text*, vol. 27, no. 1 (January 2013) 18; see also Anselm Franke, ed., *Animism* (Berlin and New York: Sternberg Press, 2010), Sabine Folie, Anselm Franke and Maurizio Lazzerato, eds, *Animism: Modernity through the Looking Glass* (Cologne: Verlag der Buchhandlung Walther König, 2012).

19 Gottfried Semper, *Style in the Technical and Tectonic Arts, or Practical Aesthetics* (1860–63) (Los Angeles: Getty Research Institute, 2004). This book has only recently been translated, despite the fact that Semper had emigrated to London; see also Dietmar Rübel, Monika Wagner and Vera Wolff, eds, *Materialästhetik. Quellentexte zu Kunst, Design und Architektur* (Berlin: Reimer, 2005).

20 Günter Bandmann, 'Bemerkungen zu einer Ikonologie des Materials', in *Städel-Jahrbuch*, N.F., vol. 2 (1969) 76 (translation: Petra Lange-Berndt); Günter Bandmann, 'Der Wandel der Materialbewertung in der Kunsttheorie des 19. Jahrhunderts', in H. Koopmann, J.A. Schmoll, gen. Eisenwerth, eds, *Beiträge zur Theorie der Künste im 19. Jahrhundert* (2 vols), vol. 1 (Frankfurt am Main: Klostermann, 1971) 129–57; Wolfgang Kemp, 'Material in der Bildenden Kunst. Zu einem ungelösten Problem der Kunstwissenschaft', in *Prisma. Zeitschrift der Gesamthochschule Kassel*, 9

(Kassel, 1975) 25–34. The research compiled at the Material-Archiv (founded 1995) situated at the University of Hamburg and led by Monika Wagner with its many projects and PhD students has especially been important in this context.

21 See Werner Mittenzwei, 'Brecht und die Schicksale der Materialästhetik. Illusion oder versäumte Entwicklung einer Kunstrichtung?', in *Dialog 75. Positionen und Tendenzen* (Berlin: Henschelverlag, 1975) 9–44, 234f.

22 Antonio Negri, 'Kairos. Prolegomena zum Feld des Materialismus' (2000), in *Ökonomien der Zeit* (Cologne: Museum Ludwig, 2002) (= Antonio Negri, *Kairòs, Alma Venus, Multitudo: nuove lezioni impartite a me stesso*, Rome 2000) (translation by Petra Lange-Berndt).

23 See Georges Didi-Huberman and Judith Butler in this volume, pages 42–53 and 120–22.

24 This impulse points to cultural differences. Following the upheavals of 1968, intellectuals in Germany had to confront the fact that after the Shoah it was clear that the rich philosophical traditions of the country had not prevented fascism. This explains for instance Monika Wagner's deeply rooted scepticism towards the acceptance of philosophy as unquestioned leader when engaging with art practices, an attitude that is completely at odds with the order of the Anglo-American world.

25 Of course artists can be art historians or curators, while conservators write academic texts. See, for the hierarchy of art and craft in relation to textile materials, Elissa Auther, *String, Felt, Thread: The Hierarchy of Art and Craft* (Minneapolis: University of Minnesota Press, 2010).

26 See for instance the 'Conservation Interviews' carried out by Tate, London, or a similar programme at the Whitney Museum of American Art, New York.

27 Tim Ingold, 'Toward an Ecology of Materials', *Annual Review of Anthropology*, no. 41 (2012) 434.

28 Antonia Wunderlich, *Der Philosoph im Museum. Die Ausstellung, 'Les Immatériaux' von Jean François Lyotard* (Bielefeld: Transcript Verlag, 2008).

29 See Jacques Derrida in this volume, pages 207–8.

30 See Gilles Deleuze and Félix Guattari in this volume, pages 38–42.

31 Jane Bennett, *Vibrant Matter: A Political Ecology of Things* (Durham, North Carolina: Duke University Press, 2010); Karen Barad, *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham, North Carolina: Duke University Press, 2007) 35; extract included in this volume, pages 213–15.

32 See Elizabeth Grosz in this volume, pages 146–9.

33 Bill Brown, 'Materiality', in W.J.T. Mitchell and Mark B.N. Hansen, eds, *Critical Terms for Media Studies* (Chicago: University of Chicago Press, 2010) 51f.

34 Donna Haraway, 'Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective' (1988), in Carole McCann and Seung-kyung Kim, eds, *The Feminist Theory Reader: Local and Global Perspectives* (New York and London: Routledge, 2003) 396.

35 Ibid., 396.

36 See Jens Soentgen, *Das Unscheinbare. Phänomenologische Beschreibungen von Stoffen, Dingen und fraktalen Gebilden* (Berlin: Akademie Verlag, 1997); Elizabeth Grosz, *Chaos, Territory, Art: Deleuze and the Framing of the Earth* (New York: Columbia University Press, 2008) 23.

37 Gilles Deleuze and Félix Guattari, *What is Philosophy?* (1991) (New York: Verso, 2013) 166, as quoted by Grosz, *Chaos*, op. cit., 60.

38 Elizabeth Grosz, *Chaos*, op. cit., 71ff.

39 As anthropologist Michael Thompson put it, 'in order to study the social control of value, we have to study rubbish.' Idem, *Rubbish Theory: The Creation and Destruction of Value* (Oxford: Oxford University Press, 1979) 10.

40 See John Chandler and Lucy R. Lippard in this volume, pages 176–8.

41 *Materializing 'Six Years': Lucy R. Lippard and the Emergence of Conceptual Art*, ed. Catherine Morris and Vincent Bonin, published on the occasion of the exhibition at the Brooklyn Museum (Brooklyn, 2012).

42 See for instance Mark Miodownik, *Stuff Matters* (London: Penguin Books, 2013).

43 Christoph Kleinschmidt, *Intermaterialität. Zum Verhältnis von Schrift, Bild, Film und Bühne im Expressionismus* (Bielefeld: Transcript Verlag, 2012).

44 For a criticism of this terminology, see Rübel, Wagner and Wolff, *Materialästhetik*, op. cit., 323.

45 See Jacques Derrida in this volume, pages 207–8.

46 See John Chandler and Lucy R. Lippard in this volume, pages 176–8.

THE WORK IS BORN
FROM A MERE TOUCH
OF MATTER

I WANT THE MATERIAL
FROM WHICH MY WORK
IS MADE TO REMAIN
AS IT IS

WHAT TRANSFORMS
IT INTO EXPRESSION
IS NO MORE THAN A
BREATH

Hélio Oiticica, Statement, 6 September 1960

FOLLOW THE MATERIALS

Monika Wagner
Material//2001

[...] Discussions of 'material' as an aesthetic category are recent. In its day-to-day applications, material belongs to a lowly sphere. Nevertheless, through its proximity to 'matter' (German: *Materie*; French: *matière*) – a concept from which material was slowly extracted in the modern era – it is charged with a philosophical significance dating back to antiquity, due to its conceptual pairing with 'form'. While matter and material are difficult to disentangle in their historical usage, the purpose here is not to define material in the context of the history of philosophy or the natural sciences. In general, material, unlike matter, refers only to natural and artificial substances intended for further treatment. The substances and objects that constitute material are subject to transformation through processing, and hence they reveal information about the forces of production at the time, or a specific historical technique. In a narrower sense, material is the stuff which provides the parent substance for artistic creation. From this perspective, material – like matter – is part of a reciprocal relationship with form and idea, the bywords for creative invention.

The current debate about material in cultural studies derived momentum from Jean-François Lyotard's Paris exhibition 'Les Immatériaux' in 1985, with contributions from many French poststructuralist theoreticians (Jacques Derrida, Christine Buci-Glucksmann, et al.). The exhibition, with the programmatic title that translates material into its opposite without eradicating the parent substance, displayed not only objects but also image and text programmes generated by computer technology. It asked questions about how the technical development of information systems changed perceptions about the materiality of things. The affected interests reach deep into everyday life and popular culture, because as a consequence of these advances in media technology, hand in hand with widely discussed ideas about extensions to the physical body and ubiquitous surveillance, the world appears to have forfeited its material differences, and perceptions of volatile surfaces seem to be replacing those of firm objects. However, the exhibition in Paris was received less as reviewing the validity of the conventional concept of material than as confirming the substitution of the old world of physical materials by the allegedly immaterial texts and images generated by information technology.

This granted digital codes an aura once reserved for the work of the artist in transforming material into another, higher state. After all, prior to secularization, the historical predecessor to the present aesthetic debate about the dissolution

of artistically processed and aesthetically perceived materials was not directed at earthly purposes.

In an idealist tradition within aesthetic theory that referenced Plato and Aristotle, material was constantly regarded as the base and counterpart to artistic creativity, which, even in its most precious forms, had to be transcended or transformed by art as activity. In so far as texts and images acquire one and the same material consistency in the new media, i.e. as temporary, intangible signs on a screen, the material of which a work consists, or in which it is realized, is also considered from new angles. It is hardly surprising, then, that material only moved into the narrower horizon of reflection within aesthetics when the physical, tactile layers of the old concept of material were undermined and their disappearance postulated.

Firstly, material is understood as an information carrier; in this interpretation, material is a medium. Because this medium, in its most recent manifestation as digitally generated codes, is no longer haptically graspable and no longer incurs tactile differentiation – unlike traditional media, be it the poet's written page or the artist's painted canvas – immaterial properties are attributed to it, as they once were to musical notes. There is a tradition still at play here, for the remote senses – hearing and sight – ranked highest in the hierarchy implicit in the European history of the senses because they came closest to knowledge of God. They seemed capable of perceiving the immaterial, whereas physical material, associated with touch, ranked lowest in the scheme of earthly cognition.

Secondly, as Marshall McLuhan put it, in the information age the medium has become the message. Postmodern positions have latched onto this and revisited old views of material as a more or less neutral medium of transportation. Material needs no longer to be understood as a detachable carrier for a form or an idea, but can be regarded as indissolubly interwoven with it. This trend, expressed in postmodern discourses, was not first triggered by computer-generated data, by images which have no archetypes, but had already been encouraged by changes taking place in the arts during the twentieth century. In the self-referential systems of 'autonomous' artworks, there is a tendency for the idea, the medium and the material to converge. This, too, meant that in the twentieth century attention to the medium was almost automatically drawn to the material.

Since an independent semantic history of the term material is not available, various facets will have to be pieced together in order to establish the concept as a category. That done, an attempt can be made to differentiate systematically and historically between matter and material. Evidently material initially played a role in the history of the fine arts, and so that is where the earliest evidence of historical reflection and evaluation is found.

Material in the sense of a physical substance carried primarily negative

connotations in aesthetic debate until around 1800. It belonged to the lower sphere of everyday life and had to be made to disappear in the process of artistic creation. This distinguished the artwork from all the other things in which material was able to play a part due to its material value, its functional properties or perhaps its semantics. Material, weighed down by the heaviness of the 'first world', apparently threatened the arts, the 'second creation'[1] with danger or seduction, or at least an impairment of the message. Semiotics established laws for this relationship. As long as the sign, be it a word or an image, refers to an absence, the meaning can be detached from the materiality of the sign. The sign can be read through the material as semantic. But as every sign is physically fixed to material, which can be converted into energy, and as even the new media are materials in this sense, even here the material contingency of the sign cannot be ignored.

Before the revolution in media technology, not all fields of cultural production had been equally successful in achieving that triumph over the material that was so highly prized. Into the nineteenth century, the hierarchy in the arts was structured according to their dependence on material, in the sense of physical substances. Music and poetry thus ranked higher than the fine arts, which took shape in an abundant variety of physical materials. Moreover, the materials used in the fine arts – such as wood, stone, metal, etc., in contrast to, say, paper as the carrier of script – were also used in other day-to-day contexts. In early modern artworks, an attempt was made to erase those historical usages that clung to materials. The same hierarchical ordering that was applied to the genres also took place between the fine arts: drawing, which in its commonest materiality is most like writing, was seen from the Renaissance onwards as capable of coming closer to the 'idea' than any other fine art. Consequently drawing, although it was late to acquire the status of an independent art rather than a mere tool, was honoured above painting, and this in turn above sculpture. Before the fine arts were emancipated from the *artes mechanicae* in the Renaissance, they had been attributed to the guilds which worked in other ways with the same materials. By contrast, the verbal arts and music, which although linked to the body do not inevitably materialize in an object by means of manual processing, counted among the superior *artes liberales*. As they were independent of realization in a physical material, they appeared to be an 'immaterial' expression of an idea.

Echoing its historically differentiated treatment, material is granted different valences within the various specialist disciplines composing the field we can designate as cultural studies (*Kulturwissenschaft*). Today the concept of materiality is above all negotiated from the perspective of linguistics and literary scholarship – and more recently media studies.[2] When literary scholars discuss materiality, they are particularly concerned with its mediality aspect; in keeping with the subject-matter, this research includes phonetic language as a physically

intangible material. In addition, as proposed by Julia Kristeva with reference to Derrida, the materiality of language designates the level of language that precedes all signification, the unformed acoustic material that is the resource of any human being.

In art history, on the other hand, in keeping with its various kinds of subject-matter, the debate is more concretely about physical material in the sense of the substances processed. Following initial reviews of individual materials around 1900, work has been underway since the 1960s in particular on an iconology of key materials such as bronze, granite, porphyry and wax.[3]

In ethnology, the older concept of sanctity (*Stoffheiligkeit*) has given way to attribution of value (*Materialwertigkeit*)[4] when addressing the semantics of the materials used for things rather than their everyday properties and functions.

Unlike West European cultures, the cultures of Asia, and above all Japan, ascribe a different status to material, which mediates between everyday culture and high art. In Japan's cultural tradition, material has a communicative function of its own beyond what can be translated with words. A fascination with this other language, reflected in an aesthetic appreciation of plain, simple materials and yet also compatible with a high-tech culture of 'immaterialities', has contributed to an aesthetic upgrading of material in European and North American culture as well.

In recent years, feminist critique has raised fundamental objections to traditional imaginations of material as a pairing for form, initiating a challenge to the ideology behind the history of this form-material dualism, with its gendered implications.[5] This critique exposes the gendered conceptualization underlying the binary scheme of material and form (of which the model of matter and form in Ancient Greek philosophy is a variant), demonstrating how the idea of femininity inscribed in material (consider also its affinity to *mater* and *matrix*), which is then subjugated to or obliterated by form as the expression of a male-conceived creator, constitutes a thread throughout Western philosophy. The figure of speech coined by Aristotle about matter desiring form 'as the female desiring the male or the foul desiring the fair' (*ósper an ei thély arrenos kai aischron kalou*)[6] can be traced down the centuries as a subtext in Western art theory. This construction of gender duality explains why material was always regarded as base and form as lofty. Moreover, it touches upon the binary construction of body and soul. Judith Butler seeks to challenge the binarism in debate about the body from a feminist perspective, describing the body as material that is gendered by cultural attribution. This extracts the body as material from the dual structure that conceives of material not as a prior given, but as itself historically constructed.

On the one hand, then, material is discussed today in the light of an idea that it has been dissolved by the so-called immaterialities of new technologies, while on the other – from the margins – we can observe the consolidation of material

as a category of its own, alongside critical investigation of this category.[7]

1 Aleida Assmann, 'Die Sprache der Dinge. Der lange Blick und die wilde Semiose', in H.U. Gumbrecht and K.L. Pfeiffer, eds, *Materialität der Kommunikation* (Frankfurt am Main, 1988) 238.
2 See Gumbrecht and Pfeiffer, op. cit., trans. *Materialities of Communication* (Stanford 1994).
3 See Julius Schlosser, 'History of Portraiture in Wax' (1910), in Roberta Panzanelli, ed., *Ephemeral Bodies: Wax Sculpture and the Human Figure* (Los Angeles, 2008) 171–314; Noberto Gramaccini, 'Zur Ikonologie der Bronze im Mittelalter', *Städel-Jahrbuch, Neuere Forschung* 2 (1987) 147–70; Thomas Raff, *Die Sprache der Materialien. Anleitung zu einer Ikonologie der Werkstoffe* (Munich, 1994); Suzanne B. Butters, *Sculptor's Tools, Porphyry, and the Prince in Ducal Florence* (Florence, 1996); Georges Didi-Huberman, 'The Order of Material: Plasticities, *malaises*, Survivals' (1999), in Brandon Taylor, ed., *Sculpture and Psychoanalysis* (Aldershot, 2006) 195–211.
4 See Wolfgang Brückner, 'Dingbedeutung und Materialwertigkeit', *Anzeiger des Germanischen Nationalmuseums* (1995) 14–21.
5 See Monika Wagner, 'Form und Material im Geschlechterkampf – Aktionismus auf dem Flickenteppich', in: C. Caduff and S. Weigel, eds, *Das Geschlecht der Künste* (Cologne, 1996) 175–96.
6 Aristotle, *The Physics*, vol. 1 (London and New York, 1929) 93.
7 Monika Wagner, *Das Material der Kunst. Eine andere Geschichte der Moderne* (Munich, 2001).

Monika Wagner, extract from 'Material', in Karlheinz Barck, ed., *Ästhetische Grundbegriffe. Historisches Wörterbuch in 7 Bänden*, vol. 3 (Stuttgart: J.B. Metzler, 2001) 866–70. Translation by Kate Vanovitch, 2015.

Antony Gormley
In Conversation with James Putnam//2004

James Putnam [...] What is your first response to clay as a working medium?

Antony Gormley It is the most immediate material that sculpture can use. It is also one of the oldest. Just think of those caves in the Dordogne or in the Haute-Garonne such as at Montespan where there is this loosely modelled bear sculpture formed from the wet clay – still wet! – and completely covered in holes where the Cro-Magnon speared it ritually.

Putnam There are also many caves that have these wonderful marks left from fingers pressed in the soft layer of clay that covered the rock.

Gormley Yes, on the roof at Rouffignac, the 'spaghetti' traces of fingers on the roof of the cave that go on for three kilometres. Those ochre hand silhouettes in Peche Merle seem to celebrate the fact that clay is so formable. When I first began using clay I just wanted something that actually carried the sign of touching, of an event between a receptive material and the hand. But I was suspicious of the 'Rodinesque' and the virtuosity of modelling. I want things to be directly made, and in as raw a material as possible. I have always used clay straight out of the ground. I get fantastic clay from a brickworks in Essex, just outside Southend. It's a lovely colour. When the loam comes off the surface you come across this sedimentary layer composed of the oldest igneous rocks that have been broken down to this very, very fine particulate and have sat there, amalgamating over millions of years. I like that, it's as if you're touching the flesh of the earth, just like those paleolithic hand impressions. [...] *Field* (1991) seems to combine this direct touch, bodies formed not as representation but as event – this act of squeezing in the space between the hands. It is the impression of this moment that gives the form, not an idea about the articulation of an anatomy. Then it is a register of a whole range of touch, because *Field* is made through many hands. It's also important to me that the clay we use is liberated from its destiny of becoming a brick. [...]

I suppose in the conventional hierarchy of materials bronze and marble are at the top, lead and wood are in the middle and plaster and clay are at the very bottom. But I think that has all been turned on its head in the last hundred years. When Richard Long poured liquid china clay on the floor of the Tate's Duveen galleries in 1990, there is a work that is absolutely recognizable as a great work of art, and yet it is swept up afterwards and there is nothing left. I think our attitude to time in objects has changed radically, so that we can now appreciate things in terms of fragility and temporality and their relationship to an event as much as to their sense of permanence and monumentality. [...]

Putnam Going back to the immediate appeal of clay, we could say it has an 'honest', down-to-earth quality to it. Yet its abundance and availability count against it in this hierarchy of fine art materials, also the fact that throughout history it was most frequently used in the manufacture of utilitarian artefacts.

Gormley But that is why it's so wonderful, because it is inherently democratic.

Putnam Clay obviously has more appeal to you in its natural state than in its more finished, glazed ceramic form.

Gormley Yes, I want it to be earth. I am very keen on the colour – the redness of

the clay being something to do with the iron in the earth, which is also the iron in our blood, which somehow makes a connection between flesh and planet. That connection is very important. *Field* suggests that the earth holds the memory of our ancestors and also the promise of the unborn. It has a life, a memory and a conscience. [...] It is extraordinary how universal and similar these ideas about creation are – from the book of Genesis, to the Akkadian and Mesopotamian myths, the Nag Hammadi Gnostic gospels and the Chinese creation legends. This idea of some primaeval matter from which man is created by the spit or breath of God. It's rooted very deep in our psyche that a god-like figure creates us from the earth and that we return to the earth.

Putnam An ancient Egyptian creation myth describes the ram-headed god Khnum as a potter who models on his wheel the egg from which all life was to emerge. There is also the idea of him modelling in clay all the forms in creation – living creatures, plant life, as well as the purely geographic features of the world. [...]

Gormley If you are interested in traces, you are interested in the shortest possible bridge between life and the record of life, and so as a medium clay is one of the best things that you can find. There is a feeling when you use it that you are repeating some primal transformation of the unformed to the formed. When you return it to the fire it becomes like stone. That is a very primal alchemy, like commending experience to memory, a fossilization or fixing of a moment, and unlike any of the other techniques – such as 'lost wax' – it is totally direct. I would like to reverse the old hierarchies in that sense too, because clay is a medium that can become an extension of the flesh in a way that no other material can.

Antony Gormley and James Putnam, extracts from 'Antony Gormley in Conversation with James Putnam', in *A Secret History of Clay: From Gauguin to Gormley* (London: Tate Publishing, 2004) 82, 84–5.

Jiro Yoshihara
Gutai Manifesto//1956

With our present-day awareness, the arts as we have known them up to now appear to us in general to be fakes fitted out with a tremendous affectation. Let us take leave of these piles of counterfeit objects on the altars, in the palaces, in the salons and the antique shops.

They are an illusion with which, by human hand and by way of fraud, materials such as paint, pieces of cloth, metals, clay or marble are loaded with false significance, so that, instead of just presenting their own material self, they take on the appearance of something else. Under the cloak of an intellectual aim, the materials have been completely murdered and can no longer speak to us.

Lock these corpses into their tombs. Gutai art does not change the material: it brings it to life. Gutai art does not falsify the material. In Gutai art the human spirit and the material reach out their hands to each other, even though they are otherwise opposed to each other. The material is not absorbed by the spirit. The spirit does not force the material into submission. If one leaves the material as it is, presenting it just as material, then it starts to tell us something and speaks with a mighty voice. Keeping the life of the material alive also means bringing its spirit to life. And lifting up the spirit means leading the material up to the height of the spirit.

Art is the home of the creative spirit, but never until now has the spirit created matter. The spirit has only ever created the spiritual. Certainly the spirit has always filled art with life, but this life will finally die as the times change. [...]

Yet what is interesting in this respect is that novel beauty which is to be found in the works of art and architecture of the past, even if, in the course of the centuries, they have changed their appearance due to the damage of time or destruction by disasters. This is described as the beauty of decay, but is it not perhaps that beauty which material assumes when it is freed of artificial make-up and reveals its original characteristics? The fact that the ruins receive us warmly and kindly after all, and that they attract us with their cracks and flaking surfaces, could this not really be a sign of the material taking revenge, having recaptured its original life? In this sense I pay respect to Pollock's and Mathieu's works in contemporary art. These works are the loud outcry of the material, of the very oil or enamel paints themselves. The two artists grapple with the material in a way which is completely appropriate to it and which they have discovered due to their talents. This even gives the impression that they serve the material. Differentiation and integration create mysterious effects. [...]

In any case, it is obvious to us that purely formalistic abstract art has lost its charm and it is a fact that the foundation of the Gutai Art Society three years ago was accompanied by the slogan that they would go beyond the borders of Abstract Art and that the name Gutaiism (concretism) was chosen. Above all we were not able to avoid the idea that, in contrast to the centripetal origin of abstraction, we of necessity had to search for a centrifugal approach. [...]

We have decided to pursue the possibilities of pure and creative activity with great energy. We thought at that time, with regard to the actual application of the abstract spacial arts, of combining human creative ability with the characteristics

of the material. When, in the melting-pot of psychic automatism, the abilities of the individual united with the chosen material, we were overwhelmed by the shape of space still unknown to us, never before seen or experienced. Automatism, of necessity, reaches beyond the artist's self. We have struggled to find our own method of creating a space rather than relying on our own self. The work of one of our members will serve as an example. Yoshiko Kinoshita is actually a teacher of chemistry at a girls' school. She created a peculiar space by allowing chemicals to react on filter paper. Although it is possible to imagine the results beforehand to a certain extent, the final results of handling the chemicals can not be established until the following day. The particular results and the shape of the material are in any case her own work. [...]

The search for an original, undiscovered world also resulted in numerous works in the so-called object form. In my opinion, conditions at the annual open-air exhibitions in the city of Ashiya have contributed to this. The way in which these works, in which the artists are confronted with many different materials, differ from the objects of Surrealism can be seen simply from the fact that the artists tend not to give them titles or to provide interpretations. The objects in Gutai art were, for example, a painted, bent iron plate (Atsuko Tanaka) or a work in hard red vinyl in the form of a mosquito net (Tsuruko Yamazaki), etc. With their characteristics, colours and forms, they were constant messages of the materials. [...]

Atsuko Tanaka started with a work of flashing light bulbs which she called 'Clothing'. Sadamasa Motonaga worked with water, smoke, etc. Gutai art attaches the greatest importance to all daring steps which lead to an as yet undiscovered world. Sometimes, at first glance, we are compared with and mistaken for Dadaism, and we ourselves fully recognize the achievements of Dadaism, but we do believe that, in contrast to Dadaism, our work is the result of investigating the possibilities of calling the material to life.

We shall hope that a fresh spirit will always blow at our Gutai exhibitions and that the discovery of new life will call forth a tremendous scream in the material itself.

Jiro Yoshihara, extracts from 'The Gutai Manifesto', *Geijutsu Shincho* (December 1956); trans. Sheila Fuchs, in *Gutai: Japanese Avant-Garde 1954–1965* (Darmstadt: Mathildenhöhe, 1991) 364–8.

Wolfgang Kemp
Wood – Figuring Problems of Material//1976

There are still two theories dominating debates about the problem of material. I would like to think of the first as an updated version of the old, idealist artistic doctrine that considered form to be everything and material nothing. [...]

On the other hand, there is the doctrine that explains the artwork as a function of material and technology. [...] This theory of material that, adapting the principle of FFF ('form follows function') we might call FFM ('form follows material'), has never been one associated with artists. It was first formulated as part of the aesthetics of empathy at the end of the nineteenth century, and has since then become important in the areas of product design and art education. It became effective as a core element of much writing on modern sculpture, as it was based – to all outward appearances – on the reduction to basics. In the absence of a descriptive reference to reality, material, among other categories, took on the role of an interpretative authority.

Today, neither of the two approaches of either denying material or glorifying it can any longer provide the basis for a systematic treatment of the problem. Both deliberately ignore a moment that I would like to place at the heart of a theory of material as a motivating, activating principle: the historicity of materials. [...] Adorno described the issue in general:

> Clearly there exists, perhaps imperceptible in the materials and forms which the artist acquires and develops something more than material and forms. [...] For the forms, even the materials, are by no means merely given by nature, as an unreflective artist might easily presume. History has accumulated in them, and spirit permeates them. What they contain is not a positive law; and yet, their content emerges as a sharply outlined figure of the problem. Artistic imagination awakens these accumulated elements by becoming aware of the innate problematic of the material.[1]

Adorno talks about 'history' accumulating in material; he does not talk about 'art history'. [...] All kinds of material exist in a broader historical context that we must understand as the material's historical use. In this way aesthetic material is related to the use and mastery of materials in the world outside art as such, and to its specific application outside its own sphere. This relationship, which can also be an interrelationship, creates a multiplicity of values alongside the actual technical application of the material. As a further factor, in light of this fundamental

classification, we should also take into account the immanent history of artistic materials [...]. This fundamental, historical constitution of materials, we contend, does not disappear in the act of artistic transformation either by placing emphasis on form, or by retreating into material's structural laws. It remains present as the object of, and a resistance to, aesthetic intervention. [...]

In the case of technically produced materials, modern art reflects the problem of 'material' as the problem of its own history and as the problem of the history of human appropriation of nature. [...] Many twentieth-century artists, whichever stylistic movement they belonged to, have ignored the problem by continuing the artistic practice and use of materials typical of the nineteenth century, while taking no account of developments outside the art world. [...]

Another position goes beyond the spectrum of aesthetically sanctioned materials to include in its designs materials hitherto considered base or of industrial origin. Cubism, Dada, Surrealism, Futurism and the Bauhaus, among other diverse movements, engaged in this process, differing fundamentally in that some considered the application of new materials to be a protest against the sclerotic artistic practice of the past, claiming this immediately as a new aesthetic system; while others wanted to elevate their production to the level of society as a whole. Both tendencies display a common attitude to their materials that we must highlight as a fundamental criterion of twentieth-century art: such art does not penetrate the material, it arranges its materials, organizes them, and brings about what Moholy-Nagy called material conditions. If, as Gottfried Semper described, the mastery of materials through machine production permeates deeply into the realm of human art, then art retreats from the kind of skill that was always a far-reaching ability to transform, i.e. an adaptation of matter, and relates to its basic elements more as an arranger – not really a producer, more an agent. [...] In its manner of production this kind of artistic practice, while it may be advanced in individual cases, remains at the level of *bricolage*. The association with alchemy, suggested to us again and again by contemporary artists, amounts to the same thing, while bestowing upon it an inappropriate aura. *Bricolage* cannot be understood as a primitive form of human practice, not even as the 'first', as Lévi-Strauss would have it. Rather, it is only conceivable as a correlate of technical and rational production, which must also include older forms of artistic production. [...] Instead, in the figurative sense, it should be the case that the modern artist like the *bricoleur* creates by drawing on a stock of individual elements that were not prepared for any artistic purpose, but which were clearly sourced from another sphere 'where they already possess a sense which sets a limit on their freedom of manoeuvre' and that every selection of an element 'will involve a complete reorganization of the structure, which will never be the same as one vaguely imagined nor as some other which might have been preferred to it'.[2]

The comparison with *bricolage* is most instructive on why modern art's use of materials can be equated with the 'organization of materials'. The reaction to the omnipotence and omnipresence of technology does not take place directly, but rather in the mediated form whereby art recovers its material at a secondary level. For art, material is the meaning that the pre-fabricated raw materials and particles of reality bring to bear in the artistic process. The previous meaning becomes what is important, and older aims become resources, the opportunity of a quasi-linguistic construction, of a 'switching of relations', to quote Moholy-Nagy [...]. I would like to call this use of materials 'concretizing': for example material does not become concrete in its elemental, aesthetic or social references; rather, concrete describes the nature of the relationship between extra-aesthetic and aesthetic ways of dealing with material. We must assume that all the arts of collage, montage, assemblage, of combination and construction, are in more or less open agreement with the technology that works on its components before they are transformed. Since the starting point for these kinds of art is the abundance of industrially produced material and not its use in society, a critical approach would also have to be very abstract. The extension into the social realm takes place here as a liberation of ludic and pedagogic moments. [...]

At first sight, objects created by Carl Andre or Florian Maier-Aichen, to name but two examples, designate a formal reduction and material enlargement of the criteria we established as constitutive of twentieth-century art. The material is merely organized spatially, with no actual intervention by the artist. [...]

To limit oneself to such an interpretation, however, would mean omitting an established, legitimate way of talking about modern art, namely negation. As a positive decision, which links many objects of the 1960s and 1970s, let us look at the presentation of material conditions that are coarse or even brutish and the use of such materials that offer a certain explicit rawness – fat and felt, Joseph Beuys's preferred materials, are just one example. Of course this choice also articulates a protest against the constant refinement of custom and practice in the art world, and against the rapid ennoblement of hitherto proscribed materials. But the meaning and strength of the objects before us do not lie in such an inherent and permanently abstract reaction. *Per negationem*, as figurations of negation, they refer to the material use that determines our environment. Where natural and synthetic materials are 'seemingly' totally subject, that is subject to the aims of appearance, where the shaping only achieves smoothness, art creates resistance. In these resistances – and this transcends the doubts expressed above – decisions concerning form and material coincide. Those who insist on the intransigence of materials do not allow for the fact that their objectifications pander to each other.

This use of materials likewise concretizes the relationship between the

artistic and social appropriation of materials, in this case as an expression of its most extreme distancing and at the same time as evidence of an aesthetic of something that has not yet been claimed by art. The brutality of this evidence takes the form of an answer that lacks questions.

1 Theodor Adorno, 'Functionalism Today' (1967) in Neil Leach, ed., *Rethinking Architecture: A Reader in Cultural Theory* (London and New York: Routledge, 1997) 12.

2 Claude Lévi-Strauss, *The Savage Mind* (1962) (Chicago: University of Chicago Press, 1966) 12.

Wolfgang Kemp, extracts from 'Holz – Figuren des Problems Material' in *Holz = Kunst-Stoff* (Baden-Baden: Staatliche Kunsthalle Baden-Baden, 1976) 9–14. Translation by Philippa Hurd, 2015.

Gilles Deleuze and Félix Guattari
A Thousand Plateaux//1980

So how are we to define this matter-movement, this matter-energy, this matter-flow, this matter in variation that enters assemblages and leaves them? It is a destratified, deterritorialized matter. It seems to us that Edmund Husserl brought thought a decisive step forward when he discovered a region of *vague and material* essences (in other words, essences that are vagabond, anexact and yet rigorous), distinguishing them from fixed, metric and formal, essences. We have seen that these vague essences are as distinct from formed things as they are from formal essences. They constitute fuzzy aggregates. They relate to a *corporeality* (materiality) that is not to be confused either with an intelligible, formal essentiality or a sensible, formed and perceived, thinghood. This corporeality has two characteristics: on the one hand, it is inseparable from passages to the limit as changes of state, from processes of deformation or transformation that operate in a space-time itself anexact and that act in the manner of events (ablation, adjunction, projection ...); on the other hand, it is inseparable from expressive or intensive qualities, which can be higher or lower in degree, and are produced in the manner of variable affects (resistance, hardness, weight, colour ...). There is thus an ambulant coupling, *events-affects*, which constitutes the vague corporeal essence and is distinct from the sedentary linkage, 'fixed essence-properties of the thing deriving from the essence', 'formal essence-formed thing'. Doubtless Husserl had a tendency to make the vague essence a kind of intermediary between the essence and the sensible, between the thing and the concept, a little like the

Kantian schema. Is not roundness a schematic or vague essence, intermediary between rounded sensible things and the conceptual essence of the circle? In effect, roundness exists only as a threshold-affect (neither flat nor pointed) and as a limit-process (becoming rounded), through sensible things and technical agents, millstone, lathe, wheel, spinning wheel socket, etc. But it is only 'intermediary' to the extent that what is intermediary is autonomous, initially stretching *itself* between things, and between thoughts, to establish a whole new relation between thoughts and things, a *vague* identity between the two.

Certain distinctions proposed by Gilbert Simondon can be compared to those of Husserl. For Simondon exposes the technological insufficiency of the matter-form model, in that it assumes a fixed form and a matter deemed homogeneous. It is the idea of the law that assures the model's coherence, since laws are what submit matter to this or that form, and conversely realize in matter a given property deduced from the form. But Simondon demonstrates that the *hylomorphic* model leaves many things, active and affective, by the wayside. On the one hand, to the formed or formal matter we must add an entire energetic materiality in movement, carrying *singularities* or *haecceities* that are already like implicit forms that are topological, rather than geometrical, and that combine with processes of deformation: for example, the variable undulations and torsions the fibres guiding the operation of splitting wood. On the other hand, to the essential properties of the matter deriving from the formal essence we must add *variable intensive affects*, now resulting from the operation, now on the contrary making it possible: for example, wood that is more or less porous, more or less elastic and resistant. At any rate, it is a question of surrendering to the wood, then following where it leads by connecting operations to a materiality, instead of imposing a form upon a matter: what one addresses is less a matter submitted to laws than a materiality possessing a *nomos*. One addresses less a form capable of imposing properties upon a matter than material traits of expression constituting affects. Of course, it is always possible to 'translate' into a model that which escapes the model; thus, one may link the materiality's power of variation to laws adapting a fixed form and a constant matter to one another. But this cannot be done without a distortion that consists in uprooting variables from the state of continuous variation, in order to extract from them fixed points and constant relations. Thus one throws the variables off, even changing the nature of the equations, which cease to be immanent to matter-movement (inequations, adequations). The question is not whether such a translation is conceptually legitimate – it is – but what intuition gets lost in it. In short, what Simondon criticizes the hylomorphic model for is taking form and matter to be two terms defined separately, like the ends of two half-chains whose connection can no longer be seen, like a simple relation of moulding behind which there is a

perpetually variable, continuous modulation that it is no longer possible to grasp.[1] The critique of the hylomorphic schema is based on 'the existence, between form and matter, of a zone of medium and intermediary dimension', of energetic, molecular dimension – a space unto itself that deploys its materiality through matter, a number unto itself that propels its traits through form.

We always get back to this definition: the *machinic phylum* is materiality, Natural or artificial, and both simultaneously; it is matter in movement, in flux, in variation, matter as a conveyor of singularities and traits of expression. This has obvious consequences: namely, this matter-flow can only be *followed*. Doubtless, the operation that consists in following can be carried out in one place: an artisan who planes follows the wood, the fibers of the wood, without changing location. But this way of following is only one particular sequence in a more general process. For artisans are obliged to follow in another way as well, in other words, to go find the wood where it lies, and to find the wood with the right kind of fibres. Otherwise, they must have it brought to them: it is only because merchants take care of one segment of the journey in reverse that the artisans can avoid making the trip themselves. But artisans are complete only if they are also prospectors; and the organization that separates prospectors, merchants and artisans already mutilates artisans in order to make 'workers' of them. We will therefore define the artisan as one who is determined in such a way as to follow a flow of matter, a *machinic phylum*. The artisan is *the itinerant, the ambulant*. To follow the flow of matter is to itinerate, to ambulate. It is intuition in action. Of course, there are second-order itinerancies where it is no longer a flow of matter that one prospects and follows, but, for example, a market. Nevertheless it is always a flow that is followed, even if the flow is not always that of matter. [...]

Why is the *machinic phylum*, the flow of matter, essentially metallic or metallurgical? Here again, it is only the distinct concept that can give us an answer, in that it shows that there is a special, primary relation between itinerance and metallurgy (deterritorialization). However, the examples we took from Husserl and Simondon concerned wood and clay as well as metals. Besides, are there not flows of grass, water, herds, which form so many phyla or matters in movement? It is easier for us to answer these questions now. For it is as if metal and metallurgy imposed upon and raised to consciousness something that is only hidden or buried in the other matters and operations. The difference is that elsewhere the operations occur between two thresholds, one of which constitutes the matter prepared for the operation, and the other the form to be incarnated (for example, the clay and the mould). The hylomorphic model derives its general value from this, since the incarnated form that marks the end of an operation can serve as the matter for a new operation, but in a fixed order marking a succession of thresholds. In metallurgy, on the other hand, the

operations are always astride the thresholds, so that an energetic materiality overspills the prepared matter, and a qualitative deformation or transformation overspills the form.[2] For example, quenching follows forging and takes place after the form has been fixed. Or, to take another example, in moulding, the metallurgist in a sense works inside the mould. Or again, steel that is melted and moulded later undergoes a series of successive decarbonations. Finally, metallurgy as the option of melting down and reusing a matter to which it gives an *ingot-form*: the history of metal is inseparable from this very particular form, which is not to be confused with either a stock or a commodity; Monetary value derives from it. More generally, the metallurgical idea of the 'reducer' expresses this double liberation of a materiality in relation to a prepared matter, and of a transformation in relation to the form to be incarnated. Matter and form have never seemed more rigid than in metallurgy; yet the succession of forms tends to be replaced by the form of a continuous development, and the variability of matters tends to be aced by the matter of a continuous variation. If metallurgy has an essential relation with music, it is by virtue not only of the sounds of the forge but also of the tendency within both arts to bring into its own, beyond separate forms, a continuous development of form and beyond variable matter, a continuous variation of matter: a widened chromaticism sustains both music and metallurgy; the musical smith was the first 'transformer'. In short, what metal and metallurgy bring to light is a life proper to matter, a vital state of matter as such, a material vitalism that doubtless exists everywhere but is ordinary hidden or covered, rendered unrecognizable, dissociated by the hylomorphic model. Metallurgy is the consciousness or thought of the matter-flow, and metal the correlate of this consciousness. As expressed in panmetallism, metal is coextensive to the whole of matter, and the whole of matter to metallurgy. Even the waters, the grasses and varieties of wood, the animals are populated by salts or mineral elements. Not everything is metal, but metal is everywhere. Metal is the conductor of all matter. The machinic phylum is metallurgical, or at least has a metallic head, as its itinerant probe-head or guidance device thought is born more from metal than from stone: metallurgy is minor science in person, 'vague' science or the phenomenology of matter. The prodigious idea of *Non-organic Life* – the very same idea Wilhelm Worringer considered the barbarian idea par excellence[3] – was the invention, intuition of metallurgy. Metal is neither a thing nor an organism but a *body* without organs. The 'Northern, or Gothic, line' is above all a mining or metallic line delimiting this body. The relation between metallurgy and alchemy reposes not, as Jung believed, on the symbolic value of metal and its correspondence with an organic soul but on immanent power of corporeality in all matter, and on the *esprit de corps* accompanying it.

1 [footnote 92 in source] On the mould-modulation relation, and the way in which moulding hides or contracts an operation of modulation that is essential to matter-movement, see Simondon, *Du mode d'existence* (Paris: Méot, 1958) 28–50 ('modulation is moulding in a continuous and perpetually variable manner', 42). He shows that the hylomorphic schema owes its power not to the technological operation but to the social model of work subsuming that operation (47–9).

2 [93] Gilbert Simondon, *L'individu et sa genèse physico-biologique* (Paris: Presses Universitaires de France, 1964) 59. [...]

3 [95] Wilhelm Worringer, *Form in Gothic* (1911) (London: Putnam, 1927) 41–2. [...]

Gilles Deleuze and Félix Guattari, extracts from *A Thousand Plateaux: Capitalism and Schizophrenia* (1980); trans. Brian Massumi (London and New York: Continuum, 2009) 449–54, 627–8.

Georges Didi-Huberman
The Order of Material: Plasticities, *malaises*, Survivals//1999

In relation to material, it seems to me that the art historian is divided. On the one hand, material belongs to an order of concrete and direct evidence, in so far as it is the physical quality of every work of art: it tells us, quite simply, what the art object is made of. On the other hand, this concrete evidence is already contradicted by a *spontaneous philosophy* that underlies the art historian's training without his or her even recognizing it. Erwin Panofsky made such a philosophy quite explicit when he subjugated the entire history of the concept of art to the authority of the Idea. He imagined that history as a pure and simple extension of Platonic questions: 'It was Plato who established the metaphysical meaning and value of Beauty in a universal and timeless way, and whose theory of Ideas has become ever more significant for the aesthetics of the plastic arts [*der bildenden Künste*].'[1] No doubt Panofsky was historically correct to emphasize the character of the matrix of intelligibility that could be taken, throughout the centuries, as Platonism – with its 'metaphysics of Beauty' and 'theory of Ideas' – in the development of 'the aesthetics of the plastic arts'. But today we can ask ourselves what sort of presupposition informs the problem, obviously crucial to all art objects, of material itself. We can deduce from the philosophical polarity Matter/Form (ubiquitous in Plato, revived by Kant, and no doubt necessary to the art historian for the formulation of stylistics), or we can infer from the polarity Matter/Spirit (ubiquitous in Plato, revived by Kant, and no doubt necessary to the art historian

for the formulation of an iconology) – that in each case material would be, in the best philosophical tradition, 'secondary', 'potential', or even 'indeterminate'.

Such has been the 'spontaneous philosophy' of art history even at the very moment of its origin: hadn't Vasari spoken of matter as the 'subject' [*sugetta*] of form, that is to say its Idea? As offering the more or less indeterminate receptacle of drawing [*disengno*] and of the intellect?[2] Close even to the point of non-being, of disorder, of dispersal; always waiting for a 'form' which could redeem it, which alone could provide a dignified outward appearance. At worst, material would be formlessness – an insurrection *against* form – at best it would be an example of passivity, of subjection *to* form.

Yet when we speak of the 'plastic arts', we suppose implicitly, etymologically, that the visual arts do not want this passivity which matter offers to the action of forms. 'Plastic art' means first of all plasticity of material, which in turn means that matter doesn't resist form – that it's ductile, malleable, can be put to work at will. In brief, it humbly offers itself to the possibility of being open, worked, carved, put into form.

Let us speak about wax (to reflect on 'matter' in general is to never understand matter since it is to make a simple 'idea' into a fatal abstraction).[3] Why wax? First because it is ductile material, plastic material *par excellence*. With a piece of wax in the hand, the old or the philosophical question of the rapport between form and matter – even the rapport between spirit and matter – assumes consistency and a sort of very tangible warmth. It is not just by chance that sudden, compelling appeals to the paradigm of wax left their mark on several significant moments in the history of these questions. First in Plato, where it is the originary wax that might be modelled in the same way as clay by the demiurge.[4] In *The Laws*, it is 'soft' virgin wax that is compared to the newborn child, whom his mother will 'roughly form' before the City finishes 'modelling' him.[5] It is also the wax of desire which becomes the metaphor for the danger confronting 'the hearts of even those who believe themselves austere' – beneath the caresses that might make men almost melt.[6] It is especially the wax of memory that appears in the *Theaetetus* under the rubric of a hypothesis: 'suppose, therefore, for the sake of argument, that we had in our souls an impregnatable wax …'[7] We know the fate of this same metaphor in Aristotle's hands, where *memory* has as its object the thing seen *through the image*: it is *the impression in the wax* that will henceforth serve as the operative model for sensation itself: […].

A material fantasy of wax is here set in motion for the long term. It will culminate in the Cartesian analysis where the piece of wax is made to illustrate the distinction between matter and spirit,[8] and at last, in the Freudian model of the *Wunderblock*, the 'mystic writing pad',[9] which itself contributed to the critical *reversal* of this entire range of distinctions. For the moment, let us keep in mind

the extent to which, in the passage from Aristotle, the development of the material image depends on an extraordinary theoretical focus upon questions of the substratum – of the material: in material that is too runny, too quick, too 'young', too wet, a form will not 'set' – just as if 'the movement of the seal were to impinge on running water'. Neither will a form 'take', for the opposite reason, in material that is too brittle, too 'old' or too dry. As usual, Aristotle has posed here, in the very quality of his examples, the crucial question.

The question of plasticity is very much the issue here: in order that a *form* set or take – so that as a rule an individuation can occur – matter must proffer that subtle quality of being neither too dry nor too liquid, neither too hard nor too soft. By thus introducing the evaluation of material qualities as the very framework of his conceptual reasoning, Aristotle opens up a field that we need to examine more closely. Which is to say that we must go beyond the metaphorical uses of wax – without losing sight of the theoretical and conceptual foundations of wax – so that we may study more thoroughly the problem of plasticity by giving a voice not just to philosophers of matter, but also to technicians of matter. Wax-workers themselves evoke many qualitative categories above and beyond the three or four criteria put forward by Aristotle – softness and hardness, dryness and humidity – and speak instead of far more than 'wax', but rather of the dizzyingly infinite number of 'waxes' revealed in working the material:

> Wax is not one wax alone, for there are so many waxes! ... There are hundreds and hundreds of waxes, and they all merge into one another ... What makes the difference between them? The way one mixes them, the way one works the various types of wax, and the compositions one makes of them.[10]

The man speaking here is Girolamo Spatafora, one of the last wax-workers of Sicily, supplier of ex-votos and other figurines for nativity scenes, in a 1991 interview with an ethnologist. His entire discourse is suspended between, first, a sense of *extinction* – because no one seems to want these rotting, outmoded objects, and so the very profession of wax-working is dying out – he is, he says, forced to repair washing machines to earn a living – and second, a sense of *survival* characteristic of the material itself, a durability that is due, precisely, to the extraordinary *plasticity* of wax: 'It's marvellous. Everything can be made from it. It even moves' ['*Meravigliosa. Tutto si può fare ... Si muove pure*'], he confides between two disillusioned remarks about the scarcity of orders.[11] By simultaneously evoking not only extinction and survival, but also the marvellous [*meraviglio*] plasticity of wax – a plasticity that is the result of the manifold uses to which the material lends itself as well as to that sort of 'life' it demonstrates through its very pliability – the Sicilian craftsman articulates what is perhaps the

essence of the historical, anthropological and aesthetic problems raised by the strange constellation of objects fabricated in wax. [...]

The 'likenesses of mortals' [...] must, of course, be understood in relation to the Roman practice of *imagines*, those masks of coloured wax made by taking an impression of the faces of the dead, and whose genealogical function emerges as fundamental throughout the history, in the West, of the likeness of the image.[12] But besides this radical meaning suggested by '*similitude mortalium*', we need to acknowledge the 'innumerable uses' of wax evoked by Pliny, among which we find mixed together apiary techniques, medicinal uses, artistic works, and folk creations such as wax models that, in merchants' windows, represented fruit or other perishable food products (we still find them today in some restaurant windows, although wax has been almost universally replaced by thermoformed plastic).[13]

These 'innumerable uses' constitute an extraordinary anthropological sedimentation of this material: magical wax (such as Egyptian dolls or figurines of medieval sorcery); votive wax (rustic effigies from Cyprus, naturalistic portraits from Western Europe, dolls representing children, anatomical ex-votos such as teeth and ears, and votive representations of internal organs such as the lungs and heart); funerary wax (such as the death-masks of Fra Angelico, who died in 1455, or Saint Philip of Neri, who died in 1595); liturgical wax (candles and reliquaries with *Agnus dei*); the wax of popular devotion (reliquaries with statuettes, figurines under glass, little animals, pieces of wax modelled to look like pieces of wood); artistic wax (the wax created for casting bronze, wax usually *lost* but which subsists in a few examples of failed castings, the wax of the preserved models for works by Michelangelo, Giambologna, or those of other studios in sixteenth-century Florence); and artisanal wax, as well as anatomical wax (which pushes to the limits the notion of the *écorché*; for example tracing the analysis of a face all the way to its very decomposition, or in which the innermost recesses of the womb are given a special exhibition value); and finally carnival wax (after being displaced from the church, and religion, to the museum, and art, and then to the scientific cabinet, the exhibition value of wax is ultimately downgraded to the world of wax museums, fairs and the public boulevard).

We might add a few more items, in no particular order and without attempting to be exhaustive – since, after all, the *Encyclopedia* of Diderot and D'Alembert itself acknowledges that 'we would never be able to list how many uses have been made of wax since the beginning of time':[14] wax for painting (encaustic wax) and textile wax (for batik); household wax and sealing wax; shoe wax and industrial waxes; adhesive waxes and cosmetic waxes and so on.[15] It's obvious: a *plasticity* of material means a *multiplicity* of functions. More precisely, plasticity *facilitates* multiplicity, sanctions it, is its very medium, and (who knows?) even invents it. How is this so? Perhaps thanks to the absolutely extraordinary

accumulation of material qualities that wax, intrinsically, brings together. Given how varied the kinds of wax seem at first glance, these innumerable uses thwart any attempt to seek a coherence in their functions. Nevertheless, by looking at the wax itself, we might perhaps be able to discover the underlying structure of this multiplicity.

What does the plasticity of wax consist of? Can plasticity, strictly speaking, consist of anything? When one reads the technical writings of people who work with wax, one comes away with the strange impression that wax is characterized only by being uncharacterizable: each time we recognize a material quality in wax, we immediately see another material quality that is exactly the opposite. Wax emerges therefore as a material that is insensitive to the contradictions of its material qualities. Wax is solid, but it may easily be liquefied. It is impermeable, but it may easily be dissolved in water (it takes only the slightest modification to do so).[16] It may be sculpted, modelled, or cast, and is thus insensitive to the contradictions as well as to the traditional hierarchies in the plastic arts.[17] It may be worked either by hand or by means of all kinds of tools. It may be painted or tinted as a block, and given either a matte or polished finish. It can be either opaque or transparent, either smooth or sticky. Its consistency may be transformed indefinitely by the addition of the most varied resins.[18] It is a fragile and temporary material, but most often used, because of the very richness of its textures, for the fabrication of objects intended to last. In her book *Wax as Art Form* (1966), Thelma Newman counted twenty-three physical characteristics of wax, giving this conclusion of an aesthetic nature: 'Its plasticity makes possible spontaneous expression but also an accuracy of detail.' This range of ambivalent physical characteristics is first of all what the plasticity of wax 'consists of'.[19]

This plasticity itself consists, therefore, of a *paradox of consistency*, linked, of course, to the fact that wax – whether it is liquid, pasty, solid, or even brittle – remains wax. No one can ever decide which is its 'primary' or 'principal' state (while by comparison one can say, for example, that the 'primary' state of water is its liquid state: when water is solid, frozen, it is suddenly not water but ice). This elementary phenomenology already gives us some information about the nature of the paradox in question, and will allow us to begin to qualify that paradox.

In one sense, *plasticity* means *malleability*. For this reason, wax is recognized as the exemplary material of *resemblance*: it is the material of 'true forms' and of 'accurate forms'. Pliny the Elder tells how Lysistratus of Sicyon, the first Greek artist to have introduced 'the practice of giving likenesses' [*similitudines reddere instituit*], was, at the same time and in the same process 'the first person who modelled a likeness in plaster of a human being from the living face itself, and established the method of pouring wax into this plaster mould' [*e facie ipsa … expressit ceraque in eam formam gypsi infusa*].[20] Wax-workers and historians alike

insist on the natural aptitude of wax as the 'plastic' material that serves the immemorial passion of human beings for fabricating those 'things which resemble' which we call images.[21] Not only does the pliability of the material permit the rendering of the smallest detail, but moreover, through the addition of the appropriate mineral solutions or colourings, its textural qualities allow the perfect imitation of bronze, alabaster, lead or flesh.[22]

In another sense, inseparable from the first, *plasticity* means *instability*. There is nothing more unstable, nothing more changeable, than the physical state of a piece of wax: I take a brittle substance in my hand, but in a matter of seconds my body heat renders it malleable and allows me, more easily than with any other material, to reproduce accurately the delicate shapes of a body or face. It takes, however, the proximity of only the smallest flame for such a 'true' form to melt away, to disfigure, to liquefy. The 'paradox of consistency' imposed by the plasticity of wax may therefore be understood as the possibility – inevitably disturbing – of a coming and going between resemblance and formlessness. A coming and going no longer linked to the world of the *disegno* – the drawing or the design – and of the *idea*, but to the intrinsic properties of the material. When we watch a piece of wax 'live', we are very quickly forced to suspect a kind of censorship at work within the traditional hierarchies of form and matter.

Plasticity, consequently, need no longer mean *passivity*. The piece of wax remains, of course, submissive in my hand. It will take the form that my 'design' prescribes; but it will also keep, without my even thinking about it or wishing it, the impression of my fingers and the traces of my most unwitting movements. The submissiveness of the material is so complete that, for a moment, it reverses itself and becomes the *power* of the material. But how can we characterize it? Maybe by means of a notion that certain modern philosophies have opposed, and not by chance, to the old polarity of matter and form: that of viscosity. It happens paradoxically – and we need to try to figure out why – that this notion gained its meaning *through the elaboration of the psychoanalytic field*. In 1929, Georges Bataille wrote that a relevant notion of matter could not expect anything from scientistic 'abstractions' or from 'artificially isolated physical phenomena'. One had, according to Bataille, to look to Freud to find what matter meant, at the very moment when Freud was trying to define his most 'metapsychological' concept – the drive – in the symmetrical terms of 'plasticity' [*Plastizität*] and of 'viscosity' [*Klebrigkeit*].[23]

Like Aristotle's, Freud's theoretical use of material qualities forces us to implement that phenomenological attention that art historians may rightfully call on when confronted with the objects of their study. In 1929, Aurel Kolnai, a young Hungarian psychoanalyst and disciple of Husserl, published an essay about 'objectal phenomenology' on the problem of *disgust* (a problematic from

which wax can hardly be excluded): he spoke there of materials living and dead, of materials viscous and plastic, always conceived of as *psychically sovereign*.[24] Bataille read this essay carefully,[25] as did, most likely, Jean-Paul Sartre who, fourteen years later, would bring together the psychical and phenomenological theme of *viscosité* in a much-anthologized passage that practically concludes *Being and Nothingness*. Sartre there calls 'material quality' as 'revelatory of being', and deploys an entire network of meanings linked to the paradox of a matter that might be neither liquid nor solid, that nevertheless haunts the psyche like a nightmare of metamorphoses:

> The viscous appears as already the outline of a fusion of the world with myself. What it teaches me about the world, that it is like a leech sucking me, is already a reply to a concrete question; it responds with its very being, with its mode of being, with all its matter ... A viscous substance like pitch is an aberrant fluid. At first, with the appearance of a fluid it manifests to us a being which is everywhere fleeing and yet everywhere similar to itself ... The viscous reveals itself as essentially dubious [*louche*] because its fluidity exists in slow motion; there is a sticky thickness in its liquidity; it represents in itself a dawning triumph of the solid over the liquid ... This fixed instability in the viscous discourages possession ... Nothing testifies more clearly to the dubious character of a 'substance in between two states' than the slowness with which the viscous melts into itself ... The honey which slides off my spoon on to the honey contained in the jar first sculpts the surface by fastening itself onto it in relief, and its fusion with the whole is presented as a gradual sinking, a collapse which appears at once as a *deflation* ... and as *display* – like the flattening out of the full breasts of a woman who is lying on her back.
>
> In the viscous substance which dissolves into itself there is a visible resistance, like the refusal of an individual who does not want to be annihilated in the whole of being, and at the same time a softness pushed to its ultimate limit. For the *soft* is only an annihilation which is stopped halfway ... The viscous is like a liquid seen in a nightmare, where all its properties are animated by a sort of life and turn back against me ... In the very apprehension of the viscous there is a gluey substance, compromising and without equilibrium, like the haunting memory of a *metamorphosis*.
>
> To touch the viscous is to risk being dissolved in sliminess ... The horror of the viscous is the horrible fear that time might become viscous, that facticity might progress continually and insensibly ... as a symbol of an *anti-value*: it is a type of being not realized but threatening, which will perpetually haunt consciousness as the constant danger which it is fleeing.[26]

There is no doubt that wax does not have the sticky sliminess characteristic of honey or of pitch; no doubt that wax does not have the direct power of a 'leech' or 'bloodsucker' that Sartre evokes in his text. But the wax object – because of the way it is fabricated as well as through the phenomenology of our 'approaching consciousness' of it – offers just as well that unfamiliar make-up of *plasticity* and *viscosity* that makes it 'everywhere fleeing and yet everywhere similar to itself', that establishes it as 'fixed instability' and as a 'substance in between two states'. The wax object certainly offers the ambivalence of the 'heavy flight' described by Sartre: both 'visible resistance' at the same time as the possibility of a 'deflation', of 'a spreading out', or of a 'flattening', in short, an 'annihilation which is stopped halfway'. This is why wax, more so than honey or pitch, has been invested as haunting, threatening, nightmarish, metamorphosing and fleeing. This is why it is perhaps a material 'which holds me and which compromises me', a *material trap* 'whose every property is animated with a kind of life and is turned against me'. This is what Freud understood so well – Sartre seems here to forget it – through recourse to the concept of '*das Unheimliche*', 'the uncanny':[27] we encounter it at almost every step of our path through the territory of wax.

What does this preliminary look at the material of wax teach us? First, that its *plasticity* cannot be reduced to the canonical *passivity* of Madame Matter enduring the thrusting – and the pounding of seals – that Mr Form would forever subject her to.[28] The reality of the material proves more disturbing: it possesses a *viscosity*, a kind of *activity* or intrinsic power, which is a power of metaporphosis, of polymorphosis, of insensibility to contradiction (particularly to the abstract contradiction between *form* and *formlessness*). Sartre states extremely clearly that this activity of the viscous, this 'kind of life', can only be symbolized or socialized as an *anti-value*. Suddenly we are better equipped to understand the cleavage that marks the epistemic position of the art historian confronted with the material. On the one hand, technical evidence is the business of restorers and, more fundamentally, of a 'science of materials':[29] no one doubts its legitimacy or its benefits. On the other hand, the philosophical prejudice of the *Idea* – invented in a Platonic context, popularized by Vasari at the very moment of birth of the academic discourse called art history and finally transported into the twentieth century by Panofskyian neo-Kantianism – creates an *anti-value* of material in general, and particularly of that unstable material, of that 'substance between two states' that is wax. Significantly, it is the museums of 'minor arts', of 'applied arts' or of 'decorative arts' – such as the wonderful Victoria and Albert Museum in London[30] – that have been able to escape censoring the anthropological as well as the aesthetic value of wax.

Censorship exists only where there is also *uneasiness* or *discontent*: wax is an aesthetically viscous material [...], it dedicates its own function of resemblance to

the simultaneous uneasiness of deterioration and excess. In both cases, it is disaster that threatens the ordinary concepts of form and imitation. Wax, in the matter of resemblance, always *goes too far*. It is capable of rendering the details that are 'the most delicate in all of nature'.[31] It adjusts itself malleably to the smallest recesses of the plaster mould into which it is poured. It can express every range and every tiny difference in texture. But it always adds a subtle and unspeakable excess – something that arouses uneasiness, that adulterates and falsifies identity, that suddenly seems *mauvais genre*, bad taste, vulgar, even criminal.

Horst Janson suggested that this *resemblance through excess*, linked to 'mechanical' procedures of casting and to malleable and tintable materials such as wax, results in the ruin of any concept of style and even of any authentic realism – better: artistic realism – which he called a 'realism of animation'.[32] As for Ernst Gombrich, the two lines of his *Art and Illusion* mentioning wax are condemnatory: 'before the proverbial wax image we often feel unease because it oversteps the boundaries of symbolization'.[33] [...]

How can we forget that our actual wax museums – Madame Tussaud's in London, or the Musée Grévin in Paris – have their origin in the revolutionary period, in those decapitations by the guillotine, which were then consciously modelled in plaster for the making of wax effigies having the function of quasi-relics? In which case, we have to acknowledge that wax is a *psychically viscous* material. [...]

The two dismissals expressed by Janson and Gombrich do not mean exactly the same thing. They nevertheless make up a system that seems to me representative of the epistemological situation of Anglo-Saxon art history of the postwar period and to what Panofsky himself called an art history of 'transplanted Europeans'.[34] Janson dismissed the *loud* side of 'bad-taste' resemblance – the kind represented by Madame Tussaud's or the Musée Grévin – in the name of a very powerful hierarchy between objects which are 'art' objects (objects of the history that bears that name) and those which are not (among which are included most wax objects). Gombrich, in turn, dismisses the *morbid* or deadening, indeed cadaverous side of resemblance that situates itself 'beyond the boundaries of symbolization'. The art history extolled by Janson is therefore an *art history without anthropology*, which would rather cling to marble busts and ignore the 'dubious' taste of works formed of polychrome, even if they date from the Quattrocento.[35] The art history praised by Gombrich calls for a psychology, but it remains an *art history without metapsychology* in the Freudian sense – specifically an art history without the death drive.[36] [...]

Consider then how wax itself – from the point of view of the material – not only downgrades the academic idea of genre; it also downgrades the academic idea of art in general. Schlosser, concerned to overturn the Vasarian ideology of

'progress in the arts' and the normative aesthetics of Neo-Kantianism, could only imagine the downgrading as a lowering of class.[37] We nevertheless need to recognize that the notion of *déclassement* has to break with all teleologies, even negative ones. The royal portrait changes into the carnival mannequin, but the great art of Edgar Degas or of Schlosser's contemporary Medardo Rosso – unfortunately unknown to him – was able, reciprocally, to *regrade* the trivial effigy: to disorient it, to reconfigure and to open, by means of that disorientation, the heuristic field that we call ... modern art.

1 Erwin Panofsky, *Idéa. Contribution à l'histoire du concept de l'ancienne théorie de l'art* (1924), trans. H. Joly (Paris, 1983) 17.

2 Giorgio Vasari, *Les Vies des meillieurs peintres, sculpteurs et architectes* (1550–68), trans. A. Chastel (Paris, 1981–7) 119, 149. Cf. Georges Didi-Huberman, 'L'image-matière. Poussière, ordure, saleté, sculpture au XVI siècle', *L'Inactuel*, no. 5 (1996) 63–81.

3 Georges Bataille characterized this as 'idéalisme de la matière', a particularly stupid philosophical position in his eyes. Cf. Bataille, 'Matérialisme', *Documents*, no. 3 (1929) 170, which I commented upon in *La Ressemblance informe, ou le gai savoir visuel selon Georges Bataille* (Paris, 1995) 268–80.

4 Cf. Luc Brisson, *Le Même et l'autre dans la structure ontologique du Timée de Platon* (Paris, 1974) 54.

5 Plato, *Les Lois*, VII, 789e, ed. and trans. E. des Places, *Oeuvres complètes*, XII–1 (Paris, 1956) 13.

6 Plato, *Les Lois*, I, 633d, ed. and trans. E. des Places, *Oeuvres complètes*, XI–1 (Paris, 1951) 13–14.

7 Plato, *Théétète*, ed. and trans. A. Diès, *Oeuvres complètes*, VIII–1 (Paris, 1926) 232. The passage is commented upon by V. Goldschmidt, *Les Dialogues de Platon. Structure et méthode dialectique* (Paris) 85–7. Before finishing, Plato would develop the image of wax pure or impure, humid or dry, etc. Cf. *Théétète*, 192a-195a, 233–7.

8 [footnote 9 in source] René Descartes, *Méditations* (1641–42), *Oeuvres complètes*, ed. C. Adam and P. Tannery (Paris, 1964) (new ed.), VII, 23–4 (Latin text), and IX–1, 18–26 (French translation).

9 [10] Freud, 'Note sur le "bloc-notes magique"' (1925), trans, led by J. Laplanche, *Résultats, idées et problèmes*, II (Paris, 1921–38) 119–24.

10 [11] Rita Cedrini, 'Il sapere vissuto', *Arte popolare in Sicilia. Le tecniche, i temi, i simboli*, dir. D. D'Agostino (Palermo, Flaccovio, 1991) 177 [...].

11 [12] Ibid., 178–80.

12 [15] Pliny the Elder, *Histoire naturelle*, XXXV, 1–14, ed. and trans J.-M. Croisille (Paris, 1985) 36–42. Cf. Georges Didi-Huberman, 'L'Image-matrice, Généalogie et vérité de la ressemblance selon Pline l'Ancien', *Histoire naturelle*, XXXV, 1–7, *L'Inactuel*, no. 6 (1996) 109–25; and *L'Empreinte* (Paris: Centre Pompidou, 1997) 38–48.

13 [16] Pliny the Elder, *Histoire naturelle*, VIII, 215, ed. and trans A. Ernout (Paris, 1952) 99, also *Histoire naturelle*, XXI, 83–5, pages 56–7.

14 [17] Article: 'Cire', in Denis Diderot and J.L.R. d'Alembert, *Enclyclopédie ou dictionnaire raisonné des sciences, des arts et des métiers*, III (Paris, 1973) 471. On the uses of wax in antiquity, cf. E. Saglio, 'Cera', *Dictionnaire des antiquités grecques et romaines*, 1–2 (Paris, 1887) 1019–20.

15 [18] The most complete inventory of wax technologies is the two monumental volumes – a life's work, financed by a German industrial firm – of R. Bull, *Das grosse Buch vom Wachs. Geschichte – Kultur – Technik* (Munich, Callwey, 1977). [...]

16 [19] Thelma Newman, *Wax as Art Form* (New Jersey: Yoseloff, 1966) 11, 99–104.

17 [20] The best synthesis available is without doubt Rudolf Wittkower, *Qu'est-ce que la sculpture? Principes et procédures* (1977), trans. B. Bonne (Paris, 1995).

18 [21] Cf. Vernon J. Murrell, 'Methods of a Sculptor in Wax', *Le ceroplastica nella scienza e nell'arte. Atti dei I Congresso internazionale*, ed. B. Lanza and M.L. Azzaroli (Florence) II, 709–13. [...]

19 [22] Thelma Newman, *Wax as Art Form*, op. cit., 20.

20 [23] Pliny the Elder, *Histoire naturelle*, XXXV, 153, page 102 (translation modified).

21 [24] Cf., notably, Jules Labarte, *Histoire des arts industriels au Moyen Age et à l'epoque de la Renaissance* (Paris, 1984) 330. [...]; Gaston Le Breton, 'Histoire de la sculpture en cire', *L'Ami des monuments et des arts*, VII (1893) 150 [...].

22 [25] Notably Samuel Anderson, 'Basic Techniques for Modelling Plants and Animals in Wax', *La ceroplastica nella scienza e nell'arte*, II, 578.

23 [26] Georges Bataille, 'Matérialisme', 170 [...]. Cf. S. Freud, *Introduction à la psychanalyse* (1916–17), trans. S. Jankelevitch (Paris, 1970) 389–407.

24 [27] Aurel Kolnai, *Le Dégoût* (1929), trans. O. Cossé (Paris, 1997). The expression 'phénoménologie objectale' is to be found on page 48.

25 [28] Georges Bataille, margin notes of 'L'abjection et les formes misérables', *Oeuvres complètes*, II (Paris: Gallimard, 1970) 438–9. [...]

26 [29] Jean-Paul Sartre, *L'Etre et le néant. Essai d'ontologie phénoménologique* (Paris, 1943) 652–7; rendered into English here largely in accord with the translation by Hazel E. Barnes (London, 1969) 606–11.

27 [30] Sigmund Freud, 'L'inquietante étrangeté' (1919), trans. B. Feron, *L'Inquiétante étrangeté et autres essais* (Paris, 1985) 209–63.

28 [31] It is a commonplace of Aristotelian embryology that the father is form (sperm) and the mother (maternal blood) 'coagulated', 'formed' by the sperm. Cf. Aristotle, *De la génération des animaux*, II, 1, ed. and trans. H. Carteron (Paris, 1926–31) I, page 49, where it is said that matter desired form 'like the female desires the male, and the ugly the beautiful'.

29 [32] Cf. notably the collection printed in *Techné*, no. 2 (1995) 29–82.

30 [33] For the collection of waxes in the museum, see John Pope-Hennessy and Ronald Lightbown, *Catalogue of Italian Sculpture in the Victoria and Albert Museum* (London, 1964) II, 417–32, 467–74, 556–60, 632–7.

31 [34] Gaston Le Breton, 'Histoire de la sculpture en cire', *L'Ami des monuments et des arts*, VII (1893) 150.

32 [35] Horst Waldemar Janson, 'Realism in Sculpture. Limits and Limitations', *The European Realist Tradition*, ed. G.P. Weisberg (Bloomington, 1982) 290–301.

33 [36] Ernst Gombrich, *L'Art et l'illusion. Psychologie de la représentation picturale* (1959), trans. G. Durant (Paris, 1971) 86.

34 [38] Cf. Erwin Panofsky, 'Three Decades of Art History in the United States. Impressions of a Transplanted European' (1953), *Meaning in the Visual Arts* (Chicago, 1982) 321–46.

35 [39] Or the rejection, by Janson, of the celebrated polychrome bust in terracotta, called Niccolò da Uzzano, now attributed to Donatello by a majority of specialists. [...]

36 [40] Cf. Ernst Gombrich, 'Psychanalyse et histoire de l'art' (1953), trans. G. Durand, *Méditations sur un cheval de bois et autres essais sur la théorie de l'art* (Mâcon, 1986) 65–89, where he addresses questions of 'symbolization' and 'aesthetic pleasure'.

37 [58] This was understood some years later by the Russian formalists. See Boris Eichenbaum, 'La théorie de la "méthode formelle"' (1925), trans. T. Todorov, *Théorie de la littérature. Textes des formalists russes* (Paris, 1965) 69. [...]

Georges Didi-Huberman, extracts from 'The Order of Material: Plasticities, *malaises*, Survivals', *Vorträge aus dem Warburg-Haus*, vol. 3 (1999); trans. Jann Matlock and Brandon Taylor, in Taylor, ed., *Sculpture and Psychoanalysis* (Aldershot: Ashgate, 2006) 195–204, 208–11.

Susan Hiller
'Truth' and 'Truth to Material'//2003

[...] That this notion of 'truth to material', attributed to Henry Moore, stuck with me may be a trick of memory or a misunderstanding on my part, or even on the part of those who taught me. Moore was everywhere during my childhood, a conservative, figurative artist (we thought), a sort of official artist. He was English but his work was ubiquitous in the United States, not just in exhibitions but also in photographs in magazines and books. Looking at reproductions of works cast in bronze I couldn't understand what this formulation of 'truth to material' could possibly mean. I was intrigued to discover only recently that Moore himself did not have any doctrinaire attachment to the idea and that in terms of his work in bronze he seemed to want to free himself from any proscriptive interpretation of it. If 'truth to material' was taken as the overriding criterion of value in sculpture, he said, 'a snowman made by a child would have to be praised at the expense of a Rodin or a Bernini'.[1] But the idea haunted me, quite possibly because I just couldn't understand what it meant. On the one hand, it was so terribly obvious. Naturally, one would not try to make in stone what could be done in plasticine. [...]

Having decided I was not an object-maker I went on to study anthropology. Here I have to acknowledge another link with Moore, and one that needs to be explored more fully. Moore was an enthusiastic explorer in the exotic worlds

represented at the British Museum. Like Henri Gaudier-Brzeska, Jacob Epstein and the Paris modernists before him, he was immensely stimulated by what he called 'an inexhaustible wealth and variety of sculptural achievement (Negro, Oceanic Islands, and North and South America), but overcrowded and jumbled together like junk in a marine stores, so that after hundreds of visits' he could 'still find carvings not discovered there before'.[2] It is in writing about these objects that Moore's theorizing about 'truth to material' and sculptural form emerges clearly. [...]

Moore wrote in 1941 that '[o]ne 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.' Discussing Mexican sculpture, he expanded at length:

> Its 'stoniness', by which I mean its truth to material, its tremendous power without loss of sensitiveness, its astonishing variety and fertility of form-invention and its approach to a full three-dimensional conception of form, make it unsurpassed in my opinion by any other period of stone sculpture.[3]

Ten years later, during the Festival of Britain, the Colonial Office sponsored a major exhibition entitled 'Traditional Art from the Colonies'. Asked to comment on the relation between artist and material in the works exhibited, Moore responded:

> the material is dominated by the artist in almost every case. The soapstone figures from Sierra Leone have a quality of stoniness about them because the artists have avoided the more deeply carved and slender forms which are easily possible in wood, but they show a mastery of the possibilities of stone; they are not just incised lumps of stone – but have forms fully realized in the round. In most of the wood carvings the sculptor has imagined something which has no relation to the original form of the tree trunk.'[4]

No wonder the idea of 'truth to material' seemed confusing to me when I was young, for it contained contradictory elements.

In quoting Moore and re-reading Roger Fry, whose writings on ethnographic arts had influenced Moore's own, I have had to try to ignore the colonialist attitudes, the 'primitivism', and let's face it, the racism so typical of the period. [...]

When I first arrived in England at the end of the 1960s I had given up anthropology and was trying to figure out how to approach 'doing art'. To earn some money, I gave lectures at various art colleges drawing parallels between the art moves of early modernism and specific ethnographic styles. In these

lectures I was critical of what I saw as unacknowledged and literal borrowings from the arts of Africa, Oceania and the Americas by European artists in the early modernist period. In these lectures I argued that the enlargement of European aesthetic horizons in the modern period, through the importation of visual ideas originating in the colonies, suggests an increasing recognition by artists that the artistic resources of those lands and peoples were just as available for exploitation as their mineral and agricultural resources. The moment in 1905 when Picasso realized that African art could provide a source, a resource, for his work, is paralleled many years later by Moore's account of his own 'discovery' of the 'inexhaustible wealth' of sculptural ideas in the ethnographic galleries of the British Museum and in photographs in books about Africa, Oceania and the Americas. These mythic moments of discovery bind together the imperialist conditions of possibility with the appropriative strategies of modernism.

I would like, now, to begin to work on this point from a different angle, to emphasize a different register, because having said all that, I can see that another perspective on these mythic moments is also possible. The 'moments' spotlight the fraying edges of Western society, marking the symbolic beginnings of a dissolution of cultural boundaries, an acceleration of cultural influences and a mingling of populations which is unprecedented. There is today a real optimism in my wish to stress this intuition of different meanings that could be attributed to these famous artistic 'discoveries' by artists such as Picasso or Moore, 'discoveries' that echo colonialist attitudes at the same time as they prefigure and enable the increasing hybridization of Western culture, leading perhaps – it is too soon to say – to a genuine multiculturalism. This hopefulness should not be heard as a naive misunderstanding of the reality of inequalities of wealth and power in the world. But *if*, if there is any movement towards revoking the oratorical, curatorial, art-historical one-sidedness of colonial discourse, then the ambivalent mixture of admiration with unscrupulous 'borrowing', typical of Picasso, Brancusi, Giacometti, Klee, Kandinsky, Epstein, Nolde, Moore and so many other artists, points forward toward new social trends in the West as well as backward toward classic colonialism. [...]

My decision always to use cultural materials as starting points, almost always materials from our own society, was provoked equally by anthropology and by modernist art history. In both these fields, looking at the 'other' yields misunderstandings which are valuable primarily for what they can tell us about ourselves. I explain the guiding principle of my work to myself as 'truth to material'. This seems to mean somewhat different things to me at different times, just as it did to Moore. But I need to be careful here, because I don't want to give the impression that I know everything about my work. It's necessary to figure out ways to talk about my work that don't make it seem as though it's

already completed and understood. I have been explicit about the fact that I use cultural artefacts as basic materials: there is nothing raw or 'natural' about my starting points. At the same time, I am not transforming them into anything else. I might create juxtapositions, series, assemblages and collections, video installations, paintings or works for groups of people to enact, but I don't disguise the main elements, the cultural materials themselves.

The formal aspect of each of my works comes about through something essential in the initial materials. That's why each work has its own look. The materials that attract me seem to be ones that have a lot to say, and I collaborate with them to say it. I am interested in making visible suppressed or repressed meanings, hidden or unacknowledged aspects of what can be discovered through looking hard at what already exists in the world of cultural objects. Sometimes I say I'm exploring the unconscious of culture, although I realize this is rather pretentious. The relationship between finding and making is very intricate. Although I'm aware of the extent to which my work on and with the materials changes them, I feel committed to maintaining the integrity of their origins, as a sign. My work is very personal, and I would rather think of it as poetic than scientific. Even when adopting classificatory modes I know I am not providing knowledge any more than I am providing entertainment. Art is something else, perhaps an area where the possibility of meaning is framed and collaboratively, collectively, determined.

1 [footnote 3 in source] David Sylvester, from *Sculpture and Drawings by Henry Moore* (London: Tate Gallery, 1951), in Philip James, ed., *Henry Moore on Sculpture* (London: Macdonald, 1966) 62–8, 113.

2 [4] Susan Hiller studied for a PhD in anthropology and conducted field work in Central America, until she experienced a 'crisis of conscience' and disillusionment with professional anthropology. (Lucy Lippard, Preface, in Barbara Einzig, ed., *Thinking About Art: Conversations with Susan Hiller* [Manchester: Manchester University Press, 1996] xi.) Anthropology has remained significant to her practice and writing [see the artist's bibliography at www.susanhiller.org].

3 [5] Henry Moore, 'Primitive Art' (1941), in Alan Wilkinson, ed., *Henry Moore: Writings and Conversations* (London: Lund Humphries, 2002) 104.

4 [8] Ibid.

5 [9] Henry Moore, 'Tribal Sculpture: A Review of the Exhibition at the Imperial Institute' (1951), in Wilkinson, op. cit., 106.

Susan Hiller, extracts from '"Truth" and "Truth to Material": Reflecting on the Sculptural Legacy of Henry Moore', in Jane Beckett and Fiona Russell, eds, *Henry Moore: Critical Essays* (Aldershot: Ashgate, 2003) 67–72, 80.

Kara Walker
In Conversation with Kara Rooney//2014

Kara Rooney How did the story of the sugar trade influence your decisions on both a formal and intellectual level for this project [*A Subtlety, or the Marvellous Sugar Baby, an Homage to the unpaid and overworked Artisans who have refined our Sweet tastes from the cane fields to the Kitchens of the New World on the Occasion of the demolition of the Domino Sugar Refining Plant*, 2014]?

Kara Walker [...] One of the selling points for me was the plant itself, along with this amazing history of sugar and its attendant legacies of slavery. There are decades of molasses that cover the entire space; it's coated – it's an amazing relic or repository vessel that contains all of these histories [...]. It came to embody something I would never want to see, something that was about slavery and industry and sugar and fat and wastelessness. [...]

This desire for refined sugar and what it means to turn sugar from brown to white and how that dovetails into becoming an American were fascinating to me. Sugar is loaded with meaning, with stories about meaning. [...] There is a passage in a book by Sidney Mintz called *Sweetness and Power: The Place of Sugar in Modern History* (1985), where the author talks about the Middle Ages in Europe and England and how sugar there was a highly prized, expensive commodity. [...] At a certain point coming from the East in the eleventh century, there began an enormous effort, at the bequest of the sultans, to make these strange, grandiose marzipan structures. Once they were fashioned, they would present and give them to the poor on feast days. This tradition made its way to Northern Europe, where the royal chefs began making similar sugar sculptures. The thing that really struck me about these sugar sculptures was what they were called – *subtleties* – there it is. [*laughs*]. [...] They would be presented between meals as this beautiful, edible trophy. It was after reading this that I realized I had to make a sugar sculpture and a large one. [...] She is basically a New World sphinx. [...] We have 80 tons of sugar in this structure, which measures approximately 80 feet long by 40 feet high, so it doesn't occupy the entire space but it does occupy it in a very specific way. She also has some sugar candy attendants who are about a third of this in scale. [...] The main object, the sphinx, is sugar coated; the smaller objects – these servant figures, or procession of servants – are basically just like big lollipops. Those have been very problematic to work with. We've got these moulds and they're solid but we'll see if they hold up. The first one just collapsed. It was really terrible at the same time that it was kind of awesome to

look at because it became this pile of beautiful, caramelized amber. It's such a fragile and volatile substance that doesn't like to take on too many forms, which is fine. I keep trying to tell everyone that I'm not a stickler for conformity, so if each one is wildly different, then that's their attempt at freedom I guess.

Rooney What colour are they exactly?

Walker They're different colours. At the moment the one that is standing is mostly brown. He burned. He went from caramelized to burnt so he's a little marbleized, really dark. The first one came out a beautiful amber colour. Like when you see caramelized sugar drizzled on your plate, he was that colour, but like I said, too soft. [...] The sphinx is white, bright white.

Rooney The element of colour is something that I want to discuss. With the silhouettes, the colour black is inherent to the eighteenth-century artform you employ, whereas with sugar there is a transfigurative chemical process that must take place in order for it to become the white powder with which we are all familiar. In a sense, the silhouettes require little conscious agency on your part in order to elicit the desired references. But with these pieces, an additional step is necessary in order to enact that same physical transformation. How did this reverse process of moving from dark to light, a natural to an artificial state, resonate with you? For example, why did you decide to make the sphinx this gleaming white as opposed to brown, or even black?

Walker I had my options: brown and white. I was thinking about all the products of sugar – molasses, brown sugar, natural sugar, and refined white sugar. I was experimenting with these different kinds of sugar, cooking at home, making all types of different candies, testing different boiling points, then just dumping it out and seeing what would happen. The white against the molasses of the walls of the interior of the refinery will be visually striking. I was also thinking about the fact that I am in a black interior. The plant is not a white-box situation. The project presented an opportunity to invert this paradigm and maybe call into question the desire for the refined – to ask what is lost in the process of refining. This is a testament and monument to the quest for whiteness, the quest for whatever that means. Authority – even as it's presenting itself on its last legs – this ideal of mastery over continents, people, bodies, ecology. [...]

Rooney I want to return to the subject of the Domino Sugar Factory itself because it is such a loaded place; loaded with industrial history as well as a turbulent one of racial and class struggle. The original refinery was built in 1882. By the 1890s

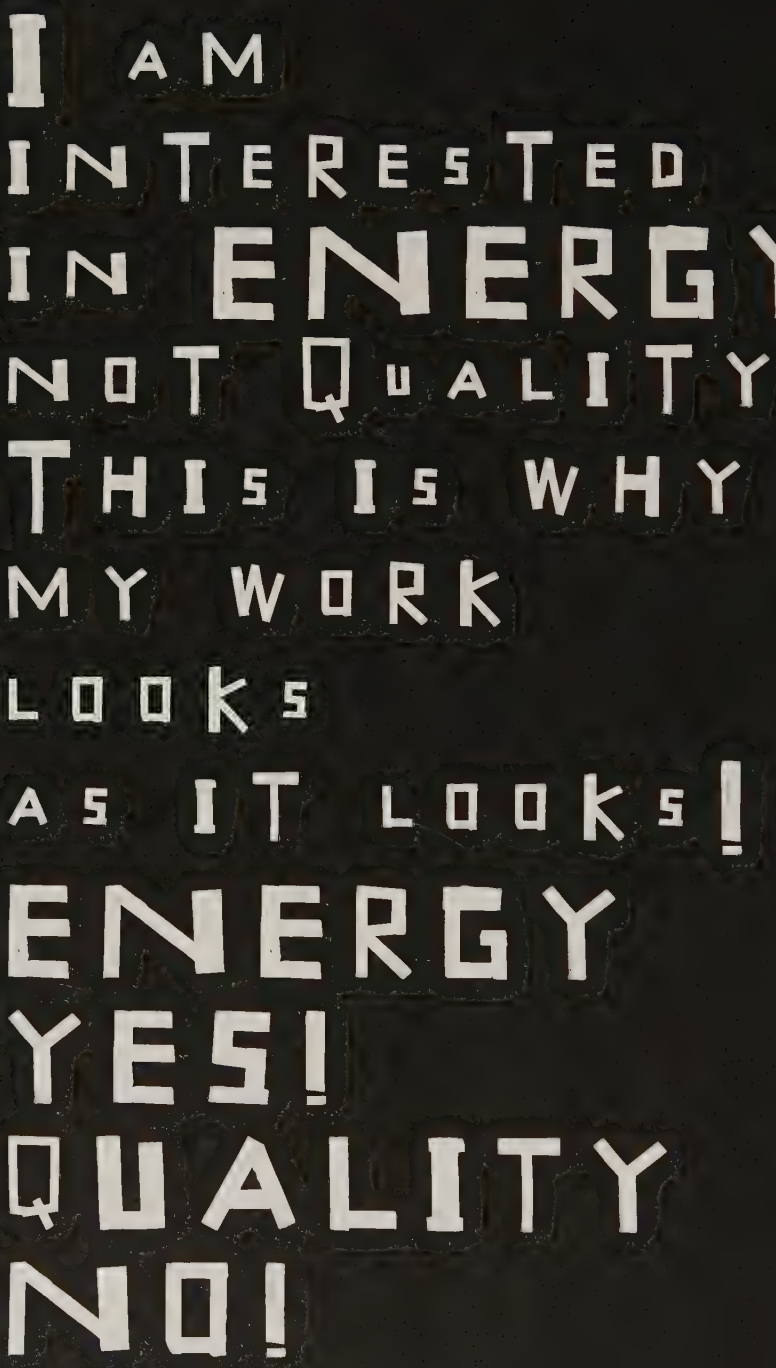
it was producing more than half of the sugar in the United States. So it is not only an iconic landmark in terms of its architectural façade, but served as a locus of activity and consumption in America for more than 100 years. Even in the latter nineteenth century, after sugar was no longer grown and processed by a slave population, the plant continued to have an ongoing association with minimal wage earnings and extreme poverty. As recently as 2000, it functioned as the site of one of New York City's longest labour strikes, with over 250 workers protesting about wages and working conditions for 20 months.

Walker Which didn't turn out well. [...] Imagine gathering all the sugar in the world in one location. This demands immense amounts of physical labour, from the Dominican Republic to Cuba and other sugar islands, that brought that product onto that site, and are still bringing that product onto the other site in Yonkers. Then there's this insane amount of pressure, heat, centrifugal force and manpower necessary to bleach the sugar. Not to bleach it, exactly, but to turn it from its natural brown to white state. There is all this knowledge that comes with that, the learned knowledge of the men and women who have worked on this site for years and years and years, not to mention of the families of these labourers. There is a living memory of the smell and the steam – this heavy molasses odour that's still in the space.

Rooney It's like the gooey, sticky manifestation of America's original sin.

Walker Yes. There's this grassy, pungent, almost nauseating sugar smell that lives in the tissue of everyone who has worked in that plant. [...] I wanted to make something that would contain that sweat and labour in the histories of the totality of sugar production – the here and now and the past and present of it – but that would also elicit this terribly sad memory of all that's lost. It's colossal and at the same time temporary, made from something completely vulnerable to the elements and time.

Kara Walker and Kara Rooney, extracts from 'A Sonorous Subtlety: Kara Walker in Conversation with Kara Rooney', *Brooklyn Rail* (6 May 2014). (www.brooklynrail.org)



Thomas Hirschhorn, 'Philosophical Battery', 2004

Esther Leslie
Volatile, Liquid, Crystal//2015

Marx is a theorist of volatility, in a few senses. He observed the volatility of the financial economy, whose vicissitudes made the lives of workers volatile, exposed as they were to economic anarchy, seasonal labour, the whims of mobile and self-seeking capital. He emphasized the volatility of class struggle, whose explosive encounters would flare up periodically. But in a more wide-ranging sense, his theory of capitalism sets out from a generalized volatility. 'All that is solid melts into air', he and Engels state.[1] Or an English translator of *The Communist Manifesto*, Samuel Moore, does, in consultation with Engels in 1888. The solid phase melts into air – this is what happens under sublimation, and is an expression of chemical volatility. The term 'sublimation' appeared in alchemical parlance and referred to a process of purifying by evaporation and allowing the vapour to cool. In this way, a substance is lifted up, elevated or refined. Chemistry appropriated the term as a description of a phase transition from solid to gas without passing through the liquid phase. Snow and ice sublime, albeit slowly, once below the melting point. As used by Marx and Engels, the metaphor suggests a rapid process of social change, resulting from the added energy of industry forcing through an uncommon process. The bourgeois sublime disperses solids into gases. Perhaps this is what the bourgeoisie hoped to achieve historically, as it rallied in the early nineteenth century, smashing up what was, in order to breathe a new air, the air of liberty. This air, however, was not to be breathed by all. As Marx put it in April 1856, in a speech delivered at a meeting to mark the fourth anniversary of the *People's Paper* at the Bell Hotel, the Strand, in London, and published in that journal:

> The so-called revolutions of 1848 were but poor incidents – small fractures and fissures in the dry crust of European society. However, they denounced the abyss. Beneath the apparently solid surface, they betrayed oceans of liquid matter, only needing expansion to rend into fragments continents of hard rock. Noisily and confusedly they proclaimed the emancipation of the Proletarian, i.e. the secret of the nineteenth century, and of the revolution of that century.[2]

The limited revolution of the bourgeois only cracked the dry crust, but even that force was a borrowed one, a surplus of energy from the true historical force embodied in pools of volcanic liquidity that burst up and out from confinement in the under earth. This is the liquid force that should and must

expand to carry through the revolution proper. The struggle between classes comes to seem like a struggle between the liquid, which is the oppressed propelling history, and the crystal, which is the hard rock and metal of reaction that would obstruct its own dissolution.

What if Marx's evocation of volatile relationships expressed chemically allowed a broader speculation of the relationship of action, thought and matter? What if a mode of thought – a volatile thinking – were in intimate connection with volatile phases of matter, which also emerge historically, or come to be known at historical moments? What if the hard form that is crystal, in periods of its prevalence, produced thought that is crystalline? What if an abundance of liquid made thought fluid, or if its absence made thinking desirous of fluidity to combat its parchedness? Is reactionary thought always a hardening and emancipation always a melting? Is liquidity a revolutionary hope – whereby current states dissolve, political renegades are liquidated, the gush of authentic sentiment overcomes the stasis of convention, and so on – or is it a capitalist necessity, along with liquid assets, the free flow of trade and labour power, the command to sink or swim in a modern global economy? Ours is a global economy that transmits images of itself worldwide through the energetic powers of liquid crystal. The polar pulls between liquid and crystalline states threaten to flatten out in the age of the flat screen. The cage lined with spectacular screens threatens to seal up, as we are never disconnected. We limn the flatness of our devices, our liquid crystal screens, and imagine thereby that we live.

Solid, liquid, gas: these are the schoolbook-familiar states of matter. Movement between these states, as one becomes another, is called phase transition. But in between these common states, forms of liquid crystallinity interpose. Liquid crystallinity is a crossbreed form. The liquid crystal state exists only for a few minutes on the way from hot to cold or cold to hot. If a substance in the liquid phase is viewed under cross-polarizing light, whereby the polarizers either side of the sample eliminate light with exactly perpendicular polarizations, only blackness is seen. At the moment that liquid crystallinity occurs, colours and shapes flash into view. These flash up for a moment, a result of the right temperature. These burst into being like a little abstract animated film. This is an animation made by nature itself. This momentary phase of liquid crystallinity was caught in view for the first time in the 1880s. Liquid crystal is a phase of matter that has always existed, indeed exists within us in abundance, but was only found, named, probed from 1888. Its inquisition allows us to think about a complex of matter, thought, society, in relation to the late Victorian social world, which is not so distinct from ours. Indeed, we live now, and those who found liquid crystal lived, in what might be called a liquid crystal epoch, in which all that happens can be conceptualized in relation to a pull this way and that way

between the liquid and the crystalline, the fluid and the frozen, a volatile flipping between states, that is sometimes also each at once. The liquid crystal is a chemical form, but it may also be a *Weltanschauung*. It becomes, in time, a way of viewing the world through screens, at the very least.

Liquid and crystal enter into a partnership, with the discovery of a state of nature that exists and can be impelled.[3] The state of liquid crystallinity is discovered and named in the late nineteenth century, though it has always existed. It joins our world of concepts and initiates immense social change, as it eventually makes possible a world built of screens, communicating devices, gauges, watches, calculators, control panels, and so on. Its discovery demands adjustments in theory too. Thinking is altered by liquid crystallinity. The state of liquid crystallinity is a curious phase, in actuality and as a mode of processing existence. It finds analogues here in other forms, such as the 'petrified unrest' which Walter Benjamin deemed characteristic of the late nineteenth century (the epoch more or less when liquid crystallinity was discovered). Does anything connect the world of liquid crystals' discovery to the stop-starting rhythm of animation, invented in the same moment, or to the jerkiness of proletarian revolution, which comes only haltingly, as Marx put it? What is the affinity between the liquid crystal screen and the vistas of liquid and crystal sublimity that crowd the demonstration discs in TV stores? What are the connections between liquid crystals, those in the laboratory and in our devices, and in us, in our bodies and in our thoughts? Might this phase discovered in 1888 allow the formulation, as Engels put in his *Dialectics of Nature*, written in the 1870s and 1880s, of, 'in its universally valid form, a general law of development of nature, society, and thought'?

How, or in what ways, do societies get the phases of matter they deserve, or in what ways do forms of physical matter play into the technologies of a particular time – which would include the modes of thinking. The liquid and the crystal may be thought dialectically or they may be thought in their separation. That they have been thought dialectically made it possible, perhaps, for the chemical phase that takes the name liquid crystallinity to be discovered at all. But in many circumstances the two states of liquid and crystal, of flow and freeze, have participated in something often pegged as the rhythm of capitalism, an eternal return, frenetic activity, a liquid agitation, the flow of goods, things, people, labouring people, endlessly captured by stasis, the freeze, a blockage of social change. Abstracted labour is dead, or perhaps it is just congealed, frozen. It might be thawed, brought back to life, recovered from its cryonic suspension. The dialectic is annihilated and animated, this volatile fluxiness, in an endless rhythm or polar pull. The crystals of totalizing thought – a frozen field of homogeneity – are subject to dissolvings – as thoughts, images, ideas, words liquefy into each other and new things. The liquid crystal is a metaphor. The liquid crystal is an

image. Liquidity and the crystalline segue with the flow and freeze, the fluid and the fixed. The liquid crystal is worldly. It is a phase of matter, in the world and now of the world. Liquidity, crystallinity, as well as light, took on particular conceptual significance as part of the Enlightenment battery of scientific objects: liquidity as the prime element of biology, crystallinity, a property for chemistry, and light, a territory of physics. These coagulate in new ways in our digital screens of the long-past, yet never achieved, Enlightenment, and they appeal to us as they reconstitute us. We live in its wake. These liquid crystal screens, networked, slosh data between themselves in endless acts of digital liquidity. The computer servers store it all in fantasy clouds – all that has been touched by digitality – petrified, like a fossil, embedded in crystal silicon, etched for ever more, or until the servers give out or up, heat up, melt down, switch off. What light can be shed on and by the liquid crystal now?

1 The German translates more literally as 'all that is standing and fixed evaporates'. The word translated here as 'standing' is also the word for 'estates' in the sense of social orders. Helen MacFarlane's first translation of *The Communist Manifesto* in 1850 holds more literally to Marx and Engels' sense: 'Everything fixed and stable vanishes, everything holy and venerable is desecrated, and men are forced to look at their mutual relations, at the problem of life, in the soberest, most matter-of-fact way'. See *Helen Macfarlane: Red Republican: Essays, Articles and her translation of the Communist Manifesto* (London: Unkant, 2014).

2 Karl Marx, 'Speech at anniversary of the People's Paper', *Marx/Engels Selected Works*, vol. 1 (Moscow: Progress Publishers, 1969) 500.

3 The accuracy or otherwise of this name has been a matter of discussion.

Esther Leslie, 'Volatile, Liquid, Crystal', in *Void ( )*, curated by Communication & Multimedia Design (Breda, Netherlands: Avans University of Applied Science, 2015) n.p.

Shozo Shimamoto
Theory of the Curse of the Brush//1957

On brief consideration it appears that paint is able to fulfil its function due to the existence of the brush. The path taken by the paint is, due to the provocation of the brush, nothing but a long path of suffering, similar to the sad stories of factory workers, who are oppressed by the machines and used up and worn out in their youth. [...]. No colour exists which is not accompanied by 'material'. [...] I do

believe though, and am certainly not wrong in claiming this, that the idea of inventing a brush – whether in the East or in the West – was based on the idea that the essential being of the paint could be disregarded or at least held in strict limits, and that the sole aim was to use the brush to bear the paint as such. [...]. But just as no line can exist without a certain width, no paint can exist without its 'material'. Therefore paint protested and put up resistance to the brush whenever and wherever possible. [...] However, in all paintings in which the brush was attributed with every increasing degrees of fineness and exactitude, until it appeared to have completely suppressed the paint, fragments of the essential nature of the paint can be discovered every now and again. At very distant points, beyond the range of the brush's influence, it suddenly puts up resistance. In the cracks and peeling paint of the surface, or in unexpected colour changes, we discover a substantial beauty of the paint [...]. Applying paint with a spatula shows us clearly its essential quality. However, that is not yet the complete liberation of paint. [...] Paint still remained the medium for presenting ideas. [...]. Today we should no longer want to falsify the characteristics of the paint – whether it be oil or enamel paint. As has already been said more than once: no colour exists without its substance. What ever the representation of nature or the presentation of the artist's own ideas may have been, they were able to maintain their beauty despite the strong limitation of their qualities by the brush. I think that in the first place one should liberate the paint from the brush.

Paint cannot be liberated until the brush has been broken up and thrown away and distance has been gained from it. Paint does not start to live until it is liberated from the brush. As an alternative to the brush, I think all possible devices and objects should be used. Quite apart from one's own hands and the paint spatula, I can also imagine the objects used by the Gutai Group. Here all sorts of things are conceivable; for example, a watering can, a vibrator, a Soroban calculating slide, umbrellas, rollers, toys, feet, a canon, etc., etc. They could even include a brush. Such a brush could be a newly invented one, but there could be others differing little from the conventional brush. But one thing is certain – that it would no longer be used to kill the very nature of the paint, but to revive the paint and let it live.

Shozo Shimamoto, extracts from 'Theory of the Curse of the Brush', *Gutai*, no. 6 (1 April 1957); trans. Sheila Fuchs, in *Gutai. Japanese Avant-Garde 1954–1965* (Darmstadt: Mathildenhöhe, 1991) 395–8.

Dominic Rahtz

Indifference of Material in the Work of Carl Andre and Robert Smithson//2012

Carl Andre has, perhaps more than any other artist, consistently argued for the priority of the material quality of his work. The literalist projection of the material condition of art was in Andre's case produced according to a particular relationship established in his work between a produced absence of self at a formal level and a literality at the level of materials.[1] Andre's literalist presentation of materials such as firebricks, wood, and metal plates was related to a consideration of the primary relationship between the self and the world of matter that, for him, was constitutive of the impulse to produce sculpture. [...] The relationship Andre established with his materials, the consequence of his 'wish to submit to the properties of ... materials', was in these terms one that involved 'a state of consciousness' consequent to the resistances presented by particular instances of the material world, the 'impingements upon our sense of touch', as Andre put it.[2] At the same time, through more rhetorical means, his art work sought to reveal or suggest the exteriority or anteriority of the world of matter that caused this 'state of consciousness'. Andre's refusal to alter or shape his materials in any conventionally artistic transformative or imaginative way can be understood in these terms.

During the late 1960s, Andre worked principally with the common metals used as raw materials in the construction industries. [...] 'It [Andre's] was a literalism, first and foremost, of materials, a matter not of truth *to* materials, but the truth *of* materials. If materials could be presented in such a manner as not to be overwhelmed or belied by form, it might be possible to introduce into art a new kind of truth.'[3] Form can be seen as a potentially falsifying imposition on the materiality of materials because it implies a more general or universal realm that exists at the level of the imagination rather than at the level of the particularity of the material. The 'truth' that Philip Leider referred to, and here his views are consistent with Andre's, was revealed rather through the sensuous experience of the materials. 'The work made of lead, for example, "looks" the same as the one made of magnesium, but it weighs three tons, while the magnesium work weighs only 450 pounds. It sounds different when you walk on it; it feels different when you touch it; each is warmer or colder than the others; each is more or less lustrous or dull than the others.'[4]

The materiality of Andre's work is described here in essentially phenomenal terms. What Leider describes is not so much the materials themselves, but rather the sensuous immediacy of the viewer's relationship to them. This sense of

immediacy was possible, as Leider suggested, due to the relative absence of form in the works. Yet this absence of form could also produce the sense of a lack of a relationship of immediacy, the sense of an exterior world of matter that cannot be interiorized. [...] The materiality of Andre's work is thus potentially subject to an ambiguity when seen in sensuous or phenomenal terms without the mediating function of form. It suggests both the possibility of an immediacy, a 'truth', in the sensuous relationship between the self and the world of matter, and the impossibility of such an immediacy.

'Labour is the living fire that shapes the pattern'

Andre's approach to materials understood in sensuous or phenomenal terms was only one side of his interpretation of his work. In an interview with Jeanne Siegel, published in 1970, Andre stated, 'Matter as matter rather than matter as symbol is a conscious political position I think, essentially Marxist.'[5] There are difficulties in reconciling a Marxist materialism with a sensuous materialist view [...]. Andre's Marxism, however, and in spite of his own protestations to the contrary, is consistent enough that it deserves more serious attention as an interpretative frame for his work.[6] His references tended to be directly to the writings of Marx, rather than those of a contemporary Marxist intellectual such as Herbert Marcuse, who was an important figure for the American New Left in the 1960s, as well as for the New York art world. Thus, although Andre was politically active in New Left-inspired groups such as the Art Workers' Coalition, a group formed in early 1969 to fight for artists' rights, his own perspective tended to be defined in the terms of a more traditional Marxism.[7] [...]

It was crucial to Andre's Marxist interpretation of the material condition of his work that this work was comprised of raw materials, that is, materials that in economic terms had already undergone some alteration by labour (as distinct from the mere stuff of nature) and which were destined for further labour. [...] Such materials would have had to have gone through a series of industrial processes – mined as ore, purified, rolled, cut, and so on – before diverging from their usual destiny in industry to become the twelve-inch square metal plates that Andre picked up from a stack placed on a trolley and laid on the floor [...] in a simple pattern.

In a letter published in the May/June 1976 issue of the British art journal *Studio International*, Andre responded to some misconceptions held about his work by drawing attention to what he believed to be his economic position as an artist. According to him [...] he was both a producer and a capitalist, the latter in the sense that he owned his own means of production and could therefore retain the value in what he produced that would otherwise be lost if he were a wage-labourer. In this letter, Andre also stated the following: 'My work does joyfully

celebrate the labour of others and the winning of human use value from indifferent matter.' He then went on to quote the following phrase from the *Grundrisse*, Marx's draft for a critique of political economy, written in 1857–58: 'Labour is the living fire that shapes the pattern …'[8] This phrase evidently had a particular significance for Andre – he used it more than once.[9] It came from a section in the *Grundrisse* concerned with the opposition between what Marx called 'living labour' and capital, and, as an aspect of this opposition, with the relationship between labour and materials. […]

In capitalist production, labour tended to be reduced from an action to a thing, a reduction that was, Marx wrote, a qualitative one, but hidden behind the apparent equality of a quantitative exchange between things. […] The distinction can also be thought of as one between objectified labour as past or dead labour, existing in space as things, and living labour as present labour, existing in time as possibility or potential.[10] In characterizing living labour with respect to capitalist production as a process, Marx frequently used metaphors that referred to natural forces or processes, to fire, or to fermentation.[11] It was the force that continually animated the process of capitalist production, and was the precondition for it, as Marx elaborated in a dense passage in the *Grundrisse* that dealt with the relationship between living labour and labour objectified in the forms of raw materials and the instruments of labour. The passage ends with the sentence that Andre partially quoted: 'Labour is the living fire that shapes the pattern; it is the transitoriness of things, their temporality, their transformation by living time.'[12] […]

Only in its existence as the material for living labour did the relationship within objectified labour between form and material lose its indifference or arbitrariness, as form became a moment of the more general forming of material of living labour. This is the sense in which living labour, as forming activity, 'shapes the pattern'. In overcoming the indifference of material to form, living labour both gave form to the material and materialized itself.[13] Within the relations of capitalism, however, labour and capital were opposed such that each were abstracted and generalized from the point of view of the other. […] Yet the real condition of these materials within modern industrial production meant that the relationship in them between what was now merely the deadened external form of living labour and material was arbitrary or indifferent. Andre's materials are thus suspended between two conditions – the imagined temporal existence of materials defined by an originary and potential appropriation by the forming activity of living labour, identified with the sensuous work of 'art', and their real deadened material existence as the correlate of generalized labour in capitalist production. Materiality in these two senses is defined according to the presence or the absence of living labour, or 'art', as sensuous forming activity.

There is, to use Jacques Rancière's phrase, a particular 'distribution of the

sensible' implied in the relationship between these two conditions, or in the relationship between what is called 'art' in the passage from Marx and the 'mechanical activity' of industrial work, which sets this relationship in broader social and political terms. According to Rancière, the relationship between art and work is determined by a distinction between the modern definition of art as a form of life, one that lays claim to a generalized idea of work – or 'production' – as 'the transformation of sensible matter into the community's self-presentation', and the actually existing condition of work as blind and particularized.[14] Andre's own artistic work may be seen as suspended between art and work defined in these ways. He wished to use such 'materials of society in the form the society does not use them'[15] [...].

In the case of Andre's work, his individual 'handling' of materials and their sensuous immediacy in phenomenal terms were the only possible ways in which his work could assume a form consistent with the originary and potential appropriation of the world of matter that defined the forming activity of living labour, or 'art'. Form also had a political meaning in this sense in that it constituted [...] the realm of an imagined different reality. Andre's 'handling', or forming activity, however, was at the same time 'dictated' by a materiality defined according to a historically developed mode of work that was blind and particularized. From this perspective, the materiality of Andre's work was defined by an indifference of material to form, both in the mode of action of generalized labour as 'merely *formal*' or 'merely *material* activity' and in the materiality of the productions of this labour (such as industrial materials) which were mere arbitrary shapes in the absence of living labour. It was as if, in Andre's work, the artistic act intentionally suffered the condition of modern work.

1 [footnote 3 in source] See my essay 'Literality and Absence of Self in the Work of Carl Andre', *Oxford Art Journal*, vol. 27, no. 1 (2004) 61–78.

2 [5] Phyllis Tuchman, 'An Interview with Carl Andre', *Artforum*, vol. 8, no. 6 (June 1970) 59, 60.

3 [10] Philip Leider, 'To Introduce a New Kind of Truth', *New York Times*, section II (25 May 1969) 41. Andre stated elsewhere that he was 'less interested in imposing a form on the matter than revealing the properties of the matter'. 'Carl Andre', in Paul Cummings, ed., *Artists in Their Own Words* (New York: St Martin's Press, 1979) 187.

4 [11] Philip Leider, op. cit., 41.

5 [13] Jeanne Siegel [interviewer], 'Carl Andre: Artworker', *Studio International*, vol. 180, no. 927 (November 1970) 178.

6 [14] Texts, often interviews, published during the period from 1968 to 1976, reveal Andre to be developing views on the relationship between consciousness and matter, on history and class consciousness, on the nature of labour, on the social position of the artist, and on the commodity-character of the work of art.

7 [15] On Andre's relationship with the Art Workers' Coalition, see Julia Bryan-Wilson, *Art Workers: Radical Practice in the Vietnam War Era* (Berkeley and Los Angeles: University of California Press, 2009) 52–64.

8 [19] Carl Andre, 'March/April Issue' [correspondence], *Studio International*, vol. 191, no. 981 (May–June 1976) 311.

9 [20] See Carl Andre, 'Letters', *Artforum*, vol. 11, no. 8 (April 1973) 9; Carl Andre and Jeremy Gilbert-Rolfe, 'Commodity and Contradiction, or Contradiction as Commodity', *October*, no. 2 (1976) 103.

10 [22] Karl Marx, *Grundrisse* (1858, unpublished until 1939); trans. Martin Nicolaus (Harmondsworth: Penguin, 1973) 271–2.

11 [23] e.g. 'Labour is the yeast thrown into it [the process of capitalist production], which starts it fermenting', Marx, *Grundrisse*, op. cit., 298.

12 [24] Karl Marx, *Marx's Grundrisse*, trans. David McLellan (London: Macmillan, 1971) 89. [...]

13 [27] Karl Marx, *Grundrisse* (1973 translation) 360–1.

14 [29] Jacques Rancière, *The Politics of Aesthetics*, trans. Gabriel Rockhill (London and New York: Continuum, 2004) 44–5.

15 [30] Transcript from a symposium at Windham College, Putney, Vermont (April 1968). Excerpts in Lucy R. Lippard, *Six Years: The Dematerialization of the Art Object from 1966 to 1972 ...* (1973) (Berkeley and Los Angeles: University of California Press, 1997) 47.

Dominic Rahtz, extracts from 'Indifference of Material in the Work of Carl Andre and Robert Smithson', *Oxford Art Journal*, vol. 35, no. 1 (2012) 35–42.

Artur Barrio
Manifesto//1969

against categories in art
against salons
against prizes
against juries
against art criticism

Owing to a series of situations in the plastic arts, pointing to the increasing use of materials considered expensive for our, my reality, in third world socio-economic terms (including Latin America), due to industrialized products not being within our, my reach, but in the power of an elite who I contest, because creation cannot be conditioned, creation has to be free.

Therefore, based on this socio-economic aspect, I make use of materials which are perishable and cheap in my work, such as: rubbish, toilet paper, urine, etc. Obviously the simple participation of the works made with precarious materials is contested within the closed systemized circles of art due to its current aesthetic.

Owing to my work being conditioned by a type of momentary situation, the record will automatically be the photograph, the film, the tape, etc. – or simply the retinal or sensorial record.

Therefore, believing that expensive materials are being imposed by an elitist aesthetic which thinks in terms of top to bottom, I oppose momentary situations with the use of perishable materials, in a concept of from the bottom to the top.

Artur Barrio, 'Manifesto' (Rio de Janeiro, 1969); trans. Michael Greer, in *Artur Barrio: Regist(R)os* (Porto: Fundação de Serralves, 2000) 226–7.

Dieter Hoffmann-Axthelm
Theory of Artistic Work//1974

In situations where the bourgeois class has become self-conscious and was establishing itself as a bourgeois society on the basis of capitalist production (not on the basis of trade, a state of affairs that kept Holland so archaically early-bourgeois),[1] that is as an association of private producers with private cultural tastes and nothing else, artistic work similarly becomes an extension of its own means of production. Such work becomes the exploitation of material in order to illustrate subjective forms. [...]

In the case of traditional material this loss of history appears in their function as raw materials. The use of materials is socially mediated only through the individual fetishism to which it is subject. [...]

The question of material is [...] the question of its use. Of course this does not mean that material should be considered as something neutral, as a kind of neutrality that the bourgeois notion of form opposes . It is not simply a question of a better use of material that turns out to be a diligent use of the same material with better intentions. What we really need are actions and aims that transform the material.

Transforming the material means wanting to abolish the division between the creative material and the ideal object of the mind. This presupposes

transcending the private disconnectedness that consequently shackles individuals working as artists to their class status. What we need here is not abstract knowledge of this division in the context of reproduction: that is not enough, as its aesthetic correlate means merely increasing the number of objects of the mind using images of production. Rather we need to subject these parasitic representations to a kind of practice that aims to fundamentally revolutionize relations of production as a disintegrational moment. Being an object of the mind – no matter how much it must be condemned as a reified fantasy and as a reference to an object that has been dissolved through fantasizing – is a function of the remnants of privilege and, clinging to them, the persistent temptation to want to belong to the ruling classes, even at the most miserable level. To this extent the use of materials in art repeats the illusions of power among middle management. Abstract work and imagined fulfilment operate in parallel but are unrelated, like daydreaming while working on an assembly line. Only reconnecting the imagination to the actions of the present can provide what we need, namely returning the imagined objects to the reality of work in society. Where imagined objects have reverted to the awareness, sensuality and sensitivity of practice, simultaneously the raw material of the semblance of the imagined object must again become the material of this practice – namely as means of production.

Turning material into means cannot remain the result of an individual effort which itself in turn only depends on a single political intent (even if under Party orders). Artistic work must also stop functioning as a thing apart, and stop the artistically engaged individual representing his private, politicized consciousness through a politically stylized use of materials. It is precisely this kind of private image, revealing itself in the use of materials, that creates an illusion of objectivity in what is represented, by exploiting and processing the objective as material. Collective action is produced aesthetically as the image of a demonstration; struggle as photojournalistic reports from Vietnam; class betrayal as the image of a prominent German CSU politician. Of course struggle is easy to represent, as the material is readily available. But it is in no way a tool in the struggle – this is precisely why the act of painting was declared to be a struggle.[2] Instead, a transformation in material can only be launched when real struggle itself sets the agenda. What advertises itself as solidarity of attitude is the on-going privacy of artistic work which has found a more human domain for its incarnation than the circulation of commodities has to offer, without liberating itself from being subsumed by its conditions. Material can become political when it has a precise function in particular struggles (that is a function that is not illusory or bloated with spectres such as 'the people' 'monopolies' or 'democratic struggle'), namely where the struggle requires this material and no other and, because the struggle itself has a precise aim, makes this material its resource. This is the opposite of a

critique of materials carried out at an individual level, for example. Instead of a critique of materials which remains true to the personal economy of art, the transformation of material should ultimately lie in the impossibility of dealing with materials through various types of critique concerning materials. This means addressing the difficulty of the work and the enjoyment of working with the material instead of the appearance, outwith society, of ease and availability, even if this is for a critical purpose and results from the needs of the working class, which still display the old class issues. The transformation of material cannot be achieved overnight; on the contrary, it represents a quality of political practice that is still impossible in Germany today, and rather only now promises to be possible in the future. The transformed material will not even possess the expressive characteristics that one tries to attain today by drawing on the political art of the 1920s (or worse – because they have been failing in this respect for a long time – by copying Renato Guttuso and the petit-bourgeois seriousness and hesitation with which he applies the raw materials). Being a resource means being used from the standpoint of use value, in the politically reflected tension between enjoyment and denial, instead of the indifference of the old wear-and-tear of material in which one considers material to be neutral. Under capitalism, however, working from the standpoint of use value is the most difficult thing to do, because it cannot exist as an imagined 'proletarian culture' but only as a result of struggles to come.

1 [footnote 31 in source] See Eric Hobsbawm, *Industry and Empire: From 1750 to the Present Day* (1969) (Harmondsworth: Penguin, 1999) 8.

2 [36] See, e.g., Guido Zingerl, 'Wir Künstler müssen endlich unsere Situation als Klassensituation begreifen' in *Kulturpolitisches Forum der DKP, 13/14 June 1971 in Nürnberg. Reden, Referate, Diskussionsbeiträge* (extracts) (Hamburg, 1972) 61 f.

Dieter Hoffmann-Axthelm, extracts from *Theorie der künstlerischen Arbeit. Eine Untersuchung anhand der Lage der bildenden Kunst in den kapitalistischen Ländern* (Frankfurt am Main: Suhrkamp, 1974) 119, 122, 125–28. Translation by Philippa Hurd, 2015.

Pennina Barnett
The Alchemist's Workshop//1997

I am not concerned with endings and beginnings, but with process and transformation. Yet if one has to start somewhere, why not a workshop bench, cluttered with tools and materials – paint brushes, a rusting funnel and jug; cans, bottles, jars; pans darkened with dried pigment; wire, rags, rope and nails; a pile of dismembered books, spines battered and torn from their covers; a yellowing wall smeared with paint?

Or the white space of commodification: an art gallery, tucked away in a side street in some European metropolis. Open out of hours, we have the place to ourselves and are self-conscious in our looking ... The work disturbs, silences: crates filled with heavy grey matter; stacks of worn stretchers; rows of jars, tightly sealed, containing an amorphous black stuff, almost foetal. Wooden trays filled with small hessian sachets, soft balls of horsehair, tiny bundles of cloth – like dried putrefied fruit, or miniature corpses, bound and laid out after what disaster? Endlessly repeated, obsessively classified, each object bears the same distinctive label: *Product of Chohreh Feyzdjou*. What to make of this work: its materiality, repetition, and the film of darkness that has settled upon it?

The Paris-based writer and academic Youssef Ishaghpour, likens the 'products' to those of a colour merchant who only sells black (darkness); and the world Feyzdjou creates to an apocalyptic bazaar, for

> ... there is no longer anything which is not a product, except precisely the nothing. And it is perhaps of this nothing that the 'Products' of Chohreh Feyzdjou bear witness, as if she is holding up a mirror to the world ... [whose] gaudiness ... is 'reproduced' in a revealing negative.[1]

Commodification is an important theme in the work. Feyzdjou (1955–96) grew up in the Iran of Reza Shah, under whose reign her father was imprisoned for his communist sympathies.

Although imbibed with Western culture, she too rejected its materialism, believing passionately in universal ideals. On arrival in France in the mid 1970s, to study at L'Ecole des Beaux Arts and then the Sorbonne, she came to understand that art, too, was a product, Later on, she also realized how difficult it was to shed her 'exiled identity', and in an ironic gesture decided to stamp it into the work itself – hence *Product of ...*

Yet it is difficult not to equate what one knows with what is presented: objects

boxed, stacked and labelled, the use and re-use of packing cases, many with her name and addresses scrawled across them; and the bare facts. Born into a Jewish family in Tehran, leaving for Paris, thus 'double displaced' ... is this the Stranger of whom Julia Kristeva writes?[2] And what is it that draws me to the work – a rawness of facture, a kind of violence, physical, emotional, metaphorical; the evocation of memory, cultural and personal; the presence of death ...? Blackened by some exhumation, some incineration, the 'products' inevitably evoke Auschwitz. Yet for Feyzdjou, many experiences converged in the making of the work:

> [T]he problems of this century ... the Jewish experience, the Iranian situation – of exile, instability ... When you identify with several cultures you ... suffer more. You have access to suffering itself ... to what is happening in Rwanda or Bosnia. It gives you the possibility of getting rid of any identity, and touching the real identity of human beings.[3]

Apocalyptic bazaar or scene of the Disaster: the 'products' refuse a single reading. For as much as they address issues of artistic practice and commodification, exile and loss, they also raise questions of identities, identification and subjectivity.

But if I have been drawn into an unremitting darkness, my focus has been partial. For although the large crates may offer nothing but grey matter, and the small jars only decay, Feyzdjou's 'scrolls' suggest another possibility – mounted on great rusty scaffolds, or heaped against a wall, many are blackened and sealed with thick sheets of plastic. Yet others are unrolled just enough to reveal small ink drawings of strange animals and cartoon-like figures, or thickly-worked abstract paintings, stitched and glued onto layers of paper, canvas and hessian – an unexpected wealth of colour, form and humour; at one extreme disintegration, at the other, a cache of images: death and life in uneasy coexistence. [...]

Airless jars, dust-gathering crates. Feyzdjou stumbled across the blackness when pasting old paintings and drawings onto rolls of wallpaper:

> I couldn't bear the colour, and the black glue I was using gave me the idea of covering them with black pigment ... The work was very diverse. I had started with studies in anatomy and perspective and then tried lots of different things; the black somehow unified the work, brought it all together ...[4]

Accident or fate, death seems to have the upper hand in these installations – undoing, destroying, decaying – and life to be in retreat, packed up and removed from light. Yet it is interesting that Feyzdjou's first experience of blackness was through a medium that both binds and protects, qualities associated with life instincts. And we might even compare this layer of dark paste to the bottles and

boxes, in that it conceals in order to preserve. Thus in the materiality of the work we are offered powerful metaphors for the psychic struggle that Freud describes. But what of the obsessive repetition: the carefully grouped objects, not only labelled, but also tagged for identification; and the catalogues for Feyzdjou's solo exhibitions, with their row-upon-row, page-after-page of monochrome photographs, organized by type, number, measurement, materials and date. In whose service does such repetition function – life or death? [...]

Product of Chohreh Feyzdjou: how else to read the trapped embryonic forms, but the presence of death in life, their textures evoking the body in decay. One is tempted to imagine them pulverized, returned to the inert matter of which Freud writes – a kind of inverse alchemy in which we are invited to think process as much as form, as Ishaghpour suggests:

> It was a question of defacing the works: unhanging the paintings, taking off the canvases, sticking them one on top of or behind the other, covering them in black, scraping them, classifying them, distributing canvases, frames, nails, colours, charcoals ... into different series. One could say a dismemberment, a tearing to pieces, but also a reduction of a primary matter from which something else could emerge.[5]

Yet although the 'products' suggest disintegration, even burning, there is little evidence of such processes; on the contrary, Feyzdjou added layers of glue, pigment and protective wrapping – cloth, plastic, bottles, boxes, crates – and what we see is destruction as artifice, the stack of worn stretchers a reminder of the contrivance of art. For while the 'products' might appear statements of irony, a disenchantment with commodity, capital, perhaps even life itself; equally, as Ishaghpour implies, death and destruction might also be seen as metaphors of transformation – means rather than ends.

Indeed, for Feyzdjou, the black had a number of associations:

> When I started working with black wax, I remember thinking 'black is like darkness, you feel much better when you can no longer see the things you fear.' The tactile qualities are the only thing that determine the materials I use, and black allows me to concentrate on this in a way that I can't with colour ... Soft materials feel very alive ... and because the wax was hot and malleable I mixed it with other materials, and the forms were coming out by themselves – it's like a dance, a dialogue with the materials ... They are not really objects in the classic sense ... you have to take care of them, protect them. They are very fragile – if you touch them, they have a quality of their own ... they change with the heat, with shock, they have something to do with life, with animals, insects, plants or fruits.[6]

Thus the work speaks of process, with materiality as its signifier. Yet it is not only physical processes that are laid bare, but psychic processes, where loss itself is origin. With their roughly hewn surfaces, the 'products' beckon us to partake in their imaginary completion, to 'become process' itself. [...]

In a recent article, Griselda Pollock explores the idea of 'a visible tactility that touches the internal organization of the drive through materiality and structure rather than through representation ...' It is here, in the liminality of the drive, in what she describes as a 'borderspace', that the encounter of subject and object/s is registered; that subjectivity, 'even in its most minimal and primordial possibilities' is imagined.[7] Yet subjectivity is never finalized. Kristeva argues that it is work-in-progress, and by analogy, that creative practices are not representation but production: art produces the subject, gives him/her identity.[8]

So, if one has to 'end' somewhere, why not that cluttered workbench – an image of facture, of strange compounds and inert matter. An alchemist's workshop, where art is production and the self is process. A place of experimentation – transformation – where, against all odds, and defying reason, lies a simple desire: to make of the mundane something precious. For what is matter but 'a particular and very condensed form of energy',[9] 'energy not yet aware of itself',[10] – a 'nothingness of being which could also be a beginning'.[11]

1 [footnote 2 in source] Youssef Ishaghpour, 'Product of', in *Product of Chohreh Feyzdjou* (Paris: Galerie Patricia Dorfrnann, 1992, unpublished translation, Mary Raphaely, 1995).

2 [3] See Julia Kristeva, *Strangers to Ourselves*, trans. Leon S. Roudiez (New York: Columbia University Press, 1991).

3 [4] Chohreh Feyzdjou in conversation with Pennina Barnett, Forough Azizi and Anna Whyatt (Paris, 6 May 1995).

4 [6] Chohreh Feyzdjou, interview with Pennina Barnett (Paris, 22 June 1995).

5 [8] Ishaghpour, 'Product of', op. cit.

6 [9] Chohreh Feyzdjou, interview (22 June 1995) op. cit.

7 [11] Griselda Pollock, 'Into "Inside the Visible"', *Make: the magazine of women's art* (August/September 1996) 26.

8 [12] For amplification of this point see John Lechte, 'Art, Love and Melancholy', in John Fowler and Andrew Benjamin, eds, *Abjection, Melancholia and Love: The Work of Julia Kristeva* (London and New York: Routledge, 1990) 24.

9 [13] Jean Perrin, cited in Jean-François Lyotard, *The Inhuman: Reflections on Time*, trans. Geoffrey Bennington and Rachel Bowlby (Cambridge: Polity Press, 1991) 43.

10 [14] Marion Milner, *The Suppressed Madness of Sane Men* (London: Tavistock, 1987) 204.

11 [15] Ishaghpour, 'Product of', op. cit.

Pennina Barnett, extracts from 'The Alchemist's Workshop: Materiality, Process and Transformation

in the *Product of Chohreh Feyzdjou*' in Juliet Steyn and John Gauge, eds, *Act 3: Endgames* (London: Pluto Press, 1997) 100–101, 104–8.

Hilke Wagner
House in Mud//2005

Shortly after his first visit to Hannover, it was clear for Santiago Sierra (born in 1966 in Madrid, since 1995 a resident of Mexico City) that the point of departure for his installation in the kestnergesellschaft would be the history of the creation of the Maschsee [an artificial lake on the city's outskirts]. In this derivation – the mud of the Maschsee was supposed to be brought into the kestnergesellschaft – Santiago Sierra makes reference to a theme which has occupied him in his actions and installations since the middle of the 1990s: the question as to the meaning of work as an instrument of domination.

> The will to build / imparted to industrious hands / the blessing of labour – / May the lake henceforth bestow / happiness, health and strength. / (1934–1936)

Thus reads the inscription on the block-form column of the torchbearer, which rises skywards on the northern bank of the Maschsee in Hannover and is visible from a great distance. The Maschsee is an easily accessible and popular recreational area within the urban area of Hannover and forms an essential element in the cityscape. It was created between 1934 and 1936 – at a time of mass unemployment[1] – as a work-creation measure in the framework of the 'Emergency Work'. Hence it is only possible in a limited sense to speak of 'industrious hands' and of a 'blessing of labour', in as much as up to 1,650 emergency workers, in other words recipients of unemployment-, crisis- and welfare-support, slogged away with hoes and shovels in the Masch and filled the carts, all for wages of not even 64 pfennigs per hour. [...]

Although the National Socialist regime attempted to appropriate both of them for itself, neither the Maschsee project nor the measures for work creation had National Socialist origins. The plans for the creation of a Maschsee extend back into the nineteenth century; already at the beginning of the twentieth century, a citizens' initiative supported the cause of linking the necessary regulation of the valley of the Leine with the realization of this particular lake upon the Masch meadows. [...]

What was qualitatively new in the National Socialist economic programme in relation to the conceptions of its predecessors was simply the concept presented by Hitler in February 1933 of job creation through armament. But the military limitations imposed by the Versailles treaty did not permit Hitler's Germany immediately and extensively to reorient the economy towards producing armaments.

Thus the National Socialist regime was only too happy to appropriate the idea of creating work through the Maschsee – similarly to the Autobahn project – for its own purposes, and it propagated the measures as part of a 'Work Battle' (*Arbeitsschlacht*) within the 'Grand Spring Offensive' in Hannover which, according to the will of the government, was supposed to be undertaken on 21 March 1934 as a crucial blow against unemployment. [...]

Now Santiago Sierra is bringing the mud of the Maschsee into the kestnergesellschaft, even if only in a symbolic manner, for the sediment of the Maschsee itself proved to be too problematic, in terms of hygienic and bacteriological considerations, for exposing visitors and employees to this material day in and day out during the course of the exhibition. Sierra's project is not concerned with National Socialism, as the artist emphasized at the beginning of the project. His interest is focused much more upon a particular concept of work and the use of work as an instrument of political domination. From Sierra's perspective all this represents themes which possess a timeless relevance and which simply took on an extreme, even paradoxical form during National Socialism: thus the use of machines was renounced during the creation of the Maschsee in order to be able to give work to more of the unemployed. At the same time, the image of 'work with the hands' corresponded to the National Socialist ideology and its cult of work which found expression as well in the iconography of work and the depictions of work in that era. This ideological exaltation of work, however, stands in contradiction to its actual devaluation, which can be seen in the minimal compensation and in the restriction of the rights associated with it: the crushing of the workers' movement and of the unions numbered among the first measures of the National Socialist regime in the area of labour politics. [...]

Thus at the centre of the installation in Hannover there stands a constant in the artistic production of Santiago Sierra: it is a matter of exploitation, of the question about the evaluation of work and its utilization for purposes of power and domination. This represents a theme of current explosiveness[2] and a conceptual complex with which Sierra has occupied himself since the 1990s in his socially critical performances and actions. [...]

In a Land art of another sort, here are the hallowed halls of art – soiled, with the visitor unsure of himself amid the mud. The visitor is irritated by the damp,

inhospitable atmosphere or the emptiness of the upper story. It is empty only at first glance, for the tracks of mud extend through the upper halls as well and thereby ostentatiously turn the visitor into a participant, into a part of the installation, into a besmircher himself when, consciously or unconsciously, he carries the sediment with his shoes through the rooms. [...]

But earth, mud and other sediment are not only dirt and filth. Each piece of earth carries its own history in it and thus, unlike any other element, is filled with symbolic, historical and sometimes even ideological references. [...]

[T]he project in Hannover also stands in explicit relation not only to the location but also to the exhibiting institution: after all, the image of *Haus im Schlamm* refers as well to the brown swamp which itself surrounded the kestnergesellschaft in the 1930s – parallel to the creation of the Maschsee. The years of the building of the Maschsee were also turbulent years for the kestnergesellschaft, which in those years had to fight against denunciations and attacks from outside, and not only because of its avant-gardist exhibition programme but also due to the fact that the artistic director at the time, Dr Justus Bier, was Jewish. Already shortly after the assumption of power, the Gauleitung of the NSDAP, the Chamber of Visual Arts in the Reich and the 'Fighting Alliance for German Culture' began to exert pressure in order to bring about his dismissal. On 20 September 1933 the Board of Trustees of the kestnergesellschaft was informed that its financial support had been cancelled upon decision of the Bürgervorsteher-Kollegium (the town council), due to an initiative of a local grouping of the 'Fighting Alliance for German Culture'. First when 'the Jew Justus Bier is removed from his office', it said, would a renewed appeal from the kestnergesellschaft be taken into consideration. Nevertheless, the kestnergesellschaft continued the exhibition programme which Dr Bier had conceived, without making any deletions or compromises.[3] [...]

On 10 November 1936 – a half-year after the opening of the Maschsee – came the express prohibition of any further cultural activity on the part of the kestnergesellschaft, issued by the Reich Chamber for the Visual Arts.[4]

1 In Hannover in February 1933 there were nearly 60,000 unemployed; almost every third worker was without a job. [...]

2 [footnote 14 in source] The attempt to replace the technically complicated process of mud-filling with a manual labour force and thereby to employ unemployed persons as '1-Euro Workers' failed because of the guidelines of the Federal Institution for Work.

3 [19] 1934/35: Paula Modersohn-Becker, Emil Nolde, August Macke, et al;1935/36: Erich Heckel, Franz Marc, et al. The number of members meanwhile rose until 1935 and first shrank in the year of its closing, as the denunciation of modern art created ever widening circles.

4 [22] Already on 8 October 1936 there was a rough interruption to the lecture of the leader of the

Islamic Art Department of the Berlin State Museums, which was supposed to inaugurate an exhibition of Persian wall paintings. Several Gestapo agents demanded to see Beindorff, who countered, 'Meine Herren! This is a closed event. You will please be so kind as to wait outside until we are finished.' But the officials refused to be rebuffed and insisted that they had been ordered to close the kestnergesellschaft, because it was presenting an exhibition prepared by a Jew. [...] The kestnergesellschaft was reopened only in 1948.

Hilke Wagner, extracts from 'House in Mud', trans. George Frederik Takis, in *Santiago Sierra: House in Mud* (Hannover: Kestnergesellschaft Hannover, 2005) 17–18, 21–2, 24, 32–3, 39–40, 43, 45, 46.

Betsy Greer
Knitting for Good!//2008

One of the things that I have been deeply involved in over the past few years is the promotion of *craftivism*, which is the point where *crafts* and *activism* meet. By taking two seemingly disparate words that are negatively stereotyped in their own ways (craft can be seen as dull or old-fashioned, activism as violent or radical) and combining them to create a new word, *craftivism* strikes out into new territory. In 2003, I started using the term after a friend came up with it during a knitting circle. I soon discovered that others had also come up with the concept, pointing to a shared frustration about issues like consumerism, materialism, anti-green living, a lack of personal expression, and overconsumption. [...]

Theorist Nicole Burisch sees craftivism as 'emerging out of the renewed interest in social justice/activist issues that came in response to global trade issues/antiglobalization politics of the early 2000s (and increased media attention for the WTO protests in Seattle, take-back-the streets parties, etc., at that time). Alongside those, it seems there was a lot of interest in using alternative strategies for protest and action: often those that employ a degree of humour, accessibility and play (costuming, street theatre, raging grannies, radical cheerleaders, etc.)'. [...]

Knit to express the need for change by knitting a protest banner to hang, share or wear; have a knit-in at a protest; share your cultural/political feelings in a piece you create; or talk to other people in your community about using their creative gifts toward the greater good.

Betsy Greer, extracts from *Knitting for Good! A Guide to Creating Personal, Social and Political Change, Stitch by Stitch* (London: Roost Books, 2008) 127, 129–30.

Romuald Hazoumè
Statement//2012

Anyone who follows my work will already know of my focus on the hardships suffered by those engaged in trafficking black market petrol or '*kpayo*' from Nigeria to Benin. These two installations [*Petrol Cargo* and *Water Cargo*, 2012] provide new updates about this hitherto hidden world, and broaden the debate to include wider aspects that go beyond what's happening in Benin alone. In fact, the same problems involve everyone today no matter where they live. Today, we exploit the petrol reserves discovered in Africa. [...] Water, pure, fresh water, something that few people think about, is also an incredibly important source of riches, indispensably vital to life, and one that is destined to become scarcer and therefore increase in value if we continue along our current course. So I've made these two installations to set the two systems in counterbalance with each other. Using local developments in Benin, it's possible to compare the two side by side, analysing the means by which they are transported and delivered from source to user, using cargo-carriers of water and petrol. [...] Clean water is a precious resource, and many financiers are beginning to take an unhealthy interest in its annexation and exploitation. Major conflicts over rights to sources of clean water have already started, and many future wars will be waged as access to water becomes synonymous with access to life. So I've started to think about the distribution networks associated with these contemporary sources of wealth – petrol and water – and begun to consider the entire system as descriptive of a place I call 'cargoland'. Our daily world has already become 'cargoland'. The word 'cargo' has been appropriated in West African French to mean anything of weight and value that needs to be transported. The word comes from the Spanish term describing loads carried on a 'cart'. In Benin 'cargo' has become the name for these tricycle scooters re-fashioned from normal scooters and designed to carry heavier loads. [...]

The underworld of *kpayo* smuggling from Nigeria to Benin is not only back-breaking work, it's also incredibly dangerous. Many of the two-wheeled motorbikes engaged in this trade simply explode: petrol leaking from the oversized plastic containers is ignited by a spark from an electrical wire somewhere, and Boom! [...] There are maybe thousands [cargos] circulating today, delivering not just *kpayo* but also fresh water. What happened was that as soon as they made the forward tank larger, the increased efficiency made the first disabled cargo-drivers a lot of money. So they then transformed themselves into water carriers, by creating a cargo specifically designed for water, because it

was much less dangerous all round. These new cargoes carried a container in which they would transport sachets of pure drinking water. They were simply streetwise, and ploughed the money they'd made carrying the dangerous *kpayo* back into their new start-up by buying a water filtration system with their profits. Next they registered themselves with the Beninese Water Board to comply with regulations. They could then filter the water, seal the pure filtrate in plastic sachets and deliver their product to the many villages around Porto-Novo and Cotonou where fresh drinking water – often cooled by ice – was much in demand. They transformed themselves into successful entrepreneurs in a much less dangerous environment. It's an amazing story of African ingenuity and resourcefulness!

Romuald Hazoumè, statement excerpted from an interview with Gerard Houghton, in *Romuald Hazoumè: Cargoland* (London: October Gallery, 2012) n.p.

Natasha Eaton
Chromophobic Activism//2014

Artist/activist Ravi Agarwal's photographic series *Down and Out: Labouring under Global Capitalism* (1997–2000) includes two images of subaltern labour that invoke colour-as-subject.[1] In photograph no. 20 of 143 a swathe of rose-hued cotton shimmering like gossamer shuttles from a giant carton, creating a blurred, almost spectral image of what it means to labour with colour. When colour reappears elsewhere in *Down and Out* (no. 32) the camera is held askance; the right-hand kite worker's undershirt and palms are slightly stained with the industrial pigment as he tries to keep out of the colour – colour that has come off the knife-sharp (potentially deadly), glass-enhanced kite strings that he winds onto a spool on top of a box marked EXPLOSIVES. For Agarwal, who is elsewhere so preoccupied with 'waste imperialism' – its detrimental and photographic aspects – colour, it would seem, here possesses an ambiguous status.[2] Colour can evoke the exploitation involved in the enormous informal sector of the Indian economy, whilst also lending a polymorphous, magical, even paradoxical materiality and dazzling aesthetic quality to the photographic image.[3]

Although the popular, tourist stereotype of India as 'a land of colour' is relentlessly enduring, there is a more politicized underside to colour's agency. My intervention focuses on colour's paradoxical, sometimes violent and sometimes magical status during the period of Indian nationalism and its

postcolonial afterlives. From the Hindu spring festival of Holi to Timo Novotny's *Life in Loops* – a 2007 remix of Michael Glawogger's 1998 documentary *Megacities* that affectively re-edits the quotidian ardours of Akhbar Ali, a Mumbai-based dyer stained and sick with/of colour – to Agarwal's photographs, colour continues to assume a problematic agency in South Asia.[4] The fine lines of materiality as they intertwine with subaltern labour and its political representation are the principal threads running through my discussion.

These threads of artistic, counterintuitive and political genealogies of colour are shot through with chromophobia. Chromophobia has been extensively discussed by the artist David Batchelor and by the anthropologist Michael Taussig, both of whom play on its intimate entanglement with chromophilia and its preoccupation with white as a kind of 'spectral dizziness'.[5] Batchelor argues that there is a 'chromophobic impulse' lurking in much Western intellectual thought, driving an attempt to purge colour or to relegate it to either the 'oriental' or the 'supplementary'.[6] Drawing on Batchelor's insights, Taussig's shamanistic-surrealist-inspired ethnographic writing sees colour as a 'combustible mix of attraction and repulsion' that lends colour its 'sacred' and 'chameleon' qualities.[7] For Taussig even the production of indigo can be redeemed when Bengali *ryots* (peasants) sing obscene songs in the beating vat: 'Perhaps all labour has something of this quality, this eerie intimacy with things and with motions inseparable from the thing we call mind.'[8] It is perhaps surprising that neither writer has anything to say specifically about South Asian art and nationalism; even Gandhi's 'chromatic' activism is absent.

While the aesthetic and ideological tenets of the Bengal School might be reasonably well known, the related genealogies of colour remain underexplored despite the fact that colour acted as a critical undercurrent in the writings and artworks of Abanindranath and Rabindranath Tagore, Ananda Coomaraswamy and Nandalal Bose. Rabindranath Tagore and Gandhi, both of whom maintained an uneasy relationship with *swadeshi* and *swaraj* (self-economy and self-rule), came to an ideological clash over colour and chromophobia. Whether this conflict could lead to a more enduring sense of what should be the relationship between colour, materiality and politics in the time of the postcolony I seek to explore [in conclusion] through the abstraction of India's most famous self-proclaimed colourist: Jagdish Swaminathan. [...]

In the years after Gandhi and Bose's collaboration, the question of the agency of the artist vis-à-vis the subaltern was taken up by Communist Party of India:

> All art is in a sense people's art ... Only real freedom can release for the people their exuberance of joy which makes creation possible. And a glowing example of its truth is the land of Soviets ... Let all who can, alone or all together spread this

message to every stratum of society, particularly to our workers, by speech, song, dance and pictures. This will be art for the people. The real people's art – art created by the people – will come after the revolution.[9]

Merely representing what members of the elite deemed to be the subaltern was not going to solve the issue of widespread suffering. The time for a 'subaltern artist' could only be positioned in a seemingly distant, perhaps unrealizable, future.

Could the turn to a Leftist abstraction redeem the political agency of colour or had the work of leading artists shifted away from concerns with the subaltern? Twenty years later the disaffected Marxist and founding member of the radical art collective Group 1890, Jagdish Swaminathan, collaborated with Octavio Paz (then Mexican ambassador to India) to establish the Leftist journal *Contra 66* in 1966. Swaminathan was instrumental in organizing Group 1890's only show – 'Surrounded by Infinity'. Held in one of the high-profile, political hearts of state, the Rabindra Bhavana cultural centre in Delhi, the exhibition was inaugurated by the first Prime Minister of India, Jawahalal Nehru, and introduced by Paz in October 1963.

By the time of Group 1890's show Swaminathan had already been experimenting with colour as the space onto which to project his experiments with abstraction. Swaminathan used Indian folk and tribal culture for their magical elements, which he refined and reduced in a quasi-alchemical fashion, to the lotus, OM and the palm imprint, then interspersed or overlaid with graffiti or *écriture*. For Swaminathan, 'a painting is also not a hieroglyph to be understood when the symbol is made known. It is rather a thing to be experienced'. This experience occurred through the creation of a shimmering, shivering space between object and observer. In his recourse to Tantric *yantras*, Swaminathan injected mystical significance into colour and certain shapes [...].

By using thin washes so as to produce a transparent consistency similar to watercolour Swaminathan began to experiment with pigments as an attempt to dematerialize what he now believed to be the unsatisfactory nature and status of oil paint. He began to soak the canvas and to lay in spaces of colour with rags immersed in pigment, which he rubbed across the picture and then lifted off so that the cloth left its imprint on the surface. In this way colour became the mnemonic substance of form. To be the mnemonic substance of form meant a reappropriation of oil on canvas, the materials previously rejected by Tagore, Gandhi and Bose; perhaps Swaminathan, able to look back over subsequent decades of nationalism and Nehru's Five Year Plans (promoting industrialization and self-sufficiency including the factory manufacture of canvas and oil paints and dyes in India), believed they could be redeemed.

But claims to redemption are shot through with the persistent question of

the subaltern. Labouring 'down and out under global capitalism' in the informal economy of waste imperialism, Ravi Agarwal's kite-threaders' bodies and lungs are stained or cut by potentially toxic pigments (the industrial successors to anilines); they have to bear the brunt of the proliferation of popular chromophilia. The photographic flourish of the flash of industrially produced sari unravelling almost entirely distracts from the blurred, semi-transparent subaltern figure to its side. Agarwal has double-exposed the image; to the right of the worker is his own double. The emergence of this ghostly blue subaltern visage can perhaps be read eccentrically through Walter Benjamin's ninth thesis on History as catastrophe – as a call from the wreckage of the past.[10] The Champaran indigo worker stained blue, and his genealogies, are today in/as the shadows of nationalism in the postcolony. In the era of post-abstraction there is a distraction to colour that can, in artistic practice, both illuminate and simultaneously sideline subaltern labour. Colour defies rules and political agendas in such a way as to become counterintuitive. Perhaps because colour can be deemed to be polymorphous and magical, and to possess a sacred, even capricious agency of its own, there is still much work to be done.

1 This project based on a study of the informal, migrant labour sector in Gujarat was undertaken in collaboration with Jan Bremen, who had spent thirty years in the region conducting fieldwork.

2 [footnote 3 in source] Ravi Agarwal founded Toxics Link, an environmental information exchange project. He is also head of Srishti, a citizens' organization that carries out pioneering work in the management of medical and municipal waste in India.

3 [4] For the polymorphous and magical qualities of colour, see Michael Taussig, *What Colour is the Sacred?* (Chicago: Chicago University Press, 2008). The paradoxical qualities of the colour blue are discussed in Carol Mavor, *Blue Mythologies: Reflections on a Colour* (London: Reaktion, 2013).

4 [5] Michael Glawogger, *Megacities*, 90 min. (Vienna: Lotus Films, 1998).

5 [6] Michael Taussig, op. cit., 81.

6 [7] See David Batchelor, *Chromophobia* (London: FOCI, 2000); and Taussig, op. cit.

7 [8] Michael Taussig, op. cit., 9.

8 [9] Michael Taussig, 'Redeeming Indigo', *Theory, Culture, Society*, vol. 25, no. 3 (2008) 1–15.

9 [62] Manoranjan Bhattacharya, 'People's Art', quoted in Sudhi Pradhan, ed., *Marxist Cultural Movements in India: Chronicles and Documents (1936–47)* (Calcutta: National Book Agency, 1979–82) vol. 1, 190–91.

10 [65] Walter Benjamin, 'Theses on the Philosophy of History', in Benjamin, *Illuminations*, trans. Harry Zohn (London: Jonathan Cape, 1970) 249.

Natasha Eaton, extracts from 'Chromophobic Activism: The Politics and Materiality of Colour in India, c. 1917 – c. 1966', *Third Text*, vol. 28, no. 6 (2014) 475–8, 487–8.

For the 49th venice biennale gelatin will transform itself into a mucous liquid, a viscous, totally transparent, almost invisible, glibbery slime

gelatin, 'the total osmose', in *Granular Synthesis / gelatin*, 2001

Georges Bataille
Formless//1929

A dictionary begins when it no longer gives the meaning of words, but their tasks. Thus *formless* [*informe*] is not only an adjective having a given meaning, but a term that serves to bring things down in the world, generally requiring that each thing have its form. What it designates has no rights in any sense and gets itself squashed everywhere, like a spider or an earthworm. In fact, for academic men to be happy, the universe would have to take shape. All of philosophy has no other goal: it is a matter of giving a frock coat to what is, a mathematical frock coat. On the other hand, affirming that the universe resembles nothing and is only *formless* amounts to saying that the universe is something like a spider or spit.

Georges Bataille, 'Formless', *Documents*, no. 7 (1929), in Bataille, *Visions of Excess: Selected Writings, 1927–1939*, ed. Allan Stoekl (Minneapolis: University of Minnesota Press, 1993) 31.

Max Kozloff
The Poetics of Softness//1967

[...] [O]ne thing sculpture is quite simply not allowed to be, if it has any pretensions to the mainstream, or any claim to historical necessity, is soft.

I mean soft in the literal sense of easily yielding to physical pressure. A soft thing can be poked, moulded, squeezed, scrunched. In a word, its surface is elastic, and its densities are scandalously rearrangeable. [...] [A] soft sculpture, in various proportions, might suggest fatigue, deterioration or inertia. It mimes a kind of surrender to the natural condition which pulls bodies down. No matter how figurative, then, sculpture in general must be seen as, in an important sense, escaping the anthropomorphic. And regardless of how abstract is a soft sculpture, it will unavoidably evoke the human.

The correlations and analogies we make between our bodily condition or tone and a sculptural statement, therefore, are natural – and revealing. For sculptures are inevitably emphatic and concrete presences, to which we have responded legitimately, and so far, optimistically, as anagrams of our energies in differing hypothetical states. It is the affront of the soft sculptural mode to have

introduced a pessimistic, and even more, a rather unflattering note into this aesthetic transaction. The 'organic' has up to now been acceptable precisely because it was a metaphor imposed stylistically upon a *rigid* or solid material. However, when it becomes a factor of the material itself, it takes on an alarming correspondence to our own transient mortality. [...]

In the various effects produced within this mode, there evidently can be qualities of nostalgia or expectancy. For the very malleability of soft materials, slightly inflated or drooping, focuses on the way an action will, or possibly already has, altered a substance in time. In this sense, a soft sculpture is an object becalmed, something like Georg Christoph Lichtenberg's watch which 'had been lying in a faint for some hours'.

The chief explorer (rather than exponent) of soft sculpture in the United States is Claes Oldenburg. [...] And, if one holds his entire production of the last five years up for view [...] then one has a spectacle of such radical, almost Ovidian transformation, that it throws in question the very nature of matter, and our relation with all the familiar objects around us. It is a dizzying task to sort out that in his work which has surprisingly gone dead and brittle, from that which is implausibly glamorous and re-animated. [...]

As a result, the experience of Oldenburg's work is colored, on the one hand, by a nightmare sense of conspiracy in which the spectator almost feels himself less organic than the creaturely squirming of all the dead things around him, while, on the other hand, he receives a premonition of psychological rebirth, in which there is extended to him the possibility of a liberation from the conceit of having to dominate all material circumstances.

Öyvind Fahlström, in [the catalogue of Oldenburg's Moderna Museet, Stockholm show, 1966], says that an object that *gives in* is actually stronger than one which resists, for which reason it also permits the opportunity to be oneself in a new way. This dream is Oldenburg's ultimate, and perhaps not altogether deliberate, subject. Here it might be well to recapitulate the stages of inquiry with which it has been possible to formulate such a speculation. Initially, one saw how inappropriate was the concept of modernist sculpture as applied to three-dimensional works of art which were soft. Their surrender to gravity introduced a pessimistic inflection into our sculptural empathies; and their acceptance of chance shapes contradicted formalist criteria. Within this anthropomorphic mode, in which, alone among his generation, he shows no prejudice for any shape over another, Claes Oldenburg establishes an equilibrium between extremes of density and the capacity of the work to change physical character. But he reveals himself to be such an astonishingly comprehensive artist that he not only encompasses a metaphor of sleep in all his work, but establishes interconnected levels between psychosomatic states in our groping

responses. Further still, he abolishes distinctions between classes of objects, like furniture and sculpture, and classes of activities, such as growth and degeneration. Preoccupied by social perceptions, he rehabilitates the public falseness of the American scene by the endorsing of synthetic materials like vinyl, and the aping of manufacturing methods in an ironically rationalized production outlook. Yet this has led, not to caricature, but to a kind of monstrous, yet strangely innocent, inflation of the scale in all his creations. [...] That this dislocates our fondly held notion of human control over matter, introduces an hallucinating element into an aesthetic encounter that may slide downward to a sense of menace, or upward to a greater potentiality in accommodating ourselves to our own 'nature'. Always, one is struck by such extreme oscillations and blurrings of import in Oldenburg's sculpture that its reference to slumber becomes the only appropriate domain in which, finally, to locate it.

Max Kozloff, extracts from 'The Poetics of Softness', in *American Sculpture of the Sixties* (Los Angeles: Los Angeles County Museum of Art, 1967) 26–7, 30 [footnotes not included].

Robert Morris
Anti Form//1968

The process of 'making itself' has hardly been examined. It has only received attention in terms of some kind of mythical, romanticized polarity: the so-called action of the Abstract Expressionists and the so-called conceptualizations of the Minimalists. [...] Of the Abstract Expressionists, only Pollock was able to recover process and hold onto it as part of the end form of the work. Pollock's recovery of process involved a profound rethinking of the role of both material and tools in making. The stick that drips paint is a tool that acknowledges the nature of the fluidity of paint. Like any other tool, it is still one that controls and transforms matter. But unlike the brush, it is in far greater sympathy with matter because it acknowledges the inherent tendencies and properties of that matter. In some ways Louis was even closer to matter in his use of the container itself to pour the fluid.

To think that painting has some inherent optical nature is ridiculous. It is equally silly to define its 'thingness' as acts of logic that acknowledge the edges of the support. The optical and the physical are both there. Both Pollock and Louis were aware of both. Both used directly the physical, fluid properties of

paint. Their 'optical' forms resulted from dealing with the properties of fluidity and the conditions of a more or less absorptive ground. The forms and the order of their work were not a priori to the means.

The visibility of process in art occurred with the saving of sketches and unfinished work in the High Renaissance. In the nineteenth century both Rodin and Rosso left traces of touch in finished work. Like the Abstract Expressionists after them, they registered the plasticity of material in autobiographical terms. It remained for Pollock and Louis to go beyond the personalism of the hand to the more direct revelation of matter itself. How Pollock broke the domination of Cubist form is tied to his investigation of means: tools, methods of making, nature of material. Form is not perpetuated by means but by preservation of separable idealized ends. This is an anti-entropic and conservative enterprise. It accounts for Greek architecture changing from wood to marble and looking the same, or for the look of Cubist bronzes with their fragmented, faceted planes. The perpetuation of form is functioning Idealism.

In object-type art process is not visible. Materials often are. When they are, their reasonableness is usually apparent. Rigid industrial materials go together at right angles with great ease. But it is the *a priori* valuation of the well-built that dictates the materials. The well-built form of objects preceded any consideration of means. Materials themselves have been limited to those which efficiently make the general object form.

Recently, materials other than rigid industrial ones have begun to show up. Oldenburg was one of the first to use such materials. A direct investigation of the properties of these materials is in progress. This involves a reconsideration of the use of tools in relation to material. In some cases these investigations move from the making of things to the making of material itself. Sometimes a direct manipulation of a given material without the use of any tool is made. In these cases considerations of gravity become as important as those of space. The focus on matter and gravity as means results in forms that were not projected in advance. Considerations of ordering are necessarily casual and imprecise and unemphasized. Random piling, loose stacking, hanging, give passing form to the material. Chance is accepted and indeterminacy is implied, as replacing will result in another configuration. Disengagement with preconceived enduring forms and orders for things is a positive assertion. It is part of the work's refusal to continue aestheticizing the form by dealing with it as a prescribed end.

Robert Morris, extract from 'Anti Form', *Artforum* (April 1968) 34–5.

Dietmar Rübel
Plasticity: An Art History of the Mutable//2012

In Stockholm's Moderna Museet from time to time a huge container is put on display that causes some bemusement both because of the substance inside and the peculiar way it behaves. A rectangular glass trough stands on an aluminium plinth measuring nearly ten square metres and filled almost half full with 4,000 litres of synthetic mud. This light-brown mass has the consistency of a cream-like fluid and appears soft, almost silky. Complex machinery consisting of pressurized-air outlets hidden in the plinth makes the mud mutate continually, from moment to moment. In some places the mud swells up uniformly, in others it spurts over a metre into the air, large and small bubbles bursting with a smack before they fall back again into the semi-liquid something. Countless tiny craters and bulges slowly sculpt the surface only to melt into the homogenous mass once again shortly afterwards in a viscous, flowing movement, transforming themselves anew.

The remarkable machine that continually produces ephemeral forms from liquid material is part of the installation entitled *Mud Muse*, developed between 1968 and 1971 under the direction of Robert Rauschenberg by a Californian high-tech company. Unable to maintain any form the liquid mass presents in its formlessness – emphasized all the more by the expansive rigidity of its metal limits – an ultimate material experience. *Mud Muse* stages an amorphous substance that develops a perplexing kind of self-will. This art work is by no means an isolated case. Rather, the performative becoming of such mass-like phenomena is a significant turn towards the 'formless' in modern and contemporary art, in which the liquid, the amorphous or the ephemeral overrun and at the same time overcome traditional aesthetic categories. Mutability is both a characteristic and the subject matter of these artistic works; more importantly, it is the active agent in this art of becoming.

The materiality and processuality of structurally comparable twentieth-century art works define the problematic areas and conflict zones discussed in this book. Under the heading *Plastizität* [plasticity] phenomena of mutability are being examined, which modern and contemporary art has brought forth on its journey from the eternal to the ephemeral and which were thus considered innovative in the history of sculpture. This book is discussing a kind of plasticity that is capable of metamorphosis. For centuries particularly valuable materials, as well as those that guaranteed constancy, stability and dignity, came top of the material hierarchies in Europe and conferred social prestige. [...]

Against the notion that the past is always more actual than what has just taken place and persists into the present, Theodor Adorno in his *Aesthetic Theory* wrote with reference to contemporary artistic production: 'The effort to create enduring masterpieces has been undermined'.[1] Adorno's comment looked extremely favourably upon art's move away from claims to immortality and its turn towards an ephemeral 'temporal nucleus'. But for him the processual quality of art works highlights an unresolved ambivalence in aesthetic experience. Since the classic avant-garde conducted their first experiments with materials taken from everyday life it has become clear that the material of art is always subject to changes, whether as a result of interventions or through the dynamic productivity of the materials themselves. Thus the materiality of an art work is never completely absorbed into the representation. As Adorno goes on to write about art works which admit of the ephemeral and where the focus is on the mutable and the transient:

> Daringly exposed works that seem to be rushing toward their perdition have in general a better chance of survival than those that, subservient to the idol of security, hollow out their temporal nucleus and, inwardly vacuous, fall victim to time [...]. Today it is conceivable and perhaps requisite that artworks immolate themselves through their temporal nucleus, devote their own life to the instant of the appearance of truth, and tracelessly vanish without thereby diminishing themselves in the slightest.[2]

Of course for a long time in what I now call art of the mutable, even the ephemeral and its manifestations always had a role on the occasion of celebrations and feast days. For example Giorgio Vasari describes Michelangelo making sculptures out of snow and Andrea del Sarto producing constructions out of food.[3] But since 1900 more and more materials came into use that deliberately defied both a semantics of permanence and the concept of the art work as something removed from all temporality and materially immutable. These new types of materials engaged a kind of soft competition with the traditional tasks and materials that claimed eternal representation. Synthetic mud, steam and smoke, fat and felt were not alone in making an appearance in art: there were also in particular new kinds of synthetics such as latex, vinyl and polyurethane. With their mutable forms these materials of 'infinite transformation', as Roland Barthes commented in his often-cited essay on 'Plastic',[4] led to an epistemological turn which crucially modified the status and claims of things and art works.

In the use of materials in artistic work in the twentieth century we can see a general tendency towards flexible, soft and – particularly since the 1960s – easily perishable substances. Sometimes these materials underwent hardly any artistic

intervention, but rather as in the case of *Mud Muse* – despite controlled accidents – were left to their own devices when it came to creating their form. This mutability highlights the relativity of all forms of time since the beginning of the nineteenth century. Precisely what is mutable about the works, their changing figurations and configurations is what could and still 'can attain permanence throughout the ages'.[5] The main characteristics of this new plastic principle are no longer permanence, constancy and mass, but rather a plasticity that is based on the metabolism of non-durable materials. [...]

With the emergence of an increasing number of substances and materials – notably natural and synthetic plastics – in the context of the industrial and scientific revolution this domain of plastic materials and things which drew on a 'vital force in materials [*Bildungstrieb der Stoffe*]'[6] was no longer explained as a God-given 'plastic nature' but understood as the plastification of the world in general.[7] This plasticity leads to an 'impurity' in art and marks a radical change in the perception of the material world. As Karl Marx pointed out, the production and introduction of all kinds of new commodities from the early nineteenth century onwards brought an end to the entrenched perception of the material world. Every substance became a raw material, and people even began to optimize available materials and invent synthetic ones only in order to produce new things. This is the moment when materiality becomes an event and obtains its own conceptuality. In short materiality is intended for consumption, for being used up, and in spite of this – or precisely because of this – it becomes a disrupting remnant. This remnant is the fall-out of our desire for modernity.

Günter Bandmann has described this movement as modernity's paradigm shift from the idealistic system, which saw the task of artistic work as conquering material, to a materialistic system whose task was 'to let the material speak'.[8] This second notion – the independent productivity and value of material in aesthetic processes – is based strictly speaking on a contradiction that results from the transfer from the social to the aesthetic field. For these unformed materials not only represented an attack on the artistic formats of established art – the staged rebellion of material against obsolete art forms – but they were also the expression of a protest that hoped to abolish the present social order. This can also be seen in the 'new materialism' of the last two decades, through which interest has transferred from social structures to concrete things.

This book [*Plasticity*] pursues the thesis that the plasticity of art and its attendant associations only became so powerful because it is a category where artistic and social transformations are combined. The different consistencies and aggregate phases of artistic materials – which are frequently employed in a way that is no longer specific to the material or media – point to a semantic instability and at the same time social conversions in which fundamental parameters of

modernity became transparent – primarily flexibility, contingency and perishability.[9] As Zygmunt Bauman writes, it is about 'smashing the protective armour forged of the beliefs and loyalties which allowed the solids to resist the "liquefaction"'.[10] This makes it clear how the changeability of amorphous masses of material offer an important metaphor – both in the sense of liquefaction and the destruction of existing categories – for understanding how the capitalist global economy functionally conceals realities with symbolic surplus. For artists as different as Piero Manzoni, Joseph Beuys or Robert Smithson, making visible the vaporous nature of modernity, the dissolving and liquidizing of fixed social or cultural structures in the interest of deterritorialized and mobile power structures became a political and cultural task. In these cases for a long time the dictum was that materials should save the art work from turning into a commodity and should refuse the economic process of creating surplus value. Thus for example in Adorno's *Aesthetic Theory* 'the idea of [the] permanence' is bourgeois only in the sense that it is 'modeled on the category of property'.[11] Could this belief in the mutable and the ephemeral not be in itself a hidden (ideological) force, on which consumer societies have agreed? Seen in this light, mutable and ephemeral art works would be a symptom of the fact that ownership has long been separate from consumption, the latter creating in us a fleeting sense of happiness. And, as Zygmunt Bauman writes, 'every need, desire or want has a price tag attached'.[12]

This book addresses the tension between material, process, use and consumption in the concept of 'plasticity'. Mutability is no longer just represented in art works, since this would reinforce fixed structures. By contrast, plasticity has permeated the materiality of art works – indeed, as it was traditionally called, the essence of art works – to soften up essential structures and their associated categories. This creates increasingly new possibilities for an ongoing metamorphosis, and means that plasticity as the indicator of contemporary culture's self-understanding confronts the deletion of stable demarcations and the dynamic dissolving of static systemic concepts. The following argument is less about addressing content and the meanings attributed to the materials, and instead about their power to mutate – their plasticity.

The artistic use of unstable things and materials that are ephemeral and formless represents the attempt to react to the fast pace of industrial societies. These are societies for whom eternal forms and durable materials are no longer important, preferring flexible materials and formations whose mutability and mobility constitutes not weakness but precisely the condition of their transitory definition.[13] [...] In this context the semantics of materials and forms turn out to be a process of negotiation in society with utopian elements whose dynamic has long been a constituent element in art. This means that the ensuing cultural and

historical formations and spheres of activity entail many connections and correspondences which change and extend the very conditions of their performative genesis. For example, Robert Rauschenberg could create *Mud Muse* at the end of the 1960s only by using a chemical that was new at the time, namely bentonite. Even if the artist achieved his aesthetic goal of a kind of liquid sculpture, the perceptual effect of this formless, artificial mud was by no means clear. Such a fluid mass with no apparent historical context of meaning had to be experienced and defined through everyday experience first. The American public reacted positively to the supposedly natural mud and plunged their hands into the tank, daubing the gallery walls with Woodstock-like inspiration, and even trying to bathe in it. However the scientists as well as Robert Rauschenberg were greatly concerned about the human body's tolerance of this synthetic primeval slime. All they knew was that the microscopically small grains that made up the substance were capable of absorbing large quantities of water. Until then bentonite had only been used to stabilize walls in the drilling industry.[14] When *Mud Muse* was gifted to the Moderna Museet in 1973, however, an important change in knowledge about the material occurred, and the situation improved. In Sweden bentonite had been known about for some time as a baking agent, and the idea that this formless mud might actually form the basic ingredient of a cream cake quickly turned the installation into a firm favourite with the public.

Such assignments of function and meaning with regard to materials can occur both in the pre-existence of substances far removed from art world, and through social negotiations about their revised use or process of alienation within the artistic context. Through a process of historical reconstruction the previous uses of the material can be seen as social traces that are brought back to life again in the art works. In this sense ephemeral and formless substances should be seen as indexical materials of social practice that resonate with the contemporary artistic background. It is, however, important [...], that the formless, liquid mud also displays an uncanny materiality – a sometimes ghostly self-will, a materiality per se – which operates beyond meaning or function as well. Hermeneutically it is very hard to conceive of plasticity. The mutability of these materials, as well as their base and sometimes banal nature, can of course be charged with meaning, but such fixed interpretations sometimes appear inappropriate.[15] That means that in this book I will not be talking about a *prima materia* or the 'thing-in-itself' – abstract philosophical categories that serve to maintain a distance from all material concreteness of reality – but precisely about the processual materiality of artistic production and the resulting resonances of dynamic artistic phenomena. It is less a question of focussing on appropriation – appropriation and semanticization continue to happen of course – and more of looking at the material composition of the world and our pragmatic

encounter with it. As Bruno Latour has shown through his hybrids and quasi-objects, everything that has been created or used by human beings attains its own contingent life outside philosophical texts.[16] Art does not crave meaning, but rather complicity and social use.

Sculpture is one of the categories neglected by art-historical research on the subject of modern and contemporary art. [...] Rosalind Krauss sought to remedy this in *L'informe. Mode d'emploi*, the catalogue of the 1996 exhibition she curated with Yve-Alain Bois at the Centre Pompidou in Paris. Inspired by Georges Bataille's philosophical writings, this catalogue elevated formlessness to a central category within twentieth-century art for the first time.[17] The curators demonstrated the importance that formlessness and its de-classifying effects had on art since the twentieth century at the latest. The exhibition catalogue was conceived as a 'user's guide' for dealing with formlessness. At its heart were disqualifying operations that allow artists to liberate themselves from the dominance of implicit meanings, and to abolish the sclerotic hierarchies between nature and art, matter and content, the concrete and the abstract, and on this basis to seek new possibilities for these concepts' interaction. However this controversial exhibition de-historicized both art and theory and ended up, in short, in a kind of formalizing anti-formalism. From the point of view of the present work it is surprising that materiality was not taken into account as an aesthetic category at all. But the material represents the central factor not only for Bataille's 'base materialism' but also for the art works in question.[18] For this reason similar projects by Georges Didi-Huberman and the exhibition project on so-called 'abject art' were subject at the same time to a targeted attack by Krauss and Bois because of their historical and material-related approach.[19]

In the resistance – whether conscious or unconscious – to materiality as a central component of an aesthetic theory of modern and contemporary art we can see most of all the anxieties of academic art history in the face of phenomena that exist beyond the text. The crucial category that is missing from art criticism of pure modernism and its heirs, who are pursuing the ontological dominance of abstract thought, is materiality.[20] Inherent engagement with this category as an (obvious) phenomenon of artistic work, sheds completely new light on the history of the arts, as Monika Wagner has shown in her book, *Das Material der Kunst*.[21] It is no accident that the first works of art history to address questions of materiality focused on a plastic material. Unfortunately these early studies on the subject of wax by Aby Warburg (1902) and particularly by Julius Schlosser (1911) were not taken any further until the 1990s.[22] [...]

In the age of 'image craze' which has gripped the universities and has in some places led to art history being turned into a general kind of visual culture, asking questions about a new formulation of the plastic in the twentieth century

can be understood as a deliberately anti-cyclic venture. [...] The materiality of the twentieth century only develops in tandem with science, mass culture and art. Here, as Tom Gunning and Mary Ann Doane have shown, individual elements can exchange places or merge into one another.[23] By contrast with traditional ways of thinking about representation the new dimensions of the plastic demand that theoretical discourse extend to the very limits of what can be represented. It is not a question of how the materiality of objects are perceived, but in what way this materiality and its transformational capacity is experienced – in time and space by means of participation. For Georges Didi-Huberman it was Aby Warburg who introduced this process, as Warburg's oeuvre 'formed a plastic material capable of absorbing all chance occurrences – objects in the history of art that were inconceivable or unimagined – and of metamorphosing as a result, without ever solidifying into [...] an absolute body of knowledge'.[24] Or to put it in the form of a question: could such a plastic knowledge that demands mutability and metamorphosis not deliver historiographical presentation methods appropriate to the time?

For this reason I am directing my epistemological interest not at vertical traditions – that put discursive obstacles in the way of questions concerning plasticity – but rather at horizontal conflict situations that deliberately enact an epistemological turn towards things,[25] as loose, ephemeral and mutable as the form and composition of plastic phenomena may appear. This is why the impression sometimes arises that formlessness is the actual goal of artistic work, a kind of work that tries to trace the incomprehensibility of the material world through its energetic and dynamic movements – although it is precisely this oscillating movement that constitutes a theory of materiality. Thus the question is not whether the plastic can be represented in art, but how the categories that make up plasticity can be applied. Or put yet another way: how can one react to plasticity plastically? [...]

As material can hardly be conceived of without form, it seems to me important to permit a 'formless' i.e. deliberately unfocussed theory, and to use it occasionally oneself. The attempt, with the aid of this book, to look at the boundaries, at the migrations and rejections of aesthetic notions of modernity in flux, will at certain points be dealt with in the style of writing itself. This work is devoted to the conceptual limits of thought and looks for the difference between the concrete materiality of unstable, processual materials and their linguistic approximations. In their metamorphic flux these substances form something other than what can be permitted by concepts inspired by abstract philosophy. Time and again metaphors are formulated that are significant for contemporary debates' attempts to grasp these new phenomena – possibly a methodically controversial process. However this approach offers possibilities for articulating materiality

and conveying something of the fascination of plastic phenomena. As Hans Blumenberg has said, metaphorical writing causes trouble, but on the blurred boundaries of conceptual thought the difficulties of aesthetic difference can indeed be found. Art is used as an 'epistemological metaphor'[26] which, as Gilles Deleuze claimed, must generate 'sensory aggregates',[27] even if aesthetic and art-historical categories thereby turn into marginal figures which both complete and abolish the form of modernity. Thus our argument sometimes operates in an area of contradiction where theory and representation are held together performatively. Here we are recording an aesthetic that thematizes a tension between materiality and process through the example of mutable materials; but also recording a pleasure in writing that invalidates the drawing of boundaries in such areas of dissent. In changing historical constellations these mutable material masses are located in marginal areas of art, as formations of the formless, as the excluded remains of modern representation, as material self-will, but also as the example of a processual becoming or as the possibility of giving artistic work a new significance or use value that also encompasses the mutability and ephemerality of the art work. To put it another way: 'The ephemeral is a polymorphous divinity, as is its name',[28] as Louis Aragon wrote in his 1926 work *Paris Peasant*, capturing and at the same time using the fascination for the ephemeral in history – its accidental, fleeting, banal and pointless moments – in order to dissolve entrenched forms of art and writing. [...]

A new materialism in art today is on the trail of precisely this fascination with the material world and its effects. This is entirely in the spirit of Jacques Derrida, who in 1985 summed up his thoughts on '*matériel*' in the formula *mât* + X and claimed: 'You know how to make the *matériel* laugh'. By this he meant the possibility of understanding 'informed' matter to be a partner in making materiality and its supplements 'resonate and sing through the equally potent forces of laughter and love'.[29]

1 [footnote 2 in source] Theodor W. Adorno, *Aesthetic Theory* (1970), trans. Robert Hullot-Kentor (London: Bloomsbury Academic, 2013) 38.

2 [3] Ibid., 243.

3 [4] Giorgio Vasari, *Lives of the Artists* (1568), trans. Julia Conaway Bondanella (Oxford: Oxford World Classics, 1991) 421; and Giorgio Vasari, *The Lives of the Painters, Sculptors and Architects* (1568), trans. A.B. Hinds, ed. William Gaunt (London: Dent, 1927), vol. 4, 33–6.

4 [5] Roland Barthes, *Mythologies* (1957), trans. Annette Lavers (London: Jonathan Cape, 1972) 97.

5 [7] Hannah Arendt, *The Human Condition* (1958) (Chicago: University of Chicago Press, 1998) 167.

6 [13] This term comes from the title of Friedlieb Ferdinand Runge's portfolio of chemistry experiments, *Der Bildungstrieb der Stoffe veranschaulicht in ständig gewachsenen Bildern* (Oranienburg, 1855).

7 [14] See Esther Leslie, *Synthetic Worlds: Nature, Art and the Chemical Industry* (London: Reaktion, 2005).

8 [16] Günter Bandmann, 'Bemerkungen zu einer Ikonologie des Materials' in *Städel-Jahrbuch N.F. 2* (1969) 75–100; 76, and Bandmann, 'Der Wandel der Materialbewertung in der Kunsttheorie des 19. Jahrhunderts' in Helmut Koopmann and J. Adolf Schmoll gen. Eisenwerth, eds, *Beiträge zur Theorie der Künste im 19. Jahrhundert*, 2 vols., vol. 1 (Frankfurt am Main: Klostermann, 1971) 129–57.

9 [17] See Marshall Berman, *All That is Solid Melts into Air: The Experience of Modernity* (New York: Simon & Schuster, 1982).

10 [18] Zygmunt Bauman, *Liquid Modernity* (Cambridge: Polity Press, 2000) 3.

11 [20] Adorno, *Aesthetic Theory*, op. cit., 243.

12 [21] Zygmunt Bauman, *Liquid Life* (Cambridge: Polity Press, 2005) 104.

13 [22] Charles Baudelaire, *The Painter of Modern Life* (1863), trans. P. E. Charvet (London: Penguin, 2010) 22f.

14 [23] On the genesis of the artwork see the exhibition catalogue, *A Report on the Art and Technology Program* (Los Angeles: Los Angeles County Museum of Arts, 1971) 279–88.

15 [25] See Hans Ulrich Gumbrecht, *Diesseits der Hermeneutik. Die Produktion von Präsenz* (Frankfurt am Main: Suhrkamp, 2004).

16 [26] Bruno Latour, *We Have Never Been Modern* (1991), trans. Catherine Porter (Cambridge, Massachusetts: Harvard University Press, 1993).

17 [38] Yve-Alain Bois and Rosalind Krauss, eds, *Formless: A User's Guide* (New York: Zone Books/ Cambridge, Massachusetts: The MIT Press, 2000).

18 [39] See Denis Hollier, *Against Architecture: The Writings of Georges Bataille* [1974] (Cambridge, Massachusetts: The MIT Press, 1989).

19 [40] Georges Didi-Huberman, *La Ressemblance informe ou le gai savoir visuel selon Georges Bataille* (Paris: Macula, 1995) and Jack Ben-Levi, Lesley C. Jones, Simon Taylor, and Craig Houser, *Abject Art. Repulsion and Desire in American Art* (New York: Whitney Museum of American Art, 1993).

20 [43] See Hope Mauzerall, 'What's the Matter with Matter? Problems in the Criticism of Greenberg, Fried and Krauss' in *Art Criticism 1* (1998) 81–96; and Stefan Germer, 'Clems Kinder reterritorialisieren das Informe', in Julia Bernard, ed., *Germeriana. Unveröffentlichte oder übersetzte Schriften zur zeitgenössischen und modernen Kunst* (Cologne: Oktagon, 1999) 209–12.

21 [44] Monika Wagner, *Das Material der Kunst. Eine andere Geschichte der Moderne* (Munich: C.H. Beck, 2001).

22 [45] Julius von Schlosser, 'History of Portraiture in Wax' (1910–11) in Roberta Panzanelli, ed., *Ephemeral Bodies: Wax Sculpture and the Human Figure* (Los Angeles: Getty Publications, 2008); and Aby Warburg, 'The Art of Portraiture and the Florentine Bourgeoisie' (1902) in Kurt W. Forster, ed., *The Renewal of Pagan Antiquity: Contributions to the Cultural History of the Renaissance*, trans. David Britt (Los Angeles: Getty Research Institute for the History of Art and the Humanities, 1999).

23 [62] Tom Gunning, 'Bodies in Motion. The *pas de deux* of the Ideal and the Material at the Fin-de-Siécle' in François Albera, Marta Braun and André Gaudreault, eds, *Arrêt sur image, fragmentation*

du temps/Stop Motion, Fragmentation of Time (Lausanne: Payot, 2002) 17–30; and Mary Ann Doane, 'The Indexical and the Concept of Medium Specificity', *differences. A Journal of Feminist Cultural Studies*, no. 18 (2007) 128–52.

24 [64] Georges Didi-Huberman, *L'Image survivante: histoire de l'art et temps des fantômes selon Aby Warburg* (Paris: Minuit, 2002) 160 ['La bibliothèque et l'incroyable quantité de manuscrits, de fiches, de documents (Warburg ne jetait rien) constituent, à ce titre, un matériau plastique capable d'absorber tous les accidents – les objets impensables ou impensés de l'histoire de l'art – et de se métamorphoser en conséquence, sans jamais se fixer en résultat acquis, en synthèse, en savoir absolu'].

25 [65] See Vilém Flusser, *Dinge und Undinge. Phänomenologische Skizzen* (Munich: Carl Hanser, 1993) and Dietmar Rübel, 'Dinge werden Kunst – Dinge machen Kunst. Über das Verhalten eigensinniger Objekte' in Katharina Ferus and Dietmar Rübel, eds, *'Die Tücke des Objekts' – Vom Umgang mit Dingen* (Berlin: Reimer, 2009) 128–57.

26 [67] Umberto Eco, 'Informal Art as an Epistemological Metaphor' (1961) in *The Open Work*, trans. Anna Cancogni (Cambridge, Massachusetts: Harvard University Press, 1989) 87–93.

27 [68] Gilles Deleuze, 'Mediators', interview with Antoine Dulaure and Claire Parnet (1985) in Gilles Deleuze, *Negotiations 1972–1990*, trans. Martin Joughin (New York: Columbia University Press, 1995) 123.

28 [69] Louis Aragon, *Paysan de Paris* (1926), trans. Simon Watson Taylor, *Paris Peasant* (London: Picador, 1980) 102.

29 [1] Jacques Derrida, 'Matériel' in Jean-François Lyotard and Thierry Chaput, eds, *Les Immatériaux* (Paris: Centre Pompidou, 1985) 126 ['... le matériel est une matière informée par une technique. [...] Nécessité alors non pas d'inventer de quoi annuler le 'mât' mais de faire vibrer ou chanter tous ses suppléments (mât + X) par la puissance du rire ou de l'amour, la même au fond. Tu sais faire rire le matériel'] [see translation by Philippa Hurd in this volume, pages 207–8].

Dietmar Rübel, extracts from *Plastizität. Eine Kunstgeschichte des Veränderlichen* (Munich: Silke Schreiber, 2012) 7–18, 21–23, 307–12, 361. Translation by Philippa Hurd, 2015.

Germano Celant
Michelangelo Pistoletto//1982

Michelangelo Pistoletto's use of fabric remnants and rags in his work goes back to 1968, when cultural values were being questioned throughout the world. At that time repressive social structures, that also dictated every artist's image, were negated and the corpses of appearances came to light – the ghosts of an imperial doctrine that aimed to subsume the world under one single concept both in the East and in the West. A unanimous aesthetic brought everything down to the same level in the name of reduction and repetition. Accordingly the artist, just like the worker or the student, would have to engage in endless repetition to become a metaphor of production together with his signature creation or style of visual composition, whether it be a comic strip, a cube or a fluorescent tube, etc.

This unanimity provides a complete contrast to the chaos, the multiplicity of marginal groups, and those global communities who were in any way desperate and who had often been classed as the dregs of society. These include the perverts, the downtrodden, all inhabitants of the Third World, women, prisoners – in short, the 'rags' of society.

We can no longer talk about an ideal unity, but rather a multiplicity of actors who give concrete form to their own subjectivity by means of their constant compulsion to self-disguise – using the very rags that might have been left over after a magnificent masquerade. Pistoletto consciously takes the side of these outcasts. [...]

The rags erupt like volcanoes – a work such as *The Orchestra of Rags* (1968) consists of an aureole of multi-coloured fabric remnants with pressure cookers bubbling and whistling in the middle. The crown symbolizes the head and the water symbolizes eternal renewal – a system in continual flux that can be understood both cerebrally and sensually .

The all-embracing nature of Pistoletto's work admits of endless interpretations; to choose just one would be like selecting a single rag from the infinite mass. Pistoletto's use of materials is the result of condensation/dissolution, a process that adapts to each individual context. [...] The rags are a mirror of the world, they flow out of the shapes of the world, replacing them and transporting them into a many-sided system whose walls become scenes in a *theatricum polyticticum*.

Germano Celant, 'Michelangelo Pistoletto', in *Kunst wird Material* (Berlin: Nationalgalerie Staatliche Museen Preussischer Kulturbesitz, 1982) 94. Translation by Philippa Hurd, 2015.

Mike Kelley
The Aesthetics of Ufology//1997

Very few people now hold views similar to those involved in the 'space brother' phenomenon of the 1950s, when a group of UFO devotees drew comparisons between advanced technology and morals. At this time it was assumed that if aliens possessed superior machinery, they must also be more socially advanced. This empathic notion of the alien was underscored by the fact that they also *looked* like us. *The Day the Earth Stood Still* (dir. Robert Wise, 1951), a film that depicted a noble alien who came to Earth to save us from our own destructive proclivities, exemplifies this view of the morally advanced alien and its technology. More often, however, Hollywood alien invasion films of that period depict the alien being as evil and totally *other*, like the one-eyed blob monster that inhabits the flying saucer in the film *Atomic Submarine* (dir. Spencer G. Bennet, 1959). I am fascinated by the contrast between the primordial appearance of such a being and the ultra-sophisticated device it pilots. It prompts the question of just why there should be such overt design inconsistency between the form of the being and its craft. The two are so unlike that they are impossible to reconcile. [...]

The image of the abject, blob-like alien is part of a long history of images of foul heavenly masses, sometimes called 'star jelly' or 'pwdre ser' [Welsh: 'rot of the stars']. Literary sources and scientific journals from the sixteenth to the twentieth centuries cite descriptions of 'gelatinous meteors' – falling stars that, when located, reveal themselves as lumps of stinking, white goo. The evocation of sperm in such accounts is so obvious that such finds were sometimes described as 'star shoot'[1] The mythic relationship between the sky and the abject thus has quite a long history. [...]

In relation to the image of the alien being, the 'unformed' alien is mostly a product of the 1950s and 60s. Many Hollywood films from this time, and even a few eyewitness accounts, feature such beings. John Carpenter's *The Thing* (1982; a remake of the Howard Hawks production from 1951) is one of the few films made since the 1960s that seriously addresses the unformed alien. The film's shape-shifting alien seems almost like an excuse to show off the wizardry of the special effects crew. The alien can adopt any form, and the film's most chilling moments come when the being is caught in a transitional phase, between fixed forms. These 'slimy' depictions strike me as overtly psychosexual. The fact hat alien invasion films no longer function as allegories of cold war political conflicts relocates the symbolic meaning of the alien into the realm of interiorized, psychological conflicts. The moments when the being is discovered in transition

are definitely 'primal scenes' within the film. Watching them, you feel like the child who has stumbled upon mom and dad in the act of fucking. You understand this is something you're not supposed to see. You don't know exactly what it *is* you have seen, but you know it's something horrible – the merging of two distinct bodies into one. [...] Also, since the 'horrific' nature of many blob monsters stems from their thinly veiled genital appearance, it is only a short step, as a viewer, to strip this veil away to embrace them as overtly erotic images. Not to do so would be to buy into the repressive sexual attitudes of those that would depict the genitals as monstrous and alien. [...]

At this point I want to return to my interest in the blob alien, and my contention that it could be viewed as an 'erotic' image – a fanciful depiction, rather than a fearfully sublimated image, of the genitals. For this to be true, the appeal of the image cannot simply be limited to a perverse reading of the blob alien as a 'dirty' image that represents a conflation of sexual notions with defilement. The latter idea would probably be in line with the original intentions behind the design of such creatures, but I would like to argue that we are not limited to such a reading. Now, Sartre's analysis of the slimy most definitely addresses the sexually horrific overtones of such substances, whose clinging qualities he designates as feminine. The female genitals, and in fact all holes, provoke in him the same fear of being swallowed up. The conclusion would be that he must find the sexual act of penetration to be exceedingly horrific. He especially disdains the 'sickly sweet, feminine' and states, categorically, that a 'sugary sliminess is the ideal of the slimy'.[2] Even so, Sartre seems to imply that there is really no hierarchy of sliminess – sticking one's hand into a pot of honey provokes the same amount of revulsion as sticking it into a pot of gooey pus. This doesn't ring true to me.

The anthropologist Mary Douglas appears to concur with Sartre when she points out that filthiness is not a quality in itself but a by-product of a boundary disruption. However, the notions of 'boundary' that she suggests operate on several levels: 'Matter issuing from them [the orifices of the body] is marginal stuff of the most obvious kind. Spittle, blood, milk, urine, faeces or tears by simply issuing forth have traversed the boundary of the body.'[3] The problematic nature of these materials lies not so much in their phenomenological qualities (as Sartre would say of the slimy) but that they are confusing materials, being both part of you and separate from you. This is similar to Sartre's slime, which provokes an ontological crisis in its clinging insistence that it is part of you when it obviously is not. But following her statement regarding materials issued by the body, Douglas makes a second point: 'The mistake is to treat bodily margins in isolation from all other margins'.[4] This notion of boundary is less specifically ontological and more one of definition and framework – abject qualities are

defined by context. A simple example: dirt in the house is bad, dirt in the garden is good. This notion of boundary is less all-encompassing than Sartre's phenomenological concept and allows for argument about proper usage and definition of boundaries.

Based on Douglas's list of abject bodily materials, it seems obvious that some of these materials are more abject than others. Very few people find tears abject at all, and only the most squeamish would find mother's milk abject – in almost any context.

1 [footnote 2 in source] An overview of this history may be found in the chapter 'Gelatinous Masses or "Pwdre Ser"', in William Corliss, *The Handbook of Unusual Natural Phenomena* (Glen Arm, Maryland: Sourcebook Project, 1977) 497–505.

2 [17] Jean-Paul Sartre, *Being and Nothingness*, trans. Hazel E. Barnes (New York: Washington Square Press, 1956) 777.

3 [18] Mary Douglas, *Purity and Danger: An Analysis of the Concepts of Pollution and Taboo* (London: Routledge, 1966) 122.

4 [19] Ibid.

Mike Kelley, extracts from 'On the Aesthetics of Ufology' (1997), in Kelley, *Minor Histories: Statements, Conversations, Proposals*, ed. John C. Welchman (Cambridge Massachusetts: The MIT Press, 2004) 401–5, 407–8, 412–13.

Gillian Whiteley
Junk: Art and the Politics of Trash//2011

With current concerns about climate change and the rapid growth of cities within and outside the West – Chongqing, Guangzhou and others in China, for example[1] – narratives about the global scrapheap have become apocalyptic.[2] The politics of geography creates abundance in some parts of the world and waste, scarcity and poverty in others – with the 21st century development of rapidly expanding 'global cities' though, these extremes are often, simultaneously, at their most visible.

Sustainability and 'thinking green' are increasingly fashionable in the economically rich West but working with trash, creatively or in any other way, has historical, cultural and social connotations which relate to hierarchies of materials at particular times and in particular places. Detritus has ideological, social, political

contexts and associations. Anyone forced to work with other people's garbage – from office cleaners to sewage workers – recognizes this. Everyone contributes to the domestic rubbish tip and landfill sites but the processing of waste is generally left to those on the social and economic margins. Besides having one of the world's fastest growing economies, India has become one of the largest dumping grounds for the rest of the world's toxic 'e-waste'. In Delhi, for instance, more than 10,000 people are employed in recycling activities, with little awareness of the health hazards and no control over working conditions; children dismantle the e-waste by hand to recover the valuable parts from the components contaminated with lethal toxins such as lead, cadmium and mercury. [...] Paradoxically, whilst the social outcasts and destitute children of India process lethal cyberjunk, in other parts of the world it is fashionable to work with trash. [...]

Shifting beyond garbage as 'the ideal postmodern and postcolonial metaphor', trash has become *the* trope of the turn of the 21st century, with, as Nicolas Bourriaud has identified, the 'flea market' as an 'omnipresent referent'

> ... since the early nineties, the dominant visual model is closer to the open-air market, the bazaar, the souk, a temporary and nomadic gathering of precarious material and products of various provenances ...[3]

With 'the nomadic gathering of precarious materials and products' using 'recycling (a method) and chaotic arrangement (an aesthetic)', the ragpicker and the *bricoleur* – both in the anthropological sense expounded by Claude Lévi-Strauss and as one of the makeshift strategies of everyday life outlined by Michel de Certeau[4] – present powerful models for recent and current artistic practice. [...]

Bric-a-brac, cast-offs, crap, crud, detritus, discards, dross, dregs, garbage, junk, lumber, mongo, ordure, rammell, refuse, residue, riffraff, rot, rubbish, rubble, schlock, scrannel, scrap, spam, tat, waste. All these different terms for trash have their own specific linguistic origins, cultural and ethnic associations and social significations. The etymology of 'trash' has its own history, shifting from its Scandinavian roots as *tros*, relating to organic matter, to acquire characteristics associated with particular social and cultural values and contexts.

The idea that trash is merely 'matter out of place' is commonly referenced[5] and was used by the anthropologist Mary Douglas in her classic study, *Purity and Danger*. She discusses the point in relation to 'dirt', in a passage in which she examines 'dirt-rejecting' and 'dirt-affirming' philosophies and cultures.[6] All dirt is relative. Clearly, 'matter out of place' is 'trash' in one diverse modality of living – and treasure – or matter *in place* – in a different interlinked, coeval one. Generally, at the point of 'dislocation', stuff usually consists of leftovers or remainders – waste or unwanted material – from some activity or process. This is reflected in

the origins and roots of many of the words used for dislocated stuff. *Refuse*, for example, comes from the Old French *refus*, with its use as 'outcast' and 'waste' dating back to the fourteenth century. Trash, generally, equates particular materials or objects with 'waste' – matter that is unwanted, of low value.

So attempts to define trash lead back to a fundamental link to systems of value which are time and place specific. There is no material which is intrinsically trash. Indeed, it is a social and culturally constructed concept – the word, like its physical manifestation, is in a continually shifting state of conceptual, symbolic and material flux. [...]

Working with trash as a raw material for art is not, *per se*, a political activity. As Jacques Rancière has implied in his exploration of the correlation between politics and art, meaning is usually dependent on an exterior state of conflict. There are no inherently politicized materials or art objects – there are only political 'contexts'.[7] [...]

Ash Keating is a young Australian activist-artist who uses waste as a raw material to address social issues such as displacement. As Zara Stanhope comments, his work is 'transparently ethical', aiming to contribute 'to socio-political discourse rather than aesthetic pleasure'.[8] In Spring 2006, in a prolonged public performance in Melbourne, Keating gathered Commonwealth Games advertising and publicity materials from skips and made them into a makeshift shelter, not only to highlight the waste of resources but also to demonstrate the hypocrisy of the notion of 'commonwealth'. Part of the pre-Games 'cleaning up' process had involved the temporary removal of homeless people, a group dominated by indigenous peoples, from Melbourne's public spaces.[9] [...]

Perhaps though, one of the greatest ecological concerns of the 21st century will be virtual waste, cybertrash and spam. Or maybe it will be the escalating accumulations of lethal electric and electronic items and components – *e-waste* – with which artists and activists such as the Australian-based Slow Art Collective have been working.

For over thirty years, the British artist Stuart Brisley has been concerned with waste in all its manifestations – dirt, excrement, pus, pollution – creating visceral performances in the 1960s and 1970s which had powerful political contexts. As a committed scavenger, Brisley has long been fascinated by the 'rubbish dump' and his practice derives from both his understanding of the 'symbolic power of the discarded object or displaced artefact'[10] and his association of ordure with global capitalism. His co-foundation of the Museum of Ordure, an online project which presents the process of digital decay – 'bit rot' – explores cyberspace as a site where language and imagery disintegrate just as in the physical world.[11]

Paradoxically, the digital word returns us, eternally, to the real.

1 [footnote 17 in source] [...] See Sanjay Reddy, 'Death in China', *New Left Review* (May/June 2007) 49.

2 [18] In *Planet of Slums* (London and New York: Verso, 2006), Mike Davis provides extensive statistics on the escalating global production of rubbish and the incapacity of respective authorities to deal with it [...].

3 [25] Nicolas Bourriaud, *Postproduction* (2002) (New York: Lukas & Sternberg, 2005) 28.

4 [26] See Michel de Certeau, *The Practice of Everyday Life* (1980); trans. Steven Rendall (Berkeley and Los Angeles: University of California Press, 1984).

5 [60] See, for example, 'What a load of old rubbish ...', *The Guardian* (11 June 2007) and Susan Strasser, *Waste and Want: A Social History of Trash* (New York: Metropolitan Books, 1999) 5.

6 [61] Mary Douglas, *Purity and Danger: An Analysis of Concepts of Pollution and Taboo* (London: Routledge, 1966) 165. [...]

7 [90] Jacques Rancière, *Le Partage du sensible: Esthétique et politique* (2000); trans. Gabriel Rockhill, *The Politics of Aesthetics* (London and New York: Continuum, 2006) 60–61.

8 [159] Zara Stanhope, *Octopus 6: We Know Who We Are* (Melbourne: Gertrude Contemporary Art Spaces (2006).

9 [160] Author's correspondence with Ash Keating. His activities are recorded in *Octopus 6*, op. cit.

10 [16] Jane England, Introduction, in *Stuart Brisley* (London: England & Co, 2006) 3.

11 [17] See Stuart Brisley, *Beyond Reason: Ordure* (London: Book Works, 2003).

Gillian Whiteley, extracts from *Junk: Art and the Politics of Trash* (London: I.B. Tauris, 2011) 4–6, 8, 24, 29, 147–8, 153–5, 158–9, 162–3, 198–9.

Ilya Kabakov
On Garbage: In Conversation with Boris Groys//1995

Boris Groys [...] In your installations a sensation of exhaustion arises, of 'tiresomeness', of excessiveness, of overloadedness, which all leads to the fact that the viewer's attention collapses and everything dissolves in garbage. I get the feeling that you display garbage not as individual articles of garbage or examples of garbage, but rather garbage in its entire mass and ominous power which represents a threat to the very artistic act. Do you feel this threat, or is it some sort of device and you have the feeling that you do not leave the bounds of guaranteed artistic space?

Ilya Kabakov Yes, absolutely I have such a feeling. Despite the fact that I have done an enormous number of installations about garbage and I myself have now

rather depressingly spoken about how everything is garbage and life is dreary and repulsive, in reality this is a profound hypocrisy – entirely artistic, I should say. I am absolutely certain that the appearance of garbage on the stage of artistic life, the filling of museums with it, is simply an episode in the history of art. It is connected with a very brief stage, like a stop along the path of a train, called 'Garbage', and the next stop, of course, will be something else. The emergence of garbage in the artistic arena is connected primarily with the inflation of the stop before it, called 'Treasure'. The appearance of garbage is a very brief stage, although, perhaps, it is calculated to last three to four decades, but it seems to me that it is nearing exhaustion.

The phenomenon consists of the fact that garbage in art today is presented as treasure – and in essence, this is the case. Appearing in museums, described in books and discussed, it performs in the capacity of a treasure. Only in the archives does garbage become a work of art. [...] Therefore, all of my shouting and work with garbage is hypocritically, you understand, connected with the understanding of the value of what I am doing and the hope that it will be housed in a place where it will be a treasure. [...]

On the one hand, everything is trash and shit, and on the other, there is a certain optimism which you have noticed very subtly. For me it is connected with the following (alas, this, perhaps, resembles some Marxist insinuations): yes, the 'towers will perish, all exceptional objects and individuals, but something average, eternally alive, full of some sort of perpetual process, will be preserved forever'. That is, perhaps I have the vitality of an insect. [...]

I would say that a democratic principle, not an aristocratic one, lies at the base of this notion. The fulcrum for this world-view is that we are all alike and we will go on living, ignoring exceptional events, solutions, exceptional people. [...]

If we are honest, work with garbage satisfies both of these criteria at the same time: the decision to collect garbage satisfies the aspiration towards exceptionality inherent in the commission for selection of exceptional valuables, but in essence your activity is democratic, since this garbage could belong to anyone. The recollections connected with this garbage could be the same for you as for any visitor. In this way, contact with the 'penetrating' anonymous viewer for you is ensured on account of the anonymity and democraticness of your product.

Groys Yes, but then let's look at this consumer. Do you believe that this anonymous consumer visiting your installation, once he has become acquainted with your work, will recognize himself, his own life? Do you believe that your works count on potential identification with them by this mass viewer, do they count on the effect of self-recognition?

Kabakov Without a doubt, I am counting only on that. This is the main motor of the works with garbage – a confidence that, having read some text or having seen a box of cigarettes or a broken bottle neck, the viewer will understand that this is the same thing that he once had or saw on the street or at his neighbour's. That is, for me there is a total expectation that identification will occur. Perhaps, herein rests a certain frivolity. I can even say wherein lies this groundlessness, since I had occasion to become convinced of this myself.

You know, I work a lot with 'biographical garbage', or I present garbage as biographical. As a rule these are things given to me which really can be found on the street, and in general this is all fictitious. And suddenly I discovered that people were looking at this garbage as though it were the 'garbage of an artist'. This dismayed me somewhat: I had thought that they would think that they had the same kind of garbage.

Ilya Kabakov and Boris Groys, extracts from 'Conversation about Garbage' (1995), in *Ilya Kabakov: The Garbage Man* (Oslo: Museet for Samtidskunst, 1996) 23, 25, 27, 29.

Mierle Laderman Ukeles
Flow City: In Conversation with Anne Doran//1996

Mierle Laderman Ukeles has been the unsalaried artist-in-residence at the New York City Department of Sanitation since 1977. In 1983, when design work began on the new 59th Street Marine Transfer Station, one of eight at which the city's garbage is offloaded onto river barges, she proposed that a public art environment be incorporated into the building's structure. For the first time in New York City's history, new zoning regulations were passed to allow public access to what had formerly been an 'off-limits' municipal workplace. The three main elements of Ukeles' proposed Flow City *form an integral part of the new facility, which opened in 1991. The first of these interlocking, walk-through spaces is the city-block-long 'Passage Ramp', which runs parallel to the ramp used by garbage trucks. Ukeles plans to create a spiral of twelve different recyclable materials that will run along all the surfaces of the covered passage. Also planned are a soundtrack composed from synthesized Sanitation-system sounds and an overhead lightwork constructed with flashing lights from defunct garbage trucks. This hollow corkscrew of matter in '(re) process' leads to the 'Glass Bridge'. From this bridge, one can watch the garbage being dumped from trucks on the tipping floor – a 650-foot-long bay cantilevered*

over a slip in the Hudson River – into the barges below. One wall of the bridge provides a view of the city, the other a view of the river. […]

Anne Doran Would you tell me why this project is called *Flow City*?

Mierle Laderman Ukeles I call it *Flow City* because it embodies a multiplicity of flows: from the endless flow of waste material through the common and heroic work of transferring it from land to water and back to land, to the flow of the Hudson River, to the physical flow of the visitors themselves. And the 'Media Flow Wall' allows observers to experience the flow beyond the transfer station to its widest connections. The word 'flow' is also the connection between me – the artist – and the engineers, the quantifiers who designed this facility. I learned about flow from them. The city is a flow system. And the movement of material *out* of it is a flow system. It is critical to keep these flow systems going. Once they get stuck, they back up, and you've got a *condition*, an innocuous-sounding word that masks a big fat mess, like a *health condition*. We too are flow systems.

Doran It seems that much of your artwork is aimed at keeping these systems visible, and emphasizing the responsibility that each of us has to know what happens within them.

Ukeles We're connected to them in the largest sense. The river is a flow system as well – its flow can teach us about the flow of our material. This waste is going to come back to us. It might not happen immediately, but eventually it will have an impact on our water, on our air, on many basic conditions of our ability to continue in time. The fantasy that many people have about garbage is that it exists outside the realm of time. There's such denial involved: *This isn't here. This isn't a problem. If there are toxins in it, they're not going to go into the water or the air …* […]

But the question that *Flow City* poses is not really what is *garbage*, but what is reality? And how are we connected to it? Staying connected is not so simple, though. For example, the reason that we're here, that we have survived, is that we know instinctively how to *separate* ourselves from decaying putrescibles. When you say that your bile *rises* or you feel like you're going to *throw up*, or your stomach *turns*, you are using words of movement – and usually a movement away. That aversion response is physical. And the more physical it is, the more you should trust it. It's the result of millions of years of us living as natural creatures and protecting ourselves. That's the good side of disconnection. The bad side is that we have focused on *taking out* of the earth: we know in such a canny way how to separate materials – how to divide a lump of rock into zinc, cadmium, silver … We know how to set up distribution systems to send that

silver all over the world. We know how to make a million *forms* of things. But when our desire for these things has been slaked, a curtain drops in our brains and we lose our creative thinking. We don't bring the same lively curiosity to the next step. Where do these things go? What can you do with them? It's the lobotomy of Western culture. [...]

The tipping floor below us is like the fulcrum of transformation, like an alchemical thing. It's the first increment of scale. The scale is tipped – literally, the scale, in the sense of size, but also the scale tipping. When the material goes from the truck to the barge, it enters another world and becomes this mega-scale matter, which is used to build the highest garbage mounds in the world in what will be the largest landfill on earth. All of this heterogeneous stuff has to become building material, like gravel or brick. (People in the Department call garbage 'material', and that's what it is.) With people living across the street from the landfill, it has to be stable. You don't want it sliding onto the highway, or across the street into the Staten Island Mall ... And yet the basic building block here is our *mush*. It's daunting for an engineer. [...]

Doran How many tons of garbage are below the bridge here?

Ukeles We're looking at two barges, and each one holds about six hundred and twenty tons. Right now the transfer station processes about eight hundred tons a day. Theoretically it could process about 3,000 tons every day – that's the entire waste stream of San Francisco. What you're looking at in these two barges are a million human choices regarding production, transportation, distribution, purchasing, consumption. When you look at a mattress or some Venetian blinds or a heart-shaped chocolate box or a toy ... and label it all 'garbage', you take away its individual differentiation. We're looking at an undeveloped mode of thought.

What I want to create with *Flow City* is a sort of path, a series of windows that frame what's really right here. I don't want this place to have a lot of labels and signage – it's vivid in itself. The geometry and the colours are just spectacular. It's the violent theatre of dumping.

Mierle Laderman Ukeles and Anne Doran, extracts from 'Flow City', *Grand Street*, vol. 15, no. 1 (Summer 1996) 209–13.

Robert Williams
Disjecta Reliquiae: The *Tate Thames Dig*//1999

Mark Dion's *Tate Thames Dig* has been described as a book with three chapters and appendix. The three chapters, constituting the activity of the project itself – the collection of material, cleaning and identification of the objects, and their classification and presentation within a cabinet of curiosities, a *Wunderkammer*. The appendix took the form of a series of events and lectures complimentary to the project during the Summer of 1999. [...] The context of a dynamic tidal river, its position central to the capital, and carrying as is does material which reflects each epoch of its existence, is undoubtably of significance. The nature of the river as a continuum is reflected in the undifferentiated material that is left on the surface of its banks. Contemporary flotsam and jetsam mingle with objects from all periods, which in a sense, confounds and challenges archaeological method, in that it is impossible to recognise a true stratigraphy. Even if the foreshore is considered to be an horizon, this coexistence of objects defies easy categorization. A state of democratic 'timelessness' exists in the assemblage, all object are equally subjected to the vicissitudes of the river. [...]

The Thames, as much as Dion's vitrine, can be considered to be a museum, containing a collection of material finding its way into the river, where it is sorted and classified according to the river's own internal physical dynamics, those of transport and deposition, tide, current and flow. [...]

The collecting methodology for the first phase of the project was straightforward, and followed the established practice of fieldwalking in order to identify surface finds. Within archaeological method, this is usually as a prelude to either a more detailed survey, or excavation; however in this case, the practice became the principle activity for the collection of objects, and reflected the conditions of the River, given that material occurred as a scatter, rather than a stratigraphy. [...] Dion's brief to the volunteer field work team asked them to adopt what he calls a 'scatter-gun' approach, to identify and collect anything that caught their attention – chasing the anomaly in the best tradition of classic archaeological method. In this sense a democratic/collaborative process was reinforced, in that the act of collection reflected the individual faculties and interests of twenty-five different people. [...]

Following the arduous task of gathering vast amounts of material, the next phase of the project was to clean, identify and organize the finds. The tents established on the South lawn of the Tate, hitherto used to store the unsorted boxes of material, now became the field centre for sorting and analysis. The

procedure of cleaning and identifying the material also followed broad archaeological method in dealing with finds, and advice had been taken from Professor Colin Renfrew and Museum of London staff, amongst others. [...]

Objects were sorted into categories and left to dry. Great care was taken not to confuse material from the different sites. As field workers sorted finds into broad categories – ceramic, glass, bone, leather, shells, organic, plastic, metal, and so on, Dion and the field centre managers set about organizing the different 'species' of objects according to sub-divisions largely suggested by a typography of objects [...]. This developed taxonomy of objects would later inform the basis for the design, and organization of the Cabinet. [...] It may be a truism that any given collection (in whatever form) provides as much of an insight into the agenda of the collector, as it does of the material itself. [...] This can be demonstrated using examples from the field, the reading of which recognizes the significance of temporally undifferentiated material becoming associated with each other, the site acting as the linking factor. By allowing this, rather than a chronology, to influence interpretation, a different space can be opened which suggests new areas for exploration. [...] Unlike its forebears, however, Dion's *Wunderkammer* is meant to be interactive, viewers are invited to browse, and to excavate its contents. There is no labelling, no chronology, and no interpretive text other than a reference to the sites where the material was gathered; in this the *Tate Thames Dig Wunderkammer* encapsulates the process of its formation. [...] This is the space within which the audience is invited to participate in their consideration of the objects, the collection and the setting that they encounter.

Robert Williams, extracts from '*Disjecta Reliquiae*: The Tate Thames Dig', in Alex Coles and Mark Dion, eds, *Mark Dion: Archaeology* (London: Black Dog, 1999) 73, 75, 77–9, 84–5, 90, 93, 98.

Nicolás Guagnini
Fetishism/Hoarding/Entropy//2014

Hoarding, a contemporary disorder featuring compulsive accumulation and an impossibility to discard, is an exacerbation of the entwined proliferation of commodities and desire. Unlike fetishism, hoarding concerns process; it's almost irrelevant what the objects themselves are for the hoarders. While fetishists tend to be super-meticulous, hoarders are big slobs. Hoarding functions as the flip side of the fetishist coin. If the fetish is the place for encoding desire into a

ritualized commodity, the hoard is the space of de-encoding the commodity, of destroying its specificity.

The hoarder enacts a paradox of decay through accumulation. Over the years, a hoarder's health and hygiene become dangerously compromised. Because stoves, sinks and tubs are used for storage, cooking and bathing become impossible. Body secretions and excretions of humans and animals (there exists a subcategory of pet hoarders), stains and stenches. Pest infestation is commonplace in hoarding quarters, as cleaning is impossible. The possibility of a ravaging fire increases over time. Utility bills become buried under heaps of papers, so people forget to pay them. Electricity is turned off – disconnection from the grid mirrors the severed ties with the social real. Hoarders turn to candles for light and gas burners for heat, inches from swaying towers of cherished trash. The house of the hoarder burns down with all its possessions inside, is boarded up, or meets condemnation. The hoarder in this case remakes the commodity as a force of nature.

Hoarding freezes the commodity in its tracks (and hence the commodity of commodities: money) and divests it of its essence and definition, namely its circulation through the system of exchange, which implies a system of classification. The hoarder hence also destroys the encyclopaedic order of the museum or the department store (or its contemporary equivalent, the Amazon website). This destruction of both actual property and its archival underwriting through endless accumulation is a peculiar form of entropy. Not a physical fact of heat loss resulting in a romantic allegory of a confrontation with non-compositionality à la Robert Smithson, but ultimately a textbook description of Maxwell's demon. Something that is 'unsustainable' like a hoard, or its abstract mirror, the system of capital accumulation, which implies a circulating agent of constant crisis in every exchange. The visual analogy between rotting corpses in mass graves and piles of decayed commodities in hoarder's homes reminds us that war and colonization, the basis of forced slave labour, mean accumulation by other means. The system accumulates capital by stripping the resources – labour power, oil, etc. – in order to reinforce the body of capital at the cost of the concrete sensuous bodies of the ones charged with physically enforcing its reproducibility.

Dickface Me.

Nicolás Guagnini, 'Fetishism/Hoarding/Entropy', *Mousse*, no. 46 (December 2014–January 2015) 104–7.

raw fish
chickens
sausages
wet paint
transparent plastic rope
brushes
paper scraps…
shifting
and
turning
between
tenderness
wildness
precision
abandon

Carolee Schneemann, *Meat Joy*, 1964

Judith Butler
Bodies that Matter//1993

What I would propose [...] is a return to the notion of matter, not as site or surface, but as *a process of materialization that stabilizes over time to produce the effect of boundary, fixity and surface we call matter.* That matter is always materialized has, I think, to be thought in relation to the productive and, indeed, materializing effects of regulatory power in the Foucauldian sense.[1] Thus the question is no longer, How is gender constituted as and through a certain interpretation of sex? (a question that leaves the 'matter' of sex untheorized), but rather, Through what regulatory norms is sex itself materialized? And how is it that treating the materiality of sex as a given presupposes and consolidates the normative conditions of its own emergence? [...]

Within some quarters of feminist theory in recent years, there have been calls to retrieve the body from what is often characterized as the linguistic idealism of poststructuralism. In another quarter, philosopher Gianni Vattimo has argued that poststructuralism, understood as textual play, marks the dissolution of matter as a contemporary category. And it is this lost matter, he argues, which must now be reformulated in order for poststructuralism to give way to a project of greater ethical and political value.[2] [...] In an effort to displace the terms of this debate, I want to ask how and why 'materiality' has become a sign of irreducibility, that is, how is it that the materiality of sex is understood as that which only bears cultural constructions and, therefore, cannot be a construction? What is the status of this exclusion? Is materiality a site or surface that is excluded from the process of construction, as that through which and on which construction works? Is this perhaps an enabling or constitutive exclusion, one without which construction cannot operate? What occupies this site of unconstructed materiality? And what kinds of constructions are foreclosed through the figuring of this site as outside or beneath construction itself? [...]

Indeed, if it can be shown that in its constitutive history this 'irreducible' materiality is constructed through a problematic gendered matrix, then the discursive practice by which matter is rendered irreducible simultaneously ontologizes and fixes that gendered matrix in its place. And if the constituted effect of that matrix is taken to be the indisputable ground of bodily life, then it seems that a genealogy of that matrix is foreclosed from critical inquiry. Against the claim that poststructuralism reduces all materiality to linguistic stuff, an argument is needed to show that to deconstruct matter is not to negate or do away with the usefulness of the term. And against those who would claim that

the body's irreducible materiality is a necessary precondition for feminist practice, I suggest that that prized materiality may well be constituted through an exclusion and degradation of the feminine that is profoundly problematic for feminism. [...]

The classical association of femininity with materiality can be traced to a set of etymologies which link matter with *mater* and *matrix* (or the womb) and, hence, with a problematic of reproduction. The classical configuration of matter as a site of *generation* or *origination* becomes especially significant when the account of what an object is and means requires recourse to its originating principle. When not explicitly associated with reproduction, matter is generalized as a principle of origination and causality. In Greek, *hylè* is the wood or timber out of which various cultural constructions are made, but also a principle of origin, development and teleology which is at once causal and explanatory. This link between matter, origin and significance suggests the indissolubility of classical Greek notions of materiality and signification. That which matters about an object is its matter.[3]

In both the Latin and the Greek, matter (*materia* and *hylè*) is neither a simple, brute positivity or referent nor a blank surface or slate awaiting an external signification, but is always in some sense temporalized. This is true for Marx as well, when 'matter' is understood as a principle of *transformation*, presuming and inducing a future.[4] The matrix is an originating and formative principle which inaugurates and informs a development of some organism or object. Hence, for Aristotle, 'matter is potentiality [*dynameos*], form actuality'.[5] In reproduction, women are said to contribute the matter; men, the form.[6] The Greek *hylè* is wood that already has been cut from trees, instrumentalized and instrumentalizable, artefactual, on the way to being put to use. *Materia* in Latin denotes the stuff out of which things are made, not only the timber for houses and ships but whatever serves as nourishment for infants: nutrients that act as extensions of the mother's body. In so far as matter appears in these cases to be invested with a certain capacity to originate and to compose that for which it also supplies the principle of intelligibility, then matter is clearly defined by a certain power of creation and rationality that is for the most part divested from the more modern empirical deployments of the term. To speak within these classical contexts of *bodies that matter* is not an idle pun, for to be material means to materialize, where the principle of that materialization is precisely what 'matters' about that body, its very intelligibility. In this sense, to know the significance of something is to know how and why it matters, where 'to matter' means at once 'to materialize' and 'to mean'. [...]

It is in the context of this second analysis that I hope to make clear how a gendered matrix is at work in the constitution of materiality (although it is obviously present in Aristotle as well), and why feminists ought to be interested,

not in taking matter as an irreductible, but in conducting a critical genealogy of its formulation.

1 [footnote 6 in source] Although Foucault distinguishes between juridical and productive models of power in *The History of Sexuality*, vol. 1, trans. Robert Hurley (New York: Vintage, 1978), I have argued that the two models presuppose each other. The production of a subject – its subjection (*assujetissement*) – is one means of its regulation. See my 'Sexual Inversions', in Donna Stanton, ed., *Discourses of Sexuality* (Ann Arbor: University of Michigan Press, 1992) 344–61.

2 [1] Gianni Vattimo, 'Au delà de la matière et du texte', in *Matière et Philosophie* (Paris: Centre Pompidou, 1989) 5.

3 [4] For a compelling analysis of how the form/matter distinction becomes essential to the articulation of a masculinist politics, see Wendy Brown's discussion of Machiavelli in *Manhood and Politics* (Totowa, New Jersey: Rowman & Littlefield, 1988) 87–91.

4 [5] See Marx's first thesis on Feuerbach [...]. Karl Marx, *Writings of the Young Marx on Philosophy and Society*, trans. Lloyd D. Easton and Kurt H. Guddat (New York: Doubleday, 1967) 400). [...]

5 [6] Aristotle, 'De Anima', book 2, chapter 1, 412a10, *The Basic Works of Aristotle*, trans. Richard McKeon (New York: Random House, 1941) 555. [...]

6 [7] See Thomas Lacqueur, *Making Sex: Body and Gender from the Greeks to Freud* (Cambridge, Massachusetts: Harvard University Press, 1990) 28; G.E.R. Lloyd, *Science, Folklore, Ideology* (Cambridge: Cambridge University Press, 1983). [...]

Judith Butler, extracts from *Bodies that Matter: On the Discursive Limits of 'Sex'* (1993) (London and New York: Routledge, 2011) xviii–xix, 4–8, 187, 191–2.

Paul Thek
Beneath the Skin: In Conversation with Gene Swenson//1966

The dissonance of the two surfaces, glass and wax [in the *Technological Reliquaries*, 1964–66], pleases me: one is clear and shiny and hard, the other is soft and slimy. I try to harmonize them without relating them, or the other way around. At first the physical vulnerability of the wax necessitated the cases; now the cases have grown to need the wax. [...] I hope the work has the innocence of those Baroque crypts in Sicily; their initial effect is so stunning you fall back for a moment and then it's exhilarating. There are eight thousand corpses – not skeletons, corpses – decorating the walls, and the corridors are filled with windowed coffins. I

opened one and picked up what I thought was a piece of paper; it was a piece of dried thigh. I felt strangely relieved and free. It delighted me that bodies could be used to decorate a room, like flowers. We accept our thing-ness intellectually, but the emotional acceptance of it can be a joy. [...] I attempt to take something that is erratic, slimy – uncontrollable – and control it. I try to look closely at something that is disturbing and detach myself from it. [...] My work is insulting to our sense of the humane, insulting to art history in terms of subject matter. [...] There is something I find very moving in hair, an extremely beautiful-ugly quality, very akin to nausea, the Sartre *Nausea*. Hair is like antennae extending from the body, like fingers or eyelashes extending into the air, vaguely bristling, extremely receptive to anything going on. It makes the human being for me a real creature, insect-like, perhaps a fly, not particularly attractive but weirdly beautiful. [...]. The flesh is not mutilated. It is rigidly and orderly cut, forced into a precise shape. As I said before it is beyond our usual sensibilities. Perfectly innocent sea-bottom ooze makes people squeamish. It's unknown and threatening. That's their problem, not mine.

Paul Thek and Gene R. Swenson, extracts from 'Beneath the Skin: Interview with Paul Thek', *ARTnews*, vol. 65, no. 2 (April 1966) 35, 66–7.

Julia Kristeva
Powers of Horror//1980

Loathing an item of food, a piece of filth, waste, or dung. The spasms and vomiting that protect me. The repugnance, the retching that thrusts me to the side and turns me away from defilement, sewage and muck. The shame of compromise, of being in the middle of treachery. The fascinated start that leads me toward and separates me from them.

Food loathing is perhaps the most elementary and most archaic form of abjection. When the eyes see or the lips touch that skin on the surface of milk – harmless, thin as a sheet of cigarette paper, pitiful as a nail paring – I experience a gagging sensation and, still farther down, spasms in the stomach, the belly; and all the organs shrivel up the body, provoke tears and bile, increase heartbeat, cause forehead and hands to perspire. Along with sight-clouding dizziness, *nausea* makes me balk at that milk cream, separates me from the mother and father who proffer it. 'I' want none of that element, sign of their desire; 'I' do not

want to listen, 'I' do not assimilate it, 'I' expel it. But since the food is not an 'other' for 'me', who am only in their desire, I expel *myself*, I spit *myself* out, I abject *myself* within the same motion through which 'I' claim to establish *myself*. That detail, perhaps an insignificant one, but one that they ferret out, emphasize, evaluate, that trifle turns me inside out, guts sprawling; it is thus that *they* see that 'I' am in the process of becoming an other at the expense of my own death. During that course in which 'I' become, I give birth to myself amid the violence of sobs, of vomit. Mute protest of the symptom, shattering violence of a convulsion that, to be sure, is inscribed in a symbolic system, but in which, without either wanting or being able to become integrated in order to answer to it, it reacts, it abreacts. It abjects.

The corpse (or cadaver: *cadere*, to fall), that which has irremediably come a cropper, is cesspool, and death; it upsets even more violently the one who confronts it as fragile and fallacious chance. A wound with blood and pus, or the sickly, acrid smell of sweat, of decay, does not *signify* death. In the presence of signified death – a flat encephalograph, for instance – I would understand, react, or accept. No, as in true theatre, without make-up or masks, refuse and corpses *show me* what I permanently thrust aside in order to live. These body fluids, this defilement, this shit are what life withstands, hardly and with difficulty, on the part of death. There, I am at the border of my condition as a living being. My body extricates itself, as being alive, from that border. Such wastes drop so that I might live, until, from loss to loss, nothing remains in me and my entire body falls beyond the limit – *cadere*, cadaver. If dung signifies the other side of the border, the place where I am not and which permits me to be, the corpse, the most sickening of wastes, is a border that has encroached upon everything. It is no longer I who expel, 'I' is expelled. The border has become an object. How can I be without border? That elsewhere that I imagine beyond the present, or that I hallucinate so that I might, in a present time, speak to you, conceive of you – it is now here, jetted, abjected, into 'my' world. Deprived of world, therefore, I *fall in a faint*. In that compelling, raw, insolent thing in the morgue's full sunlight, in that thing that no longer matches and therefore no longer signifies anything, I behold the breaking down of a world that has erased its borders: fainting away. The corpse, seen without God and outside of science, is the utmost of abjection. It is death infecting life. Abject. It is something rejected from which one does not part, from which one does not protect oneself as from an object. Imaginary uncanniness and real threat, it beckons to us and ends up engulfing us.

It is thus not lack of cleanliness or health that causes abjection but what disturbs identity, system, order. What does not respect borders, positions, rules. The in-between, the ambiguous, the composite. The traitor, the liar, the criminal with a good conscience, the shameless rapist, the killer who claims he is a saviour

... Any crime, because it draws attention to the fragility of the law, is abject, but premeditated crime, cunning murder, hypocritical revenge are even more so because they heighten the display of such fragility. He who denies morality is not abject; there can be grandeur in amorality and even in crime that flaunts its disrespect for the law – rebellious, liberating and suicidal crime. Abjection, on the other hand, is immoral, sinister, scheming and shady: a terror that dissembles, a hatred that smiles, a passion that uses the body for barter instead of inflaming it, a debtor who sells you up, a friend who stabs you ...

In the dark halls of the museum that is now what remains of Auschwitz, I see a heap of children's shoes, or something like that, something I have already seen elsewhere, under a Christmas tree, for instance, dolls I believe. The abjection of Nazi crime reaches its apex when death, which, in any case, kills me, interferes with what, in my living universe, is supposed to save me from death: childhood, science, among other things.

Julia Kristeva, extract from *Powers of Horror: An Essay on Abjection* (1980); trans. Leon Roudiez (New York: Columbia University Press, 1982) 2–4.

VALIE EXPORT
Aspects of Feminist Actionism//1980

The equation material = body typifies Viennese Actionism, which anticipated Body Art and certain forms of performance art. In other countries, there are forms of action in which it is not the body but things that serve as material – automobile tires, fat, electronic devices, etc. Using the body in actions corresponds to using these other materials (as, for example, in Beuys's actions). In any case, a specific awareness of material characterizes Actionism, the drama of material acting in and against itself. The free handling of artistic material also freed material of its old, repressive meanings and made new, prospective meanings available. Freed, extended material extends awareness and frees people from old and restrictive meanings and conditions.[1] Regardless of whether the material consisted of the body or objects, in reality the drama of material was a drama of meaning. Material was the stage for various meanings, not only processing and integrating people's experiences, but also activating their ability to experience and sharpening their awareness of the meanings the material called forth. A way of thinking that sets material free and keeps it free and a use of artistic material

that sets thoughts free and keeps them free aims at creativity as the significant form of experience and thus of life. The activity freed by the creation of new sign combinations in the artistic process is not only a self-affirmation but, what is more, a new self-creation.[2] [...]

Just as 'material thinking shall free human products from their thing-character', one might suggest, Feminist Actionism shall free men's products, that is, women, from their thing-character. Just as action aims at achieving the unity of actor and material, perception and action, subject and object, Feminist Actionism seeks to transform the object of male natural history, the material 'woman', subjugated and enslaved by the male creator, into an independent actor and creator, subject of her own history. For without the ability to express oneself and without a field of action, there can be no human dignity. Human history is without dignity because it is solely male, a story of masculine activity. As long as women have not escaped and been liberated from male history, the history of humanity has not fulfilled its claim of humanity. 'The million tears which have flowed over canvases of pain, fear and despair are the Niagara Falls of women's servitude'.[3] Feminist Actionism shares the artistic sources of Actionism, but has other, new ones as well. [...] Feminist Actionism can be traced back to Tachism and Surrealism, which, in its techniques of automatism, articulates the repressed and unconscious. [...] A further source of Feminist Actionism is action art itself (Happenings, Fluxus, music and dance performance, etc.), but its primary source is the history of female experience. [...] 'The blood trail inscribed in us all with invisible ink as sex-specific taboo'[4] is the material of Feminist Actionism. And there is no lack of material; it is abundant. [...]

The revolt against male language has already been identified as one source of Feminist Actionism. The work of women artists like Annette Messager, Gina Pane, Friederike Pezold, Yvonne Rainer, VALIE EXPORT and Carolee Schneemann in developing a women's body language has been discussed. It was not possible to 'find one's own words', because words belong to men. Nor was it easy to find one's words in body language, because it too was mainly occupied by male fantasies. [...]

Everything from female sex characteristics to female body functions can be used as material for free artistic articulation. Thus, a new time and space will be inscribed with women's body language, an age where for the first time, human beings are at home. The echo of the breasts and the belly reverberates not only in the mass media, but also in the valley of hope.

1 [footnote 2 in source] Peter Weibel, 'Material Thinking as Freeing People's Products from Their Thing-Characteristics', *Kritik der Kunst* (Vienna and Munich: Jugend & Volk, 1973).

2 [3] Ibid.

3 [5] VALIE EXPORT, 'Those Who Are Not Painted Are Stupid', *Kronen-Zeitung* (16 June 1973).

4 [6] Gertrud Koch, *Frauen und Film*, no. 13 (1977).

VALIE EXPORT, extracts from 'Feministischer Aktionismus. Aspekte', in Gislind Nabakowski, Helke Sander and Peter Gorsen, eds, *Frauen in der Kunst* (2 vols), vol. 1 (Frankfurt am Main: Suhrkamp, 1980); translation in *New German Critique*, no. 47 (Spring/Summer 1989) 69–72, 87–8.

Simon Taylor
The Phobic Object//1993

Since the English translation of Julia Kristeva's *Powers of Horror: An Essay on Abjection* in 1982, the concept of 'abjection' has entered the critical syntax of contemporary art.[1] Scatological assemblages, bodily fragments and base materials – dirt, grunge and the traces of sexual difference – have defiled the white cube of the gallery space, calling into question its ideological 'neutrality' as a site encoded with a rhetoric of contamination. This body of production often incorporates what Lacan terms '*images of the fragmented body*', which is to say, 'images of castration, mutilation, dismemberment, dislocation, evisceration, devouring, bursting open of the body'.[2] Representing an oppositional practice rather than an ontology, this insurgent materialism in art asserts the claims of the body, sensuality and difference over and against societal repression and its institutional architecture. [...]

Desublimatory investigations of abjection within art – prominent in the work of Cindy Sherman, Kiki Smith, Mike Kelley, Robert Gober, John Miller and David Hammons, among others – imply not so much a lack of cleanliness or health as an assault on the totalizing and homogenizing notions of identity, system and order. This base materialism in art confronts and transgresses social prohibitions and taboos, reenacting psychic traumas, personal obsessions and phobias, and challenging the stability of our bodily gestalts. While the body ego, formed at the time of the mirror stage, signifies a unified, phantasmatic gestalt of a newly formed subject's body, the stability of this *imago* is continually threatened from within by traces of abjection, such as corporeal wastes (excrement, urine, blood, breast milk, vomit, pus, and spit) that are jettisoned or leaked from the body. These traces of abjection represent both 'me' and 'not-me', referring back to the child's 'physiological natal prematuration'[3] and the traumatic and liminal separation of self and other. Furthermore, the ideal bodily imago is also threatened from without, in a 'society of control' which disperses bodies into

desiring machines and part-objects.[4] Observing the early modern workplace, Georg Lukács noted that 'the fragmentation of the object of production necessarily entails the fragmentation of its subject'.[5] This slicing and portioning of the body finds its corollary in abjection.

In a recent essay, Susan Buck-Morss suggests that 'the mirror stage can be read as a theory of fascism'. Her thesis centres on Walter Benjamin's neurological conception of modernity as being based on shock. 'Threatened bodies, shattered limbs, physical catastrophe', she writes, were the underside of modern technocracy.[6] It was precisely these bodily realities which were repressed by the fascists who declared, 'technology is our uniform.'[7] 'Thus the significance of Lacan's theory emerges only in the historical context of modernity as precisely the experience of the fragile body and the dangers to it of fragmentation that replicates the trauma of the original infantile event (the fantasy of the *corps morcelé* [body-in-pieces])'. Abjection, as an indication of animality, returns to haunt the subject, undermining the metalized, fascistic body which armours itself as a defensive reaction against bodily 'impurities'. [...]

The proliferation of bodily fragments and degraded materials in contemporary art represents, on the one hand, the exteriorization of all interiority in the contemporary world; in the present-day postmodern age, we are 'bodies without organs', 'desiring machines' or 'cyborgs'. The increasing tendency among artists to 'recuperate' the body metonymically via fragments, fetishes, traces and part-objects must be viewed historically at a time when the body is being replaced and eclipsed by technology and prosthetics. On the other hand, malevolent associations of the other with the abject (e.g. women and menstrual blood, gay men and disease, the working class and trash, blacks and dirt) have been deployed by artists to force stereotypes to resignify and circulate in alternately parodic, celebratory and non-oppressive ways. Abjection within recent art practices signals a profound attack whose weapons are the very forces that the armoured subject most fears: 'sexuality and the unconscious, desire and the drives, the *jouissance* ... that shatters the subject, that surrenders it precisely to the fragmentary and the fluid'.[8] The recent production of abject art, at a time of AIDS, backlash against women's rights, and 'private telematics'[9] (the dematerialization of the body in postmodernism), signifies the irrepressible resurgence of the body in an era of diminishing returns.

1 [footnote 3 in source] Julia Kristeva, *Powers of Horror: An Essay on Abjection*, trans. Leon S. Roudiez (New York: Columbia University Press, 1982). [...]

2 [4] Jacques Lacan, 'Aggressivity in Psychoanalysis', in *Écrits: A Selection*, trans. Alan Sheridan (New York: W.W. Norton, 1977) 11. [...]

3 [6] Jacques Lacan, 'Aggressivity in Psychoanalysis', op. cit., 19.

4 [7] Gilles Deleuze, 'Postscript to the Societies of Control', *October*, no. 59 (Winter 1992) 3–7.

5 [8] Georg Lukács, 'Reification and the Consciousness of the Proletariat', in *History and Class-Consciousness: Studies in Marxist Dialectics*, trans. Rodney Livingstone (Cambridge, Massachusetts: The MIT Press, 1971) 89.

6 [9] Susan Buck-Morss, 'Aesthetics and Anaesthetics: Walter Benjamin's Artwork Essay Reconsidered', *October*, no. 62 (Fall 1992) 27.

7 [11] Ibid., 37.

8 [48] Hal Foster, 'Postmodernism in Parallax', *October*, no. 63 (Winter 1993) 10; see also Klaus Theweleit, *Male Fantasies*, vol. 1, *Woman, Floods, Bodies, History*, trans. Stephen Conway (Minneapolis: University of Minnesota Press, 1987).

9 [49] Jean Baudrillard, 'The Ecstasy of Communication', in Hal Foster, ed., *The Anti-Aesthetic: Essays on Postmodern Culture* (Port Townsend, Washington: Bay Press, 1983) 128.

Simon Taylor, extracts from 'The Phobic Object: Abjection in Contemporary Art', in *Abject Art: Repulsion and Desire in American Art* (New York: Whitney Museum of American Art, 1993) 59–60, 80–81, 83.

Marjorie Allthorpe-Guyton
A Purpose in Liquidity//1994

Tristan Tzara, perhaps, declared the right to urinate in different colours and that writing poetry was as natural as making water.[1] He wrote his name in the snow saying 'There! I think I'll call it the Alps'.[2] But the audacity of male Dadaism was tempered by a passive irony which is utterly displaced by Helen Chadwick's dynamic, playful, yet surgical engagement with body and matter. *Piss Flowers* (1991–92), were produced during a three week residency at the Banff Centre for the Arts, Alberta, Canada. Plaster casts were made from the cavities created when she and her male collaborator, David Notarius, indulged in the childhood sport of pissing in the snow. The ground was prepared with the scrupulousness of a laboratory experiment. And neither knew whether the results would have any value beyond the act. Urine, or rather the *colour of urine*, significant in both art and science, has been used from ancient times as a diagnostic instrument and in the 1620s by the magus Robert Fludd for an abstract colour circle.[3] For Helen Chadwick its use as a creative force was expedient: 'My apparatus is a body x [multiplied by] sensory systems with which to correlate experience'.[4] This was not simply a return of what Freud called a 'primaeval period' of infantile sexuality, but a mature sexual

act involving 'a dynamic of curiosity that is possibly the foundation of all intellectual activity, which I describe under the rubric of *epistemophilia*'.[5] [...]

There are twelve *Piss Fowers*, each shaped by a unique, unpredictable event in which the agency of the artist's hand is bypassed in favour of the creative power of urine, normally regarded as polluting and marginal.[6] Here the pleasure of a taboo act is exalted through the object. We are confronted with the fabulous facts of our bodies through things which are childlike and insistent. Their crepuscular forms, their flower pistils cast from the cavities melted in the snow by the warm flows of urine strong and hot from the woman, diffuse and cooler from the man, are an inversion of human genitalia. The central female form is penile, the male circumference labial, but with time, as the body's strength and its sexual distinction wanes the pattern would change: 'The female pattern would become more diffuse and approximate to the male form. The resultant *flower* would go to seed!'[7]

These glistening whitened bronze flowers on their short fat stalks are aberrant polyps, fungoid and fairy-like, presenting what Bataille names 'an obscure vegetal resolution' to the condition of human love and death: 'But even more than by the filth of its organs, the flower is betrayed by the fragility of its corolla: thus, far from answering the demands of human ideas, it is the sign of their failure'.[8]

The invitation is to sit on these improbable erections, glistening like stalagmites – but such calciferous trophies are the accretions of ages, while the *Piss Flowers*, although bronze, seem vulnerable, brittle and transient.

1 Tom Stoppard, *Travesties* (London: Faber & Faber, 1975) 61.

2 Ibid., 25.

3 See John Gage, *Colour and Culture, Practice and Meaning from Antiquity to Abstraction* (London: Thames & Hudson, 1993) 171 n.101.

4 Helen Chadwick, 'Soliloquy to Flesh', *Enfleshings* (London: Secker & Warburg, 1989) 109.

5 Peter Brooks, *Preface, Body Work, Objects of Desire in Modern Narrative* (Cambridge, Massachusetts: Harvard University Press, 1993) xiii.

6 [7] For the exemplary analysis of concepts of pollution and taboo see Mary Douglas, 'External Boundaries' in *Purity and Danger* (London: Routledge, 1966) 114–28.

7 [8] Dr Rachel Armstrong, 'Urination and Cystometry, the Differences between Men and Women', unpublished paper 1993. I am grateful to Helen Chadwick for this reference.

8 [9] Georges Bataille, 'The Language of Flowers', from *Visions of Excess, Selected Writings 1927–1939* (Minneapolis: University of Minnesota Press 1985) 10.

Marjorie Allthorpe-Guyton, extracts from 'A Purpose in Liquidity', in *Effluvia: Helen Chadwick* (Essen: Museum Folkwang, 1994) 9–10, 25.

Dan Cameron
Parts and Whole: On Janine Antoni's *Gnaw*//2000

Operating on the cusp between corporal gesture and physical construction, *Gnaw*'s narrative is by now well known to most viewers. Beginning with two otherwise similar-looking blocks of raw material, chocolate and lard, Antoni enacted the traditional process of carving, using her mouth as tool. [...] Chewing at each of the blocks (on separate occasions) until she exhausted herself, Antoni displaced a portion of the raw material by removing it and spitting it away. What is left behind are the same blocks, but with corners of each one apparently eroded, the artist's teeth marks vividly punctuating its otherwise smooth surface. While clearly intending that the viewer recognize the similarity of this manner of carving to the act of eating, Antoni makes an equally explicit reference to the techniques of *beaux-arts* modelling [...]. The gradual removal of chunks of material is, according to this pre-modern tradition, a way of seeking the form one is after within the mass of undefined substance – to remove, as it were, the extraneous portions so that the hidden inner artwork can be revealed.

Antoni's careful application of metaphor extends to the customary use of the materials chosen for *Gnaw* (1992), in particular their role in the formation of a social dynamic based on beauty and pleasure. While the colour, texture and taste of the two blocks are completely different, they are both distinguished by their exceedingly high fat content. [...] Viewed from one perspective, the person who consumes too much fat loses control over the way in which the body presents itself to the outside world. This is why Antoni's 'performance' entails a pushing against the limits of her physical strength, since it also references the loss of control over one's own physicality, and the transformation of the corporal self into something that no longer registers as desirable social currency. This also explains why the system evoked by *Gnaw* is even more essential than the two blocks of residue in driving the artist's point home. Collecting the discarded lumps of lard and chocolate made by her 'carving', Antoni formed the accumulated fragments into object/accessories that bring the peculiar logic of consumption full circle. While the chocolate scraps are moulded into heart-shaped simulations of the brown plastic trays that serve as barriers within boxed assortments, the remaining lard is fabricated into lipsticks of an identical shade. Trays and lipsticks are displayed in tandem with the blocks, as part of the work's finished state. [...] [T]he explicit references to Antoni's own physical interaction with the materials in *Gnaw* produces a structural tension that seems almost narrative in its complicity with the viewer's inherent tendency toward closure. [...] Because we

are being asked to complete the work in our minds, viewers of *Gnaw* have a greater tendency to project multiple interpretations onto it, the implied parallel between an artist's struggles with materials and the socially driven 'sculpting' of the body being one of the more frequently cited.

Dan Cameron, [retitled] extract from 'Parts and Whole: Three Works by Janine Antoni', in *Janine Antoni* (Ostfildern–Ruit: Hatje Cantz, 2000) 27–31.

Ann Temkin
Strange Fruit//1999

What has happened to *vanitas* in the late twentieth century? The subject of human mortality certainly has not gone away; in the last fifteen years the AIDS epidemic has brought it closer than ever to the surface. From Pablo Picasso and Marcel Duchamp to Kurt Schwitters and Robert Rauschenberg, we live in a century which declares that things rather than symbols are the stuff of art. A serious work of art cannot, by current definition, 'illustrate' death, but it can embody or imply it. [...] And this, of course, presents real dilemmas for collectors, curators and conservators.

A case study is an artwork that the Philadelphia Museum of Art acquired in February 1998. Titled *Strange Fruit (for David)*, it was made from 1993 to 1998 by a thirty-six-year-old New York artist named Zoe Leonard. It is composed of about three hundred rinds and skins of avocados, grapefruits, lemons, oranges and bananas. After the artist ate, or others had eaten, the meat of the fruit, Leonard allowed the skins to dry out and then 'repaired' and adorned them – literally sewing up the seams she had opened – with coloured thread, shiny wires and buttons; bananas, for example, are neatly closed up with stitches or zippers that run from top to bottom.

Leonard has furnished a creation story for the piece, discussing its evolution as a work of mourning after the death of a friend. [...]

The experience of making (remaking) the fruit seemed to Leonard to readmit into her work the possibility of beauty and its reconciliation with a stance of political engagement. As she worked, she did not have a sure sense of the ultimate configuration or context for the objects. But sometime in 1997, she 'decided to keep this group of sewn fruit together, as one piece, to decompose in its own time'. She told an interviewer that 'I would love for this piece to have a

room somewhere where I could install them and then leave them be. Just let them decay.'[1]

This conclusion had not come immediately. Early on, her dealer, Paula Cooper, suggested the possibility of preservative intervention for the sculpture. Leonard was amenable and worked for two years with the German conservator Christian Scheidemann to devise a way to arrest the decay of the fruit surfaces. After much testing, Scheidemann developed a solution that consisted of shock-freezing the pieces and then soaking them with the consolidant Paraloid *B72* under vacuum. This solution was complicated by the need to protect the wires, threads and other decorative elements from the Paraloid *B72*; in other words, the piece presented the intricacies typical of any mixed-media work. But Scheidemann succeeded in this as well, and it seemed that everything was all right; much like seventeenth-century still-life paintings, *Strange Fruit* would talk about ephemerality but would itself endure.

However, Leonard surprised herself and found that she recoiled at Scheidemann's hard-won results. She realized that the appearance of decay was not enough for her, the metaphor of disappearance was insufficient. I would argue that this was a reaction determined by art history – after Joseph Beuys's sausages or Dieter Roth's chocolate, the mere pretence of deterioration was no longer persuasive. Leonard set herself a criterion of honesty and rejected the twenty-five preserved pieces. [...]

When Leonard first heard that the Philadelphia Museum of Art wanted to buy *Strange Fruit*, she was thrilled and grateful. But soon after, she developed concerns about the museum's willingness to show it continuously, to devote a specific space to it, and to show it, still, when it became more evidently a ruin. The museum agreed to try (although not to formally commit) to show the piece for periods of time with a certain calendrical regularity, which seemed in the spirit of the work's sense of marking time. We agreed to photograph, or permit Leonard to photograph, successive installations, perhaps in the interest of an eventual publication. We agreed to collaborate with her over the years to determine when the piece was no longer presentable and what should be done with it at that time. Admittedly, this allowance for continued communication with the artist is unusual. However, we live in a time when the museum is much more actively engaged with its public, so why not with its artists? [...]

What did the museum's conservators think? Indeed, the piece is a bit of an affront to the whole profession. It is like bringing to a surgeon a patient with an inoperable disease; next patient, please. But here, too, I feel that *Strange Fruit* is very much a work of our time. The heroics of the conservation lab are as much in question as those of the hospital. As medical and conservation technology develops and the number of potentially treatable patients grows, the questions

raised by *Strange Fruit* become social questions as much as art questions – for example: Is it more graceful and humane to let a person die than to preserve him or her bizarrely and at great expense? [...]

In a museum, it often seems, we are dedicated to preserving something larger than individual works of art; we are dedicated to preserving the fiction that works of art are fixed and immortal. Our building is the greatest support for this argument: a seemingly imperishable monument of Vermont limestone constructed in the timeless idiom of the classical temple. In recent years, however, it, too, has manifested various signs of serious deterioration. To me, the provocation offered by Leonard's work sends a message that reverberates throughout our building. Maybe it is not the only thing in the museum that is not forever. Maybe this is not a universe without wounds, reconstructions, scars or death. Visitors may consciously realize its implications or they may not. [...] *Strange Fruit* is a piece that will visibly alter in appearance in the museum. And for that reason, even though it faces death and portrays death, I believe it may be more alive for today's viewers than many of the objects apparently fixed and never changing.

1 [3] 'Zoe Leonard Interviewed by Anna Blume', in *Zoe Leonard* (Vienna: Wiener Secession, 1997) 18.

Ann Temkin, extracts from 'Strange Fruit', in Miguel Angel Corzo, ed., *Mortality Immortality? The Legacy of Twentieth-Century Art* (Los Angeles: Getty Conservation Institute, 1999) 45–50.

Ian Hunt
Interior Structures//2000

A first encounter with the bones of Christine Borland's *Bison-Bison* (1997) has an immediate shock of fascination that the subsequent explanation of the process used in its making and unmaking cannot quite take away. Bone is revealed as possessing pale but attractively luminous colour: blue-grey, dusty ochre, pink, chalky white. The colour is striking in those bones which appear to be crumbling apart, like wood embers after a fire; and the powdery pale blue of the surface of the trestle table on which they are laid is calculated to show off these colours. They are named by the label as the vertebrae, and are laid out in order. Other bones, the ribs, are displayed on lower tables, which make a cross shape with the first. They are a more uniform and darker shade of yellow and have developed a sheen that is slightly unpleasant; they resemble the things sometimes given to

dogs to chew. These bones could clearly withstand being handled, unlike the vertebrae. They are all strangely contorted into loops or coiled. How the bones could have become flexible – they are secured in their bends and loops by silver wires – is not fully explained.

Bison-Bison: the familiar name doubled in the Latin classification provides no clues. Although the beast is, for Europeans, an exotic species, and its bones impressive in size, the mystery displayed is a chemical one which could as easily be demonstrated with the bones of a cow or a horse. What we are looking at is bone that has been subjected to calcination – heating – which has removed the organic compounds, leaving the friable, chalky remainder (principally calcium phosphate); and that has been subject to another process, which has successfully dissolved the mineral compounds through immersion in a weak mineral acid. This leaves the organic remainder, ossein, the substance which determines the resiliency and tenacity of bone. Immediately after the experiment the bones thus treated are flexible and can be twisted into knots. The puzzlement does not quite end when the recipe from *Gray's Anatomy* that inspired the work is produced. Can the 'animal, organic' part of bone really be so easily separated from the 'mineral, inorganic' part? That is the language the 1930 edition uses, and it reminds us of the first question of the game of twenty questions: 'Animal, vegetable or mineral?'.

Substances really are either organic or inorganic. The distinction is an absolute one, which all of us with a little thought could elaborate. But having drawn the line, do we not still want to cross it? Would we hesitate for a moment over chalk, deposited from the bodies of sea creatures – is it purely a mineral? Or bone china, famed for its translucence, one ingredient of which is indeed bone ash? (It is a substance used, following the classic Spode recipe, to make two works: *English Family China* – family groups represented by skulls moulded and glazed in blue-and-white patterns – and *Five Set Conversation Pieces* (both 1998), in which bone china pelves and foetal skulls are shown in various positions for labour.) When organic material is no longer part of a living structure it enters a state of limbo hard to define. In an ossuary where mediaeval femurs were stacked to make neat walls, I have seen human skulls that have been touched so often on the brow by visitors that they have developed a hardened surface polish, which resembled that on tooth enamel, or on marble balustrades where the polish is also produced by repeated encounters with human hands. And then at the microscopic level there are other puzzles of classification. Viruses are fragments of nucleic acid in a protein coat that have the ability to copy themselves using parts of living cells, but which are not actually classified amongst living creatures. In their chemistry they are organic, but they are without independent life. They lack the structure that a cell possesses: membrane, cytoplasm, organelles,

nucleus. Animal, vegetable or mineral, organic or inorganic, alive or dead? Viruses have a semblance of life that is so substantial in its effects that it seems impossible to think of them as non-living.

(Quite apart from these grey areas for scientific definition, our imaginations and use of language do not respect the boundary between organic and inorganic, animate and inanimate, and project interchanges and sympathies between the two; think of children's unsuppressed admiration for the vitality of machines.) [...]

The use of bone other than of human origin permits different questions to be asked. The idea that we carry a 'mineral' burden, which our DNA codes to conform into the shapes of bones, need not be a disturbing thought. (God was happy to choose clay as a modelling material.) And without it, as the experiments show, bones would lack the rigidity they need to hold us upright. A display of bones, on a pale blue surface and on transverse tables, in a pointedly aesthetic arrangement, does not automatically have to signify mortality. It can function as a poetic emblem, one interpretation of which is that humans must ultimately be classified as part of nature, not separate from it – even though its rules can be twisted.

Ian Hunt, extracts from 'Interior Structures', in *Christine Borland: The Dead Teach the Living* (Zurich: Migros Museum für Gegenwartskunst, 2000) 13-15, 19.

Pascal Beausse
Teresa Margolles: Primordial Substances//2005

DEATH IS HER PROFESSION. Death is the core of Teresa Margolles' art. The Mexico City morgue is her workplace: she is both the morgue's artist and its legal and medical technician. The neo-minimal forms of her sculptures, installations, images and actions are double-barrelled. Their apparent neutrality summons the viewer to a political and metaphysical meditation on death and on the social and economic inequalities surrounding it. All of Margolles' works are realized with materials either originating from corpses or having been in contact with them. Margolles confronts the taboo of death, and especially the taboo that impels us to remove corpses from view. The bodies she handles are those of people who died a violent death, due to a social context of poverty and violence connected, in particular, to drug trafficking. They are the corpses of those Walter Benjamin called 'the eternally vanquished, the humiliated, the victims of hunger and poverty'.

Santiago Sierra, who, after his arrival in Mexico City, found in Margolles his

alter ego, perfectly defined the elements of her work: 'Margolles' work puts the assassins on constant trial by placing the corpses of those victims on society's table. It opposes the general indifference towards crimes always committed in another society, on the other side of the Atlantic or on global television, and is a constant reminder of the fact that this Mexican who got killed could be any one of us.' If both anthropology (the rituals surrounding death) and sociology (the inequalities at the local and global levels) inform Margolles' work, it is through a complete reversal of traditional values. The sacred is articulated outside of the religious. Among Margolles' icons of choice, Georges Bataille seems like one of the best points of entry into what animates the artist's peculiar exploration. Bataille writes: 'In a sense, the corpse is the most complete affirmation of the spirit. What death's definitive impotence and absence reveals is the very essence of the spirit, just as the scream of the one that is killed is the supreme affirmation of life.'

Margolles' aesthetic strategies have considerably evolved since the 1990s and the end of her participation in the art collective SEMEFO (SEMEFO is an acronym for the Forensic Medical Service). The embalmed animal corpses and the imprints of human cadavers have been replaced by more restrained forms, referencing the visual codes of minimalism without being any less evocative. Water in all its states, as well as human fat, have become privileged materials. The water that has been in contact with corpses is distilled, vaporized, turned into mist solidified or mixed with cement, and takes as many forms as possible in an attempt to reintroduce death in the cycle of life. Fat was applied on the walls of Kunst-Werke in Berlin (*Secreciones sobre el muro* / Secretions on the Wall, 2002) and on the body of a drug dealer in Barcelona (*Grumos sobre la piel* / Lumps of Fat on the Skin, 2001); it has been used to fill the holes in the wall of a school in Cuba (*Ciudad en espera* / Standby City, 2000), and leaked drop by drop from the ceiling to the floor of the FRAC Lorraine in Metz (*Caida Libre* / Free Fall, 2005), thus tracing an artistic paternity link with the shaman Joseph Beuys.

Form and the formless define the two main aesthetic poles of Margolles' recent work. *Vaporización* (Vaporization, 2002) invites viewer to penetrate an exhibition space filled with fog, and in so doing to come into contact with the memories of the dead – the water being diffused in the gallery had previously been used to wash the corpses. The realization of this is shocking and disquieting. The atmospheric dimension of the fog doesn't permit any distance: insinuating itself everywhere, its droplets settling onto the skin and the clothes of the viewer, the vaporized water establish direct contact with the bodies of the dead and short-circuits our intellectual understanding of the work by soliciting both a sensitive and a cognitive approach. This invitation to immerse oneself in the space of these anonymous deaths has both an evocative and an immediately physical, sensorial dimension. Each viewer is confronted with his/her own

responsibility in managing his/her emotions. Through the reinvention of a funerary ritual, Margolles operates a translation from sacred to profane. What was just a sanitary act within the morgue is extended into a ritual. The vapour circulating in the art space turns it into a redemptive surface.

Aire (Air, 2003) used the same principle but made it even more mental and less tactile. This time, water was diffused by air humidifiers located in the apparently empty exhibition space of Galerie Peter Kilchmann in Zurich. As one crosses the room, whose thresholds are materialized by translucent plastic curtains, one is put in the position of breathing the air of the dead. This invasive aspect is completely neutralized in its potentially aggressive dimension (in terms of the visitor's body) through the theoretically sterilized convention of the white cube, but it remains powerfully suggestive. Where else can we, hypermodern individuals desensitized by the fantastic universe of technology, be put in a situation of co-presence with death without the company of religiosity?

En el aire (In the Air, 2003), in turn, consisting of two bubble machines installed up high, has a spectacular, almost ludic dimension. The bubbles, made again from the water used in the morgue to wash corpses before the autopsy, fall at regular intervals on the floor or on the heads of the visitors, evoking fragility and the supernatural. The bubbles, all transience and perfection, inevitably refer to the representation of the sublime in the history of art and philosophy. They also echo the politics of spheres, as theorized by Peter Sloterdijk to describe our living spaces as air, the condition of life, movement and being: 'What is inside me, what I breathe, what I share, what I am both a particle and a pole of, in short, the sphere, the open ball of which I am the half, living in this world, the "me"-half'. Each of Margolles' atmospheric installations creates an ambient space, a space of participation, of dialogue with the absent 'other'.

Banca (Bench, 2002) and *Mesa y dos bancos* (Table and Two Benches, 2003) are the link between dead and living bodies, as they proceed from an attempt to reconstitute a community. This concrete furniture welcomes the living bodies of the viewers while evacuating the question of form (the design itself is not relevant) and finding in turn another form. What does the ordinary act of sitting on an object mean, when that object refers to the reification of the corpse, because it is made of a mix of cement and used water from the morgue? What occurs is a reanimation of the corpse, a circulation of corporeal substances, as the artist systematically carries these fluids from Mexico to the various locations of her exhibitions. At the Centre d'Art de Brétigny, in France, Margolles created *Fosa Común* (Communal Grave, 2005). The exhibition space was seemingly empty; in reality, the artist had broken up the floor to recreate it using a concrete mix made of her usual ingredients. Implacably, Margolles forces the visitors to walk on what becomes a memorial, the funerary monument of an anonymous community,

in so doing, she offers a burial ground to those who have been deprived of it. Indeed, she explains that the dead of the Mexico City morgue are often abandoned by their families, who don't have enough money for a burial. These victims of violent deaths are frequently thrown out with the trash. The artist's decisions are then clearly motivated by her confrontation with pain and indifference. By pouring the memory of these destitute and murdered bodies in the ground at Brétign, she forces everyone – including the curator and the artists exhibiting after her – to determine their place in the knowledge of this presence/absence. Because ritual characterizes every social activity. Margolles reinvents a ritual for the space of art. Once the individual is no longer present, these transmutations of his/her corporeality form a political, universal body.

Pascal Beausse, extract from 'Teresa Margolles: Primordial Substances', *Flash Art* (July–September 2005) 107–9.

ORLAN
The Body: A Material amongst Other Usable, Questionable Materials//2015

I wrote that in the 1970s.

In 1977, the *Kiss of the Artist* created a corporal, material link between the artist and the spectator.

In 1989 I wrote the 'Carnal Art Manifesto'[1] to differentiate my work of body art and conceptualize my series of surgical-operation-performances, created between 1990 and 1993. The idea was to put some face on my face. Having, for instance, two implants, two bumps put on my temples.

In 1997 I used the services of the criminal investigational department of the Copenhagen police to identify myself through a skull, medical gauzes soaked with my blood and a reliquary with a couple of grams of my flesh. What followed was the exhibition 'Exogène' (exogenous) where I showcased my DNA sequence.

In 2008, in the SymbioticA laboratory of the University of West Australia, I underwent a biopsy as a performance, in order to withdraw cells of my skin and cultivate them in my installation *Harlequin's Coat*.

In 2013 I created a 3D printed sculpture of my skull, made from medical scans. I am one of the first artists to see their own skull in their lifetime. These medical images were also used in the video *Bumpload and Memento mori*.

The same year I created a digital 3D avatar of my skinned body that can re-enact my performances: in the video *Skinned Liberty* this self-portrait takes the position of the Statue of Liberty in slow-motion.

This flayed self refers to medical iconography but her acid green translucent prostheses allude to more current cyber characters and to my 2012 performance *MeasuRage of the Andy Warhol Museum*. In this *MeasuRage* these prostheses[2] functioned as measuring tools of my body while I measured the Museum with my body. The idea was to show the investment of the artist's body in the creation of the work of art, to show the body matter is an instrument completely invested in the creation process.

All my work questions social, cultural, political and religious pressures that leave an imprint on the body, on the flesh.

In every era the materiality of the body and its representation are perceived differently according to the prevailing ideology that makes the laws, the taboos, the censorships ...

The matter is now questioned, transformed. Presently my interest lies with genetics and synthetic biology.

1 See Orlan, 'Carnal Art Manifesto' (http://orlan.eu/adriensina/manifeste/carnal.html)

2 BODYMEDIA armbands that measure physiological body signals.

ORLAN, 'The Body: A Material amongst Other Usable, Questionable Materials', statement for this volume, 2015.

Paul Vanouse
Counter Laboratories, Inverted Suspects and Latent Signs//2011

It was precisely the relationship of eugenics to genomics that began my work with DNA imaging and it is pertinent to underscore here: my first major DNA-based project, the *Relative Velocity Inscription Device* (*RVID*, 2002) was conceived after considering two key pieces of information. First, that the original working title for the *Human Genome Project* proposed by its co-investigator Robert Sinsheimer was 'neo-eugenics', and that it was Nobel Laureate and famous co-discoverer of the DNA double-helix structure James Watson who suggested a less historically laden title.[1] Second, that following the rough draft of the *Human*

Genome Project in 2000, genome scientists proudly declared: 'there is no such thing as race', as it is a social construction with no biological basis.[2] It was my suspicion that under such circumstances racism would go molecular; race would somewhat vacate its historic locus of the skin, or more broadly the body, and relocate to within our DNA. It was my hunch that racism could exist even if race did not. Furthermore, it seemed that once race was so disembodied, racism could resume where it had left off at the end of the eugenics movement. While selectively removing unfit individuals was no longer tolerable, certainly the eradication of a gene considered unfit from a gene pool would be less scrutinized.

Relative Velocity Inscription Device is based on an elaborate and intentionally flawed analogy, specifically mapped to the technology of DNA analysis, gel electrophoresis. Gel electrophoresis is a process that begins with inserting DNA into a porous gelatin within an electrophoresis chamber. Then, applying voltage to the chamber causes the DNA to move at varied rates and thus differentiates DNA fragments of different sizes. Since this technology can differentiate DNA based on the rate of its movement through a gel, it seems ironically fitting to attach value to the speed of this movement. The analogy follows: some genes would move through a gel faster than others and the fastest must be the most 'genetically fit'. In *RVID* I extract skin colour genes of my Jamaican/American family and literally 'race' them against one another in an electrophoresis gel, in a perverse update to the infamous treatise against 'racial intermingling' called *Race Crossing in Jamaica*, by Charles B. Davenport (1929).[3]

A perverse validation of my theory came then from a speech by James Watson himself. In a lecture at the University of California, Berkeley, in November 2000, Watson discussed an experiment at the University of Arizona in which a group of male students were injected with melanin, the substance responsible for the colour of skin. Watson claimed that the students quickly became sexually aroused – that is, they developed erections.[4] We are left to assume that as the scientifically unpopular concept of race has been removed from skin colour, a stigmatization and microanalysis of individual black-identified traits would follow. Perhaps it is not the black body any more that is deemed prone to promiscuity, but blackness itself. The very signifiers of race, rhetorically dislodged from their referents but still encoded within every cell in our bodies, could be personified as sexual deviants awaiting the opportunity to express themselves against our will and irrespective of environment.[5]

Soon after the completion of the *RVID* in 2002, came the radical shift in the cultural context in which works of conceptual, tactical, interventionist, media artists like myself were meant to resonate. Many of us throughout the late 1990s regarded the slippery, promiscuous, neoliberal, corporate/cultural, global amalgamations to be the most important site of critique. It became more and

more apparent that the recently waning, benign state apparatus was waxing with predictable traits. Ultra nationalism, enhanced borders, total surveillance, hyper security and inescapable subjectivity were evident. In the art/science community, and certainly in my cosy niche of Buffalo, NY, the Department of Justice's bio-terror scam epitomized the new cultural context of our work.[6] [...]

Latent Figure Protocol (2007) is an operational critique of the metaphor of a DNA image as a 'DNA Fingerprint'. By creating multiple DNA images using the same subject's DNA, I'm demonstrating that the DNA image is a cultural construct, which takes a certain pattern depending upon a laboratory's choice of DNA fragmenting, amplification and/or hybridization techniques and thus the 'DNA Fingerprint' tells us as much about the techniques used to segment DNA as it does about the individual that it purports to identify. *LFP* tries to undermine essentialist notions of identity and determinist senses of biological destiny, such as the phrase 'you are your DNA', and to destabilize the idea that the 'DNA Fingerprint' is somehow natural. I sought, in *LFP*, to make the critique as transparent as possible, by performing the imaging process live, before audiences, and subsequently addressing their questions. *Suspect Inversion Center* carries on where *LFP* left off. Not only is the DNA imaging carried out in public, but every aspect of the DNA labwork has been made accessible. Even the laboratory procedures, notes and intermediary images are disclosed and shown on clipboards rather than files in a desk. While the title is an anagram of *CSI* (*Crime Scene Investigation*),[7] it might as well be an inversion. While mainstream dramatic television like *CSI* builds an awe of authority, and complete technological fictions, *SIC* creates skepticism and total de-mystification. Unlike dramatically scripted, tightly edited, televised techno-fictions, *SIC* is excruciatingly real-time, offering a viewing public an eight-week engagement with a mammoth technological challenge of painstaking replication of the invisible icon of the DNA Wars.[8]

1 [footnote 8 in source] Daniel J. Kevles, 'Out of Eugenics: The Historical Politics of the Human Genome', in Kevles and Leroy Hood, eds, *The Code of Codes: Scientific and Social Issues in the Human Genome Project* (Cambridge, Massachusetts: Harvard University Press, 1992).

2 [9] Natalie Angier, 'Do Races Differ? Not Really, Genes Show', *New York Times* (22 August 2000).

3 [10] Charles B. Davenport and Morris Steggerda, *Race Crossing in Jamaica* (Washington, DC, 1929).

4 [11] Abate, Tom. 'Nobel Winner's Theories Raise Uproar in Berkeley Geneticist's Views Strike Many as Racist, Sexist', *San Francisco Chronicle* (13 November 2000).

5 [12] Paul Vanouse, 'Race, Inter-Race and Post-Race in the Study of Human Genetics', *Afterimage* (September/October 2002).

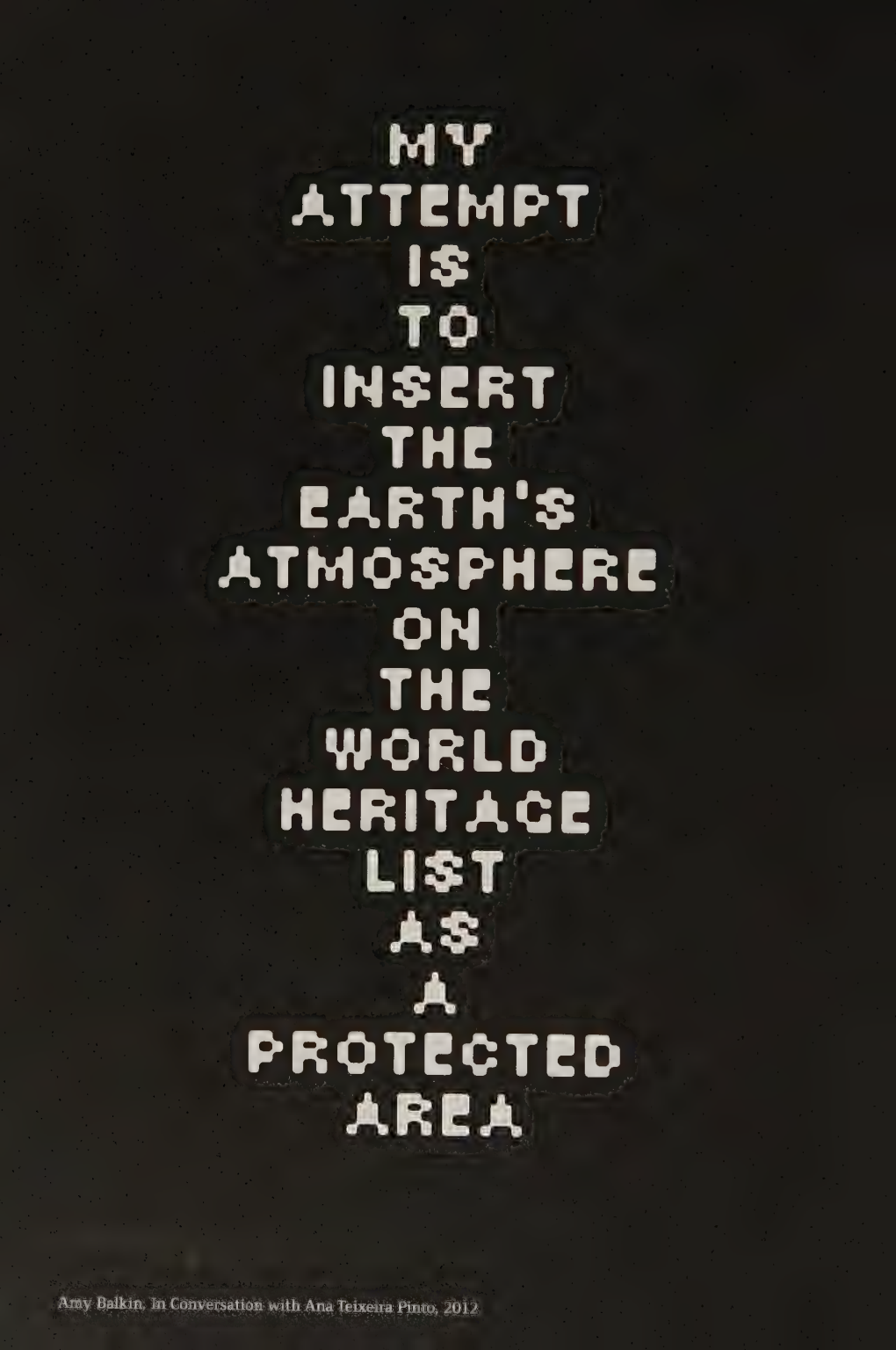
6 [13] Dan Herbeck, 'Six Are Said to Resist Grand Jury', *Buffalo News* (17 June 2004). FBI agents first detained Steve Kurtz, member of the Critical Art Ensemble, for over 24 hours, then shortly after appeared at my studio asking to come inside to ask a few questions. I replied that unless they

possessed a warrant, they should contact my attorney, with whom I would happily answer their questions. The aforementioned article will supply some details of the beginning of what followed. The case against Kurtz and Ferrell continued for four years.

7 [18] CSI references *Crime Scene Investigation*, the popular US television show first broadcast in 2000. The impact of its heroic portrayal of the hyperbolic proficiency of forensic technologies such as DNA Fingerprinting on the public's understanding of identification technologies is the source of the term 'the CSI effect'. [Editor's note.]

8 [19] This martial metaphor describes the controversy accompanying the introduction of DNA-evidence, which had been employed in US courtrooms since 1987 and successfully challenged in the early phase by highlighting errors in the securing and analysing of evidence and in the laboratory procedures.

Paul Vanouse, extracts from 'Counter Laboratories, Inverted Suspects and Latent Signs', in Vanouse, *Fingerprints ... Index – Imprint – Trace*, ed. Jens Hauser (Berlin: Ernst Schering Foundation/ Argobooks, 2011) 57, 59, 61, 63, 65.



Amy Balkin, In Conversation with Ana Teixeira Pinto, 2012

Elizabeth Grosz
The Thing//2001

The thing goes by many names. Indeed the very label, 'the thing', is only a recent incarnation of a series of terms which have an illustrious philosophical history: the object, matter, substance, the world, *noumena*, reality, appearance, and so on. In the period of the Enlightenment, from Descartes to Kant, the thing became that against which we measured ourselves and our limits, the mirror of what we are not. While rare, anomalous readings of the thing emerge in post-Kantian philosophy, it is primarily associated with inert materiality. Much more recently, since the cold war, it has been associated, through this alienation from the subject, with an animated and potentially malevolent materiality, a biological materiality that is or may be the result of our unknowing (usually atomic or nuclear) intervention into nature, the revenge of the blob, of protoplasm, of radiated existence, which imperils man. Nevertheless, through these various permutations, the thing remains identified with immanence, with what we are capable of overcoming, albeit with the input of a technological supersession of the body and its reemergence in virtual form.[1] But instead of outlining *this* history, paying homage to the great thinkers of the thing, and particularly to the scientists who devoted their intellectual labours to unravelling its properties and deciphering the laws regulating its relations (the thing has become the property of the intellect and of science), I am seeking an altogether different lineage, one in which the thing is not conceived as the other, or binary double, of the subject, the self, embodiment or consciousness, but as its condition and the resource for the subject's being and enduring. Instead of turning to Descartes or his hero, Newton, to understand things and the laws governing them, we must instead begin with Darwin and his understanding of the thing – the dynamism of the active world of natural selection – as that which provides the obstacle, the question, the means, by which life itself grows, develops, undergoes evolution and change, becomes other than what it once was. The thing is the provocation of the non-living, the half-living, or that which has no life, to the living, to the potential of and for life.

The thing in itself is not, as Kant suggested, noumenal, that which lies behind appearances and which can never appear as such, that which we cannot know or perceive. Rather, if we follow Darwin, the thing is the real that we both find and make. The thing has a history: it is not simply a passive inertia against which we measure our own activity. It has a 'life' of its own, characteristics of its own, which we must incorporate into our activities in order to be effective, rather than

simply understand, regulate and neutralize from the outside. We need to accommodate things more than they accommodate us. Life is the growing accommodation of matter, the adaptation of the needs of life to the exigencies of matter. It is matter, the thing, that produces life; it is matter, the thing, which sustains and provides life with its biological organization and orientation; and it is matter, the thing, that requires life to overcome itself, to evolve, to become more. We find the thing in the world as our resource for making things, and in the process, for leaving our trace on things. The thing is the resource for both subjects and technology.

This Darwinian inauguration of the active thing marks the beginning of a checkered, even mongrel, philosophical history, a history that culminates in a self-consciously evolutionary orientation: the inauguration of philosophical pragmatism that meanders from Darwin, through Nietzsche, to the work of Charles Sanders Peirce, William James, Henri Bergson, and eventually, through various lines of descent, into the diverging positions of Richard Rorty, on the one hand, and Gilles Deleuze on the other. These are all, in their disparate ways, pragmatist philosophers who put the questions of action, practice and movement at the centre of ontology. What these disparate thinkers share in common is little else but an understanding of the *thing as question*, as provocation, incitement or enigma.[2] The thing, matter already configured, generates invention, the assessment of means and ends, and thus enables practice. The thing poses questions to us, questions about our needs and desires, questions above all of action: the thing is our provocation to action and is itself the result of our action. But more significantly, while the thing functions as fundamental provocation – as that which, in the virtuality of the past and the immediacy of the present cannot be ignored – it also functions as a *promise*, as that which, in the future, in retrospect, yields a destination or effect, another thing. The thing is the precondition of the living and the human, their means of survival, and the consequence or product of life and its practical needs. The thing is the point of intersection of space and time, the locus of the temporal narrowing and spatial localization that constitutes specificity or singularity.

Space and Time

The thing is born in time as well as space. It inscribes a specific duration and concrete boundaries within the broad outlines of temporal succession or flow and spatial mapping. It emerges out of and as substance. It is the coming-into-existence of a prior substance or thing, in a new time, producing beneath its processes of production a new space and a coherent entity. The thing and the space it inscribes and produces are inaugurated at the same moment, the moment that movement is arrested, frozen or dissected to reveal its momentary aspects,

the moment that the thing and the space that surrounds it are differentiated conceptually or perceptually. The moment that movement must be reflected upon or analysed, it yields objects and their states, distinct, localized, mappable, repeatable in principle, objects and states that become the object of measurement and containment. The depositing of movement, its divisibility, and its capacity to be seen statically are the mutual conditions of the thing and of space. The thing is positioned or located in space only because time is implicated, only because the thing is the dramatic slowing down of the movements, the atomic and molecular vibrations, that frame, contextualize and merge with and as the thing. [...]

The thing is what we make of the world rather than simply what we find in the world, the way we are able to manage and regulate it according to our needs and purposes (even if not, as James [suggested], at will or consciously. We cannot but perceive the world in terms of objects. We do not do so as a matter of will). The thing is an outlined imposition we make on specific regions of the world so that these regions become comprehensible and facilitate our purposes and projects, even while limiting and localizing them. Things are our way of dealing with a world in which we are enmeshed rather than over which we have dominion. The thing is the compromise between the world as it is in its teeming and interminable multiplicity – a flux as James calls it, a continuum in Lacan's terms, or waves of interpenetrating vibrations in Bergson's understanding – and the world as we need it to be or would like it to be: open, amenable to intention and purpose, flexible, pliable, manipulable, passive. It is a compromise between mind and matter, the point of their crossing one into the other. It is our way of dealing with the plethora of sensations, vibrations, movements and intensities that constitute both our world and ourselves, a practical exigency, indeed perhaps only one mode, not a necessary condition, of our acting in the world. [...]

We stabilize masses, particles large and small, out of vibrations, waves, intensities, so we can act upon and within them, rendering the mobile and the multiple provisionally unified and singular, framing the real through things as objects for us. We actively produce objects in the world, and in so doing, we make the world amenable to our actions but also render ourselves vulnerable to their reactions. This active making is part of our engagement in the world, the directive force of our perceptual and motor relations within the world. [...]

What is left out in this process of making/reflecting is all that it is in matter, all that is outside the thing and outside technology: the flux of the real,[3] duration, vibration, contractions and dilations, the multiplicity of the real, all that is not contained by the thing or by intellectual categories. The uncontained, the outside of matter, of things, of that which is not pragmatically available for use, is the object of different actions than that of intelligence and the technological. This outside, though, is not noumenal, outside of all possible experience, but

phenomenal, contained within it. It is simply that which is beyond the calculable, the framed or contained. [...]

This teeming flux of the real – 'that continuity of becoming which is reality itself',[4] the integration and unification of the most minute relations of matter so that they exist only by touching and interpenetrating, the flow and mutual investment of material relations into each other – must be symbolized, reduced to states, things and numeration in order to facilitate practical action. This is not an error that we commit, a fault to be unlearned, but a condition of our continuing survival in the world. We could not function within this teeming multiplicity without some ability to skeletalize it, to diagram or simplify it. Yet this reduction and division occur only at a cost, which is the failure or inability of our scientific, representational and linguistic systems to acknowledge the in-between of things, the plural interconnections that cannot be utilized or contained within and by things but that makes them possible. [...]

1 See, for example, Hanna Fenichel Pitkin's curiously titled *The Attack of the Blob: Hannah Arendt's Concept of the Social* (Chicago: University of Chicago Press, 1998).

2 [...] See William James, 'What Pragmatism Means', in *Pragmatism and Four Essays from The Meaning of Truth* (Cleveland: Meridian Books, 1970) 43.

3 [15] See Henri Bergson, *Creative Evolution*, trans. Arthur Mitchell (New York: Random House 1944) 250.

4 [16] Henri Bergson, *Matter and Memory*, trans. N.M. Paul and W.S. Palmer (New York: Zone Books, 1988) 139.

Elizabeth Grosz, extracts from 'The Thing', in Cynthia Davidson, ed., *Anything* (Cambridge, Massachusetts: The MIT Press, 2001) 240–43, 246.

Robert Smithson
A Sedimentation of the Mind: Earth Projects//1968

The earth's surface and the figments of the mind have a way of disintegrating into discrete regions of art. Various agents, both fictional and real, somehow trade places with each other – one cannot avoid muddy thinking when it comes to earth projects, or what I will call 'abstract geology'. One's mind and the earth are in a constant state of erosion, mental rivers wear away abstract banks, brain waves undermine cliffs of thought, ideas decompose into stones of unknowing,

and conceptual crystallizations break apart into deposits of gritty reason. Vast moving faculties occur in this geological miasma, and they move in the most physical way. This movement seems motionless, yet it crushes the landscape of logic under glacial reveries. This slow flowage makes one conscious of the turbidity of thinking. Slump, debris slides, avalanches all take place within the cracking limits of the brain. The entire body is pulled into the cerebral sediment, where particles and fragments make themselves known as solid consciousness. A bleached and fractured world surrounds the artist. To organize this mess of corrosion into patterns, grids and subdivisions is an aesthetic process that has scarcely been touched.

The manifestations of technology are at times less 'extensions' of man (Marshall McLuhan's anthropomorphism), than they are aggregates of elements. Even the most advanced tools and machines are made of the raw matter of the earth. Today's highly refined technological tools are not much different in this respect from those of the caveman. Most of the better artists prefer processes that have not been idealized, or differentiated into 'objective' meanings. Common shovels, awkward looking excavating devices, what Michael Heizer calls 'dumb tools', picks, pitchforks, the machine used by suburban contractors, grim tractors that have the clumsiness of armoured dinosaurs, and plows that simply push dirt around. Machines like Benjamin Holt's steam tractor (invented in 1885) – 'It crawls over mud like a caterpillar.' Digging engines and other crawlers that can travel over rough terrain and steep grades. Drills and explosives that can produce shafts and earthquakes. Geometrical trenches could be dug with the help of the 'ripper' – steel toothed rakes mounted on tractors. With such equipment construction takes on the look of destruction; perhaps that's why certain architects hate bulldozers and steam shovels. They seem to turn the terrain into unfinished cities of organized wreckage. A sense of chaotic planning engulfs site after site. Subdivisions are made – but to what purpose? Building takes on a singular wildness as loaders scoop and drag soil all over the place. Excavations form shapeless mounds of debris, miniature landslides of dust, mud, sand and gravel. Dump trucks spill soil into an infinity of heaps. The dipper of the giant mining power shovel is 25 feet high and digs 140 cubic yards (250 tons) in one bite. These processes of heavy construction have a devastating kind of primordial grandeur, and are in many ways more astonishing than the finished project – be it a road or a building. The actual *disruption* of the earth's crust is at times very compelling, and seems to confirm Heraclitus' *Fragment 124*, 'The most beautiful world is like a heap of rubble tossed down in confusion.' The tools of art have too long been confined to 'the studio'. The city gives the illusion that earth does not exist. Heizer calls his earth projects 'The alternative to the absolute city system'.

Recently, in Vancouver, Iain Baxter put on an exhibition of *Piles* that were

located at different points in the city; he also helped in the presentation of a *Portfolio of Piles*. Dumping and pouring become interesting techniques. [...] My own *Tar Pool and Gravel Pit* (1966) proposal makes one conscious of the primal ooze. A molten substance is poured into a square sink that is surrounded by another square sink of coarse gravel. The tar cools and flattens into a sticky level deposit. This carbonaceous sediment brings to mind a tertiary world of petroleum, asphalts, ozokerite and bituminous agglomerations. [...]

The bins or containers of my *Non-Sites* gather in the fragments that are experienced in the physical abyss of raw matter. The tools of technology become a part of the Earth's geology as they sink back into their original state. Machines like dinosaurs must return to dust or rust. One might say a 'de-architecturing' takes place before the artist sets his limits outside the studio or the room. [...]

As 'technology' and 'industry' began to become an ideology in the New York art world in the late 1950s and early 60s, the private studio notions of 'craft' collapsed. The products of industry and technology began to have an appeal to the artist who wanted to work like a 'steel welder' or a 'laboratory technician'. This valuation of the material products of heavy industry, first developed by David Smith and later by Anthony Caro, led to a fetish for steel and aluminium as a medium (painted or unpainted). Moulded steel and cast aluminium are machine manufactured, and as a result they bear the stamp of technological ideology. Steel is a hard, tough metal, suggesting the permanence of technological values. It is composed of iron alloyed with various small percentages of carbon; steel may be alloyed with other metals, nickel, chromium, etc., to produce specific properties such as hardness and resistance to rusting. Yet, the more I think about steel itself, devoid of the technological refinements, the more rust becomes the fundamental property of steel. Rust itself is a reddish brown or reddish yellow coating that often appears on 'steel sculpture', and is caused by oxidation (an interesting non-technological condition), as during exposure to air or moisture; it consists almost entirely of ferric oxide, Fe_2O_3 and ferric hydroxide, $Fe(OH)_3$. In the technological mind rust evokes a fear of disuse, inactivity, entropy and ruin. Why steel is valued over rust is a technological value, not an artistic one.

By excluding technological processes from the making of art, we began to discover other processes of a more fundamental order. The break-up or fragmentation of matter makes one aware of the sub-strata of the Earth before it is overly refined by industry into sheet metal, extruded I-beams, aluminium channels, tubes, wire, pipe, cold-rolled steel, iron bars, etc. I have often thought about non-resistant processes that would involve the actual sedimentation of matter or what I called 'Pulverizations' back in 1966. Oxidation, hydration, carbonatization and solution (the major processes of rock and mineral disintegration) are four methods that could be turned towards the making of art.

The smelting process that goes into the making of steel and other alloys separates 'impurities' from an original ore, and extracts metal in order to make a more 'ideal' product. Burnt-out ore or slag-like rust is as basic and primary as the material smelted from it. Technological ideology has no sense of time other than its immediate 'supply and demand', and its laboratories function as blinders to the rest of the world. Like the refined 'paints' of the studio, the refined 'metals' of the laboratory exist within an 'ideal system'. Such enclosed 'pure' systems make it impossible to perceive any other kinds of processes than the ones of differentiated technology.

Refinement of matter from one state to another does not mean that so-called 'impurities' of sediment are 'bad' – the earth is built on sedimentation and disruption. A refinement based on all the matter that has been discarded by the technological ideal seems to be taking place. [...] The fact remains that the mind and things of certain artists are not 'unities', but things in a state of arrested disruption. One might object to 'hollow' volumes in favour of 'solid materials', but no materials are solid, they all contain caverns and fissures. Solids are particles built up around flux, they are objective illusions supporting grit, a collection of surfaces ready to be cracked. All chaos is put into the dark inside of the art. By refusing 'technological miracles' the artist begins to know the corroded moments, the carboniferous states of thought, the shrinkage of mental mud, in the geologic chaos – in the strata of aesthetic consciousness. The refuse between mind and matter is a mine of information. [...]

The artist or critic with a dank brain is bound to end up appreciating anything that suggests saturation, a kind of watery effect, an overall seepage, discharges that submerge perceptions in an onrush of dripping observation. They are grateful for an art that evokes general liquid states, and disdain the desiccation of fluidity. They prize anything that looks drenched, be it canvas or steel. Depreciation of aridity means that one would prefer to see art in a dewy green setting, say the hills of Vermont, rather than the Painted Desert.

Aristotle believed that heat combined with dryness resulted in fire: where else could this feeling take place than in a *desert* or in Malevich's head? [...] The desert is less 'nature' than a concept, a place that swallows up boundaries. When the artist goes to the desert he enriches his absence and burns off the water (paint) on his brain. The slush of the city evaporates from the artist's mind as he installs his art. [...]

The strata of the Earth is a jumbled museum. Embedded in the sediment is a text that contains limits and boundaries which evade the rational order, and social structures which confine art. In order to read the rocks we must become conscious of geologic time, and of the layers of prehistoric material that is entombed in the Earth's crust. When one scans the ruined sites of prehistory one

sees a heap of wrecked maps that upsets our present art historical limits. A rubble of logic confronts the viewer as he looks into the levels of the sedimentations. The abstract grids containing the raw matter are observed as something incomplete, broken and shattered.

In June 1968, my wife Nancy, Virginia Dwan, Dan Graham and I visited the slate quarries in Bangor-Pen Angyl, Pennsylvania. Banks of suspended slate hung over a greenish-blue pond at the bottom of a deep quarry. All boundaries and distinctions lost their meaning in this ocean of slate and collapsed all notions of gestalt unity. The present fell forward and backward into a tumult of 'de-differentiation', to use Anton Ehrenzweig's word for entropy. It was as though one was at the bottom of a petrified sea and gazing on countless stratographic horizons that had fallen into endless directions of steepness. Syncline (downward) and anticline (upward) outcroppings and the asymmetrical cave-ins caused minor swoons and vertigos. The brittleness of the site seemed to swarm around one, causing a sense of displacement. [...]

The brain itself resembles an eroded rock from which ideas and ideals leak.

Robert Smithson, extracts from 'A Sedimentation of the Mind: Earth Projects', *Artforum*, vol. 7, no. 1 (September 1968) 45–7, 49–50.

Helen Mayer Harrison and Newton Harrison In Conversation with Craig Adcock//1992

Newton Harrison [In the late 1960s] ecology wasn't really fashionable. What was fashionable was using earth as a material, or using material that was alive. We make a distinction between growth material and ecology. When we made our first works, the differences between growth material and ecology had not yet been worked out. [...]

Craig Adcock You would argue then that there are important differences between your pieces and the earthworks of such artists as Michael Heizer and Robert Smithson?

Newton Harrison Yes. They used earth as material; we feel that our works were among the first to deal with ecology in the full sense of the term. The key test for ecological art is the concept of the niche. [...]

One of their [Newton and Helen Harrison's] first joint projects consisted of shallow ponds containing algae and brine shrimp. The piece was included in the 'Art and Technology' exhibition at the Los Angeles County Museum of Art in 1971. Survival Piece No. 2: Notations on the Ecosystems of the Western Salt Works (with the Inclusion of Brine Shrimp) *addressed questions of how living organisms react to specific environments. Designed with the help of Dr Richard Epley of the Scripps Institute of Oceanography, the sculptural system involved the interaction of Dunaliella algae and tiny brine shrimp. As the shrimp grew and developed, ate the algae and altered the salinity of the water, the shallow basins gradually changed colours. [...]*

Adcock The kinds of organisms that you were using as food for the brine shrimp – single-celled plants – are very fundamental to the entire global ecosystem.

Newton Harrison Yes, that's true, and this particular alga is among the toughest in the world. It can take heat and cold. It can survive in very salty water. The saltier the water, the redder it gets.

Helen Mayer Harrison It changes colour by producing carotene in response to the salinity of the water. [...]

Adcock When you did the piece, were you thinking of broader issues of salinization – the ways in which irrigation, for example, can cause salt to accumulate in some soils to such levels that continued irrigation becomes counterproductive?

Newton Harrison No, not at that time. We were just dealing with the fact that life is tough. We were dealing with the miracle of it all. Those ponds, if scaled up to an acre, would have produced twenty thousand pounds of salt per year. With just a small quantity of plant food you could produce huge amounts of other material. [...]

Throughout the 1970s and 1980s, and into the 1990s, the Harrisons have continued to produce works of art that engage real-world ecological situations. Because ecosystems are among the most complex interactive networks of any kind, their work necessarily hinges on difficult issues. The more biologists study the relationships that exist among organisms, the more apparent is that complexity, both to biologists and to the rest of us. The ecological art of the Harrisons comes face to face with perplexing questions: What effects will deforestation have upon tropical ecosystems? How devastating is an oil spill? What are the driving dynamics of global warming? Will the depletion of the ozone layer create holes in the atmosphere over the poles

and wreak havoc with marine food chains in the Antarctic and Arctic oceans? Does continuing development and exploitation of the environment threaten to interrupt the inorganic-organic cycles that characterize the biosphere?

Helen Mayer Harrison, Newton Harrison and Craig Adcock, extracts from 'Conversational Drift: Helen Mayer Harrison and Newton Harrison', *Art Journal*, vol. 51, no. 2 (Summer 1992) 35–7 [footnotes not included].

Primo Levi
The Periodic Table//1975

The first day it was my fate to be assigned the preparation of zinc sulphate: it should not have been too difficult; it was a matter of making an elementary stoichiometric calculation and attacking the zinc particles with previously diluted sulphuric acid: concentrate, crystallize, dry with the pump, wash and recrystallize. Zinc, Zinck, zinco: they make tubs out of it for laundry, it is not an element which says much to the imagination, it is grey and its salts are colourless, it is not toxic, nor does it produce striking chromatic reactions; in short, it is a boring metal. It has been known to humanity for two or three centuries, so it is not a veteran covered with glory like copper, nor even one of those newly minted elements which are still surrounded with the glamour of their discovery.

Caselli handed me my zinc; I returned to the bench and prepared to work: I felt curious, shy and vaguely annoyed, as when you reach thirteen and must go to the temple to recite in Hebrew the Bar Mitzvah prayer before the rabbi; the moment, desired and somewhat feared, had come. The hour of the appointment with Matter, the Spirit's great antagonist, had struck: *hylè*, which, strangely, can be found embalmed in the endings of alkyl radicals: methyl, butyl, etc.

There was no need to get from Caselli the other raw material, the partner of zinc, that is, sulphuric acid: it was there in abundance in every corner. Concentrated, of course: and you had to dilute it with water; but watch out! It is written in all the treatises, one must operate in reverse, that is, pour the acid in the water and not the other way around, otherwise that innocuous-looking oil is prone to wild rages: this is known even to the kids in *liceo*. Then you put the zinc in the diluted acid.

The course notes contained a detail which at first reading had escaped me, namely, that the so tender and delicate zinc, so yielding to acid which gulps it

down in a single mouthful, behaves, however, in a very different fashion when it is very pure: then it obstinately resists the attack. One could draw from this two conflicting philosophical conclusions: the praise of purity, which protects from evil like a coat of mail; the praise of impurity, which gives rise to changes, in other words, to life. I discarded the first, disgustingly moralistic, and I lingered to consider the second, which I found more congenial. In order for the wheel to turn, for life to be lived, impurities are needed, and the impurities of impurities in the soil, too, as is known, if it is to be fertile. Dissension, diversity, the grain of salt and mustard are needed: Fascism does not want them, forbids them, and that's why you're not a Fascist; it wants everybody to be the same, and you are not. But immaculate virtue does not exist either, or if it exists it is detestable. So take the solution of copper sulphate which is in the shelf of reagents, add a drop of it to your sulphuric acid, and you'll see the reaction begin: the zinc wakes up, it is covered with a white fur of hydrogen bubbles, and there we are, the enchantment has taken place, you can leave it to its fate and take a stroll around the lab and see what's new and what the others are doing.

Primo Levi, extract from *The Periodic Table* (1975); trans. Raymond Rosenthal (New York: Schocken Books, 1995) 35–7.

Mel Chin
Revival Field//1995

Revival Field was to be a sculpture in the most traditional sense. My primary concern was with the poetic potential of the work, besides the obvious ecological and political aspects. My desire to realize the aesthetic product of *Revival Field* – decontaminated earth – led me to a responsible search for the necessary scientific understanding and method.

I spent several months on a datura dragnet, trying to ascertain all the properties of jimson weed (*Datura stramonium*), beyond its well-known psychedelic and mystical properties. I was unable to verify claims that the plant could be used to remediate soil in the way I envisioned. I continued my research in many directions until I finally found Dr Rufus Chaney, a senior research scientist at the US Department of Agriculture. He specialized in soil and microbial systems, sludge composting and the transfer of heavy metals from plants to animals to humans. Chaney's proposal in 1983 to use plants as remediation

agents for polluted soil had been shelved by the conservative politics of the times. He was one the few people in the world who had knowledge of and belief in this untested process. My desire to create a sculptural work rekindled Dr Chaney's hope of bringing this biotechnology into fruition, and we initiated an earnest co-operation that eventually led to the first *Revival Field*.

Together we envisioned *Revival Field* as an experimental project using plants to cleanse industrial contamination from soil. These plants, which have evolved the capacity to selectively absorb and contain large amounts of metal or mineral, are called hyperaccumulators. [...]

Conceptually, the work is sculpture that involves a reduction process, a traditional method used when carving wood or stone; here, the material is unseen, and the tools consist of biochemistry and agriculture. The work, in its complete incarnation, after the fences are removed and the toxin-laden weeds harvested, will offer minimal visual and formal effects. For a time, an intended invisible aesthetic will be measured scientifically by the quality of a revitalized earth. Eventually the aesthetic will be revealed in the return of growth to the soil. [...]

Whether it is viewed as an alchemic, metallurgic, social, scientific or aesthetic experiment, its goal is to realize the full remediation of a contaminated area. The *Revival Field* project is driven by a desire to find solutions for problems, rather than express problems metaphorically. It will reach its final form, completing an evolutionary aesthetic, when the burden of heavy metal contamination is shed, when *Revival Field* is forgotten and the mechanics of nature can resume their course.

Mel Chin, Statement, in Baile Oakes, ed., *Sculpting with the Environment – A Natural Dialogue* (New York: Van Nostrand Reinhold, 1995) 174–7.

herman de vries
in memory of the scottish forest//1995

reay forest glendhu forest inchnadamph forest glencanisp forest benmore forest inverpolly forest drumrunie forest loch choire forest ben armine forest dundonnell forest strathnasheallag forest fisherfield forest kinlochewe forest letterewe forest flowerdale forest shielding forest rhidorroch forest freevater forest inverlael forest lael forest tollomuick forest amat forest glencalvie forest diebiedale forest braemore forest fannich forest strathvaich forest kinloch-

luichart forest inchbae forest kildermore forest wyvis forest lochrosque forest corriemoillie forest garbat forest strathgarve forest [...]

when i travelled through scotland, 1986, to collect materials for the scottish travelling exhibition 'the unpainted landscape', i encountered on the topographical maps the names of many forests. when i arrived at those places, there were no trees, the great caledonian forest that covered the biggest part of scotland was almost completely destroyed for timber, in the first place, to make charcoal for melting iron ore. this happened after the occupation of scotland by the english. on the wall are the names of about all the local forests whose names were traceable on a complete set of topographical maps of scotland [...].

herman de vries, extracts from 'in memory of the scottish forest' (1995), in herman de vries, *to be. texte – textarbeiten – textbilder*, ed. Andreas Meier (Ostfildern-Ruit: Hatje Cantz, 1995) 136–7. The full text-work records the names of over 300 forests.

Jimmie Durham
Between the Furniture and the Building (Between a Rock and a Hard Place)//1998

[...] I want to make a film, and I want to free some stones.

For the past couple of years in Europe I have been investigating this dictatorial power of architecture, and the investigations have led to further research into the concepts which support and weigh upon stone.

Some materials, innocent in themselves, have been overly scripted; given roles that are too dense. [...]

Stone suffers from architectural weight, the weight of metaphor and the weight of history. (I must make another interruption here, to tell you a story so absurd you won't believe it, but I swear to you it's true: in the middle of the Plains of North America, quite close to the geographic centre of that continent, there is a small forested mountain formation called the Paha Sapa. It is a truly sacred place for all of the Plains Indians. As our brave new Triumphalist Century began, someone made an astounding conjuncture of Art (don't worry, *most* art is bad art), architecture and Self-justification. It shows us new things about mountains. It is the heads of four Indian-killers, carved gigantically into the mountain itself. Almost as large as a mountain, staring down across the plains

and missile silos. It is appropriately named Mount Rush More. Look it up in the Atlas if you don't believe me!)

Last year in Sweden I came across nine pieces of granite that are a perfect illustration of the problems of stone. They were intended to be part of Hitler's oversized *Arch of Peace* (you see, he didn't say 'Triumph'; he was already using 'newspeak') in Berlin. Hitler himself made the original plans and drawings, and Albert Speer polished it up and located quarries and carvers in Sweden and Norway. Speer had commissioned the work on the granite stones that I saw. They are beautifully carved, and absolutely massive, quietly waiting for history. I want to free them; make them light.

There are some similar carved stones, for my film project, in Norway. The quarry master there will not give them up; he wants them to be a monument. To what? How? And some others, from other Swedish quarries, actually arrived in Berlin during the war. Those stones were liberated into new slavery by the Soviets, and are now part of the monstrous *Monument to the Soviet Dead Soldiers* at Treptower Park.

What's to keep some idiot neo-Nazis from reclaiming them at some future time?

The film will *not* be a documentary, although it will kind of 'document' itself. It will be a feature-length film (about ninety minutes) of high artistic merit, and therefore 'commercial' in some sense; even if not a 'summer blockbuster'. We'll get one of those barges that have no engine, and after taking the stones by truck through the forests to the harbour we'll load the stones onto the barge and tow them across the Baltic in the direction of Rügen Island and Berlin. Then we'll sink them, barge and all, in the Baltic Sea (forming a useful artificial deepwater reef to support a variety of marine life.) The stones will be free – and light, because they will have been transformed into light and cellulose (the film). But they'll be eternal, too, as carved granite cannot be, because they will be art, and art is eternal people say.

So here's the help I need: a film producer and/or hotshot art curator. A film director and crew. A lot of bucks to get the producer started, etc. A barge that will float and sink. [...]

The Museum of Contemporary Art in Pori, Finland, invited me to do something there in 1997. I got a truckload of rocks the size of fists or potatoes and put them all over the floor of the museum – even in the offices, toilets and the gift shop. I also put these rocks outside the building, on the sidewalk and into the street. They were not so densely placed that they made a covering; they were spaced from 50 cm to 100 cm apart. I was trying, with these 'free' stones, to see if I could free up the architecture itself, and its agenda for the museum. (Not to fight or

attack – the building is quite beautiful and well suited to be an art museum.)

The result was pleasing to me. The building *did* look as though it were getting ready for motion. And the interior, especially the reception desk area and the toilets, could no longer act so serious and separate. And what I liked best was that the effect was not theatrical. There was nothing for you to Believe or to pretend to believe.

On a wall inside there was a large map of the world, with a hand-drawn 'suggested route' for attempting to kick a stone, not *to* Chalma, the Centre of The World in Mexico, but *towards* Chalma; from Finland across northern Russia to Siberia.

A text explained that Indians in Mexico make pilgrimages to the sacred tree (an *Ahuehuete*) in Chalma. Those who give up and try to stop or turn back become stones, so people are encouraged to kick stones along the way toward the direction of Chalma. *Perhaps* one of those stones is a person, and *perhaps* that person will live again upon reaching the sacred tree.

Jimmie Durham, extracts from 'Between the Furniture and the Building (Between a Rock and a Hard Place)' (1998), in Durham, *Waiting to be Interrupted: Selected Writings 1993–2012* (Milan: Mousse Publishing/Antwerp: MUHKA, 2014) 144–5, 147, 149, 153–4.

Monika Wagner
Hans Haacke's Earth Samplings for the Bundestag//2007

Earth is a ubiquitous material, but it is not welcome everywhere, as is shown by the partly polemical, long-lasting debates about the project for Berlin's Reichstag Building by Hans Haacke, a German artist living in New York. After the reunification of Germany and Berlin's reinstatement as the capital, the Reichstag Building, remodelled by Norman Foster, became the seat of the German parliament, the Bundestag. Haacke called on all 669 Bundestag delegates to bring 100 kg of earth each from their electoral districts to Berlin and to pour it into a 6.80 x 20.80 metre bed in the interior courtyard of the Reichstag building. On 12 September 2000, the first earth was dumped here in the presence of Bundestag President Wolfgang Thierse and a number of parliamentarians. The seeds contained by chance in the various samples of earth have meanwhile brought forth an uncontrolled growth of pan-German vegetation. A material as base as earth – and that in connection with the inscription 'Der Bevölkerung' (to the

population) – in such a lofty site as the building of the German Bundestag seemed suspicious, and not only to some delegates. Aside from the debates about the inscription – which I will not address here – suspicion in Germany always dutifully falls on the possibility that the material still bears traces of the 'earth rituals'[1] staged by the Nazi state. Earth seemed ideologically contaminated, especially to members of Haacke's own generation. It was seemingly to be feared that participants would dirty more than their hands if they were willing to bring a hundredweight of earth from their election districts to Berlin. [...]

What traditions are such 'earth rituals' tied to? How valid is it to posit a direct parallel with National Socialist practices? And, finally, what symbolism can possibly be regained for the present? [...]

In Haacke's Berlin project, in the course of time, soils from the various German electoral districts have amalgamated under the open sky and produced wild-growing vegetation. Earth is the ideal material for such blurring of differences. In contrast to stone, it is in a constant process of change. While stone takes on the semantics of eternity and its hardness is proverbial, earth has an amorphous character. This makes it unpopular in the urban ambience. Now that it has been as good as banned from the cities, it is returning as a showpiece, encased in glass, which gives a plastic impression of Berlin's foundations in the sand of the Brandenburg March. [...]

As widespread as earth rituals may be, on closer inspection they usually involve anything but earth mixtures; rather, we find precisely separated deposits of earth. What the opponents of Haacke's Berlin project employ as a kind of weapon of annihilation is the spectre of the earth rituals of National Socialism. Some of this indeed comes almost literally from the *Handbook of Superstition*, which records the oddest customs in the use of soil.[2] Other arguments refer to the earth transfers that actually took place, in which soil was taken from First World War battlefields and placed in 'consecrated sites'. This followed practices of the Christian cult of martyrs. Interesting in this connection is that there were fundamental differences of opinion between the Volksbund Deutsche Kriegsgräberfürsorge (People's association for the care of German war graves) and the Reichsdienststelle der Wehrmacht (Reich office of the German army) on how graves were to be marked and labelled when bodies were reinterred. The leadership of the army called for the 'marking of each individual grave'.[3] In accordance with this interest, even where it was said that 'holy' or 'bloody' earth was being transferred, it was not done in the form of a huge barrow, as was created in 1820 for Poland's hero in the struggle for freedom, Kosciuszko, to which everyone politically like-minded could make his own contribution, but rather in urns or other vessels. This is consistently left unmentioned in the generalized comparisons to Haacke's earth piles. [...]

The reason the separation of the soils seems so important to me is because it indicates that on this level, as well, the symbolization was about 'purity' and 'maintaining purity'. Crossbreeds were undesirable, and not only racially. 'Topsoil from Memelland' and 'Sand from the Brandenburg March' are specifics that travel guides paid honour to in their individuality and 'purity'. But blends of earth, like soil in the big city, were automatically condemned as dirt. [...]

But the urge to separate earth from different places is not at all specific to the 'blood and soil' regime. After 1945, soils have been transported not only from battlefields, but also from death camps to memorial sites and monuments – always in separate repositories. As early as 1949, a monument was erected in Hamburg in which 105 urns containing earth from 26 concentration camps are preserved. The urns hang suspended in the air in a kind of bell tower, so that they do not even come into contact with the soil of Hamburg. In 1969, when the Neue Wache (New Guard House) in Berlin was remodelled as a monument for the victims of fascism and militarism, urns 'with blood-soaked earth from nine former fascist murder sites' and urns with 'earth from nine bloody battlefields of the war' were buried there.[4] At the Buchenwald Memorial, 'an urn crypt with bloodied soil from the other fascist concentration camps, whose names are recorded in the bronze cover plate' was set up in the interior of the bell tower.[5] The separate preservation and presentation of earth is still a current practice in connection with commemorating the Holocaust. In the Holocaust Museums in the United States, the soils, as authentic material from the sites of the annihilation, are not concealed, but presented visibly under glass – carefully separated. In Houston, Texas, samples of earth from Nazi concentration camps are separated and alphabetically arranged in a series of small, square fields, somewhat reminiscent of pattern books for floor coverings. In its cleanness and clarity, this palette of terror is no less breathtaking than the martial urns full of 'blood earth'. Separated preservation is also the rule in the many everyday rites surrounding 'homeland earth'. Only in the case of burial in foreign countries was the transported earth strewn over the coffin, in order symbolically to bury the deceased in home soil – as has been repeatedly documented in folklore research on the burial ceremonies of refugees after the Second World War.[6] [...]

The rejection of Haacke's earthen crossbreed thus seems less based in the ideological contamination of the material, soil, than in worries about its uncontrolled mixture. For this is the one point in which the programmatic mixture of earth in Berlin's Bundestag building differs from political earth rituals [...].

To my knowledge, there is only one political ceremony whose programme was to mix earth from all the regions of a territory in an indistinguishable jumble. Structurally, it is akin to the Reichstag project, even if it was practised in a different context of rule: the last act of the Hungarian coronation ceremony was for the

freshly crowned ruler to ride up onto the coronation hill; there he had to swing his sword in all four directions of the compass. The symbolic act expressed that he would defend the territory against enemies from all directions. 'For the erection of the coronation hill ... earth was brought from all the comitats [counties or districts] of the Kingdom of Hungary'.[7] Only after that did the gathering pay homage to the new ruler. The crowning of Austrian Emperor Franz Joseph as King of Hungary in 1867 also followed this ceremony, in incomparable splendour.[8] But the custom did not become widely known abroad until the release of Ernst Marischka's legendary film of 1956, *Sissi – Die Junge Kaiserin* (Sissi – The Young Empress). In the third *Sissi* film, the ride on the hill is the climax of the film as well as of the coronation ceremony. In the film, two parts of the ceremony are compounded, so that the king swears the less martial-seeming oath on the earthen hill. The movie shows extensively how delegations from all of Hungary's comitats, wearing local traditional costumes, carry earth in sacks and baskets, pouring them together in a common hill for the King of all Hungarians, despite all their ethnic and class conflicts. The director extensively staged this creation of a communal project out of the different parts: the viewer sees how the various soils combine in a single mound, which serves the king as a pedestal. It cannot be distinguished whether the earth brought from everywhere designates the territory to be defended or the inhabitants, whom the film stages so unmistakably. At any rate, the differences in origin previously emphasized are abandoned with the pouring of the earth. At this moment, the point is the whole, so to speak, and this is what the ruler claims. The community ritual has unmistakable relationships to Hans Haacke's project in Berlin. Here there is no king who would have to be placed in obligation to his country, but there are elected delegates. They represent various old and new federal states, but on the level of the Bundestag, all the differences are suspended. But Haacke goes one step further with his inscription, between the mixing of the soils and the subsequent burgeoning vegetation, which dedicates the monument not to the delegates, but to 'The Population'. It appears in the same typography as the dedication on the gable of the Reichstag, once prevented by the Prussian king and then added after 1918: 'To the German People'. Haacke's inscription in the pan-German greenery thus claims the soil for everyone, not solely for German citizens but also for those entitled to vote. Under the eyes of those delegated to this lofty site, the 'own' soil, the 'homeland earth', or whatever the identificational terms may be, is thereby transformed into a representation of everyone. Thus, the soil, as a low-grade material tending to formlessness and taking everything into itself, becomes an indicator even for the excluded.

1 Hans-Ernst Mittig, 'Nationale Erdrituale', *kritische berichte. Zeitschrift für Kunst- und Kulturwissenschaften*, vol. 25, no. 1 (1997) 4–22.

2 [footnote 9 in source] For example, a report in *Die Welt* of 22 March 2000, which, in the context of Haacke, refers to the book by Heinrich Fraenkel and Roger Manvell, *Goebbels, Eine Biographie* (1960). According to the book, after the birth of his son, Rudolf Hess ordered earth from 'all Gauen [districts or regions] of the Reich ... to place them under the infant's cradle'.

3 [10] Quoted in Meinhold Lurz '... ein Stück Heimat in Fremder Erde', *Arch+*, no. 71 (October 1983) 67

4 Laurenz Demps, *Die Neue Wache. Entstehung und Geschichte eines Bauwerks* (Berlin: Militärverlag der DDR, 1988) 173.

5 Gitta Günther, Wolfram Huschke and Walter Steiner, *Weimar. Lexikon zur Stadtgeschichte* (Weimar: Böhlau, 1993).

6 Albrecht Lehmann, *Im Fremden ungewollt zuhaus. Flüchtlinge und Vertriebene in Westdeutschland 1945–1990* (Munich: Beck, 1991).

7 Stefan Holcik, *Krönungsfeierlichkeiten in Preßburg/Bratislava 1663–1830* (Bratislava: Tatran, 1988) 64.

8 Adolph Kohut, *Kaiser Franz Joseph I als König von Ungarn* (Berlin: Schwetschke, 1916) 200ff.

Monika Wagner, extracts from 'Hans Haacke's Earth Samplings for the Bundestag: Materials as Signs of Political Unity', trans. M. Cohen, *Journal of Material Culture*, vol. 12, no. 2 (2007) 116–17, 119, 124–9.

Tim Ingold
Making Culture and Weaving the World//2000

Unlike the products of human labour, hives, nests and dams are not generally admitted as objects of material culture. Now if weaving is understood as a modality of making, then it, too, must be uniquely human. But if on the other hand – to invert the relation – making is conceived as a modality of weaving, then there is no a priori reason why weaving should be restricted to human beings. More generally, could the qualities of skill outlined above, and which are epitomized in the activity of weaving, be attributed just as readily to the practices of non-human animals?

Perhaps the closest parallel to human weaving in the animal kingdom is furnished by the nest building of male weaverbirds, which has been investigated in a remarkable series of studies [...]. The nest is made from long strips torn from the leaves of grasses, which are intertwined in a regular lattice formed by passing successive strips over and under, and in a direction orthogonal to, strips already laid. It is held together, and attached to the substrate, by a variety of stitches and

fastenings [...]. The bird uses its beak rather like a needle in sewing or darning; in this the trickiest part lies in threading the strip it is holding under another, transverse one so that it can then be bypassed over the next. The strip has to be pushed under, and through, just far enough to entangle the bird to let go with its beak in order to shift its hold and pull it up on the other side. If the free end is left too short, the strip may spring back; pushed too far, it could fall to the ground. Mastering this operation calls for a good deal of practice. From an early age, weaverbirds spend much of their time manipulating all kinds of objects with their beaks, and seem to have a particular interest in poking and pulling pieces of grass leaves and similar materials through holes. In females this interest declines after about the tenth week from hatching, whereas in males it continues to increase. Experiments showed that birds deprived of opportunities to practice and suitable materials are subsequently unable to build adequate nests, or even to build at all. Indeed, fiddling about with potential nest material appears to be just as essential for the bird, in preparing itself for future building, as is the babbling of the human infant in preparing itself for speech [...].

The conventional notion that the birds' activity is due to instinct whereas humans follow the dictates of culture is clearly inadequate. The form of the nest no more follows the specifications of an innate, genetically transmitted design than does that of the coiled basket, in our earlier example, follow the specifications of an acquired, culturally transmitted one. In all likelihood the human basketmaker has an idea in mind of the final form of the construction whereas the weaverbird almost certainly does not. Yet in both cases, it is the pattern of regular movement, not the idea, that generates the form. And the fluency and dexterity of this movement is a function of skills that are developmentally incorporated into the *modus operandi* of the body – whether avian or human – through practice and experience in an environment. Such skills are fundamentally resistant to codification in the form of representations or programmes, which have then only to be executed in the material. That is why the most sophisticated computer program ever devised [...] could still fail to comprehend the nature of even such a mundane object as a waste-paper basket. [...]

Now the idea that in the manufacture of objects like houses, baskets and canoes, people 'weave the world', is entirely in keeping with the argument I have developed in this chapter – namely that making should be regarded as a way of weaving, and not vice versa. [...] I mean to suggest [...] that the forms of objects are not imposed from above but grow from the mutual involvement of people and materials in an environment. The surface of nature is thus an illusion: we work from within the world, not upon it. There are surfaces of course, but these divide states of matter, not matter from mind. And they emerge within the form-generating process, rather than pre-existing as a condition for it.

Tim Ingold, extracts from 'Making Culture and Weaving the World', in Paul Graves-Brown, ed., *Matter, Materiality and Modern Culture* (London and New York: Routledge, 2000) 65–8.

Amy Balkin
Atmospheric Monument: In Conversation with Ana Teixeira Pinto//2012

Amy Balkin My works emerge from the debris left by the history of industrial capitalism. The imperative of permanent economic growth was bound up with the development of mass production via the eviction and reorganization of spaces for extraction through infrastructure, planning and architecture. Simultaneously, it produced new forms of labour, alienation and resistance, via political and labour organizing. My work, including *Public Smog*, involves political and physical spaces produced by capitalism that we may occupy in the future, and those we still inhabit from its lingering past. [...]

Ana Teixeira Pinto The project *Public Smog*, which has the support of documenta (13), seems to be framed as a legal challenge to the concept of private property and common usage. Do I get this right?

Balkin Yes, it's a defence of the atmosphere as commons, set against emissions trading as a new zone of privatization of a global public good. In this model of privatization, atmospheric gases are restated as emission derivatives, a new form of fictitious capital. [...]

Climate change is also an opportunity to reinvigorate some of the power relations of colonialism, such as by unequal treaties between more and less powerful nations. *Public Smog* is concerned with 'economic restructuring', including the reframing of the biogeochemical commons as 'ecosystem services' and the creation of new forms of indebtedness, such as the 'structural adjustment' of the sky. [...]

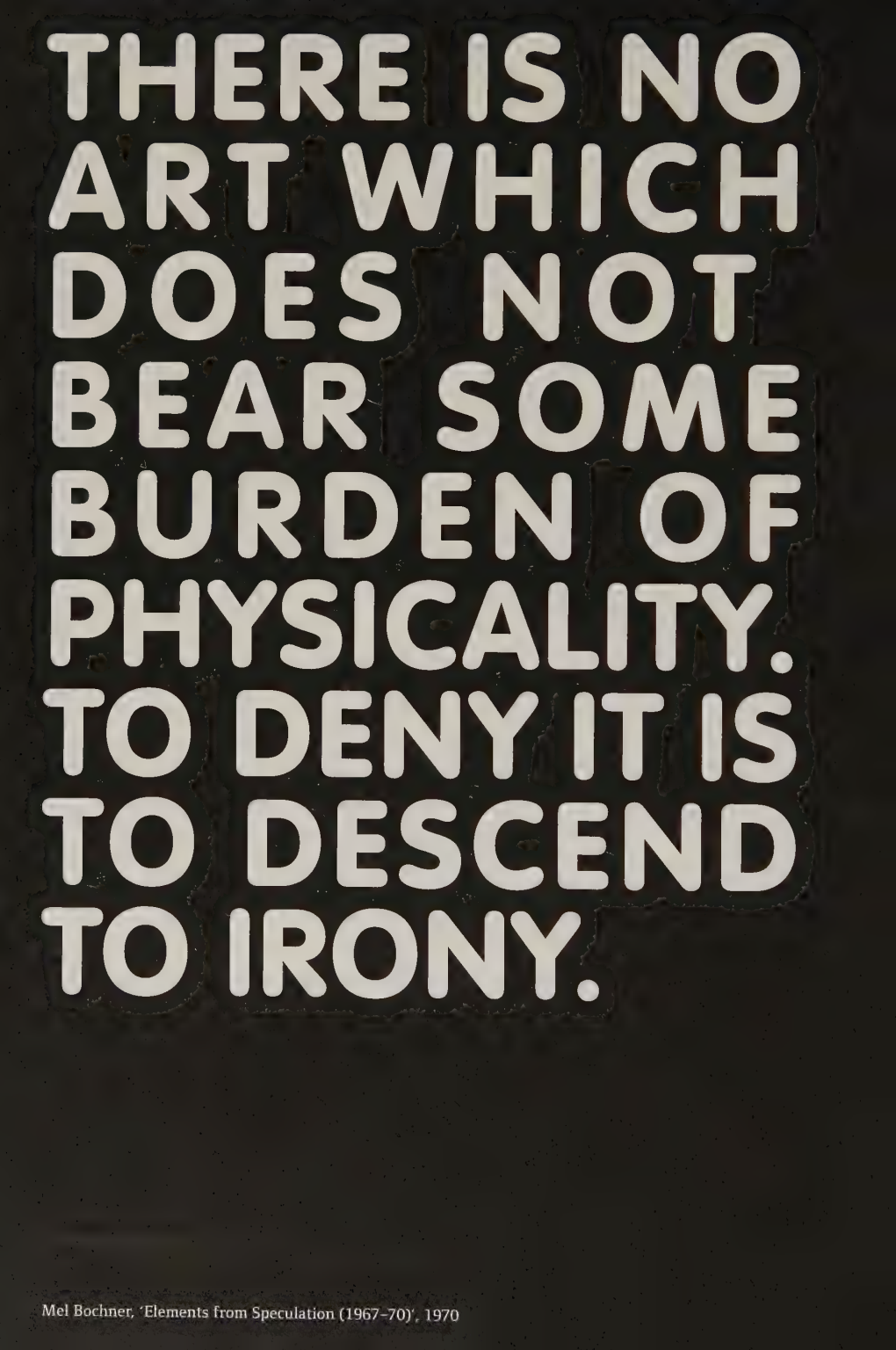
Public Smog was first opened through the activity of purchasing and withholding carbon credits from use in regulated emissions markets in the US and EU, opening parks over Southern California and the European Union. The first phase of *Public Smog* was concerned with the claims of market-based mechanisms (like cap-and-trade) to reduce carbon emissions and to slow climate change. These programmes have been dangerous, as they have forestalled or

replaced other solutions, whether direct reductions of climate-altering pollutants through command-and-control policies, or broader systems change.

Since 2010, in an effort to expand a clean-air park to include the entire atmosphere, I've worked with the institutional support of documenta (13) to find a UNESCO State Party to lead an effort to include the earth's atmosphere on the UNESCO World Heritage List. I chose the World Heritage process because it's concerned with the intersection of tangible and intangible culture via 'mixed natural and cultural sites', futurity and the language of universal value. So my attempt is to insert the Earth's Atmosphere on the World Heritage List as a protected area (or biosphere reserve, or atmospheric monument), acknowledging its universal value and its primacy to human continuity, as well as its impact on every other 'Property' already included on the World Heritage List. As the atmosphere is a 'Property' not contained within a 'State's Party', and because it affects all 'States' Parties', all signatories to the World Heritage Convention would have to support a nomination for it to succeed. What will be shown at documenta (13) will be the responses to this request. [...]

During the exhibition, there will be a postcard petition for visitors to mail to their own governments, including Germany, urging the country to initiate an emergency nomination process. To this end, I've written an argument for the listing of the Earth's Atmosphere using the World Heritage Tentative list submission format.

Amy Balkin and Ana Teixeira Pinto, extracts from 'Atmospheric Monument: Amy Balkin', *Mousse*, no. 34 (Summer 2012) 153, 156.



Mel Bochner, 'Elements from Speculation (1967–70)', 1970

Nicolas Bourriaud
Blue Company, or Yves Klein Considered as World Economy//2000

Yves Klein, corporate CEO, works in the world's greatest factory: the world itself. The objects he commercializes take on a new status: far from constituting the primary object of his quest, they are but the ashes of his true production. The stores that carry them disorient the consumer: they are empty. The commerce at which Klein excels unsettles his partners: he exchanges the void for gold, which he jettisons before their eyes, throwing it into the course of a river. The engineering with which he gains his reputation deals only with breath and breezes, invisible energies. And as the director of this vast company, Klein reigns over prestigious ranks of employees, contracting with a composite proletariat that includes rain, fire, air, earth and the human body.

But even as it reaches its peak, the company suddenly cashes in the chips on 6 June 1962. Some claim its success was due to its short life, that its disappearance was almost programmed. Others, that painful working conditions were the cause for the cessation of its activity: the 80 square-metre apartment on rue Campagne Première was in reality a clandestine sweatshop. 'When we worked with poisonous materials such as acetone, we didn't dare open any windows and laid down thick cloths in front of the door to the flat so that the odour didn't permeate into the rest of the house', explains Rotraut Klein.[1] The blue company ended that way, with the sudden death of the boss. It would have no real inheritor. [...]

Contrary to the working world which lays value on the acquisition and accumulation of wealth, on patient earning and projection into savings, Klein's practice is indexed on the present instant. His activity as a monochrome painter thus comes into play at the precise moment when the material stabilizes on the surface of the canvas. At this moment the canvas is 'charged', or fails to charge, with immaterial energy. If this 'impregnation' does not take place it's worth nothing. Once done, the canvas has no other value than that of prolonging this brief instant of creation, which has taken place before the gaze which will light upon it. A work is just ashes. The spark is all that counts. Klein's paintings are delayed rebroadcasts of an event that has already taken place. Thus he reverses the logic on which the alienation of salaried labour is founded: the leisure time, the 'time wasted' in recharging oneself, represents in reality the veritable moment of production, whereas concrete fabrication, the labour time of classical economy, is nothing other than a short burst of flame – an orgasmic moment of which he shows nothing to the public, except the sheets, while its objet has slipped away. [...]

Klein wasn't political, but vitalist: 'He was convinced that between body and spirit there was a third dimension, which was sensibility. And this sensibility was a way of appropriating energy. A very simple postulate: all communication is based on energy; the master of this energy is the master of language'.[2] [...]

Let's recall that for Beuys, Duchamp's attitude in relation to his 1913 *Fountain* was inadmissible: by what right could he sign a urinal which was produced by a long chain of cooperation, from the miner working in the kaolin mine to the designer who traced its form? One can guess the critique he could have made, on his principles, of Klein Co.

Indeed, Klein often evokes the 'free energies' that he claims are in circulation in space – as though it were a matter of a cosmic labour force showing up at his factory doors. One of the characteristics of the blue company is to make the elements work like employees: the wind submits to the hourly rate of the Paris-Nice journey, fire and air are domesticated in the pneumatic architecture. With the publication of *Dimanche*, 'the newspaper of a single day', in 1960, the artist claims the entire world as his work, encouraging everyone to continue going about their daily tasks. Klein behaves like a boss, the director of a small existential business, whose vocation is to employ the course of the entire planet, to restructure it in branch offices. He directs the flames just as he directs the women he covers with blue paint for the anthropometric ceremonies. Throughout it all he wears white gloves, a tuxedo, a bow tie: foreman of the visible, he orchestrates the impersonal labour. He does not touch the material. [...]

Immaterial sensibility is a gas. An invisible substance that inflates the works, augmenting them with an elastic aura, haloing them with value. The blue company is a pneumatic firm: indeed, Klein uses the term to separate his 'blue period' from his 'pneumatic period', the period of the exhibition of the void and the architecture of the air. Art is the fixative medium of a gas. Of an ambiance which has become sensible and shareable.

Klein Co. thus finds its logical partners among gas suppliers. For his exhibition at Haus Lange museum he collaborated with the Krefeld gas company, which laid an underground pipeline all the way to the museum to feed two spouts of fire situated on either side of the entry to the exhibition, as well as a hedge garnished with tow rows of burners. Then the blue company contracted with Gaz de France, to work at the experimental laboratory of La Plaine Saint-Denise, giving rise to a series of thirty fire paintings carried out with the very latest in immense torches. Will art be distributed to every home tomorrow, just like gas? Some aspects of the architecture of the air prefigure what the Internet is in the process of becoming: an omnipresence of connection.

The constitution material that matches the void is blue light. In the stratosphere it is energy that must be deployed, in the atmosphere we will

construct with heavy air or any other gas heavier and denser than air, additionally playing with optical flame, magnetism, light and sound.

Pneuma, or breath, runs through all the art of the twentieth century, as though it constituted one of its secret obsessions. The mastery of energy, and the hope of producing it from nothing: Galvani and his frogs resuscitated with electric current, Frankenstein's monster and Jules Verne's nomadic balloons constitute the unavowable aspect of this imaginary, transferred from the nineteenth century, which would nourish the childhood of the next century's artists. Thus a pneumatic energy runs through Marcel Duchamp's *Large Glass*, fed by waterfalls, pistons of air currents, inhabited by the cemetery of uniforms and liveries, the *Moules Mâlic*, inflatable figures recharged by an invisible 'lighting gas', and still more, the dynamo desire or the energy of weight... [...]

Duchampian physics possesses its basic principle: displacement. Klein's physics is based on the activation of principles considered in their purity. In this sense, as his project for the architecture of the air illustrates clearly enough, he is one of the precursors of modern ecology and of the recent developments in the search for non-fossil fuels. 'Air, gases, fire, smells, magnetic forces, electricity and electronics are materials', he wrote. When Peter Fend exhibits his work concerning the treatment of marine algae, when the Dutch artists' group Superflex outfits African villages with energy generators functioning off the recycling of garbage, they're settling a debt to Yves Klein's pneumatic enterprise. [...]

'The painter leaps into the void': such was the inaugural voyage, the first voyage into the void carried out by a private citizen, which took place in 1960.

On the photograph by Harry Shunk one clearly perceives the double exemplarity of Klein's gesture. Number 1: you can leap painlessly into the void, as long as you know how to capture the pneumatic energy and become a breath yourself. Number 2: this minimal voyage can be carried out anywhere, the image proves it. Look at what you can fall on, after plunging into the void: a street in a residential suburb, without any particular character; the peaceful, moss-covered France of François Mauriac or Emmanuel Bove, with its postmen and low fences. Nowhere at all, really. But for the individual who undertakes this little experiment, the impression is undoubtedly one of traversing the cosmos.

1 [The artist Rotraut Klein-Moquay, formerly wife of and collaborator with Yves Klein.]

2 [footnote 10 in source] Pierre Restany, interview with C. Millet, *Art Press*, no. 67 (February 1983).

Nicolas Bourriaud, extracts from 'Blue Company, or Yves Klein Considered as World Economy', in *Yves Klein: Long Live the Immaterial!* (Nice: Musée d'Art Moderne et Contemporain, 2000) 35, 37–8, 41, 43–4.

Roland Barthes
Plastic//1957

Despite having names of Greek shepherds (Polystyrene, Polyvinyl, Polyethylene), plastic, the products of which have just been gathered in an exhibition, is in essence the stuff of alchemy. At the entrance of the stand, the public waits in a long queue in order to witness the accomplishment of the magical operation par excellence: the transmutation of matter. An ideally-shaped machine, tubulated and oblong (a shape well suited to suggest the secret of an itinerary) effortlessly draws, out of a heap of greenish crystals, shiny and fluted dressing-room tidies. At one end, raw, telluric matter, at the other, the finished, human object; and between these two extremes, nothing; nothing but a transit, hardly watched over by an attendant in a cloth cap, half-god, half-robot.

So, more than a substance, plastic is the very idea of its infinite transformation; as its everyday name indicates, it is ubiquity made visible. And it is this, in fact, which makes it a miraculous substance: a miracle is always a sudden transformation of nature. Plastic remains impregnated throughout with this wonder: it is less a thing than the trace of a movement.

And as the movement here is almost infinite, transforming the original crystals into a multitude of more and more startling objects, plastic is, all told, a spectacle to be deciphered: the very spectacle of its end-products. At the sight of each terminal form (suitcase, brush, car-body, toy, fabric, tube, basin or paper), the mind does not cease from considering the original matter as an enigma. This is because the quick-change artistry of plastic is absolute: it can become buckets as well as jewels. Hence a perpetual amazement, the reverie of man at the sight of the proliferating forms of matter, and the connections he detects between the singular of the origin and the plural of the effects. And this amazement is a pleasurable one, since the scope of the transformations gives man the measure of his power, and since the very itinerary of plastic gives him the euphoria of a prestigious free-wheeling through Nature.

But the price to be paid for this success is that plastic, sublimated as movement, hardly exists as substance. Its reality is a negative one: neither hard nor deep, it must be content with a 'substantial' attribute which is neutral in spite of its utilitarian advantages: resistance, a state which merely means an absence of yielding. In the hierarchy of the major poetic substances, it figures as a disgraced material, lost between the effusiveness of rubber and the flat hardness of metal; it embodies none of the genuine produce of the mineral world: foam, fibres, strata. It is a 'shaped' substance: whatever its final state, plastic keeps a flocculent

appearance, something opaque, creamy and curdled, something powerless ever to achieve the triumphant smoothness of Nature. But what best reveals it for what it is is the sound it gives, at once hollow and flat; its noise is its undoing, as are its colours, for it seems capable of retaining only the most chemical-looking ones. Of yellow, red and green, it keeps only the aggressive quality, and uses them as mere names, being able to display only concepts of colours.

The fashion for plastic highlights an evolution in the myth of 'imitation' materials. It is well known that their use is historically bourgeois in origin (the first vestimentary pastiches date back to the rise of capitalism). But until now imitation materials have always indicated pretension, they belonged to the world of appearances, not to that of actual use; they aimed at reproducing cheaply the rarest substances, diamonds, silk, feathers, furs, silver, all the luxurious brilliance of the world. Plastic has climbed down, it is a household material. It is the first magical substance which consents to be prosaic. But it is precisely because this prosaic character is a triumphant reason for its existence: for the first time, artifice aims at something common, not rare. And as an immediate consequence, the age-old function of nature is modified: it is no longer the Idea, the pure Substance to be regained or imitated: an artificial Matter, more bountiful than all the natural deposits, is about to replace her, and to determine the very invention of forms. A luxurious object is still of this earth, it still recalls, albeit in a precious mode, its mineral or animal origin, the natural theme of which it is but one actualization. Plastic is wholly swallowed up in the fact of being used: ultimately, objects will be invented for the sole pleasure of using them. The hierarchy of substances is abolished: a single one replaces them all: the whole world can be plasticized, and even life itself since, we are told, they are beginning to make plastic aortas.

Roland Barthes, 'Plastic', *Mythologies* (Paris, 1957); trans. Annette Lavers (New York: Hill & Wang, 1972; London: Vintage Books 2009) 117–19.

Dan Graham
Foams//1966

White bread is a solid foam. Most white bread is sanitary. It is also allotropic, according to Dr Chadton Fredericks. In almost all store-bought white bread the wheatgerm has been ruthlessly sacrificed on the altar of modern milling process (denaturation) ... Much if not most of what poses as white bread is pure pap; a tribute to engineering ingenuity, advertising cleverness and packaging artistry. It is also an insult to human intelligence. Foams are agglomerations of gas bubbles separated from each other by thin liquid films. They constitute the first eight classes of colloidal systems. The first eight classes of colloidal systems are: 1 gasses dispersed in gas / 2 gasses dispersed in solid (solid gel) / 3 liquids dispersed in gas (fog, spray mist) / 4 liquids dispersed in liquid (emulsion) / 5 liquids dispersed in solid (some gels) / 6 solids dispersed in gas (fume) / 7 solids dispersed in liquid / 8 solids dispersed in solid (many sols and gels) / Fire-fighting foam blankets / fire preventing free access of vapour to air / artificial flowers / artificial islands / artificial snow / astronaut chairs / ball floats for toilets / beer / book covers / breakable stage furniture / breakwaters / buoys / burial vaults / cabanas / caskets / [...] CRAZYFOAM / detergents / display racks, booths / encapsulating gasoline and corrosive chemicals / floating aquarium decorations / floating lounge chairs / floating ramps / floating soap dishes / floating tables / foam rubber / fossil shipping packing / frozen food containers / Gillete FOAMY shaving cream / GLASSFOAM / Lampshades / mannequins / mothballs / partitions, temporary, non-supporting / perforated acoustic tile / pool kickboards / portable weather shields / rafts / scum slipped through sewage disposal systems into streams / seaplane pontoons / septic tank liners / soap bubbles / stage settings, columns, statuary / stancheons / storage vaults / STYROFOAM / surf boards / temporary shelters / toilet soaps / traffic barriers / void filling of deteriorating roofs, walls, gutters, columns / wall plaques / wheel chokes / whipped cream in cans.

Dan Graham, 'Foams', (1966), *Extensions*, no. 2 (1969) 34–5; reprinted in *Dan Graham: Works 1965–2000* (Porto: Museu de Arte Contemporânea de Serralves, 2001) 108.

Lucy R. Lippard and John Chandler
The Dematerialization of Art//1968

During the 1960s, the anti-intellectual, emotional/intuitive processes of art-making characteristic of the last two decades have begun to give way to an ultra-conceptual art that emphasizes the thinking process almost exclusively. As more and more work is designed in the studio but executed elsewhere by professional craftsmen, as the object becomes merely the end product, a number of artists are losing interest in the physical evolution of the work of art. The studio is again becoming a study. Such a trend appears to be provoking a profound dematerialization of art, especially of art as object, and if it continues to prevail, it may result in the object's becoming wholly obsolete.

The visual arts at the moment seem to hover at a crossroad that may well turn out to be two roads to one place, though they appear to have come from two sources: art as idea and art as action. In the first case, matter is denied, as sensation has been converted into concept; in the second case, matter has been transformed into energy and time-motion. If the completely conceptual work of art in which the object is simply an epilogue to the fully evolved concept seems to exclude the *objet d'art*, so does the primitivizing strain of sensuous identification and envelopment in a work so expanded that it is inseparable from its non-art surroundings. [...] As the time element becomes a focal point for so many experiments in the visual arts, aspects of dance, film and music become likely adjuncts to painting and sculpture, which in turn are likely to be absorbed in unexpected ways by the performing arts. [...]

A highly conceptual art, like an extremely rejective art or an apparently random art, upsets detractors because there is 'not enough to look at', or rather not enough of what they are accustomed to looking *for*. Monotonal or extremely simple-looking painting and totally 'dumb' objects exist in time as well as in space because of two aspects of the viewing experience. First, they demand more participation by the viewer, despite their apparent hostility (which is not hostility so much as aloofness and self-containment). More time must be spent in immediate experience of a detail-less work, for the viewer is used to focusing on details and absorbing an impression of the piece with the help of these details.[1] Secondly, the time spent looking at an 'empty' work, or one with a minimum of action, seems infinitely longer than action-and-detail-filled time. [...]

The danger, or fallacy, of an *ultra*-conceptual art is that it will be 'appreciated' for the wrong reasons, that it will, like Duchamp's *Bottle Rack* or *Large Glass*, come to be mainly an ingratiating object of aesthetic pleasure instead of the

stringently metaphysical vehicle for an idea intended. The idea has to be awfully good to compete with the object, and few of the contemporary ideas listed above are finally that good. Nevertheless, the 'thinness', both literal and allusive, of such themes as water, steam, dust, flatness, legibility, temporality, continues the process of ridding art of its object quality. [...] Visual art is still visual even when it is invisible or visionary. The shift of emphasis from art as product to art as idea has freed the artist from present limitations – both economic and technical. It may be that works of art that cannot be realized now because of lack of means will at some future date be made concrete. The artist as thinker, subjected to none of the limitations of the artist as maker, can project a visionary and utopian art that is no less art than concrete works. Architecture provides many precedents for this kind of unmaterialized art; Frank Lloyd Wright's mile-high skyscraper is no less art for not having a concrete expression. Moreover, since dealers cannot sell art-as-idea, economic materialism is denied along with physical materialism. [...]

The concept of drawing as pseudo-painting was banished and drawing was brought back to its original function as a sketch or medium for working out ideas – visual or Intuitive. [...] Of course the use of the object of art as a vehicle for ideas is nothing new. In the course of art history it was only in the late nineteenth century that an alternative was offered by the proposal that art is strictly 'retinal' or sensuous in effect – a proposition that has come down to us as the formal or modernist mainstream.[2] Throughout history, art has been not merely descriptive but has been a vehicle for ideas – religious, political, mystical; the object has been taken on faith. What something looks like and what it is about may be complementary but not necessarily (rarely) identical.

Sol LeWitt sees ultra-conceptual art as a 'blind man's art' or 'nonvisual art' whose logic is conceptual and whose visual appearance is incidental, regulated entirely by the concept rather than by the appearance. [...] The illegible but fundamentally orderly tangle of lines connecting point to point is *felt* by the mathematical layman more than it is understood rationally or visually. Often there is not even a perceptible pattern. [...] many ultra-conceptual artists seem to saturate their outwardly sane and didactic premises with a poetic and condensatory intensity that almost amounts to insanity. [...]

Idea art has been seen as art about criticism rather than art-as-art or even art about art. On the contrary, the dematerialization of the object might eventually lead to the disintegration of criticism as it is known today. The pedantic or didactic or dogmatic basis insisted on by many of these artists is incorporated in the art. It bypasses criticism as such. Judgement of ideas is less interesting than following the ideas through. In the process, one might discover that something is either a good idea, that is, fertile and open enough to suggest infinite possibilities; or a mediocre idea, that is, exhaustible; or a bad idea, that is, already exhausted

or with so little substance that it can be taken no further. (The same can be applied to style in the formal sense, and style except as an individual trademark tends to disappear in the path of novelty.) If the object becomes obsolete, objective distance becomes obsolete. Sometime in the near future it may be necessary for the writer to be an artist as well as for the artist to be a writer. There will still be scholars and historians of art, but the contemporary critic may have to choose between a creative originality and explanatory historicism. [...]

We still do not know how much less 'nothing' can be. Has an ultimate zero point been arrived at with black paintings, white paintings, light beams, transparent film, silent concerts, invisible sculpture, or any of the other projects mentioned above? It hardly seems likely.

1 [footnote 2 in source] No, not more time, though often equal time. As one painter has put it: 'Is less ever any more than more, or is it only just as good?'

2 [8] J.J. Sweeney, 'Eleven Europeans in America', *Museum of Modern Art Bulletin*, vol. 13, no. 4–5 (1926), interview with Duchamp.

Lucy R. Lippard and John Chandler, extracts from 'The Dematerialization of Art', *Art International* (February 1968) 31, 34–6.

Robert Barry
Ideas Come out of Objects: In Conversation with Mathieu Copeland//2009

Mathieu Copeland In the *Inert Gas* series in 1969 you released inert and noble gases into the atmosphere in various different places. In a previous discussion you mentioned that far from being about nothing, these works are about the release of a million molecules.

Robert Barry The sculpture is all the molecules together, invisibly and endlessly expanding in the atmosphere. But the thing about inert gases is that they don't change chemically, they always stay the same. You can think about them as a unified whole. [...] You start with something that's completely measured, a cubic foot of inert gas that's released into the expansive infinity. But it's also a cycle, since these gases originally come from the atmosphere. It's something we breathe in, it's always with us. And yet it's a totally conceptual piece because you

can't visualize it, you can only imagine this endless expansion and the fact that it's recycled.

Copeland It's only remembered by the photos of the gas being released from the bottles.

Barry We had to drive to the Mojave Desert to do the first one. Seth Siegelaub was photographing a piece for Douglas Huebler. I decided that we would do a couple of the *Inert Gas* pieces while we were out there, driving around the desert. Both Seth and I documented the pieces, and when I did it I really wasn't sure how the photos would be used, or if they would be used at all. For me the initial concept was the statement on the poster, and that was it! How it would be sold and all that was something we just didn't think about at the time. In fact the documentation comes from Seth's salesmanship as an art dealer and the fact that he was heavily into documentation. [...] He also had a patron out there who was willing to pay for the whole thing – in fact we used his company credit card to buy the inert gas! We looked up a scientific warehouse that usually sold to science labs and science departments. It came in various forms such as glass or metal bottles.

Copeland The beauty of this piece is that it's constantly expanding.

Barry Infinity is something that's always been in my mind. The *Carrier Wave* (1968) and *Inert Gas* series (1969) are pieces that both constantly expand into the universe; things that are outside of our ability to handle or that we can't deal with physically. [...]

Copeland I was thinking about Lucy Lippard's phrase, 'the dematerialization of the art object', but in your case it's not so much a matter of *de*-materialization but rather of *re*-materialization.

Barry I've always worked on some kind of material. It may not have been perceptible in those days, but the idea of material reminds me of the phrase 'ideas come out of objects'. Our connection to the real world is always important to me. [...]

Copeland I'd like to come back to the process of reduction. Although the paintings are not actually more material than the gas, it's just a different kind of materiality. There's a reduction in terms of what one gets to see, of what one gets to consider as material. [...] The notion of belief seems rather important in your work. One has to believe that there is a radio transmitter, or that there is radiation.

Barry It's a question of trust. [...]

Copeland The radio transmitter emits a radio wave. What can we hear when we turn to the right frequency?

Barry For the first radio transmitter you could hear a whistle. It was a little module that sent out a silent signal, what's called a carrier wave. This one also had a little standard signal, at 1,600 megahertz. And I liked that because if you came to the gallery with a portable radio you could hear the signal. [...] the sound was part of that work. But the next group of works was just the carrier wave without the signal. [...] There are different kinds of waves. AM waves bounce off the atmosphere and travel all around the world, FM shoots into outer space, as do television waves. It all has to do with infinitely moving out, keeping the idea alive. [...].

Copeland And moving on to another kind of wave, can you tell me about the *Radiation Piece* installations from 1969?

Barry You could buy the radioactive material very easily then, it just came in the mail. I actually carried some of those pieces on airplanes too.

Copeland Could you tell me about the *0.5 Microcurie Radiation* installation carried out in Central Park on January 5, 1969?

Barry I buried four Barium-133 Capsules in two different locations in Central Park and took a photograph of the locations. As far as I know they're still there. And I also realized another of those pieces, *Uranyl Nitrate* ($UO_2(NO_3)_2$), up on the roof of the Kunsthalle in Bern, for the exhibition 'When Attitudes Become Form' the same year. [...] Time is the essence of this piece. Zero time is when the element is created, and it has a half-life. For instance it can have a half-life of a second, which means that every second it loses half its strength, or its half-life could be a million years. So we're dealing with ideas of time that are really outside of our ability to grasp. We can talk about it, but we can hardly conceive this kind of time.

Robert Barry and Mathieu Copeland, extracts from 'Ideas Come out of Objects: Interview with Robert Barry by Mathieu Copeland', in *Voids: A Retrospective* (Paris: Centre Pompidou, 2009) 79–82, 84–5, 87.

Lucy R. Lippard
Six Years ... //1973

The era of conceptual art – which was also the era of the Civil Rights movement, Vietnam, the Women's Liberation movement and the counter-culture – was a real free-for-all, and the democratic implications of that phrase are fully appropriate, if never realized. 'Imagine', John Lennon exhorted us. And the power of imagination was at the core of even the stodgiest attempts to escape from 'cultural confinement', as Robert Smithson put it, from the sacrosanct ivory walls and heroic, patriarchal mythologies with which the 1960s opened. [...]

Conceptual art (or 'ultra-conceptual art', as I first called it, in order to distinguish it from Minimal painting and sculpture, earthworks, and other grand-scale endeavours which appeared in the early sixties as abnormally cerebral) was all over the place in style and content, but materially quite specific.

Conceptual art, for me, means work in which the idea is paramount and the material form is secondary, lightweight, ephemeral, cheap, unpretentious and/or 'dematerialized'. [...]

I planned this book to expose the chaotic network of ideas in the air, in America and abroad, between 1966 and 1971. While these ideas are more or less concerned with what I once called a 'dematerialization' of the art object, the form of the book intentionally reflects chaos rather than imposing order. And since I first wrote on the subject in 1967, it has often been pointed out to me that dematerialization is an inaccurate term, that a piece of paper or a photograph is as much an object, or as 'material', as a ton of lead. Granted. But for lack of a better term I have continued to refer to a process of dematerialization, or a de-emphasis on material aspects (uniqueness, permanence, decorative attractiveness). [...]

Sol LeWitt's premise that the concept of idea was more important than the visual results of the system that generated the object undermined formalism by insisting on a return to content. [...] Other artists were more concerned with allowing materials rather than systems to determine the form of their work, reflected in the ubiquity of temporary 'piles' of materials around 1968 (done by, among others, Andre, Baxter, Beuys, Bolinger, Ferrer, Kaltenbach, Long, Louw, Morris, Nauman, Oppenheim, Saret, Serra, Smithson). This premise was soon applied to such ephemeral materials as time itself, space, nonvisual systems, situations, unrecorded experience, unspoken ideas, and so on.

Such an approach to physical materials led directly to a similar treatment of perception, behaviour, and thought processes per se. [...]

It isn't really a matter of how much materiality a work has, but what the artist is doing with it. [...]

Unpublished letter-essay from the Art-Language group, Coventry, to Lucy Lippard and John Chandler 'Concerning the article "The Dematerialization of Art"' (23 March 1968). An excerpt:

> All the examples of artworks (ideas) you refer to in your article are, with few exceptions, art-objects. They may not be an art-object as we know it in its traditional matter-state, but they are nevertheless matter in one of its forms, either solid-state, gas-state, liquid-state. And it is on this question of matter-state that my caution with regard to the metaphorical usage of dematerialization is centred upon. Whether for example, one calls Carl Andre's 'substance of forms' empty space or not do not point to any evidence of dematerialization because the term 'empty space' can never, in reference to terrestrial situations, be anything more than a convention describing how space is filled rather than offering a description of a portion of space which is, in physical terms, empty. Andre's empty space is in one sense a void ... Consequently, when you point, among many others, to an object made by [Terry] Atkinson, 'Map to not indicate etc.', that is has 'almost entirely eliminated the visual-physical element', I am a little apprehensive of such a description. The map is just as much a solid-state object (i.e. paper with ink lines upon it) as is any Rubens (stretcher-canvas with paint upon it) and as such comes up for the count of being just as physically-visually perusable as the Rubens ...
>
> Matter is a specialized form of energy; radiant energy is the only form in which energy can exist in the absence of matter. Thus when dematerialization takes place, it means, in terms of physical phenomena, the conversion (I use this world guardedly) of a state of matter into that of radiant energy; this follows that energy can never be created or destroyed. But further, if one were to speak of an artform that used radiant energy, then one would be committed to the contradiction of speaking of a formless form, and one can imagine the verbal acrobatics that might take place when the romantic metaphor was put to work on questions concerning formless-forms (non-material) and material forms. The philosophy of what is called aesthetics relying finally, as it does, on what it has called the content of the art work is, at the most, only fitted with the philosophical tools to deal with problems of an art that absolutely counts upon the production of matter-state entities. The shortcomings of such philosophical tools are plain enough to see inside this limit of material objects; once this limit is broken these shortcomings hardly seem worth considering as the sophistry of the whole framework is dismissed as being not applicable to an art procedure that records its information in words, and the consequent material qualities of the entity produced (i.e. typewritten sheet, etc.) do not necessarily have anything to do with the idea. That

is, the idea is 'read about' rather than 'looked at'. That some art should be directly material and that other art should produce a material entity only as a necessary by-product of the need to record the idea is not at all to say that the latter is connected by any process of dematerialization to the former. [...]

Mel Bochner, 'Elements from Speculation (1967–70)'. *Artforum* (May 1970); excerpts:

> A fundamental assumption in much recent past art was that things have stable properties, i.e. boundaries. This seemingly simple premise became the basis for a spiraling series of conclusions. Boundaries, however, are only the fabrication of our desire to detect them ... a trade-off between seeing something and wanting to enclose it ... The problem is that surrendering the stability of objects immediately subverts any control we think we have over situations. Consider the possibility that the need to identify art with objects is probably the outgrowth of the need to assign our feelings to the things that prompt them ... [...] My disagreement with [the term] dematerialization goes beyond a squabble with terms. There is no art which does not bear some burden of physicality. To deny it is to descend to irony ... It is misleading to the intentions of artists finding different ways for art to come into being ... and both how and how long it stays there.

Lucy R. Lippard, extracts from *Six Years: The Dematerialization of the Art Object from 1966 to 1972 ...* (1973) (Berkeley and Los Angeles: University of California Press, 1997) vii, 5–6, 43–4, 166–7.

Richard J. Williams
After Modern Sculpture//2000

'Nine at Leo Castelli' [Giovanni Anselmo, Bill Bollinger, Eva Hesse, Stephen Kaltenbach, Bruce Nauman, Alan Saret, Richard Serra, Keith Sonnier, Gilberto Zorio, December 1968] had strong material presence, and as the critics noted, it encouraged both physical and phenomenological responses, responses that in other words were to do with being there. The visitor was clearly encouraged to think about process: the physical acts of splashing lead, or scraping away part of the wall, or rearranging a piece of rubber, of the movement of moisture through an absorbent material. Many of the works also seemed to provoke questions around the immediate conditions of viewing. Works encroached on the viewer's

space or provided obstacles. Sculptural debris was everywhere, including under the visitor's feet, and it was hard to tell where the works ended and real space began. And the building itself, perhaps more than anything else, would have engendered an unusual physical response to the exhibition. I say much more about this elsewhere, but let me say here that by the standards of the Castelli Gallery's usual premises, an elegant town house near the Metropolitan Museum, the warehouse was not a nice place. It was unheated – significantly in the New York winter – and it was barely altered from its previous existence as a place of storage. The lighting and paintwork were both very crude. And for the gallery's usual clientele, the opportunity to visit a crumbling neighbourhood on the fringes of Harlem would not have been exactly welcomed. If the show encouraged a physical, visceral response in these ways, this physicality was nevertheless understandable in the orbit of dematerialization. The critics were agreed that transience was the key term: what the show presented was a spectacle of transience, a spectacle, as it were, of material on the point of dematerializing.

However, there are stranger ways in which the materiality of the warehouse show was at issue, ways which were not easily accountable in terms of any contemporary theory. I am fairly certain, to begin with, that almost nobody visited the show, apart from the participating artists and a few critics. The spectacle of transience was not therefore widely perceived. Neither were phenomenological questions at issue in the critical discourse around the show. Critics described it as if it were the most natural thing in the world that an exhibition take place in a freezing, disused warehouse. But more curious is the unreliability of factual data, such that it is hard to say with authority what, if anything, actually happened. The dates of the exhibition vary by up to four months. [...] There is also confusion as to which artists actually exhibited. [...]

These archival confusions and absences indicate another kind of dematerialization perhaps, but not the kind intended by Lippard and Chandler. How we account for this is what I want to turn to now.

The exhibition at the Castelli warehouse is legible in terms of dematerialization. It left no lasting physical trace, it showed highly ephemeral work; it barely received any visitors, and its existence, like that of the majority of the work in Lippard's book, was principally as idea. We can read the exhibition through the texts that surround it, and in doing so we simply reiterate concepts such as dematerialization which are, as Lippard's work ultimately shows, applied in such a broad way as to be meaningless. There is no sense in simply reiterating the rhetoric of dematerialization. Such an approach also glosses over the subtler aspects of the exhibition's circumstances. It was clearly an ephemeral show: but the curator, and other anonymous persons, seem to have worked hard to conceal the exhibition from the public, not only through location, but in various ways by

preventing the dissemination of information about it such that it becomes difficult to say whether or not it actually took place. These efforts seem to have taken place from the beginning. The critic John Perrault, who had written favourably and often about Robert Morris [who organized the exhibition] in his weekly column in the *Village Voice*, wrote that he had been actively discouraged from visiting the show.

> I received word via the art world that it might be better if I did not write about this show. It was supposed to be some sort of a secret ... If this show was supposed to be secret then I should never have received the expensive poster announcement. The show should not have been open to the public, and perhaps the art should never have been made in the first place.[1]

The scenario Perrault outlines is more complex than the rhetoric of dematerialization can accommodate. This is not simply a discourse around materiality, or lack of it, but many other things: coercion (attempted by the curator), threat (implied, to the critic), mystery (perhaps contrived, surrounding the whole project), concealment (on the part of the organisers), fear (on the part of the critic), anger (likewise, and forming his response to the show). None of these things is exactly precise, but they are certainly present in the discourse around the exhibition, and they are not accounted for by either the concept of dematerialization or Morris's concept of Anti Form – both of which are theories which account for a process without specifying an end point. There is something else going on.

I think this something else is myth. Morris's statement about the history of the show, 'now only gossip and legend remain', indicates its presence, describing a transformation from a material reality to immaterial narrative. Such narratives are a striking feature of Lippard's book *Six Years*, although it is not one she appears to recognize. It contains countless stories, many of them very good, from the account of John Latham's literal distillation of Clement Greenberg's art criticism, to Walter De Maria's imagined 'art yard' in which an invited audience in evening dress witness a great digging of holes using earth-moving equipment, to Keith Arnatt's burial of his students from Manchester Art School on a Lancashire beach: there are hundreds more. In some cases the narratives purport to describe real events; in others the events are clearly imaginary or impossible; in many, the distinction is hard to make.[2]

The apparent rationality of purpose suggested by Morris's writings, and indeed the project of dematerialization, is perhaps not so rational after all. Sol LeWitt made precisely this point in 1969. 'Conceptual artists', he wrote in 'Sentences on Conceptual Art', 'are mystics rather than rationalists. They leap to conclusions that logic cannot reach'.[3] This was not the first time LeWitt had

connected his dematerialized art practice and irrationality, but it is a point that Lippard and Chandler underplayed. [...]

In this way, myth extends the value of dematerialization: it adds to the art of idea the possibility of realization.

1 [footnote 14 in source] John Perrault, 'A Test', *Village Voice* (19 December 1968) 19.

2 [15] Lucy R. Lippard, *Six Years: The Dematerialization of the Art Object from 1966 to 1972* (New York: Praeger, 1973) 14–16, 50–51, 54–5.

3 [19] Sol LeWitt, 'Sentences on Conceptual Art', in Lippard, *Six Years* ..., op. cit., 75–6.

Richard J. Williams, extracts from *After Modern Sculpture: Art in the United States and Europe, 1965–70* (Manchester: Manchester University Press, 2000) 90–93, 95, 99.

Briony Fer
The Scatter: Sculpture as Leftover//2005

[...] There is a systemic relation between things, where the intervals between things become mobile and animated, and where even a breath or something as immaterial as the air that circulates around things can be transformed into matter. Leftovers come to stand not for what once has been but what will be. They suggest forever-fluctuating possibilities. What is kept as important and what is cast out as unimportant have always been mutually dependent, and, needless to say, have been subject to radical historical changes over time. Focusing attention on the leftover puts in question the value of what we choose to keep. The things that seem important at first end up being abandoned, and what is at first abandoned ends up being the most productive. Chance often works this way, when something that has been cast aside breaks through to something new.

In 2003 Gabriel Orozco worked with polyurethane, a highly toxic material used as insulation in building construction. He made a series of hanging works called *Spumes*, by pouring the polyurethane into a stretched-out latex sheet, its weight causing the latex to bear down. Like lava, it ran its course and quickly dried, uncannily fixing the form of its movement. Full of tiny bubbles of air, this is how air moves – the most immaterial of vapours made palpably material. In other works he made at this time, he poured the foam through mesh. Orozco experimented with the polyurethane in different containers and receptacles, pouring it into a range of different kinds of trays for fruit, the kind found on the

street after an open-air market. A cardboard melon tray buckles under the expansive synthetic foam. In another, a polystyrene apple tray, it squeezes through the slits that he has cut in a kind of rough-and-ready grid. These are neither strictly cast nor moulded and the foam necessarily exceeds its support. They are not strictly experiments either but are more like exercises or improvisations. They now reappear on a table in a new set of relations, having in the meantime been stored away. Leftovers, but also proto-objects: they are no longer redundant as they once were, but neither have they quite become something else, yet. A term Duchamp coined, 'indefinity', seems appropriate here.[1]

Leftovers are part objects in time rather than space. Leftovers suggest fractured rather than continuous time. They are cut off from both a past and a future. This cutting adrift is more violent than we might at first imagine. This is neither an archive nor a memory bank of things. If memories are stirred by some objects, they are quickly cancelled by being dislodged from the circuits they normally inhabit. They leapfrog from one to another, temporary residents in a different space. A kind of violent dispersal is at work, a dispersal that generates a tissue of shifting relations. [...]

Given the inertia and stasis of contemporary cultural life, to insist on the 'scatter' is to insist again on the sensual-encounter with the world *at hand*. The 'scatter' includes the spaces between things, the air surrounding things, as at least as material, at least as bodily, at least as 'left over' as the things on a table.

On one of Orozco's tables[2] sits a soccer ball, scruffy and frayed, with circular shapes excised from its surface. Slightly deflated, the ball echoes any number of spheres: a shrunken peel from half an orange covered in plasticine nearby, or a spinning world. On its surface is drawn a small constellation, like a stellar constellation charting the vast intervals between the stars in a miniature diagram. To call this drawing the scatter is to emphasize the role of chance; to call it a constellation is to emphasize the systemic. The friction between these two creates maximum mobility.

1 [footnote 13 in source] *In the Infinitive*, a typotranslation by Richard Hamilton and Ecke Bonk of Marcel Duchamp's 'White Box' (Northend: Typosophic Society, 1999) 76.

2 [From the series *Working Tables*, of which the first was shown in Zurich in 1996. The tables are arranged with a diverse collection of found and formed objects, drawn from several years of working with them and thinking about them. Their configurations are reminiscent of tools lying where they were last put down on a workshop table.]

Briony Fer, extracts from 'The Scatter: Sculpture as Leftover', in *Part Object Part Sculpture* (Columbus, Ohio: Wexner Center for the Arts, 2005) 228, 231–2.

Anthony McCall
Line Describing a Cone and Related Films//2003

Line Describing a Cone is what I term a solid light film. It deals with the projected light beam itself, rather than treating the light beam as a mere carrier of coded information, which is decoded when it strikes a flat surface.

The viewer watches the film by standing with his or her back toward what would normally be the screen, and looking along the beam toward the projector itself. The film begins as a coherent pencil of light, like a laser beam, and develops through thirty minutes into a complete, hollow cone.

Line Describing a Cone deals with one of the irreducible, necessary conditions of film: projected light. It deals with this phenomenon directly, independently of any other consideration. It is the first film to exist in real, three-dimensional space.

This film exists only in the present: the moment of projection. It refers to nothing beyond this real time. It contains no illusion. It is a primary experience, not secondary: i.e. the space is real, not referential; the time is real, not referential.

No longer is one viewing position as good as any other. For this film, every viewing position presents a different aspect. The viewer therefore has a participatory role in apprehending the event: he or she can, indeed needs, to move around relative to the slowly emerging light form'.[1] [...]

These issues of scale and the body, and of moving around a three-dimensional object in a three-dimensional space, are, of course, sculptural issues, and part of the resonance of the experience of looking at them is drawn from this. However, unlike sculptural materials such as steel, lead, wood, latex, felt, etc., light has no solidity and no gravity. In addition, the explicit control of disclosure over time, the representation of movement, the interchangeability of forms through editing, and the fact that these works have to be viewed in the dark – these are all properties of cinema. In the end, the experience of *Line Describing a Cone*, and the pieces that followed, depends equally on their relationship to both sculpture and to film.

Visibility is also an issue. These pieces are visible in three-dimensional space, because the projected light is reflected off tiny particles in the air. In the days when they were made, loft spaces were grittier and dustier than they are now, being then much closer to their earlier lives as sites for manufacturing or warehousing; the same was true of the downtown exhibition spaces. When I projected a film then, I could rely on the dust particles in the air, which would often be augmented by a couple of smokers. Since then exhibition spaces have become cleaner, and smoking has been prohibited. Fortunately, technology has

caught up, and we now thicken the air with a small fog machine, which actually does a far more effective job of making visible the planes of light.

1 [From the artist's statement to the judges of the Fifth International Experimental Film Competition, 1974, Casino Knokke-Heist, Belgium, 1974]; reprinted in *The Avant-Garde Film: A Reader of Theory and Criticism*, ed. P. Adams Sitney (New York: New York University Press, 1978).

Anthony McCall, extracts from '*Line Describing a Cone* and Related Films', *October*, no. 103 (Winter 2003), 42, 44, 46–7.

Joseph A. Amato
Dust//2000

Throughout the ages, dust has been the first and most common measure of smallness. Dust is a result of the divisibility of matter.[1] Even the hardest materials erode and become dust. The ivory of piano keys and the coins of the realm become smooth and worn over time, adding themselves, bit by bit, to dust.[2] Softer materials abundantly supply the microscopic stuff that flows around the islands of perceptible and palpable objects. An average puff of a cigarette has been estimated to contain 4 billion particles of dust. The vapour that condenses on a dry plate – water dust, so to speak – is 500,000 times thinner than a sheet of writing paper. A grain of musk perfumes a room for years, and a single grain of indigo colours a ton of water.

Amorphous, dust is found within all things, solid, liquid or vaporous. With the atmosphere, it forms the envelope that mediates the earth's interaction with the universe.[3] It flies over the highest mountains and crosses the widest seas. It fills the still air of home and the busy air of streets. It comes to rest everywhere in nature and on the human body. The finest dust – dust that can enter the pores of human skin – comes to rest in the oceans' depths. It falls with every drop of rain and flake of snow, and in the course of a year it can cover the rooftops of buildings with tons of fine debris. Even in the cleanest conditions, it has been estimated, 'there are over a thousand motes of dust in every cubic inch of air'.[4]

Dust is everywhere because its source is everything. Its most remote origins in time and space are the Big Bang, collapsing stars and the dark line across the centre of the Milky Way, which, according to astronomer Donald Brownlee, 'is a line of dirt perhaps 65,200 light-years across, and 3.832×10^{17} miles long'.[5] Here

on earth, dust comes from everything under the sun: minerals, seeds, pollen, insects, moulds, lichens and even bacteria. Its sources also include bone, hair, hide, feather, skin, blood and excrement. And things of human fabrication, too numerous to mention, also cover the earth and fill the atmosphere with dust.

Dust goes where the wind lifts. As if it were nothing at all – without mass, without volume, the featherweight of featherweights – it rises up and forms a vapour and haze. Indeed, these qualities evoke its etymological origin in the German word *Dunst*, which means vapour.[6] Dust is as fine and familiar a thing as the unaided human eye can perceive.

While doubtless certain dusts are identified with precious metals and life-giving pollens (which themselves once were used to measure the smallest things), dust commonly travels with the children of earth: dirt, mud and muck. Unnoticed, trodden underfoot, it is associated with the lowliest things, with what is broken, discarded and formless. Although dust can be identified with the precious essence of things, its most regular associates are fragments, tailings, splinters, scraps, shreds, morsels, chips and nicks. It is commonly identified with the trivial, meagre, petty, scanty, puny and picayune. [...]

Dust as an element cannot claim the glory of light, the subtlety of air, the solidity of earth or the vitality of water, even though it envelops galaxies, circles planets, and hides in the bedrooms of kings and queens. Scattered throughout the atmosphere and the universe, its refracting power helps account for why and how humans see light itself. It explains blue skies and daylight, with the array of rich and diffuse colours we cherish. Dust's refracting power also explains why so little light – visible radiation – reaches the earth in its long trek from the sun.[7]

Dust forms the ceaseless tides of the becoming and dissolution of things. Out of it things are made; into it they dissolve. So constant, so pervasive, dust, aggregating and disintegrating, gauges matter on its way to and from being. So dust would seem to measure history and the historian, not the reverse. [...]

Ideas about dust have undergone a revolution in the last century and a half. Dust has been transformed from an enduring condition to an enemy of sanitary civilization, and then to a precise object of scientific knowledge and technological manipulation. At the same time, the discoveries of atoms and germs – and the whole network of microscopic entities and concepts they sustain – have redefined the minuscule and emphatically denied dust its role as humanity's primary gauge of smallness. [...]

This unseen world is anything but predictable. In contrast to the old materialist model of the atomic world, which posited matter as a bunch of billiard balls moving around empty space and occasionally bumping into each other, this new realm of the invisible is complex, diverse and subtle, its form and

motion often indicated only by faint and ephemeral traces recorded on the most refined machines and then statistically generalized. Edward Harrison speculates, 'A particle ... is a vibrant creature of a little world made cunningly.'[8]

As Harrison's quote indicates, physicists often resort to metaphor to convey a sense of a universe too complex to be described accurately in anything but the most complex and arcane mathematical language. Stephen Hawking has popularized the existence of black holes, caused when a star collapses in on itself under its own gravitational force and condenses to zero volume.[9] Hawking has more recently argued that black holes somehow 'leak'. Thus it could be said that something does come from nothing after all.

1 J. Gordon Ogden, *The Kingdom of Dust* (Chicago: Popular Mechanics Company, 1912) 10.
2 Ibid., 10–13.
3 William Bryant Logan, *Dirt: The Ecstatic Skin of the Earth* (New York: Riverhead Books, 1995) 9.
4 Ogden, *Kingdom of Dust*, op. cit., 16.
5 Cited in Logan, *Dirt*, op. cit., 7.
6 C.T. Onions, *The Oxford Dictionary of English Etymology* (Oxford: Clarendon Press, 1966) 295.
7 [...] *Dust* (New York: The John Day Company, 1958) 116.
8 [footnote 9 in source] Edward Harrison, *The Mask of the Universe* (New York: Macmillan, 1985) 123.
9 [11] [...] Stephen Hawking, *A Brief History of Time: From the Big Bang to Black Holes* (New York: Bantam Books, 1988) 49.

Joseph A. Amato, extracts from *Dust: A History of the Small and the Invisible* (Berkeley and Los Angeles: University of California Press, 2000) 3–5, 12, 95–6, 179–80, 203.

Hubert Damisch
Blotting Out Architecture?//2003

In the summer of 2002, at Yverdon-les-Bains, on the banks of Lake Neuchâtel in Switzerland, I photographed a strange, thick, oblong-shaped cloud that seemed to float some distance from the shore above the surface of the water. It seemed to float, or to put it more accurately, since the choice of words is fairly crucial here, it seemed to be in a state of levitation above the lake. As I examined it more closely, I could make out fragmentary glimpses of a metallic structure momentarily showing through the cloud at certain points and emerging from it as though following it in its endlessly changing shape, seemingly enveloped by

it in the manner of a celestial body endowed with a more or less opaque nebulous atmosphere.

I sought out the two people I call the authors of the thing ('thing' – not object or phenomenon), Elizabeth Diller and Ricardo Scofidio, at whose invitation I arrived at the scene to visit what they first called a 'cloud machine' before limiting themselves to the more succinct and programmatic title of *Blur*. Initially, *Blur* was conceived as one of several attractions organized around sites retained for what styled itself as Swiss Expo 2002. [...]

The Diller + Scofidio project presents a number of features or aspects typical of a conceptual work, beginning with the fact that it gave rise to the publication of a book – *Blur: The Making of Nothing*[1] – which is like the work's archive, providing an otherwise ephemeral embodiment with a kind of lasting quality at once textual and iconic and comparable to that to which a number of contemporary productions can lay claim, whether arising from performance or not: the lasting quality of a fable or, better still, of a work of fiction.

I will return to the problem posed by the term *blur*, a term that may mean a number of things and may assume different forms as noun or verb with a flexibility that goes to the heart of the matter. [...] [I]n what way might architecture form a pact with clouds without exposing itself to becoming the victim of determinations strictly foreign to its own order?

Wittgenstein writes 'clouds cannot be 'built' [*bauen*]. And that is why the 'dreamt of' future never comes true',[2] thereby implying that dreams have no more consistency than clouds and that we are incapable of building anything essentially oneiric or fantastical – which leaves the whole question of utopia hanging, along with that of narrative. [...]

For an example of how a concept may be evolved along lines peculiar to architecture, we might look at how the idea of structure was handled in this particular case, along with the design and construction, properly speaking, of the machine, as well as the effects the latter was supposed to produce and which were neither exclusively visual nor constructive. A brief description will show how an ovoid metallic structure suspended from four incredibly skinny tubular piles sunk deep into the water and lake bed at a point where it is particularly loose, and working essentially in tension as a tensegrity system, was coupled with a network of pipes punctured at regular intervals by apertures, out of which mist was sprayed at very high pressure. The accumulation of the mist in jets at the periphery of the structure produced, on contact with the ambient air, the fog or thick cloud through which visitors were invited to roam after donning blue raincoats handed out at the entrance to the ramped bridge slung from shore to machine. The whole thing involved considerable technology. The flow of the water through the nozzles and its output as atomized mist were designed to be

regulated by a computer from a built-in weather station, which adjusted the strength of the spray according to atmospheric conditions and wind direction.

I would like to return to the use of the concept of structure, and whether we understand this in a strictly constructive, tectonic sense or whether we take it in its epistemological sense as having to do with structuralism. What implications can the idea of a cloud structure have, and further, what effect can what we are forced to call the fantasy (or fiction) of a building whose primary components are steel and fog have on the very concept of structure? As Diller + Scofidio put it to the technical team with whom they discussed the terms for testing what claimed to be a cloud of dots: 'We do not intend to make a volume of space covered with fog. We intend to make a building of fog with integrated media'.[3]

But isn't 'building' saying too much, or a mistranslation? If we take this text on its own terms, what is involved here is merely a matter of 'making' (*to make a building of fog*), the idea of the building being directly associated with consideration of the paradoxical material that is fog – a material whose production has now become, as we learn in *Blur*, a veritable industry, particularly big in Switzerland, with its engineers, technicians and machinery. And this, in obliviousness to, or should we say the fogging up or blotting out of – both possible equivalents for the word *blur* – that other material associated in a privileged way with the notion of built structure, that is, steel. Paradoxically, as far as so-called 'primary' materials go, priority was given, phenomenologically speaking, to the 'cloud' element, with architecture succeeding where perspective failed, at least as far as Brunelleschi conceived it: I mean, contrary to Wittgenstein's assertion, by building a cloud, if not by building *in cloud*, as we speak of building in wood, in brick, in stone, in steel. Or to put it another way, without resorting to metaphor, by using cloud as a material with a structural application. This is something that seems to go without saying for steel, but once cloud is brought into play we are forced to rethink the concept of structure and, without actually rejecting it, to try to inject a bit of elasticity into it, its share of fuzziness – something that is, again, far from obvious. *Blur* has nothing of the poststructuralist about it and still less of the post-structural. But in so far as an honourable role must be given to architecture in the genealogy of the very notion of structure, we have a right to expect that the sometimes unpredictable evolutionary mutations in building would be of consequence for the future of structural thought and affect its economy.

Don't get me wrong: if one is justified in the circumstances in speaking of a 'cloud building', this is less in terms of construction or function than in relation to the play of opposition the /cloud/ element is caught up in, play with a patently symbolic dimension (putting the word between slashes I aim to set it up in the position of signifier). [...] In a similar vein, I would cite the wonderful book in which the biologist Henri Atlan attempted to explore the notion of system and the

organization of the living being in reference to the two extreme poles constituted by crystal and smoke.[4] By way of anecdote or symptom, I might add my own amusing discovery, as I was strolling through the online library catalogue of the Canadian Center for Architecture, of a paper titled 'Steel For Bridges', delivered at a meeting of the American Institute of Mining Engineers in Philadelphia in 1881 by a certain John W. Cloud. That a name like John Cloud could have been worn by a man with a marked interest in steel construction I see as the index of a symbolic determination based on the same kind of structural opposition between steel and cloud that Diller + Scofidio wanted to play around with.

For myself, I can clearly see what fixed determinations the interest I felt from the outset in the Diller + Scofidio project complied with – to the point where I accepted writing about it even before I saw it, walked through it, and 'breathed' it. I mean, beyond the beauty of the thing, which I would qualify as 'pneumatic'. [...]

As surprising as it was, the Diller + Scofidio project was not without echoes or precedents – from Mies van der Rohe, who wanted to *punch through the clouds* and whose façades actually have nothing of the shimmering about them, to Coop Himmel(b)lau, founded in 1968 with the desire to make 'an architecture as floating and changing as the clouds',[5] and, above all, to the Pepsi-Cola Pavilion for the International Fair at Osaka in 1970. This was a geodesic dome covered in an artificial fog created by Fujiko Nakaya, who treated it as a sculpture, as we would expect. If we look at Diller + Scofidio's gambit more closely, the deal remains no less drastic: not only, as the authors of *Blur* insist, are we not dealing here with a *built* fog, strictly speaking, the way the Coop Himmelb(l)au structures, hung out like 'skies', could be said to be built. But, more importantly, as sparkling as it was, the Pepsi-Cola Pavilion still adhered to the norm of a shelter firmly anchored to the ground and with the aim to serve as a theatre for a whole series of performances and representations.[6]

Even though it has its place in the tradition of exhibition pavilions, the *Blur* does not fit into the tradition of provisional structures intended to serve as showcases for mercantile production, from the Crystal Palace to Melnikov's pavilion for the Paris Exhibition of Decorative Arts of 1925. Nor does it fit into the tradition of pavilions designed as so many advertising panels for one type or another of housing. [...] Yet there most certainly was a proposition here that had something to do with the idea of an inhabitable place, a place where it would be good to breathe, and to breathe differently, by inhaling a different air, one charged with the purest of waters – in vapourized form. And if there was nothing really to exhibit or show here, a person could still front up to the bar upstairs to take the waters once more, this time as mineral water, still or sparkling, everything playing on the juncture of the two elements of water and air with nothing earthy muddying the waters. [...]

A new and rare example of an exhibition pavilion with a strictly self-referential, not to say reflexive, purpose, *Blur* went one step further to the extent that self-exhibition was coupled with self-regulation in meteorological terms. Aside from the fact that strict economic considerations meant abandoning electronic media attractions such as underwater projections, the machine ultimately met the initial criteria of integrating the interactive concept of 'media-architecture' under the title 'cloud'. The operation that aptly calls itself *Blur* is in effect the equivalent of a fable or fiction that one might describe as media-based. [...]

I have spoken, still in relation to *Blur*, about a kind of 'pneumatic' beauty (from the Greek *pneuma*, meaning 'breath'): the pleasure, both physical and spiritual, we felt in passing through this fog that seemed to have no density, only to emerge here and there into the open air, could only be compared to the feeling of the first aviators navigating among the clouds, out in the open sky. A pleasure that wasn't only optical in nature but, indeed, was pneumatic, proceeding from what used to be called the revolutions of the 'breath' in Chinese aesthetics: revolutions that were not reduced to nebulous or vaporous effects but which could manifest themselves just as well, as the scholar painters insisted, in a brushstroke and its evanescence, its blurring, if not its effacement, seen as constructive in terms of structure, just as in the fable delivered in *Blur*, all the more ineffaceable in that it was entirely fictional.

1 [footnote 11 in source] Elizabeth Diller and Ricardo Scofidio, *Blur: The Making of Nothing* (New York: Harry N. Abrams, 2002).

2 [12] Ludwig Wittgenstein, *Vermischte Bemerkungen*; trans. *Culture and Value*, ed. G.H. von Wright (Chicago: University of Chicago Press, 1984).

3 [14] 'We do not intend to make a volume of space covered with fog. We intend to make a building of fog with integrated media'. Diller + Scofidio, op. cit., 3.

4 [15] Henri Atlan, *Entre le cristal et la fumée. Essai sur l'organisation du vivant* (Paris: Éditions du Seuil, 1979).

5 [17] See Wolf Prix and Helmut Swiczinsky, Coop Himmel(b)lau, *Austria: From Cloud to Cloud* (Venice: Venice Biennale, 1996) and *Construire le ciel* (Paris: Centre Pompidou, 1990)

6 [18] See *Experiments in Art and Technology (E.A.T.), Pavilion*, ed. Billy Klüver, Julie Martin and Barbara Rose (New York: E.A.T., 1978).

Hubert Damisch, extracts from 'Blotting Out Architecture? A Fable in Seven Parts', *Log*, no. 1 (Fall 2003) 12–13, 15–19, 26.

Tino Sehgal
In Conversation with Tim Griffin//2005

Tim Griffin What is your idea of 'deproduction'? Or better, how would you describe the simultaneous production and deproduction that you claim for your work?

Tino Sehgal 'Deproduction' in itself isn't of particular interest to me but the simultaneity of production and deproduction is. The mode of production that takes place in my work is what one could call the transformation of actions. If one does a movement or sings or speaks, then one is obviously producing something. But immediately as a note ends or the movement stops, it is gone; it deproduces itself. In the prevalent mode of production (which most other visual artworks adhere to and thus promote) – which is the transformation of material – deproduction is something that at best takes place after the product has been used, not as something inherent in it but as something external to it. So even the deproduction of a material thing needs again more labor and resources to be invested in it.

The reason I'm interested in the transformation of actions and the simultaneity of production and deproduction is because I think that the appearance in Western societies in the twentieth century of both an excess supply of the goods that fulfil basic human needs and mankind's endangering of the specific disposition of 'nature' in which human life seems possible renders the hegemony of the dominant mode of production questionable. Obviously, this doesn't mean to propose an essentialist 'No' to material objects in general but rather leads to the question as to how we could produce things that, on the one hand, aren't problematic and, on the other, are more interesting or complex, or less static.

Griffin Still, do you fear that your 'deproduced' entity might end up a material production? Is it possible that even when you put something out in a 'deproduced' fashion, it can be – and I use my next word reluctantly – reified, or brought back into a material mode? I know, for example, that you don't allow photographic reproductions of your work.

Sehgal My work isn't deproduced; it is produced and it is material, but the difference is that it materializes itself in the human body and not in a material object. I don't make photographic or filmic reproductions of my work, because it exists as a situation, and therefore substituting it with some material object like a photo or video doesn't seem like an adequate documentation. Also, my works

take a form that exists over time – as they can be shown over and over again – so they're not dependent on any kind of documentation to stand in for them.

Your reference to this classical discourse of reification connotes a critique of the material object as product, that there is something inherently problematic about something becoming a product. That's not my line of thinking. I criticize the mode of production inherent to a material object but not the fact that it can be bought or sold. [...]

Griffin I'm going to put your own words back to you: How can you use existing conventions and fill them up with something else?

Sehgal As the twentieth century has shown, sooner or later a lot of conventions come back into play, so I think it's more interesting to operate within them rather than pretend we're outside – when we aren't. Then, what I'm trying to say is that there's a certain set of conventions, related to a certain ideology – this ideology being a celebration of material production connected to an idea of a subject that forms itself through what it materially produces – and let's see if I can fill them with another one. Is this model, which we've had for ages, still so interesting today? Can I go into this place where the celebration of this model has installed itself in Western society, the museum, and celebrate something else? [...]

Griffin In our previous conversations, you've said that art fairs offer an almost perfect context for your work. Why?

Sehgal Because I think there's a kind of monoculture on how to think about economic structures. This is apparent even in our conversation now. You look at my work and say, 'Where's the product? When does it get reified?' You're implying that I'm trying to do something that is not a product, that cannot be reified – and that's totally *not* what I'm trying to do. I think that, at the very moment one wants to do something specialized, one has to exchange that something in order to be able to cover one's basic needs, so one is in the market. Factually, you *do* want to be inside the market. So for me, this whole discourse of reification isn't interesting. Instead of being against the product, for me the question is rather how to use the market to circulate a different, more sustainable, and more interesting kind of product.

Tino Sehgal and Tim Griffin, extracts from 'Tino Sehgal: An Interview', *Artforum* (May 2005) 218–19.

EVEN WHEN I WORK
WITH MY BODY,
WITH MYSELF AS
THE PERFORMER,
I AM MATERIAL,
A LUMP OF WHIZZING
ATOMS AND A
STRUCTURE OF
UNBENDING MOLECULES,
WHICH SIMULTANEOUSLY
GENERATES THE ORDERS
THAT DICTATE
HOW TO DEAL WITH
THE MATERIAL.
THEN,
AND NOT ONLY THEN,
I TRY AS SUBJECT,
AS CAMERA,
NOT TO INTIMIDATE
MY MATERIAL.

Pipilotti Rist, 'Don't Intimidate the Material', *Parkett*, no. 71, 2004

MATERIALITIES OF MEDIA

Marshall McLuhan
Understanding Media//1964

In a culture like ours, long accustomed to splitting and dividing all things as a means of control, it is sometimes a bit of a shock to be reminded that, in operational and practical fact, the medium is the message. [...] [T]he 'content' of any medium is always another medium. The content of writing is speech, just as the written word is the content of print, and print is the content of the telegraph. [...] [I]t is the medium that shapes and controls the scale and form of human association and action. [...] [S]o the latest approach to media study considers not only the 'content' but the medium and the cultural matrix within which the particular medium operates. [...] For the 'content' of a medium is like the juicy piece of meat carried by the burglar to distract the watchdog of the mind. The effect of the medium is made strong and intense just because it is given another medium as 'content'. The content of a movie is a novel or a play or an opera. The effect of the movie form is not related to its programme content. The 'content' of writing or print is speech, but the reader is almost entirely unaware either of print or of speech. [...] If the formative power in the media are the media themselves, that raises a host of large matters that can only be mentioned here, although they deserve volumes. Namely, that technological media are staples or natural resources, exactly as are coal and cotton and oil. Anybody will concede that a society whose economy is dependent upon one or two major staples like cotton, or grain, or lumber, or fish, or cattle is going to have some obvious social patterns of organization as a result. Stress on a few major staples creates extreme instability in the economy but great endurance in the population. The pathos and humor of the American South are embedded in such an economy of limited staples. For a society configured by reliance on a few commodities accepts them as a social bond quite as much as the metropolis does the press. Cotton and oil, like radio and TV, become 'fixed charges' on the entire psychic life of the community.

Marshall McLuhan, extracts from *Understanding Media: The Extensions of Man* (New York: McGraw Hill, 1964) 23, 24, 26, 32, 35.

Tony Conrad
7360 Sukiyaki//1977

This film takes its name from the dish known as sukiyaki and is similarly put together just before consumption. The pleasure of artistic preparation is not the sole privilege of the filmmaker, but is also offered to the audience. Eastman Kodak MP 7360 is a particular delicacy. It is a low-sensitivity orthochromatic copy film which has a deep red layer. This stock is mixed with other ingredients using a recipe the artist created by drawing on his experience with material from various manufacturers. While preparing the film, the filmmaker discusses the techniques he is using and answers questions from people who, like himself, are interested in alternative approaches to film production. The film itself is enjoyed in silence.

Tony Conrad, '7360 Sukiyaki', in *documenta 6*, vol. 2: *Fotografie, Film, Video* (Kassel, 1977) 258. Translation by Kate Vanovitch, 2015.

Jean-François Lyotard
Les Immatériaux//1985

Presentation

In the tradition of modernity, the relationship between human beings and materials is fixed by the Cartesian programme of mastering and possessing nature. A free will imposes its own aims on given elements by diverting them from their natural course. These aims are determined by means of the language which enables the will to articulate what is possible (a project) and to impose it on what is real (matter).

The ambition of the exhibition entitled 'Les Immatériaux' is to make the visitor realize how far this relationship is altered by the existence of 'new materials'. New materials, in a wide meaning of the term, are not merely materials which are new. They question the idea of Man as a being who works, who plans and who remembers: the idea of an author. The aim of the exhibition is to bring this interrogation into the limelight and intensify it. The selection of the illustrations will not be made according to technological criteria, nor even anthropological ones (in terms of their social effects, their psychic effects, etc.),

but rather for the manner in which they may set off and dramatize these questions. The term 'immaterial', which in its contradiction denotes a material which is not matter for a project, is proposed to convey this uncertainty.

The Intention

The conception of the exhibition will be philosophical. We will first of all ask questions, and incite others to ask questions, not only about what the material is, but also about what is associated with it: material versus spiritual, material versus personnel (in the administration, the army), hardware versus software (in a computer), matter versus form (in the analysis of a manufactured object, a natural object or a work of art), matter versus mind (in philosophy and theology), matter versus energy (in classical physics), matter versus state (in modern physics), matrix versus product (in anatomy, printing, minting and casting; the problem of reproduction and, in art, of multiples), mother versus child, mother versus father, etc. Note, the Sanskrit *mâtram*: matter and measure (root *mât*: to make by hand, to measure, to build).

The semantic field is considerable (see, for example, the works of Bachelard). Although the intention of the exhibition is not to cover it in its entirety, nor even to focus attention on this fertile aspect, the 'objects' presented should nonetheless evoke passages, overlaps and slippages from one semantic zone to another. The visitor must at least sense that the material is not simply what human activity operates on, and that if it is indeed a new material, then the whole network of associations suggested above is altered as a consequence.

The importance given to this semantic aspect enables us to broaden the investigation of 'immaterials' along lines which would be neglected by sociological or psychological approaches or by the history of technologies; for example, on the one hand, the 'dematerialization' of transferable securities or electronic money, and, on the other, Suprematism and Minimal Art in painting, or Serialism in music. [...]

The Principal Question

It is formulated as follows: do 'immaterials' leave the relationship between human beings and material unaltered or not? – this relationship being understood as it has been fixed in the tradition of modernity, for example by the Cartesian programme of becoming the master and possessor of nature.

It would be wrong to reply hastily that a profound upheaval, a 'revolution', is obviously affecting this relation. It has long been a banality, where 'innovation' is concerned, to adopt an apocalyptic tone. Or to assert, on the contrary, that there is nothing new under the sun. The spirit in which this exhibition is conceived requires rather that the question be left open for the visitor, until he or she leaves,

and even afterwards. It is more a case of intensifying the interrogation, and, so to speak, of aggravating the sense of uncertainty which it casts over the present and the future of humanity. It is easy, because it suits our latent ideology, to demonstrate how far new technologies, and in particular, new materials or 'immaterials' (the term is justified in the paragraph below on 'The Title'), 'maximize' Man's control over nature.

If we wish to achieve an effect of intensifying the interrogation, then this comforting modern prejudice must be challenged by more disturbing views. Man's anxiety is that he is losing his (so-called) identity as a 'human being'. One aspect of 'immaterials', and by no means the least important, is that they imply just such a loss of identity. Just as material is the complement of a subject that masters it in order to attain his own particular ends, so also does the 'immaterial', in its contradictory concept, signify a material which is no longer matter (whether 'brute' or not) for a project; it reveals, for 'Man', a dissolution which is comparable to his own. Most of these 'immaterials' are generated from computer and electronics technosciences, or at least from techniques which share their approach. This very approach interferes with the identity of 'Man', understood as mind and will, or as consciousness and liberty. The word 'human', as substantive adjective, designates an ancient domain of knowledge and intervention which the technosciences now cut across and share; here they discover and elaborate 'immaterials' which are analogous (even if they are in general more complex) to those examined and detected in other fields. The human cortex is 'read' just like an electronic field; through the neurovegetative system human affectivity is 'acted' on like a complex chemical organisation composed of information transmitted by media and according to diverse codes connected by interfaces where 'translations' take place.

As a result of this, the ideas associated with the one of 'material', and which lend support to the immediate apprehension of an identity for Man, are weakened. I mean: experience, memory, work, autonomy (or liberty), even 'creation', and more generally, the radical difference from all that is not Man. The idea of a general interaction is strengthened.

The Operator

It is that of communication or of 'pragmatics' in the linguistic sense. The first formulations of it were given by Laswell and Wiener, then Jakobson. Contemporary studies allow it to be freed from its anthropological origins. An object in general or a phenomenon is considered as a message (a set of signs). The signs which constitute it are formed from discrete elements that are the differential features of the support or *material* (the model here is that of relevant features in phonology). The differential variations according to which these features are

distributed form the *code* of the message. This is disseminated from a *sender* pole to a *receiver* pole, with prior encoding and subsequent decoding as the case may be. The message provides at least one bit of information on a *referent* (what is being referred to).

The general idea of interaction means, first of all, that each pole of the structure is only relevant with respect to its relations with the other poles; secondly, it means that a modification in the function of one of the poles leads to a destructuring and restructuring of the whole: in which case it becomes another message.

The Title

The term 'immaterials' has been chosen for two reasons:

– the message cannot be dissociated from the support (material), and the code itself is inscribed in the support as an orderly distribution of the discrete elements (grains) which constitute the material (electronic waves, sound waves, light waves, elementary particles and their differential features, etc.). The material disappears as an independent entity. The principle on which the operational structure is based is not that of a stable 'substance', but that of an unstable ensemble of interactions. The model of language replaces the model of matter;

– the scale on which the structure is operational in contemporary technoscience and artistic experimentation is no longer a human one. Humans are overwhelmed by the very small, which is also the only means of information about the very large (astrophysics). This change of scale is required by particle physics, genetics and biochemistry, electronics, data-processing, phonology ....

With 'immaterials', the attribution of an identity (thing, man, mind, etc.) to one of the poles of the structure appears as an error. A 'same' identity may occupy various poles of the structure.

Conception

The Principle

From the root *mât* five terms are chosen:

- material
- *matériel*
- maternity
- matter
- matrix

These are located on the operational structure:

- the material is the support of the message;

- the *matériel* or hardware is what handles the acquisition, transfer and collection of the message;
- maternity designates the function of the sender of the message;
- the matter of the message is its referent (what it is about, as in the French for 'table of contents');
- the matrix is the code of the message.

In Laswell's nomenclature:

- material = through what medium does it speak?
- *matériel* = to what end does it speak?
- maternity = in whose name does it speak?

- matter = of what does it speak?
- matrix = in what does it speak?
  ('it' = the message; the signification = what it says).

The Context

The exhibition attempts to characterize an aspect of our contemporary situation, associated with the new technological revolution. Whereas mechanical servants hitherto rendered services which were essentially 'physical', automatons generated by computer science and electronics can now carry out mental operations. Various activities of the mind have consequently been mastered. Thus the new technology pursues and perhaps accomplishes the modern project of becoming master and possessor. But in so doing it forces this project to reflect on itself; it disturbs and destabilizes it. It shows that the mind of Man is also part of the 'matter' it intends to master; and that, when suitably processed, matter can be organized in machines which in comparison may have the edge over mind. The relationship between mind and matter is no longer one between an intelligent subject with a will of his own and an inert object. They are now cousins in the family of 'immaterials'.

Yet technology is not the cause of the decline of the modern figure; rather, it is one of its signs. Our grief is another of its symptoms. At the end of the eighteenth century, Europe and America, in the name of the free and virtuous enlightened mind, claimed to spread light, law and wealth over the human world. After two centuries of massacres and civil, international, world wars, we are now beginning to go into mourning for this arrogance. In its scenography at least, 'Les Immatériaux' should distantly echo this wise melancholy.

The 'target' of this exhibition is a precise one: to arouse the visitor's reflection and anxiety about the postmodern condition, by means of our five

questions derived from the root *mât* and applied to domains where they are most critical. [...]

The Hypothesis

Localization is in the Centre Pompidou, at the heart of modern old Paris: the Great Gallery on the fifth floor (the highest). A rectangular space of 3,000 square metres, with two foyers (mezzanine on the fourth floor, the entrance). Level floor, outer walls of plate glass, cables and ducts visible in the ceiling, permanent foyer entrance and exit lights. In short, relatively few constraints, except for the lighting.

On this level there will be 20 or 30 radio transmitters, each one covering a carefully limited zone. Each transmitter will broadcast a soundtrack relating to one of the *mât* questions examined above (cf. 'Conception', 'The Principle'). The visitors are supplied with headphones. The oral messages they receive are not necessarily instructions, but also poems, prose, questions, exclamations, quotations, explanations ... Musical messages too. Arts of time, the most immaterial.

In each zone *sites* are assembled. They are taken from diverse domains (foodstuffs, painting, astrophysics, industry, etc.), but grouped together according to the common question which they illustrate. For example, maternity: who is the composer of a piece of electronic music? Who is the mother of a child born of an ovum impregnated *in vitro*, implanted in a 'surrogate mother' and later adopted? What is the source of light of an abstract painting? The sites may either compare two moments in the same discipline, or confront two different disciplines.

Between the zones are 'desert', neutralized regions. The visitor, passing from one zone to another, becomes an investigator; he is accosted by the voices and the music, as well as by the sites he sees. His own individual itinerary might be recorded on a magnetic memory card, and given him in the form of a print-out when he leaves. [...]

['Les Immateriaux' (1985) was conceived by the Centre de creation industrielle for the Centre Pompidou; Lyotard was the exhibition's chief organizer. This was Lyotard's second statement on the project, following a preliminary document circulated in December 1983.]

Jean-François Lyotard, extracts from 'Les Immatériaux', translated in *Art & Text*, no. 17 (1985) 47–57; reprinted in Reesa Greenberg, Bruce W. Ferguson and Sandy Nairne, eds, *Thinking about Exhibitions* (London and New York: Routledge, 1996) 159–65, 168–9, 173.

Christine Buci-Glucksmann
Dematerialization//1985

Matter is no longer what it was … Due to the impact of science and technology it has shed its classic criteria of identity: solidity of matter, materiality of constituent parts, temporal and spatial fixity, stability of supports, self-evident reality. Wave-matter, flux-matter, energy-matter, language-and-interaction-matter – 'dematerialization' is nothing but a word-program for the composition of what Bachelard called '*this materialism of matter* […] *informed by the vast plurality of different matters*'. Man is here no longer subject but stakeholder [*partie prenante*].

Christine Buci-Glucksmann, 'Dématérialisation', in *Les Immatériaux. Epreuves d'écriture*, ed. Jean-François Lyotard and Thierry Chaput (Paris: Centre Pompidou, 1985) 42. Translation by Ian Farr, 2015.

Jacques Derrida
Dematerialization, *Matériau*, *Matériel*//1985

Dematerialization
Tends towards the effacement of exteriority: self-referentiality. Game of *Scrabble*: the definition or the commentary only adds a sign by situating it in the network of words already given, writing of interaction, each sign returning the currency of the other. Simulation of an artificial order, a single phrase inhabiting the right angles of an improbable memory. Matter is no longer a support, substance, subject, term at the borders of an opposition. Nor is it a receptacle or an intelligible kind of matter (*hylè noété*) or something 'disembodied'. Perhaps *khôra* (spacing, emplacement beyond oppositions, *tertium quid* conceived 'as in a dream'). Insensible. Capacity of resistance (*restance* [minimal possibility]) more intractable than ever (non-opposable): ineluctable death in my relationship to myself, what I send to myself with no apparent support, with absolute speed, with you, with me, back home.

Matériau [*support of the message*; *medium*]
If the '*new matériau*' is no longer '*matter*' (whether it's 'raw material' for a '*project*'

or not [...]) why does the word '*matériau*' not run out breath, not give up its last breath and the memory within it? If it does not disappear, it is surely not a sign of immortality, but the fact that it still resonates like a currency, a currency of exchange with the history of its concept, paying homage to the 'tradition of modernity'. Why? Why not? This is what interests me most in this game, apart from the fact that I am not playing it alone. What does it mean to say 'I am playing with you', 'I am playing with them', 'he is playing with us'?

Matériel [*addressee of the message*; *physical or material world*; *equipment*]
Noun or adjective? Noun, according to the coded definition [...] '*that which handles the acquisition, transfer and collection of a message*', *matériel* is matter informed by a technique, the matter of an instrument (photographic equipment, the typewriter on which I am improvising here, etc.). Thus if we proceed from the opposition between matter and form (*physis/tekhnè*, etc.), should this opposition not cede to the 'post-modernity' of 'immaterials' [*les immatériaux*]? There is nothing here that is preventing the 'metaphysical' from being rendered appropriately in ten lines. However: imagine a love letter archiving its clichés through the *matériel* of a word processor (in its present-day form, with its horrible signs). What we need, then, is not to invent something to cancel out *mât*, but something to make all its supplements (*mât* + X) resonate and sing through the equally potent forces of laughter and love. You know how to make the *matériel* laugh.

Jacques Derrida, 'Dématérialisation', 'Matériau' and 'Matériel', in *Les Immatériaux*, op. cit. above, 42, 124, 126. Translation by Philippa Hurd, 2015.

Vilém Flusser
Form and Material//1991

A lot of nonsense has been talked about the word *immaterial*. But when people start to speak of 'immaterial culture', such nonsense can no longer be tolerated. This essay aspires to clear away the distorted concept of the 'immaterial'.

The word *materia* is the result of the Romans' attempt to translate the Greek term *hylè* into Latin. *Hylè* originally meant 'wood', and the fact that the word *materia* must have meant something similar is still suggested by the Spanish word *madera*. When, however, the Greek philosophers took up the word *hylè*,

they were thinking not of wood in general but of the particular wood stored in carpenters' workshops. In fact, what they were concerned with was finding a word that could express the opposite of the term *form* (Greek *morphé*). Thus *hylè* means something amorphous. The basic idea here is this: The world of phenomena that we perceive with our senses is an amorphous stew behind which are concealed eternal, unchanging forms which we can perceive by means of the supersensory perspective of theory. The amorphous stew of phenomena (the 'material world') is an illusion, and reality, which can be discovered by means of theory, consists of the forms concealed behind this illusion (the 'formal world'). Discovered, indeed, in such a way that one recognizes how the amorphous phenomena flow into forms, occupy them in order to flow out into the amorphous once more.

We get closer to this opposition *hylè*/*morphé* or 'matter'/ 'form' if we translate the word *matter* as 'stuff'. The word *stuff* is both a noun and a verb ('to stuff'). The material world is that which is stuffed into forms; it gives them a filling. This is much more plausible than the image of wood being cut into forms. For it demonstrates that the world of stuff only comes about when it is stuffed into something. The French word for filling is *farce*, this makes it possible to claim that, from a theoretical perspective, everything material in the world, everything made up of stuff, is a farce. This theoretical perspective, in the course of the development of science, entered into a dialectical relationship with the sensory perspective ('observation – theory – experiment'), and this can be seen as a stumbling-block to theory. It could even lead to the sort of materialism for which matter (stuff) is reality. Nowadays, however, under pressure from information technology, we are returning to the original concept of 'matter' as a temporary filling of eternal forms.

For reasons that would go way beyond the scope of this essay, there grew up, independently of the philosophical concept of matter, the opposition 'matter-spirit'. The original conception here was that solid bodies could be turned into liquid and liquid bodies into gas, in so doing escaping the field of vision. Thus, for example, breath (Greek *pneuma*, Latin *spiritus*) can be seen as a turning of the solid human body into gas. The transformation from solid to gas (from body to spirit) can be observed in one's breath in cold weather.

In modern science, the concept of changing states of aggregation (solid > liquid > gas and back again) has given rise to a different world-view, according to which, roughly speaking, this change takes place between two horizons. On the one horizon (the point of absolute zero), everything whatsoever is solid (material), and on the other horizon (at the speed of light), everything whatsoever is more than gaseous (high energy). (One is reminded that 'gas' and 'chaos' are the same word.) The 'matter-energy' opposition that arises here makes one think of spiritualism: One can transform matter into energy (fission) and energy into matter (fusion)

(this is expressed in Einstein's formula). According to the world-view of modern science, everything is energy – i.e. the possibility of chance, improbable agglomeration, of the formation of matter. In such a world-view, 'matter' equals temporary islands consisting of agglomerations (warps) in high-energy fields of possibility which intersect with one another. Hence all the fashionable nonsense talked nowadays about 'immaterial culture'. What is meant by this is a culture in which information is entered into the electromagnetic field and transmitted there. What is nonsense is not just the misuse of the term *immaterial* (instead of *high-energy*) but also the uninformed use of the term *inform*.

To return to the original opposition 'matter-form' – i.e. 'content-container'. The basic idea is this: When I see something, a table for example, I see wood in the form of a table. It is true that the table is being hard as I am seeing it (I bump into it), but I know that this state is transitory (it will be burnt and decompose into amorphous ash). But the table-form is eternal, since I can imagine it anywhere and at any time (see it in my mind's theoretical eye). Hence the form of the table is real, and the content of the table (the wood) is only apparent. This illustrates what carpenters do: They take the form of a table (the 'idea' of a table) and impose it upon an amorphous piece of wood. The tragedy here is that in so doing they not only in-form the wood (impose the table form on it) but also deform the idea of the table (distort it in the wood). The tragedy is therefore that it is impossible to make an ideal table.

This all sounds very archaic, but it is in fact so up-to-date that it deserves to be called a 'burning issue'. [...]

Forms are neither discoveries nor inventions, neither Platonic Ideas nor fictions, but containers cobbled together for phenomena ('models'). And theoretical science is neither 'true' nor 'fictitious' but 'formal' (model-designing).

If 'form' is the opposite of 'matter', then no design exists that could be called 'material': It is always in-forming. And if form is the 'How' of matter, and 'matter' the 'What' of form, then design is one of the methods of giving form to matter and making it appear as it does and not like something else. Design, like all cultural expressions, illustrates that matter does not appear (is not apparent) except in so far as one in-forms it, and that, once in-formed, it starts to appear (become a phenomenon). Thus matter in design, as everywhere in culture, is the way in which forms appear. [...]

The 'burning issue' is therefore the fact that in the past (since the time of Plato and even earlier), it was a matter of forming the material to hand to make it appear, but now what we have is a flood of forms pouring out of our theoretical perspective and our technical equipment, and this flood we fill with material so as to 'materialize' the forms. In the past, it was a matter of giving formal order to the apparent world of material, but now it is a question of making a world appear

that is largely encoded in figures, a world of forms that are multiplying uncontrollably. In the past, it was a matter of formalizing a world taken for granted, but now it is a matter of realizing the forms designed to produce alternative worlds. That means an 'immaterial culture', though it should actually be called a 'materializing culture'.

What is at issue is the concept of in-formation. In other words, imposing forms on materials. This has been apparent since the Industrial Revolution. A steel tool in a press is a form, and it in-forms the flood of glass or plastic flowing past it into bottles or ashtrays. [...] The criteria for criticizing information are now more like the following questions: To what extent are the forms being imposed here capable of being filled with material? To what extent are they capable of being realized? To what extent is the information practical or productive?

It is therefore not a question of whether images are the surfaces of materials or the contents of electromagnetic fields. But a question of the extent to which they arise from material, as opposed to formal, thinking and seeing. Whatever 'material' may mean, it cannot mean the opposite of 'immaterial'. For the 'immaterial' or, to be more precise, the form is that which makes material appear in the first place. The appearance of the material is form. And this is of course a post-material claim.

Vilém Flusser, extracts from 'Form and Material' (1991); trans. Anthony Mathews, in Flusser, *The Shape of Things: A Philosophy of Design* (London: 1999) 22–4, 26, 28–9.

Sadie Plant
Zeros + Ones//1997

Just as individuated texts have become filaments of infinitely tangled webs, so the digital machines of the late twentieth century weave new networks from what were once isolated words, numbers, music, shapes, smells, tactile textures, architectures, and countless channels as yet unnamed. Media become interactive and hyperactive, the multiplicitous components of an immersive zone which 'does *not* begin with writing; it is directly related rather to the weaving of elaborate figured silks'.[1] The yarn is neither metaphorical nor literal, but quite simply material, a gathering of threads which twist and turn through the history of computing, technology, the sciences and arts. In and out of the punched holes of automated looms, up and down through the ages of spinning and weaving, back

and forth through the fabrication of fabrics, shuttles and looms, cotton and silks, canvas and papers, brushes and pens, typewriters, carriages, telephone wires, synthetic fibres, electrical filaments, silicon strands, fibre-optic cables, pixelled screens, telecom lines, the World Wide Web, the Net, and matrices to come. [...]

When images are [...] painted, or written in the form of words on a page, patterns are imposed on the passive backdrop provided by the canvas or the page. But textile images are never imposed on the surface of the cloth: their patterns are always emergent from an active matrix, implicit in a web which makes them immanent to the processes from which they emerge. [...]

This is the diagonal route which feels a way through the binaries of one and the other, master and slave. Those who pick up on it are neither in charge of their materials nor are their materials enslaved to them. Neither random nor deliberate, this is a diagonal route, 'determined in such a way as to follow a flow of matter, a *machinic phylum*', a line which is 'materiality, natural or artificial, and both simultaneously; it is matter in movement, in flux, in variation, matter as a conveyor of singularities and traits of expression. This has obvious consequences: namely, this matter-flow can only be *followed*. [...]'.[2]

If the conventions of the visual arts had activated artists and their tools and divided them from pacified matrices, digitization interweaves these elements again. On the computer monitor, any change to the image is also a change to the program; any change to the programming brings another image to the screen. This is the continuity of product and process at work in the textiles produced on the loom. The program, the image, the process, and the product: these are all the softwares of the loom. Digital fabrications can be endlessly copied without fading into inferiority; patterns can be pleated and repeat, replicated folds across a screen. Like all textiles, the new softwares have no essence, no authenticity. Just as weavings and their patterns are repeatable without detracting from the value of the first one made, digital images complicated the questions of origin and originality, authorship and authority with which Western conceptions of art have been preoccupied. [...] Written out of an official history which draws them in as its minor footnotes to itself, cloths, weavers and their skills turn out to be far in advance of the artforms digitization supersedes.

1 Philip and Emily Morrison, eds, *Charles Babbage and his Calculating Engines: Selected Writings by Charles Babbage and Others* (New York: Dover, 1961) xxxiii.

2 Gilles Deleuze and Félix Guattari, *A Thousand Plateaux* (1980); trans. Brian Massumi (Minneapolis: University of Minnesota Press, 1987) 409.

Sadie Plant, extracts from *Zeros + Ones: Digital Women + the New Technoculture* (London: 1997) 11–12, 67, 80, 189–90.

Karen Barad
Meeting the Universe Halfway//2007

Language has been granted too much power. The linguistic turn, the semiotic turn, the interpretative turn, the cultural turn: it seems that at every turn lately every 'thing' – even materiality – is turned into a matter of language or some other form of cultural representation. The ubiquitous puns on 'matter' do not, alas, mark a rethinking of the key concepts (materiality and signification) and the relationship between them. Rather, they seem to be symptomatic of the extent to which matters of 'fact' (so to speak) have been replaced with matters of signification (no scare quotes here). Language matters. Discourse matters. Culture matters. There is an important sense in which the only thing that doesn't seem to matter anymore is matter.

Taking Matter Seriously: Materiality and Performativity

What compels the belief that we have a direct access to cultural representations and their content that we lack toward the things represented? How did language come to be more trustworthy than matter? Why are language and culture granted their own agency and historicity, while matter is figured as passive and immutable or at best inherits a potential for change derivatively from language and culture? How does one even go about inquiring after the material conditions that have led us to such a brute reversal of naturalist beliefs when materiality itself is always already figured within a linguistic domain as its condition of possibility?

It is hard to deny that the power of language has been substantial. One might argue that it has been too substantial, or perhaps more to the point, too substantializing. Neither an exaggerated faith in the power of language nor the expressed apprehension that language is being granted too much power is a novel feature of the late twentieth century and the early twenty-first. [...]

Is it not, after all, the common-sense view of representationalism – the belief that representations serve a mediating function between knower and known – that displays a deep mistrust of matter, holding it off at a distance, figuring it as passive, immutable and mute, in need of the mark of an external force like culture or history to complete it? [...]

A *performative* understanding of discursive practices challenges the representationalist belief in the power of words to represent pre-existing things. Unlike representationalism, which positions us above or outside the world we allegedly merely reflect on, a performative account insists on understanding

thinking, observing and theorizing as practices of engagement with, and as part of, the world in which we have our being. [...]

I propose a *post-humanist performative* approach to understanding techno-scientific and other natural/cultural practices that specifically acknowledges and takes account of matter's dynamism. The move toward performative alternatives to representationalism shifts the focus from questions of correspondence between descriptions and reality (e.g. do they mirror nature or culture?) to matters of practices, doings and actions. [...]

Matter is neither fixed and given nor the mere end result of different processes. Matter is produced and productive, generated and generative. Matter is agentive, not a fixed essence or property of things. Mattering is differentiating, and which differences come to matter, matter in the iterative production of different differences. [...]

The notion of *intra-action* (in contrast to the usual 'interaction', which presumes the prior existence of independent entities or relata) represents a profound conceptual shift. It is through specific agential intra-actions that the boundaries and properties of the components of phenomena become determinate and that particular concepts (that is, particular material articulations of the world) become meaningful. Intra-actions include the larger material arrangement (i.e., set of material practices) that effects an *agential cut* between 'subject' and 'object' (in contrast to the more familiar Cartesian cut which takes this distinction for granted). [...]

In my further elaboration of this agential realist ontology, I argue that phenomena are not the mere result of laboratory exercises engineered by human subjects; rather, *phenomena are differential patterns of mattering* ('diffraction patterns') produced through complex agential intra-actions of multiple material-discursive practices or apparatuses of bodily production, where *apparatuses are not mere observing instruments but boundary-drawing practices – specific material (re)configurings of the world – which come to matter*. These causal intra-actions need not involve humans. Indeed, it is through such practices that the differential boundaries between humans and nonhumans, culture and nature, science and the social, are constituted. [...]

The world is a dynamic process of intra-activity and materialization in the enactment of determinate causal structures with determinate boundaries, properties, meanings, and patterns of marks on bodies. [...] That is, it is through specific intra-actions that phenomena come to matter, in both senses of the word. [...]

In summary, the primary ontological units are not 'things' but phenomena – dynamic topological reconfigurings/entanglements/relationalities/(re)articulations of the world. And the primary semantic units are not 'words' but material-discursive practices through which (ontic and semantic) boundaries

are constituted. This dynamism is agency. Agency is not an attribute but the ongoing reconfigurings of the world. The universe is agential intra-activity in its becoming. [...]

In an agential realist account, materiality is an active factor in processes of materialization. Nature is neither a passive surface awaiting the mark of culture nor the end product of cultural performances. The belief that nature is mute and immutable and that all prospects for significance and change reside in culture merely reinscribes the nature-culture dualism that feminists have actively contested. Nor, similarly, can a human-nonhuman distinction be hardwired into any theory that claims to take account of matter in the fullness of its historiality. To presume a given distinction between humans and nonhumans is to cement and recirculate the nature-culture dualism into the foundations of feminist theory, foreclosing a genealogy of how nature and culture, human and nonhuman, are formed. Hence any performative account worth its salt would be ill advised to incorporate such anthropocentric values in its foundations.

A crucial part of the performative account that I have proposed is a rethinking of the notions of discursive practices and material phenomena and the relationship between them. In an agential realist account, discursive practices are not human-based activities but specific material (re)configurings of the world through which boundaries, properties, and meanings are differentially enacted. And matter is not a fixed essence; rather, matter is substance in its intra-active becoming – not a thing but a doing a congealing of agency. Apparatuses are material (re)configurings or discursive practices that produce (and are part of) material phenomena in their becoming. Discursive practices and material phenomena do not stand in a relationship of externality to each other; the material and the discursive are mutually implicated in the dynamics of intra-activity. In an agential realist account, performativity is understood not as iterative citationality (Butler) but as *iterative intra-activity*. Intra-actions are agentive, and changes in the apparatuses of bodily production matter for ontological as well as epistemological and ethical reasons: different material-discursive practices produce different material configurings of the world, different difference/diffraction patterns; they do not merely produce different descriptions. Objectivity and agency are bound up with issues of responsibility and accountability. Accountability must be thought of in terms of what matters and what is excluded from mattering.

Karen Barad, extracts from *Meeting the Universe Halfway: Quantum Physics and the Entanglement of Matter and Meaning* (Durham, North Carolina: Duke University Press, 2007) 132–3, 135, 137, 139–41, 183–4 [footnotes not included].

Jens Hauser
Who's Afraid of the In-Between?//2008

The specific materialities of communication *matter* – they matter in art, and they matter even more in the current state of a still developing post-digital paradigm for which Roy Ascott has coined the intriguing term *moist media*, 'comprising bits, atoms, neurons, and genes in every kind of combination' and in which 'the dry world of virtuality and the wet world of biology' merge to become a substrate of art.[1] Since we cannot expect such techno-holistic views of how matter will then be in-formed to unfold 'naturally', nor cultural notions or concrete physical realities to warmheartedly collapse into each other, it is first and foremost the mediating membranes that warrant our consideration – membranes conceived as active rather than passive, membranes that do not merely separate insides from outsides nor are simply crossed or transgressed, but instead are negotiated.

sk-interfaces attempts to make these membranes tangible in a twofold yet mutually informing approach through art and cultural theory which provides a locus both for phenomenological experience and embodied thought. Put succinctly, art came first and cultural theory followed, unless it was already taken up in the artistic position itself. In contrast to the trend in academic publications to use art primarily as a mere placeholder or litmus paper, illustrating otherwise self-sufficient arguments from preexisting heuristic frameworks with the most 'meaningful' examples, the artworks and performances in *sk-interfaces*, reflecting a wide variety of forms both with respect to discourse and technique, should first be considered independently. A five-year empirical study of why and how artists have recently developed an interest in the material properties and functionalities inherent in the notion of 'skin as a physiologically mediating instance' revealed common patterns of motivations. What these works share is their liminality within which major shape-shifting transformations can occur. In the ambiguity, openness and disorientating indeterminacy of these unstable transition zones, ontological crises and epistemological doubts relating to our ever-expanding identities are given material form: from trans-border, -gender or -species issues and mixed ethnicity to the fascination of growth, self-experimentation, infection and healing, to matters of the living and non-living, such as the status of foetuses, stem cell research and tissue culture. [...]

In the context of the question at hand, whether and how interfaces should be understood not only through cognitive-language vectors but beyond that through direct physiological ones, McLuhan opens up greater possibilities, in particular because his media theory is not limited to telecommunication or information

theory but incudes such various 'media' as clothing, housing, weapons, aeroplanes and so on. Coupled with his theory of inclusion, that media *per se* always already contain other media (the infamous 'the medium is the message'), McLuhan's theory can be extended to biomedia as well, which in the age of xenotransplantation and transgenics may no longer be considered from a strictly anthropocentric point of view.

With what or whom do we need to interface today and how, beyond the established protocols? Louise Poissant brings the issue to a head when she writes that, in new media art, 'the raw material, one must say, is algorithmic and abstract and at the same time composed of communicational flux made of sensations, emotions, ideas, and exchanges'.[2] [...]

A central characteristic of contemporary media art has long been its affinity for interactive displays and the inherently processual nature of the exchange between artist and participant, in order to clearly distinguish themselves from 'dead object and material art', where processes merely culminate in the end product of the completed work. Media art's emphasis on the processual implies progression on the scale of time, and movement, whatever the form, set in motion by cognitively initiated, binary logical processes, hence conceived as *active*. By contrast, material properties are considered *passive* and would fall outside the realm of interfaces. But are there not, then, points of interconnection between two entities when parameters are 'programmed' not electronically but chemically, mechanically or biologically? Emulsions and dispersions can also be understood as interfaces. When water and oil are mixed, they tend to separate and at equilibrium become two distinct strata with an oil-water interface in between – processes such as those employed by Zbigniew Oksiuta in his *Isopycnic Systems*[3] in order to create empirico-material forms of such complexity that no computer simulation could calculate the parameters in their entirety. Even the surface of Narcissus's lake may be regarded as an interface of water and air.

Performance artists such as Yann Marussich encroach upon these spaces in-between. In *Bleu Remix*, Marussich creates a controlled biochemical situation that generates an apparently motionless choreography of methylene blue, using thermal regulation and precisely calculated timing, which then seeps out of body cavities and pores, thus making 'the motionless body a monochrome vibration that hints at the problem of the relationship between outward immobility and inner mobility. What is going on inside the body ahead of the visible movement. The premovement is written down in the body'.[4] Marussich, who actually comes from the field of dance, intentionally plays here with the topos of an activity perceived externally as passive, speaking of 'motionless sculpture' and the 'bloodless flaying of the body'. What interests him is less the expression of psychological states or the externalization of cognitive processes than the notion

of presence: 'Presence and the bubbling mobility of the inner body which are complementary to the image of the motionless body [...] Art is no longer a *representation* but a continuous inner state *presented* before third parties'. [...]

Reverse Othering

Since the vector of change is shifting from the use of networks to bridge distances to microscopic modelling at the cell level, and from presence as a temporal dimension to presence as a spatial dimension of proximity, it is no surprise that artists have turned to the use of skin cells. For one thing, in comparison to other cells they reproduce and renew themselves faster; and for another, they are suited for use *per se* as biological metaphors for '*trans*', as in trans-racial, trans-species, trans-gender. The duo Art Orienté objet, in *Artists Skin Cultures*, cultivated the epidermal cells of both artists together, then grafted this layer of epidermis onto pig derma, before finally tattooing it with motifs of endangered species. Their trans-species totems are ultimately and ideally supposed to be grafted onto compliant art collectors themselves, who can then make the art bodies part of their own, and not necessarily merely in a symbolic sense. [...]

The Australian Tissue Culture & Art Project (Oron Catts and Ionat Zurr) has specialized for a decade in cell and tissue culture and exhibits miniature sculptures that the collective itself describes as 'semi-living'. These are characterized by the fact that they are put on display in bioreactors and incubators as artistic growth processes. On the other hand, these fragmentary satellite bodies occupy an ontological grey zone. The collective's doll-size cell sculptures in *Victimless Leather* grow from human, mouse and pig cells cultivated together into the utopic vision of leather produced without victimizing animals,[5] whereby the characteristic of leather as a dead surface here, in the age of xeno-transplantation becomes a *trans-species interface*. What in psychoanalysis is referred to as the protective and defining surface which constitutes the human individual, much as Didier Anzieu has described it in the paradigm of skin-ego, is here inverted into its opposite: progressive permeability.

In these examples of *biofacts* which are created for the sake of art, we are dealing with 'models of something that does not yet have a body but could have one'.[6] It is the notion of growth that makes up the central thematic of Nicole C. Karafyllis's concept of biofacts – growth, which as a process suggests a self-dynamic, though 'directed growth ensures from the beginning that technical control' requires precisely this materiality to expose the 'trick of living material [growing] as natural material, although it is considered technology and is cultivated for specific purpose'. But the vegetal and the notion of growth represent the quintessence of nature, which, on the one hand, stands in opposition to the technological and instrumental; yet it is precisely this sense of

the 'vegetal, which has always accompanied machine discourse'.[7] Here, the example of tissue engineering is interesting insofar as it does not represent a revolutionary new technology but rather an older technology that, in McLuhan's sense, is capable of generating and pointing to new media and of referencing their repercussions. After all, it can be argued in the face of the convergence today of biomedia as information transmitters, nanotechnology, synthetic biology, DNA chips and DNA sequencing that we are dealing with a certain virtualization of biology; yet 'the matching with wetware, that is, with the biological system for monitoring the function, remains necessary'.[8]

Naturally, the form of the cellular sculpture in *Victimless Leather* is recognizable as a 'leather jacket'; the image that people have even of body fragments conceptually holds the body together, to a degree as an *imprint* – however, not as negative but as positive. But the peculiar thing about biomedia, in this case, is that in the contemplation of cellular mixes signifier and signified – image body and body image overlap. The medium as 'body of the image' is itself materially identical to the body of the viewer; it is not merely a reference to it, nor does it 'stand for' something, so that this relationship is less metaphoric than metonymic. Herein lies a common characteristic of the biomedia used in art: they refer synecdochally to a whole and constitute a material part of this whole 'represented' by the fragment, so that we may speak both of *epistemological metaphors* and of *ontological metonyms*. The hybrid as a result may be seen more easily than the becoming of a biofact may be grasped. [...]

Computer culture had promoted 'the shift of paradigms from defining life as substance, material hardware or mechanisms to conceiving life as code, language, immaterial software, dynamical system'.[9] Since then, new media art has re-materialized itself. The former fascination with the 'code of life' is receding and making way for practices involving *wetwork*. There has also been a shift from a dominant focus on genetics to culturing cells when it comes to artistic practice.[10] Here art runs parallel to theoreticians of science such as Evelyn Fox Keller. In 'Beyond the Gene, but Beneath the Skin',[11] Fox Keller complains of the still strongly gene-centred focus of much of molecular biological research, which is only slowly subsiding. She argues that not the gene but the entire cell must be put into focus as the scale of evolutionary biology. While the gene may be the *locus* of heredity, it cannot be its *source*. Genes remain stable only as long as the machinery in the cells responsible for that stability persists. Hence, according to Fox Keller, we must always examine the entire interaction within the cell and not the gene; for it is the cell that regulates so much of the traffic between inside and out, whereby the cell membrane is itself an active agent. Yet the focus on genetics reopens 'a far older controversy namely that concerning the relations between *form* and *matter*'.[12] Here, form is generally construed as *active* and matter as *passive*. This old

debate now appears conceptually in art in the light of genes as 'active agents' and of the cellular and extra-cellular environment as 'passive material', as a substrate formed by an originally inscribed genetic code. Still, as Fox Keller reminds us, talk of a 'genetic program' is misleading and teleological, as if there were somehow a purpose or perhaps even a theological signpost behind it all. [...]

> 'Bio Artists' and bioscientists share a core experience: waiting for growth. It takes a relatively long time for cells and tissues to grow sufficiently that they can be used as media and means. The phenomenon of growth, in its slowness, mediates between subject and object because it *makes present* the time both share with one another synchronously.[13]

And it is not yet clear whether visitors will encounter *enlightenment*, and how much, nor whether or not it will be at all visible to them. No plug-and-play here. We'll wait and see if everything will go, grow and glow to plan.

1 [footnote 2 in source] Roy Ascott, 'Technoetic Territories', in Ric Allsopp and Scott Delahunta, eds, *Performance Research: Digital Resources*, vol. 11, no. 4 (2006) 39–40.

2 [29] Louise Poissant, 'The Passage from Material to Interface', in Oliver Grau, ed., *MediaArtHistories* (Cambridge, Massachusetts: The MIT Press, 2007) 244.

3 Ibid., 134.

4 [33] Yann Marussich, 'Immobile, Bleu ... Remix!', in Jens Hauser, ed., *SK-Interfaces. Exploring Borders – Creating Membranes in Art, Technology and Society* (Liverpool: Liverpool University Press, 2008) 128

5 [45] Indeed, because of the use of calf serum in tissue culture, there is indeed a victim, as Adele Senior points out in her essay 'In the Face of the Victim: Confronting the Other in the Tissue Culture and Art Project', in *SK-Interfaces*, op. cit., 76.

6 [46] Nicole C. Karafyllis, 'Endogenous Design of Biofacts: Tissues and Networks in Bio Art and Life Science', in *SK-Interfaces*, op. cit., 50.

7 [47] Ibid., 48.

8 [48] Ibid., 53.

9 [50] Peter Weibel, 'Life – The Unfinished Project', in *Genetic Art – Artificial Life* (Vienna: Ars Electronica, PVS, 1993) 9–10.

10 [51] Jens Hauser, 'Bio Art – Taxonomy of an Etymological Monster', in Gerfried Stocker and Christine Schopf, eds, *Hybrid – Living in Paradox* (Linz: Ars Electronica/Ostfildern-Ruit: Hatje-Cantz, 2005) 182-93.

11 [52] Evelyn Fox Keller, 'Beyond the Gene, but Beneath the Skin', in Eva M. Neumann-Held and Christoph Rehmann-Sutter, eds, *Genes in Development. Re-reading the Molecular Paradigm* (Durham, North Carolina: Duke University Press, 2006) 290–312.

12 [53] Ibid., 292.

13 [55] See *La Mettrie: Machine Man and Other Writings*, ed. Ann Thomson (Cambridge: Cambridge University Press, 1996) 56.

Jens Hauser, extracts from 'Who's Afraid of the In-Between?', in Hauser, ed., *sk-interfaces: Exploring Borders – Creating Membranes in Art, Technology and Society* (Liverpool: Liverpool University Press, 2008) 6–7, 11–13, 15–17.

Kristine Marx
The Materiality of Impermanence//2008

A shiny pink plastic strip streams through masses of machinery at its birthplace in Chalon-sur-Saône, France. This celluloid is the protagonist of Tacita Dean's 44-minute film *Kodak* (2006). [...] Like her earlier films, *Kodak* addresses themes of obsolescence, nostalgia and longing.

Dean records a Kodak manufacturing plant, the material's point of origin, to make a work about the death of film. The factory was the last in Europe to produce black and white standard 16mm film stock, the artist's medium of choice. When Dean contacted them to make her film the factory was preparing to close its operations. The black and white takes interspersed in *Kodak* were shot on some of the last few rolls of stock. These bits document the final images of the film's own making, underscoring the reflexivity of her project. There are many films about filmmaking, but usually from the perspective of film as a creative artifice – its direction, acting and storytelling. *Kodak* is about the physical making of film – its materiality and its impermanence. It shows the production of film before it is overtaken by digital technologies. Meditative and melancholic, it is a record of loss. [...]

Dean presses the superiority of film over video by exploiting its potential in *Kodak*. Film has a better capacity to imitate real life, with a greater depth of field and the ability to capture light more accurately than digital recording. Video cannot reproduce true black the way that film can, which is emphasized in *Kodak*'s colour. The factory, bathed in Caravaggio light and shadow, possesses the seduction of a painted image. Its hues – deep reds, rich blacks, blue-violets and the blush pink of the polyester strip – soften the machinery's geometry. Close-ups of the celluloid running through the apparatus contrast to wider views of the workrooms. The film's reflective surface glistens with newness. These tightly cropped shots reduce the image to colour, light and movement. As

the camera directs our gaze through the celluloid's transparent body, the materiality of the film is at once tangibly present and absent. Seeing through is both seeing the literal substance of film and its nascent potential as projected image. The abstract form provides a subjective counterpoint to the documentary style of the wider angles.

Dean alternates the close-ups with views of the facility's interior. [...] At times, the still camera passively observes the factory as if it were an instructional film from the 1960s or 70s. Occasionally we see a worker tending the process. The size of the machines, which fill entire workrooms, is reminiscent of the scale of clunky, antiquated computers. [...]

As the atomic age fades into the digital, analogue technology seems misplaced. *Kodak*'s beauty of the birth of film belies the futility of clinging to the passing medium. The image of the film strip, flowing through the machine like water, suggests the fluidity of memory – the slippery thread to past experiences – just as the celluloid links many rooms of machinery. Here, as in Dean's former films, memory reaches back as nostalgia. But a peculiarity of the new film is that nostalgia desires a past even before history has taken the present completely from us. After all, film has not yet totally vanished. [...]

In *Kodak*, the factory workers are filmed as supporting actors to their celluloid lead. They are there to further the development of the film, not as individuals. We don't register their faces; there is no dialogue. Only near the end of the film as the workers prepare to leave do we hear the muffled chatter of the workplace. They push out of the plastic curtain room dividers, whose shiny surface recalls earlier scenes of the celluloid passing through machinery, and disappear from view.

The last scenes show the abandoned, empty lots of the film-packaging factory. Every time the film repeats, the empty lots return, undermining any claim to optimism suggested by the rosy polyester beauty of earlier scenes. We are also privy to views of the deserted factory's interior with bits of film carelessly strewn across the floor. At the end of the day, the order of technology collapses into disarray. Entropy permeates the scene of a fading medium.

Included in the Guggenheim's exhibition is a framed, unexposed 16mm film negative called *Found Obsolescence* (2006). The brittle fragment was collected from a sprocket machine in the factory. Displayed like a relic, the ready-made piece draws attention to the fragility of film's materiality. The crumbling decay of *Found Obsolescence* metaphorically points to the cessation of film manufacturing. Film is presented as more concrete than video; more a part of the physical world than the pixilated image.

Kristine Marx, 'The Materiality of Impermanence', *PAJ: A Journal of Performance and Art*, vol. 30, no. 1 (January 2008) 64–5, 68–70.

Simon Starling
In Conversation with Francesco Manacorda//2012

Francesco Manacorda The detour [in *Project for a Masquerade (Hiroshima)*, 2011] takes its starting point from a photograph, so a two-dimensional work becomes three-dimensional, but also four-dimensional because it includes travel across time. After this process it goes back into the two dimensions as a photograph. This passage from one dimension to the other is something that has been explored in relation to your practice [...]. Lately, though, it has taken different directions.

Simon Starling There are some other examples: using a vintage photograph of a Henry Moore sculpture and then interrogating a single silver particle that constitutes a tiny fragment of the bigger image and then enlarging it in order to create a small bronze sculpture (*Silver Particle/Bronze after Henry Moore*, 2008). In the work there are constant shifts from image to object, object to image. And from material to information, digital to analogue, etc. [...]

I suppose, in a way, one of my formative creative experiences was when, at the age of ten, I developed my first black and white print in a darkroom. Witnessing the chemically induced appearance of an image was extraordinary somehow. I later built a small darkroom at home, and the mess, the toxic business of silver-based photography became very important to me and is something that I've carried through into my later career. As that kind of technology is disappearing so rapidly, it has come into focus more for me. Both its imminent obsolescence and its replacement by largely dematerialized digital picture-making, which in turn accentuates silver photography's materiality, has given it a certain new relevance. [...]

The object [a photograph] is apparently flat, but it is of course made up of hundreds of thousands of three-dimensional particles. In this way an image archive could be understood as a kind of stratified geological deposit. *One Ton II* (2005), for example, makes a very direct sculptural equivalence between image and material. The work involved travelling to make an image in a platinum mine and then producing as many platinum prints of that image as is possible from one ton of ore from that mine. A single motif was reproduced as many times as possible with the tiny quantity of platinum that comes from that ton of rock. They're photographs, but they're very much sculptures too.

Simon Starling and Francesco Manacorda, extracts from 'Francesco Manacorda in Conversation with Simon Starling', in Dieter Roelstraete et al., *Simon Starling* (London and New York: Phaidon, 2012) 25, 27.

Kenneth Goldsmith
Uncreative Writing//2011

[...] In uncreative writing, new meaning is created by repurposing pre-existing texts. In order to work with text this way, words must first be rendered opaque and material. [...]

I attempted to do something similar when I wrote *Soliloquy*, a six-hundred-page unedited record of every word I spoke for a week, from the moment I woke up on Monday morning until the moment I went to bed the following Sunday. It was an investigation into how much one average person spoke over the course of a normal week. And this was the book's postscript: 'If every word spoken in New York City daily were somehow to materialize as a snowflake, each day there would be a blizzard.' There was a great snowstorm that year, and, as the trucks and backhoes moved up and down Broadway, I imagined this mass as language. Daily, such collections would happen, back-hoes shovelling language into the back of trucks, which, in turn, like the snow, would be dumped in the Hudson River and floated out to sea. I was reminded of Rabelais, who tells of a winter battle when it was so cold that the sounds created during the battle instantly froze upon hitting the air, falling to the ground, never reaching the ears of the combatants. When springtime arrived, these long inaudible sounds began to melt randomly, creating a racket by skewing their original temporal sequences of action. It was suggested that some of the frozen sounds be preserved for later use by packing them in oil and straw.[1] [...]

Impermanent language, moveable type, fluid language, language that refuses to be stuck in one form, sentiments expressed in language that can be swapped on a whim, a change of mind, a change of heart surround both our physical and digital environments. While deconstructionist theory questioned the stability of language's meaning, current conditions both online and in meatspace amp it up a notch, forcing us to view words as physically destabilized entities, which can't help but inform – and transform – the way that we, as writers, organize and construct words on the page.

1 [footnote 15 in source] I owe these thoughts to Douglas Kahn's great study, *Noise, Water, Meat: A History of Sound in the Arts* (Cambridge, Massachusetts: The MIT Press, 1999).

Kenneth Goldsmith, extracts from *Uncreative Writing: Managing Language in the Digital Age* (New York: Columbia University Press, 2011) 35–6, 49–51, 54, 232.

Viktoria Schmidt-Linsenhoff
The Aesthetics of Production, A–Z//2004

Western art criticism – for there is no other at present – has lauded Georges Adéagbo's work for exemplary paradigms that have become mainstream during the past decade: hybridization, in-between, and translocation. The artist's reception – as evidence of a Euro-American Postcolonial discourse – has emphasized the radicalism with which he adheres to a specific place, without the critics paying any attention to Cotonou itself or deeming their lack of knowledge even worthy of mention. [...] There is not a trace in Benin of the mediatized 'ethnoscapes' and ethnicized 'mediaspaces' that Arjun Appadurai describes as effects of globalization.[1] The imaginary does not convey virtual images, but rather the materiality of the things: the *objet trouvé* as fetish. No one would think to claim here that media produce or substitute for reality. Which is not to say that authenticity or some pristine state prevails, but rather that other media dominate: the bodies and gestures, hairdos and textiles, the sign painting, the cell phones, the Zemidjans. Electronic media have no part in Georges Adéagbo's installations, although he regularly enjoys watching TV. The book-like plastic video boxes are included in his installations, but not video art. Not e-mails but handwritten letters, and likewise we find photos and Xeroxes but no digital images. Reproductions, copies, replicas, imitations, parodies, inversions, citations and self-quotes, a never-ending recuperation of the culture industry – but all bound to tactile materials and media which display the marks of their histories like scars, and whose corporeality deeply moves the art audience. The main aesthetic theme dictated by urban culture in Benin is the relationship between materiality and mediality. There would be no deeper significance to this simple observation were it not systematically ignored. The negation by the digital media of a media reality (still) bound to materiality is neocolonial, because it anticipates the latter's disappearance and exoticizes its conversation in the artwork.

1 [footnote 10 in source] Arjun Appadurai, *Modernity at Large: Cultural Dimensions of Globalization* (Minneapolis: University of Minnesota Press, 1996) 31.

Viktoria Schmidt-Linsenhoff, extracts from 'The Aesthetics of Production, A–Z', in *Georges Adéagbo* (Cologne: Museum Ludwig, 2004) 17–18, 22.

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ACKNOWLEDGEMENTS

Editor's acknowledgements

I would like to thank very warmly Daniel Herrmann, who encouraged me to submit a proposal to the Whitechapel Gallery; Ian Farr, who has been a wonderful editor, and Francesca Vinter, who made possible the first publication in English of several influential German texts: Philippa Hurd and Kate Vanovitch produced great translations. This book would not have been possible without the generosity of many artists; in particular, ORLAN wrote a statement especially for this volume. Isabelle Lindermann, Sarah Sigmund, Benjamin Stölzel, Pandora Syperek and Sarah Wade provided invaluable help with my research. I am also grateful to my Doktormutter Monika Wagner and the Materialarchiv at the University of Hamburg, where I was initiated into researching contemporary art via its materials. But above all, my deepest gratitude goes to Dietmar Rübel, who not only shared his amazing library but also supported this project in the most enabling way possible.

Publisher's acknowledgements

Whitechapel Gallery is grateful to all those who gave their generous permission to reproduce the listed material. Every effort has been made to secure all permissions and we apologize for any inadvertent errors or omissions. If notified, we will endeavour to correct these at the earliest opportunity. We would like to express our thanks to all who contributed to the making of this volume, especially Craig Adcock, Marjorie Allthorpe-Guyton, Joseph A. Amato, Karen Barad, Pennina Barnett, Artur Barrio, Pascal Beausse, Nicolas Bourriaud, Christine Buci-Glucksmann, Judith Butler, Dan Cameron, John Chandler, Mel Chin, Tony Conrad, herman de vries, Georges Didi-Huberman, Anne Doran, Jimmie Durham, Natasha Eaton, Kenneth Goldsmith, Antony Gormley, Dan Graham, Boris Groys, Nicolás Guagnini, Betsy Greer, Elizabeth Grosz, Jens Hauser, Susan Hiller, Dieter Hoffmann-Axthelm, Newton Harrison, Gerard Houghton, Ian Hunt, Philippa Hurd, Tim Ingold, Max Kozloff, Mierle Laderman Ukeles, Esther Leslie, Lucy R. Lippard, Ilya Kabakov, Wolfgang Kemp, Julia Kristeva, Francesco Manacorda, Kristine Marx, Jann Matlock, Helen Mayer Harrison, Anthony McCall, Robert Morris, ORLAN, Sadie Plant, James Putnam, Dominic Rahtz, Kara Rooney, Dietmar Rübel, Tino Sehgal, Santiago Sierra, Simon Taylor, Ana Teixeira Pinto, Ann Temkin, VALIE EXPORT, Paul Vanouse, Kate Vanovitch,

Hilke Wagner, Monika Wagner, Kara Walker, Gillian Whiteley, Robert Williams.

We also gratefully acknowledge the cooperation of ARS, ARTnews, Artforum, Ashgate Publishing, Bloomsbury Publishing, Bortolami Gallery, Fondazione Celant, James Cohan Gallery, Columbia University Press, DACS, Farrar, Straus & Giroux, Ronald Feldman Gallery, Gingko Press, Grand Street, the Holt-Smithson Foundation, Journal of Material Culture, The Journal of Modern Craft, Steven Kasher Gallery, the Estate of Mike Kelley, Lisson Gallery, Liverpool University Press, Log, Manchester University Press, University of Minnesota Press, the MIT Press, Mousse Magazine, Mousse Publishing, October Gallery, Oxford University Press, Pluto Press, Reaktion Books, Routledge, the Estate of Victoria Schmidt-Linsenhoff, the Estate of Shozo Shimamoto, Tate Publishing, Victoria Miro.

Petra Lange-Berndt is Lecturer in Modern and Contemporary Art at University College London and a leading researcher in the field of material studies in art history. She is co-editor of *Sigmar Polke: We Petty Bourgeois! Contemporaries and Comrades, the 1970s* (2011).

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MATERIALITY is among the most contested yet central topics in contemporary art. This anthology investigates materiality in art that attempts to expand notions of time, space, process or participation. It looks at materials that obstruct, disrupt or interfere with social norms, surfacing as impure formations and messy, unstable substances. It re-examines the notion of 'dematerialization'; addresses materialist critiques of artistic production; surveys the relationships between materiality and bodies; explores the vitality of substances, and the concepts of intermateriality and transmateriality that have emerged in the hybrid zones of digital experimentation.

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