

University of Wollongong Research Online

Faculty of Law, Humanities and the Arts - Papers

Faculty of Law, Humanities and the Arts

2014

A robot walks into a room: google art project, the new aesthetic, and the accident of art

Susan (Su) Ballard University of Wollongong, sballard@uow.edu.au

Publication Details

Ballard, S. "A robot walks into a room: google art project, the new aesthetic, and the accident of art." Interference Strategies. Ed.L. Aceti and P. Thomas. San Francisco: Leonardo/ISAST, 2014, 122-131.

 $Research\ Online\ is\ the\ open\ access\ institutional\ repository\ for\ the\ University\ of\ Wollongong.\ For\ further\ information\ contact\ the\ UOW\ Library:\ research-pubs@uow.edu.au$

A robot walks into a room: google art project, the new aesthetic, and the accident of art

Abstract

On the 1st February 2011 Google unleashed the Google Art Project, a new way to engage with the major collections of the world's art galleries. With the Google Art Project came a new way of viewing, not just art but the other objects that inhabit art galleries. Google Art Project depends on a robot looking machine. This aesthetic machine is a different form of digital material that has entered into what have for a long time been quiet still spaces for human, and not machine contemplation. With an equal focus on the spaces between things as much as on the things themselves, Google Art Project suggests a new way of understanding art, in the interval. Except it is not new at all. This essay draws a connection between the Google Art Project, James Bridle's new aesthetic tumblr log and Aby Warburg's Mnemosyne Atlas in order to suggest that accidental encounters and ghost images formed in the spaces between things remain key to contemporary understandings of aesthetics.

Keywords

aesthetic, project, art, accident, google, robot, room, into, walks

Disciplines

Arts and Humanities | Law

Publication Details

Ballard, S. "A robot walks into a room: google art project, the new aesthetic, and the accident of art." Interference Strategies. Ed.L. Aceti and P. Thomas. San Francisco: Leonardo/ISAST, 2014, 122-131.

A Robot Walks into a Room

Google Art Project, the New Aesthetic, and the Accident of Art



Susan Ballard

Senior Lecturer Art History, Visual and Media Arts Faculty of Law, Humanities and The Arts University of Wollongong sballard@uow.edu.au suballard.net.nz

An art gallery is a public space, somewhere where almost anyone can walk off the street and experience something at a minimal cost. However, there are limits; not just to where we can walk, but to what we can look at, for how long and from what kind of distance. Galleries are social and transformational, but what if we no longer need to step through their doors? What if we let a machine do the walking, looking, and experiencing on our behalf?

A robot machine walks through an art gallery. Slowly over one evening it views the entire contents of an art gallery, not just the major art works, but everything: the fire hydrants, the exits signs, and the washbasins. To the robot, everything it sees is the same. It forms images that bear relationships to other images, which together will make a network of more images that will connect to other networks of images formed in other galleries, and then to viewers. Humans, not allowed into the galleries at night spend their evenings watching and reviewing what it is that the machine sees. The images the machine composes are the result of a long process, they are stitched together by another machine and checked for anomalies before humans

ABSTRACT

On the 1st February 2011 Google unleashed the Google Art Project, a new way to engage with the major collections of the world's art galleries. With the Google Art Project came a new way of viewing, not just art but the other objects that inhabit art galleries. Google Art Project depends on a robot looking machine. This aesthetic machine is a different form of digital material that has entered into what have for a long time been quiet still spaces for human, and not machine contemplation. With an equal focus on the spaces between things as much as on the things themselves, Google Art Project suggests a new way of understanding art, in the interval. Except it is not new at all. This essay draws a connection between the Google Art Project, James Bridle's new aesthetic tumblr log and Aby Warburg's Mnemosyne Atlas in order to suggest that accidental encounters and ghost images formed in the spaces between things remain key to contemporary understandings of aesthetics.

MACHINES THAT LOOK

can view them, some are astounding but sometimes errors occur. The machine encounters unexpected objects, and forms images of things that are not art, yet inhabit the spaces of an art gallery. These accidental encounters in the art gallery occupy a critical space that moves beyond established behaviours and expectations. The accidents both caused and caught by the machine are crucial to everyday encounters with art objects in the art gallery. These misunderstood moments offer up shared and transformative experiences, a nose can be pressed against a canvas, an exit sign or a glass toilet door with equal aesthetic pleasure.

ISSN 1071-4391 ISBN 978-1-906897-26-0

The major public galleries of the world are now inhabited by robot machines that are capable of looking closer and in more detail than their human companions. With their wide-angle multiple eyes free to roam where even humans cannot go, the robot machines document the invisible, allowing anyone anywhere to see more and access more via the digital networks that now connect galleries and their collections to each other. googleartproject.com has been live since 1 February 2011 when it opened with seventeen of the world's major art galleries. On 3 April 2012 it expanded to include a further 150 galleries from 40 different

countries. Interestingly, it has been met with general applause, particularly by curators of the galleries it has documented. For example, Beth Harris from the Museum of Modern Art says that Google Art Project allows visitors "to avoid the crowds, physical fatigue, and selfconsciousness" that visitors to the museum struggle with. 1 Robin White Owen says "you can take as much time as you like, any time and place you choose." 2

Trundling through art galleries opened specially for it in the early hours of the morning, the Google cameras have the space to themselves. They scan according to a predetermined path that gathers not just the ambient feel of the room, but generates a 360 degree panoramic immersion within the gallery spaces. Watching from our desktops we follow the eye view of a machine strapped into a trolley, standardised to an average human height of 170cm as if it is tracking an invisible adversary. It watches and scans the interior environment. However, StreetView technologies when moved inside create jittery and grainy images. The jerky movements replicate the hand held video camera footage favoured in horror movies from the late 1990s such as The Blair Witch Project. Alastair Sooke commented in *The Telegraph*, this is "a 'look' that is surely anathema to the carefully orchestrated clarity of the galleries in reality." The smoothness of our journey is controlled by the precision of our scrolling hand and the speed of the stream we receive over the network. Every exhibition is viewed at an equivalent scrolling pace, works are apprehended from the same distance, video works are freeze framed, and there are moments where the camera zooms forward producing a rapid movement into the next room, when fragments are glimpsed out of the corner of the eye, yet stepping back renders them invisible. Not everything is equally visible. Google has not received copyright clearance for all images so they appear pixilated or bleached out, ghosts of their former selves. When this technique (usually used by Google as a protection of

individual privacy when a face has been captured front on in StreetView) is applied to sculptures traces are left behind; a plinth seems strangely empty, or the reflection of a figure is captured in the glass of another image, yet when the view is rotated, the figure is gone.

When first opened to the public in the mid nineteenth century the art gallery enabled the general public to encounter the unexpected. Artworks were aesthetic tools able to transport people away from their everyday existence. This is not always the case when images are viewed inside GoogleArtProject. For example, Google described the inclusion of Hans Holbein the Younger's The Ambassadors as "tough." 4 This was due to the anamorphic techniques used to distort the image of a skull in the foreground of the painting. When looking at the original painting at the National Gallery in London, the depiction of the skull appears distorted until the viewer moves laterally to the side of the painting. Looking at the shape from the intended vantage point, the skull materializes in stunning 3D. Even in the gallery itself this is an unusual activity and met with stares and comments by other onlookers. To attempt to get side on to one's computer screen is even more challenging, and because the 'image' viewed via StreetView is made up of multiple fragments (the StreetView cameras see more like a fly than a human) the magic of distorted binocular vision is lost. In reality any unexpected encounter in GoogleArtProject is more likely to be with a blurred virtual force than something framed and labelled as art. Occasionally it is possible to catch glimpses of things reflected in mirrors and windows, objects that seem to have shadows but not presence. These documented accidental images become highly speculative objects within the gallery generating a new kind of aesthetic moment.

But with this new aesthetic must come a warning. To use Rancière's term, not everything a machine or a hu-

man sees is 'sensible.' 5 For Rancière the distribution of the sensible controls the laws by which things enter perception, or more specifically the conditions of possibility for seeing, hearing, thinking and speaking. Like any politics, Rancière says, the sensible is not available to everyone. In the late Eighteenth century it was the leisured classes who had time to hone their aesthetic judgements at public art galleries. In the early twentyfirst century machines do a lot of looking on our behalf. This is more than a general cultural condition, but a combination of digital machines and the humans who watch and experience these machines and their outputs over time. It would be possible to continue this paper with a genealogy of moments in which machines have looked, or look: a camera obscura flipped the world into an upside down colour shadow of itself; as soon as the photographic camera was invented it was taken by balloon into the sky so it could see from above; and, in St Petersberg Dziga Vertov became one with his movie camera. "I am kino-eye, I am a mechanical eye, I, a machine, show you the world as only I can see it [...] my path leads to the creation of a fresh perception of the world I decipher in a new way unknown to you." 6 However this kind of listing does not offer many more tools to think about the robot we left exploring the art galleries of the world. For this we need to return to the aesthetics of the sensible and human relationships with the machinic environment.

A COLLECTION OF ARTIFACTS

The cataloguing of machine aesthetics reached obsessive proportions in April 2012, when Bruce Sterling wrote an article in Wired both critiquing and celebrating the work of James Bridle and the notion of the 'new aesthetic' as embodied in the tumblr log: http:// new-aesthetic.tumblr.com/. Although Sterling labeled the new aesthetic as perhaps no more than a "glitch-hunt" Sterling's article lead credence to the

tumblr log and the activities of its collectors. Together, the collection of images seem to imply that there is a level of decision making, if not consciousness, to machines as they look. Bridle on the 'about' page describes it thus: "The New Aesthetic is not a movement, it is not a thing which can be *done*. It is a series of artefacts of the heterogeneous network, which recognises differences, the gaps in our overlapping but distant realities." Ban Catt summarises the new aesthetic as the inspiration behind the cataloguing of computer vision; because the "digital and the physical are moving closer together." ⁹ Kyle Chayka describes the new aesthetic as not a revolutionary art movement out to shock society, but something operating in reverse. He says, it responds "to a shocked society." 10 Chayka continues "We will not just observe how machines act and perceive, but integrate how they act and perceive into our own sensory experiences and creative processes." 11 Chayka begins with something that sounds like an argument for digital materiality, but quickly slips into utopian imaginings for the future. Catt continues with the same approach: "As the digital and the physical move closer and closer, that combination will eventually look less like a hybrid and more like a united whole, the new aesthetic reality." 12 The new aesthetic, like Google Art Project, is the collection of artifacts that are already present rather than a movement for the creation of new aesthetic objects. Crowd sourcing moments of digital ephemera and convergences where glitch overlaps with the everyday, has made for a new and somewhat spectacular, cabinet of curiosities. After a premature closure and reactivation of the log, the new aesthetic remains a fast moving collaborative catalogue, made up of a twitter feed, the tumblr log, and a collection of blog entries that circulate around each other. What is sometimes lost among the flood of machine images is Bridle's original assertion that the new aesthetic is not a movement or an action, but a series of artifacts, which when viewed together encourage us (the humans, that is) to recognize differ-

ences and gaps.

It still seems easy enough to dismiss. Except, that as we look at the ongoing influence of Walter Benjamin's unfinished Arcades Project or Aby Warburg's also unfinished Mnemosyne Atlas it is worth considering if the image based gathering practices of the new aesthetic are more than an accidental convergence. 13 In the catalogue for his recent exhibition at Reina Sofia in Madrid and ZKM that examined the influence of early art historian Aby Warburg, Georges Didi-Huberman argued for a return to earlier methods of art history that involves piecing together "visual forms of knowledge" without teleological narration. 14 This is art history with out the text. From 1924 to 1929 Warburg constructed seventy-nine wooden panels that he covered in black linen, each with groupings of reproductions, totaling over two thousand images. Labeling it the *Mnemosyne Atlas*, Warburg used the images to demonstrate the "iconography of the interval", an art history without the need for text. 15 The panels themselves are now lost, but Warburg's final arrangement of the Atlas survives as a series of 79 photographs. 16 Between and across the panels are aesthetic movements; sometimes patterns seem to flow out of one figure and into another, or grids overlap in a kind of invisible moire. In focusing on emergent points where ideas could be found to appear in-between the images on his panels, Warburg generated a diagram of gesture and energy. His methodology is described by Giogio Agamben as "an art of remembrance that shows the development of forms of expression." 17 And in this manner, Warburg's practice is often cited as core to the newly emergent discipline of art history that would initially focus on images and the connections that form between them in time and place. 18 However, Warburg's own work was not focused on the interpretation of the meanings of the images, but on their complex and autonomous interrelationship and arrangement. 19

Warburg described his relationship with images as a

confrontation either lethal or vitalizing. 20 The atlas itself was a freeze frame of relationships. Brian Dillon describes the whole project as images held "in a paradoxical pose of frenzied immobility." ²¹ Art history was understood as a network of images within which there are stored enormous energies. For Warburg the art historian was someone who conjured up this energy from the past to give it a new life. Warburg activated dynamic properties, and following on from his research with German psychologist Richard Semon he argued that it is in the spaces between things that memory functioned. 22 Warburg did not concentrate on the movement of the images as a fluid construction of time and place but his focus repeatedly turned to the gaps. Agamben continues: Warburg's "'atlas' was a kind of gigantic condenser that gathered together all the energetic currents that had animated and continued to animate Europe's memory, taking form in its 'ghosts.'" ²³ In between each image is a black field that serves to both isolate and frame the images. In these intervals Warburg saw faultlines. These irregular black spaces separated and isolated the images at the same time as they organised their relationships. Rather than links and nodes, Warburg produced a cartographic relief upon which the images floated, as if constellations of thought. 24 The panels do much more than juxtapose; they are productive and generative.

Bridle insists on the same approach for the new aesthetic tumblr. This in-between activation of memory means that the new aesthetic will similarly never be finished, it is not a thing, movement, or process. It is the capturing of a series of interim possibilities and accidental convergences that only come into focus in the corner of our eye. We cannot yet remember the new aesthetic. For now, a machine collects and logs, and people are the contributors but not the keepers of the images. In some cases spaces between things generate new aesthetic moments as different pages

spring up either in response to Sterling or to Bridle. 25 The majority of these are not yet dynamic or accidental (although many contain a superficial aesthetics of the accident as glitch or error).

Greg Borenstein was among the first to suggest that the new aesthetic resonates with other recent trends in speculative thought, and in particular with the philosophical momentum called object-oriented ontology (000):

The New Aesthetic is a visible eruption of the mutual empathy between us and a class of new objects that are native to the twenty-first century. It consists of visual artefacts we make to help us imagine the inner lives of our digital objects and also of the visual representations produced by our digital objects as a kind of pigeon language between their inaccessible inner lives and ours. ²⁶

There is a tension here. The new aesthetic seeks to make digital objects visible, to suggest that within the accident or the glitch there are overlooked moments of literal and aesthetic 'beauty.' OOO suggests that objects have ways of apprehending the world that are not necessarily human, or defined by the human, and thus do not really need us to recognize them, but that we should leave them to their own nonhuman ways. I'm purposely reducing large and complex arguments here. The point is this: if the new aesthetic is to be a useful method for understanding nonhuman (and in particular digital objects) its objects need to remain invisible, they need to transform into the pieces of black linen peeping between Warburg's reproductions, and remain un-romanticized. Even un-aestheticized. To trace the (new) accident of art we need to return with much more certainty to Warburg's unnamed science, and rather than proclaim the visibility of machine aesthetics too quickly, spend some time looking at the intervals.

Philippe-Alain Michaud says that "The conception of the images in Mnemosyne, [is a] silent conception based in pure dynamic relationships and phenomena of visual attraction and repulsion." 27 In describing his exhibition Atlas, based on Warburg's work, Didi-Huberman says that the atlas is a visual tool, the links it makes are "not a link of similarity, but a secret link between two different things." 28 If it retains the sense of an atlas, of secret links - of moments of both attraction and repulsion that can only be apprehended obliquely – the new aesthetic Tumblr will take a new place beside the arcades project and the Mnemosyne Atlas. However, if it becomes a movement or even a single act of collection formed by filling in the gaps, it will become yet another redundant archive inhabiting the dark recesses of the Internet.

Where does this leave our robot in the gallery?

THE ACCIDENT OF ART

Trapped in a very different frenzy of the visible, yet also dealing with things caught in the corner of the eye, (but with a very different purpose) Google Art Project strives to eliminate the accidental. As more and more 'information' is fed into the Google machine, less and less accidental encounters are possible. Google Art Project aims for completion; when there are no more spaces between things, when there are no more accidents. Google Art Project aims to be an archive not an atlas. The images in an atlas are not located in time, as they are with an archive, instead there is a "confrontation and a co-existence of different times." ²⁹ Currently Google Art Project allows viewers to form their own attractions and repulsions. Small dusty corners can meet with the same attention as the Mona Lisa. This confrontation is central to a journey through a gallery formed through images of images that do not discriminate but include the

accidental as encounter. However, in letting more machines loose in the gallery, Google Art Project aims for a different form of reproduction, and a different process of accumulation to that undertaken by Warburg. Although at the moment Google Art Project is accidental and found in the intervals, as more images are rendered to multi-gigapixel scale, the intervals will become invisible and Google Art Project will form an archive of the world's museums where there can be no accidents.

Aristotle suggested that the accidental "does not inhere in the constitutive essence of a thing, being, or event." 30 The accidental is more a case of its relationships with other things, beings or events. This accident as relationship revealed the substance of something, what it could do. It is through the accident that the thing, being, or event presents itself to others. In the contemporary world, as both Google Art Project and the new aesthetics Tumblr show, machines bring their own accidents with them. Paul Virilio developed Aristotle's argument for a world where images and imaging have become one. Virilio says that the accident of art results from a proliferation of images that has lead to complex relations between seeing, knowing, and imagining a world: the accident is now generalized. ³¹ In identifying a shift from the accidental as caused by essential yet mistaken relations between bodies (the specific accident), towards the intended affects of that body, Virilio's generalised accident also elides the difference between accident and attack. The contemporary mediated accident of art is the eradication of these distinctions.

The lurking presence of catastrophe became the focus of Virilio's 'Museum of Accidents' project at the Cartier Foundation in Paris in 2002 in which the aestheticising of the events 9/11 resulted in a romantic sheen over the horror produced by accidental encounters between machines and architectures. ³² In Virilio's

'Museum of Accidents' images are placed together and archived in order to discover some kind of essential connections; links between the nodes. The problem is that the nodes are not in themselves positioned as transformative, but become fixed images. In harvesting machines or media into the service of accident, there is the risk of aestheticising extreme harm, and Virilio seems to tread on the wrong side of this line. The imaging machine itself cannot acknowledge the accident (all data is data, it is the human who distinguishes between information and noise) and despite what 'ooo' offers in its consideration of the non-human, it still seems a mistake to attribute some kind of agency to the machine independent of the human. In Virilio's museum the intervals become invisible rather than visible. A different kind of accident that escapes the catalogue is necessary.

THE NIGHT WATCH

As the accidents vanish from the corners of the Google Art Project we loose the opportunity to see them. These temporal artifacts are removed and smoothed over by the ever increasing 'resolution' of the digital image. Despite the best efforts of the contributors to the new aesthetic Tumblr, the new accident of art is the noise of the digital; only visible in retrospect when it is no longer there. Warburg's iconology of the interval suggests that the accidental encounter is the way to build an "unnamed science" from art history. 33 Both the Google Art Project and the new aesthetic Tumblr hold the potential for a new accident of art where the aesthetics of the sensible and those of the machine come together in the art

The robot that roams the galleries at night is not unlike the fox in Francis Alÿs' Night Watch (2004). The robot follows paths, maps routes, and does the

walking for us. Like the fox it is always in motion, suggesting new forms of movement within gallery architecture. There is another connection though. Multiple surveillance screens track Alÿs' fox showing the many ways that the fox is a creature out of place, and reminding us that when we enter an art gallery we are always being watched. As I have said the Google Art Project depends on a robot looking machine. This aesthetic machine is a totally different form of digital material that has entered into what have for a long time been quiet still spaces for human, and not machine (or fox), contemplation. The digital matter the machine is formed from is flawed and what it sees is error-ridden. If, as has been argued by both Aristotle and Virilio, in its relations each machine contains an accident; encounters that recognise the interval between the image and instability might actually introduce new affective productions within the gallery space. This means that rather than archive and document the gallery, while it retains the blurred and the grainy, the invisible and the some-what visible, the Google Art Project is constructing an atlas of the spaces between things. Google Art Project picks up objects that misbehave and in the process maps the transformation of both machines and architectures. Agamben describes the spaces between the images in Warburg's Atlas as "the dark demon of an unnamed science whose contours we are only today beginning to glimpse." 34 There is a surprising similarity between Warburg's careful atlas of relationships where accidents emerge in the interval, the new aesthetic Tumblr, and Google Art Project's gathering together of invisible interferences, visible only to those who choose to look. Rather than collate and archive images, the new accident of art traces the unnamed science of the interval with care. Warburg called his atlas a "ghost story for adults" 35 – the images currently produced by Google Art Project are also a ghost story: a machinic aesthetics formed in accidental intervals. And like ghosts they will soon vanish at the hands of a rational smoothing of time and

space, where everything is captured and rendered into a perfect deception fit for human eyes.

REFERENCES AND NOTES

- 1. Nancy Proctor, "The Google Art Project: A New Generation of Museums on the Web?" Curator: The Museum Journal 54, no. 2 (2011): 215.
- 2. Robin White Owen, quoted in ibid.
- 3. Alastair Sooke, "The Problem with Google's Art Project," The Telegraph, February 1, 2011, http://www.telegraph. co.uk/culture/art/art-news/8296251/The-problem-with-Googles-Art-Project.html (accessed August 14, 2013).
- 4. Philip Kennicott, "National Treasures: Google Art Project Unlocks Riches of World's Galleries," The Washington Post, February 1, 2011, http://www.washingtonpost.com/wpdyn/content/article/2011/02/01/AR2011020106442.html (accessed August 14, 2013).
- 5. Jacques Rancière, "Aesthetic Separation, Aesthetic Community," in The Emancipated Spectator (London and New York: Verso, 2009), 51-63.
- 6. Annette Michelson, ed., Kino-Eye: The Writings of Dziga Vertov (Los Angeles: University of California Press, 1984),
- 7. Bruce Sterling, "An Essay on the New Aesthetic," Wired, April 2, 2012, http://www.wired.com/beyond_the_beyond/2012/04/an-essay-on-the-new-aesthetic/ (accessed August 14, 2013).
- 8. James Bridle, "about," The New Aesthetic, http://newaesthetic.tumblr.com/about (accessed August 14, 2013).
- 9. Dan Catt, "Why the New Aesthetic Isn't About 8bit Retro, the Robot Readable World, Computer Vision and Pirates," revdancatt.com, July 4, 2012, http://revdancatt. com/2012/04/07/why-the-new-aesthetic-isnt-about-8bit-retro-the-robot-readable-world-computer-vision-andpirates/ (accessed June 26, 2012).

- 10. Marius Watz, Kyle Chayka, Jonathan Minard, Greg Borenstein, James George and Kyle McDonald, "In Response to Bruce Sterling's 'Essay on the New Aesthetic,'" The Creators Project, April 6, 2012, http://www.thecreatorsproject. com/blog/in-response-to-bruce-sterlings-essay-on-thenew-aesthetic (accessed June 26, 2012).
- 11. Ibid.
- 12. Dan Catt, "Why the New Aesthetic Isn't About 8bit Retro."
- 13. Susan Buck-Morss, The Dialectics of Seeing: Walter Benjamin and the Arcades Project, 6th edition (Cambridge, MA: MIT Press, 1996). See also Philippe-Alain Michaud, Aby Warburg and the Image in Motion, trans. Sophie Hawkes (New York: Zone Books, 2004).
- 14. Georges Didi-Huberman, Atlas: How to Carry the World on One's Back (Reina Sofia and Karlsruhe: Museo Nacional Centro de Arte Reina Sofia and ZKM, 2011).
- 15. Philippe-Alain Michaud, Aby Warburg and the Image in Motion, 262.
- 16. Brian Dillon, "Collected Works: Aby Warburg's Mnemosyne Atlas," Frieze, no. 80 (2004), https://www.frieze.com/ issue/article/collected_works/ (accessed August 14, 2013).
- 17. Giorgio Agamben, "Aby Warburg and the Nameless Science," in Potentialities: Collected Essays in Philosophy, ed. Giorgio Agamben (New York: Stanford University Press,
- 18. Philippe-Alain Michaud, Aby Warburg and the Image in Motion, 278.
- 19. Ibid., 252.
- 20. Ibid., 77.
- 21. Brian Dillon, "Collected Works: Aby Warburg's Mnemosyne
- 22. Philippe-Alain Michaud, Aby Warburg and the Image in Motion, 253-255.
- 23. Giorgio Agamben, "Aby Warburg and the Nameless Sci-
- 24. Philippe-Alain Michaud, Aby Warburg and the Image in
- 25. Marius Watz, "In Response to Bruce Sterling's 'Essay on the New Aesthetic."
- 26. Ian Bogost, "The New Aesthetic Needs to Get Weirder,"

- The Atlantic, April 13, 2012, http://www.theatlantic.com/ technology/archive/2012/04/the-new-aesthetic-needsto-get-weirder/255838/ (accessed June 26, 2012).
- 27. Philippe-Alain Michaud, Aby Warburg and the Image in Motion, 246.
- 28. "ATLAS Entrevista con Georges Didi-Huberman," YouTube video, 3:44, posted by museoreinasofia, December 21, 2010, http://www.youtube.com/watch?v=WwVMni3b2Zo (accessed June 26, 2012).
- 29. Ibid.
- 30. Hillel Schwartz, Making Noise from Babel to the Big Bang and Beyond (New York: Zone Books, 2011), 547.
- 31. Paul Virilio, "The Museum of Accidents," in The Paul Virilio Reader, ed. Steve Redhead (New York: Columbia University Press, 2004), 255-262. Sylvere Lotringer and Paul Virilio, The Accident of Art (Semiotext(e)/ Foreign Agents), trans. Mike Taormina (Cambridge, MA: MIT Press, 2005).
- 32. Sean Cubitt, "Unnatural Reality: Review of Paul Virilio The Vision Machine," Film-Philosophy, no. 3 (1999), http:// www.film-philosophy.com/vol3-1999/ngcubitt (accessed June 26, 2012).
- 33. Giorgio Agamben, "Aby Warburg and the Nameless Science."
- 34. Ibid., 90.
- 35. Philippe-Alain Michaud, Aby Warburg and the Image in Motion, 260.