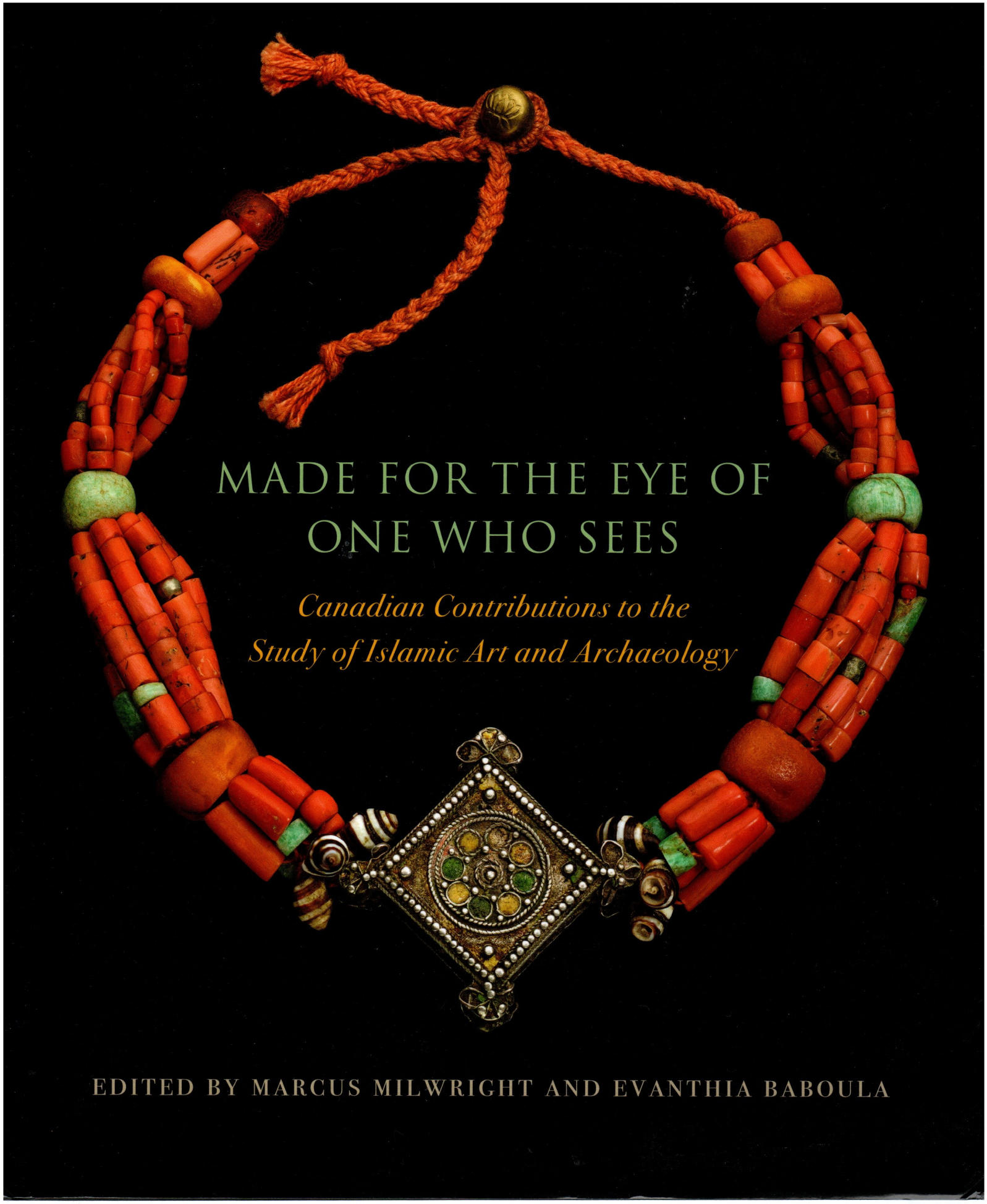

MADE FOR THE EYE OF ONE WHO SEES

Canadian Contributions to the Study of Islamic Art and Archaeology

EDITED BY MARCUS MILWRIGHT AND EVANTHIA BABOULA

MADE FOR THE EYE OF ONE WHO SEES

Canadian Contributions to the Study of Islamic Art and Archaeology

EDITED BY MARCUS MILWRIGHT
AND EVANTHIA BABOULA

MCGILL-QUEEN'S UNIVERSITY PRESS
Montreal & Kingston • London • Chicago

and

THE ROYAL ONTARIO MUSEUM
Toronto

CHAPTER 16

Process Thinking for Islamic Art and Media Art: Performative Abstraction and Collective Transformation

Laura U. Marks

This chapter, developed from the premise of my book *Enfoldment and Infinity: An Islamic Genealogy of New Media Art* (2010), proposes that classical Islamic religious art and contemporary media artworks share performative qualities and that contemporary media art practice and theory can learn from the sophisticated methods of Islamic art from multiple regions and periods.[1] The argument is based on enfolding–unfolding aesthetics, a method I have developed that draws on both Euro-American and eastern Islamic philosophies of process, including those of Henri Bergson, Alfred North Whitehead, Abu 'Ali Ibn Sina, and Sadr al-Din al-Shirazi. Enfolding–unfolding aesthetics examines how perceptible images unfold from information, a nonvisual quantification, such as code or text, by way of specific algorithms or what I call "manners of unfolding." In turn information unfolds from the infinite, which can be understood philosophically as the universe or the Open, or religiously as God. Every art form has its own manner of unfolding. What initially drew me to seek Islamic "origins" for contemporary algorithmic media art was the hunch that classical Islamic religious art could provide aesthetic and philosophical criteria to improve the media arts of our time and critique the society in which they take form. Over the years of researching these relationships, my attention has been increasingly drawn to the strong current of process philosophy that moves between Islamic and Euro-American thought, which informs the processual, performative nature of unfolding in works of art. Understanding images as the result of processes, rather than as representations, allows us to see Islamic art as performative and closely links its strategies to those of modern and contemporary art.

Enfoldment and Infinity's fundamental thesis is that Western algorithmic and media artworks are informed by Islamic aesthetics, whether the artists are aware of it or (as is most likely) not. To use Islamic aesthetics now means to adapt its process approach, its manners of unfolding, for contemporary art and media. Thus, after an overview of the book's founding concept of enfolding–unfolding aesthetics, I turn to a case study of generative abstraction and processual figuration in the media artworks of Mounir Fatmi. At the end of the chapter I discuss the Substantial Motion

Research Network, which grew from the artists and scholars from Muslim and non-Muslim backgrounds who responded to my bridging of Islamic and media art, many of whom deploy enfolding–unfolding aesthetics in media from painting to interactive art.

ENFOLDING–UNFOLDING AESTHETICS

In the late 1990s I began noticing that many of the media that populate everyday life are the result of nonperceptible codes. I began to develop an aesthetic theory that could account for the way perceptible images in computer-based art are often less important than the code that generated them. Against then current notions that computer-based media are an immaterial foundation of the image, I argued that both image and code arise from the material, historical, and social world. Looking for art–historical parallels to strengthen this argument, I quickly realized that Islamic arts, especially those that avoid figurative imaging, provided not only a precedent for the still new computer-based media arts but a slew of creative strategies that could inspire contemporary media makers and theorists. Islamic art is rich with models of retreating from and returning to the perceptible, enfolding and unfolding. Moreover, enfolding–unfolding aesthetics allows us to see images – including aniconic images – not as static but as stages in a process of unfolding. This model brings together the logic of Charles Sanders Peirce, Henri Bergson's theory of perception in a universe conceived as "flowing-matter," Gilles Deleuze's philosophy of the fold based on Leibniz's *Monadology*, and physicist David Bohm's concept of the "implicate order."[2] It is also informed by currents of Islamic thought, including neo-Platonist understandings of emanation, Isma'ili theories of enfolded (*bāṭin*) knowledge, Ibn Sina's (d. 1037) concept of the univocity of being, and later, Mulla Sadra's (d. 1640) concept of *tashkīk al-wujūd*, the modulation of being.

Enfolding–unfolding aesthetics answers the question Where do images, those things that we perceive with our senses, come from? by arguing that they come from the universe, infinite, unarticulated, and unknowable in itself. When we perceive, it is the universe touching us. Bergson calls the universe the "infinite set of all images," which Deleuze terms the plane of immanence and also "flowing-matter."[3] I called it the infinite to emphasize the parallel with Islamic theological conceptions of God. The infinite is ultimately unknowable, but it contains all things, including information and image, in an enfolded and virtual state. Here enormous philosophical and theological questions arise. For example, do the virtual contents of the infinite have form, do they only take form once they are actualized, and if the latter, does the actual continue to transform? On these questions, later Islamic process philosophers such as Ibn Sina and Mulla Sadra have much to offer contemporary process philosophy.[4]

Now and then some part of the infinite *selectively unfolds*; something that was inaccessible to thought or perception becomes accessible. In our everyday perception

we face an infinity of possible things to perceive, of which we select just a few to actually perceive. Usually the infinite unfolds as an image, which I define, following Bergson, as that which is perceptible to the senses. When something is perceptible to our senses, it is a bit of the infinite that has unfolded. However, sometimes the images we perceive do not unfold directly from the world – as a photograph or a landscape painting might, for example – but as images of information. For the infinite also unfolds at the level of information: it is selectively quantified in discrete forms, for example as data, actions, and language. Thus, the image is a selective explication of either the infinite or of information. As a Peircean Third, the image shows us how information has selected, unfolded, and expressed certain aspects of the infinite. Thus, while we cannot perceive the universe directly, we can learn about it by studying the way information filters the universe to give rise to perceptible images.

Information is a filter, as in Deleuze's argument that, for each monad, there lies between chaos and the perceptible world a filter that extracts "differentials that could be integrated in ordered perceptions."[5] However, this filter is subject to power, in a way that has accelerated with media in the age of capitalism: information ideologically pre-selects the world prior to perception. This suspicious conception of information, which as I mentioned initiated me on this research path, resonates with concepts from philosophy of science and technology: Vilém Flusser's *technical images*, communication technologies that depend on mathematical code; Richard Grusin's concept of pre-mediation; Bernard Steigler's argument that information, in the hands of a few power brokers, comes to define collective memory.[6] These views, together with current critiques of the effects of information capitalism on perception from theorists such as Jonathan Crary, Jonathan Beller, and Pasi Väliaho,[7] engender the most dispiriting attitude toward the algorithmically generated media that surround us. Hence, it was thrilling to find in classical Islamic art artworks whose algorithmic nature drew attention to a source more infinite than capitalism and to a fascinating array of ways that the perceptible world can flow from this source. Islamic art's manners of unfolding and its vision of a divine source can, I argue, be "immanentized" to critique capitalist media and generate more meaningful alternatives.

Enfoldment and Infinity argues that each theological approach and the artworks associated with it privilege a particular *manner of unfolding*. Each of chapters 6 through 10[8] is structured around a particular manner of unfolding that characterizes a given moment in theological and intellectual history, and the art that can be seen to respond to these views.

For example, in the atomist theory of causality proposed by al-Ash'ari (d. 835) and further developed by al-Ghazali (d. 1111), God disposes phenomena however he sees fit. Fire burns cotton not because of the internal properties of each but because God has decided it should; but tomorrow he may decide it should not, for example.[9] Ash'arites argue that it is pointless hubris to try to infer or "unfold" effect from cause. The manner of unfolding in the Ash'arite universe is that relationships be-

tween God and the perceptible world, or infinite and image, are unknowable. As a result, the perceptible world is fragmentary and discontinuous in structure: as Muhsin Mahdi puts it, "The atomistic world does not have its inner structure but emphasizes God's activity at every point."[10] Bringing atomism to cinema, Jalal Toufic proposes that a film as a whole reproduces the illusion of temporal time, while individual frames show that the individual responds not to earthly time but to God, who destroys and recreates him/her at every moment. Toufic's bracing alternative to conventional film theories of suture seems to become only more true as more of our images become digital. As computer-based media move images into users' hands, through such simple means as YouTube remixes, the breaks between images are often as important in people's experience as is the illusionistic continuity between them. In chapter 7, "Baghdad, 1000: Origin of the Pixel," I argue that Islamic concepts of matter and temporality help us to make sense of contemporary media that constantly come together, break down into a thousand luminous fragments, and come together differently.

Other manners of unfolding include austere enfoldment in the theology and (some) art of the Almohads (c. 1120–1248), discussed in chapter 7, and expressive unfoldment in the luxuriant paintings of Kamal al-Din Bihzad (d. c. 1535) in fifteenth-century Timurid Iran, which seems to be informed by the theory of emanation as a set of cascading relationships between God and the material world.[11]

In an astute review of *Enfoldment and Infinity*, Josh Ellenbogen, an intellectual historian as well as historian of photography and modern art, critiqued my use of the terms "code" and "information" to refer to both computer-based and Islamic art, arguing that their meanings diverge too far to be really useful.[12] I appreciate this critique. I believe the concept of information as a selective quantification that in turn is expressive is useful and flexible to describe what is going on in many at forms. However, it does take a lot of conceptual maneuvering to make the secular media arts proportional to the religious weight of Islamic art. It demands a philosophy of immanence, such that the making and reception of algorithmic media be understood to take place in an interconnected *dunya* or world-below, now constituted as the entire universe.

PERFORMATIVE ANICONISM

One of the most interesting common characteristics of Islamic art and computer-based art is aniconism: a manner of unfolding in which the perceptible image is almost entirely enfolded. In both cases, the cause of the perceptible image cannot be represented but only referred to indirectly. For many good reasons, art historians have rejected the notion that Islamic art is defined by the rejection of representational imagery. The unrepresentability of God can be a reason to eschew image making, if one worries that people will mistake the image for the divine being, but this does

not characterize the majority of art making in majority-Muslim lands. However, the concept of enfolding is not a phenomenon of representation but one of process. I redefine aniconism in Islamic art as a process-based phenomenon in which it is not a question of punishing the desires of the faithful by destroying representational images but of *withdrawing* the divine from perception. Withdrawal enfolds the divine image yet invites a devotional attitude, so that it is not in seeing but in imagining that the faithful come close to the presence of God. The unrepresentability of God can also compel people to multiply images in the confidence that no image can represent the divine, but images can perform the longing of the faithful, as in figurative book paintings of the fifteenth-century school of Tabriz.

The withdrawal of figurative images in much Islamic art enables a shift from representing life to performing life. Geometric ornament is often full of performative life, as contemplating it one can witness forms springing from a central point and multiplying, reflecting, and rotating around their symmetries, in a movement that can appear to take place in time. For example, the interior of the dome of the Friday Mosque at Yazd (originally constructed 1324–28) with its spiralling geometric *yazdi bandi* ornamentation that increases in complexity as it radiates from the dome can invite the viewer, gazing upward, to image and embody the process of creation and ceaseless, harmonious change in the universe. Vegetal ornament also gives a wonderful sense of the way a non-moving medium such as tile or textile can enact growth and development, by lending the fecundity of developing plant forms to rules for pattern development not drawn from nature.[13] For example, the vegetal ornament on the Qajar-period (1796–1925) walls of the Friday Mosque in Isfahan not only interweaves vine like motifs but also grows vines *through* circular passages in leaves and plant forms (a motif I speculate might be drawn from the *lingzhi* mushrooms that symbolize longevity in Chinese painting, which are sometimes depicted with holes in their stems), in a fractal fantasy of unnatural growth. The image performs a process of emergence.

In Western visual art and cinema from the early twentieth century to our time, aniconism or the avoidance of figuration often operates on similar principles to those of classical Islamic art. Some artworks challenge art's capacity to represent the divine, like Kazimir Malevich's *Black Square* (1915), or to represent anything at all. Later in the century, a deconstructive movement in cinema negated the audiovisual medium's capacity to reproduce experience, beginning perhaps with Alain Resnais's *Hiroshima Mon Amour* (1959), whose Japanese protagonist insists to his French lover, "You saw nothing at Hiroshima." In such works an enfolded image refuses to divulge its knowledge, encapsulating Jalal Toufic's argument that artworks made after a "surpassing disaster" become unavailable as culture.[14] However, other enfolded images draw the perceiver in and invite imagination. Hiroshi Sugimoto's time-lapse photographs of movie theater screens condense the time-based, social experience of cinema-going into a blindingly white absence inviting viewers to imaginatively reconstruct the event. Other aniconic works similarly shift the responsibility of

meaning-making from the artwork to the viewer, accepting in turn that these meanings will be constructed subjectively, if at all. Most contemporary artworks do not represent life but bring life into being. This may be carried out in performative artworks like the paintings of Jackson Pollock, images that index the performance that generated them. It may be by computer-based artworks using genetic algorithms to create new and unanticipated forms that evolve according to changes in their environment, such as human interactions.[15] It may be in relational artworks that create connections and tensions among people in social situations. In all these cases, representation is replaced by process. To explore this idea further, I propose the concepts of generative abstraction and performativity of figuration.

GENERATIVE ABSTRACTION

Abstraction in Western art history tends to be associated with the lack of a figure, given the largely figurative tradition of Western art before modernism.[16] In modern and contemporary art, abstract art is usually distinguished from non-figurative art in that the figure is abstracted, rather than entirely absent. To deal with the difference between these terms, it is useful to think of figuration as the expression of a process that occurs in time. The figure is captured, as it were, in the process of coming into being: a process that occurs either in the work or art itself or through the beholder's engagement with it. We can think of this process as performative: the act of bringing into being, making, or revealing. As I argue above, this approach to images gives precedence to performance over representation, and process over substance. We might understand it, for example, in terms of Gilbert Simondon's concept of individuation, whereby a figure (or any thing) is just the result of a process, the way a wave is the result of the movement of the sea.[17]

Many artists draw on the performativity of the image in order to critique the fixity of the figure. When things appear as fixed representations it is easier to imagine that they do not change and that all that they are is contained in the image of them. Artists intervene in the politics of representation by critiquing this kind of fixity and showing that things are in process. Later I will explore how Moroccan French video artist Mounir Fatmi returns regularly to the prohibitive and productive processes of aniconism and the emergence of figuration under new conditions of performativity. Fatmi works on the unbearable image, the silhouette, and a troubled figure-ground distinction. His works generate what Gilles Deleuze termed the Figural: a figuration that does not respect the boundaries required by representation.[18]

As I describe above, both Islamic art and Islamic philosophy developed rich practices and concepts of being as process long before these arrived to modern Western art and philosophy. Islamic art is rich with precedents for non-figurative art that has an interior fullness, a generative image that performs its coming into being. Indeed we can argue that this is one of the achievements of aniconism: an image that is not

lacking in anything but performing being. We can term this process-based imaging "generative abstraction," since it is abstraction that arises from or returns to figuration. The obverse concept would be "performative figuration."

Since the last decades of the twentieth century, concepts of abstraction in Western art have expanded to include ideas of an abstract image not based on lack. Critical theory has begun to place a greater emphasis on Western twentieth-century philosophies that emphasize process, becoming, performativity, creative evolution. The process philosophies of Henri Bergson, Alfred North Whitehead, Gilbert Simondon (1992), Gilles Deleuze (2002), and others support the idea that a non-figurative image is full, not empty. For example, Simondon argues that substances are not fixed but undergo transformation in the course of their being.

In so doing, Western twentieth-century and contemporary thought has drawn closer to long-established Islamic modern philosophies of process, becoming, and individuation. The most fully developed of these is probably the work of Sadra in seventeenth-century Persia. As Parviz Morewedge points out, Islamic philosophy from Suhrawardi on abandoned substantialism for process.[19] The processual nature of Sadra's philosophy develops from his critique of Ibn Sina's concept of the univocity of being. The problem with Ibn Sina's influential concept is that it lacks fluidity because Ibn Sina drew on an Aristotelian understanding that substances or quiddities, like "man" and "horse," are the basic entities of being: this is substantialism. Sadra maintained Ibn Sina's concept of God as the only Necessary Being (*wājib al-wujūd*) on which all other existences are contingent but redefined it as act or process: *al-sarayān al-wujūd*, the flow of Being. Sadra invented the concept of *substantial motion* (*al-harakāt al-jawhariyya*; also translated as transubstantiation or trans-substantial motion). This concept allows Sadra to describe a universe in which everything is unified by a constant flow of becoming, which he terms *tashkīk al-wujūd*, the modulation of being.

In Sadra's process philosophy, existence is not static but a principle of modulation or individuation (*tashakhkhus*) and in turn things are modulations of the singular reality that is Being. Substantial motion respects the potential for intensification in all things. Sadra wrote, "The act of being is the most real of things with respect to real effectuation, because what is other than it becomes effectively real through it."[20] In a sort of divine vitalism, things are transforming, becoming more real and more intense, in the process of drawing closer to God.[21] Sadra's account of substantial motion thus resonates with Simondon's argument, three centuries later, that individuation is ontologically prior to individuals, and individuals are simply symptoms or effects of a flow of being: "If the being is no longer conceived using the model of a substance, it becomes possible to think the relation as one of the non-identity of being to itself."[22]

These shared concerns of modern Euro-American and modern Islamic philosophy with conceptions of being as process are gradually being recognized.[23] Art theory now can fruitfully call on shared Islamic and Western concepts of generative abstraction. Artists are already doing this. Many artists in the Muslim world entered

contemporary art practice through Western-style art education, which in some institutions stopped at modernist abstraction[24] – inheriting and transforming European worries about figuration. However, many contemporary artists from Muslim backgrounds incorporated Islamic conceptions of generative abstraction into their practice later.[25] By now, Islamic and Western practices of abstraction, as well as conceptions of abstraction, are closer than they have been for centuries.

While we can identify many examples of what I am calling generative abstraction in visual art, my examples here come from experimental media art. Film and other time-based media arts have their own issues with abstraction, of course, given that it is the norm that they be figurative, but the time-based image is also an ideal medium for testing and showing process. Moving image media works that engage abstraction thus tend to be working rigorously and thoughtfully with process-based approaches to figuration. The subset of these concerns that I propose to examine in the rest of this chapter is the performativity of figuration.

Mounir Fatmi's *Dieu me pardonne* (2001–04) addresses the obscene by showing, then shielding the eyes of the viewer from a barrage of images: pornography, news footage of a Palestinian youth shot by Israeli soldiers, a martyr's coffin. "May God forgive me," as the title says, for the lustful and murderous thoughts that these images brought upon me. At intervals three texts appear: "the first look is for you / the second is for the devil / the third look is a crime." This last occurs over an aerial shot of the bombing of Baghdad in the first Gulf War (1990–91) from the viewpoint of its destroyers. "Smart" weapons that align bombardment with vision are designed to hypostasize the figure-ground distinction in order to identify a target.[26] Weaponized vision is the limit case of figuration, turning the representation image into an operational image or an image that plays a role in operations that bypass the human subject.[27]

Fatmi tries different ways to put women's figures into process. For the porn movie, he uses an analog video synthesis effect that floods the broader areas of the figure with colours, an effect similar to solarization. The effect is that the naked actress's supine body becomes insubstantial, an outline filled with pulsing colours; her nipples and belly seem to fall away. Carved this way by the video synthesis, the actress's naked body looks rather like a death's head, in a gesture to *memento mori*. But because the colours and shapes created within the outline of her body are changing, Fatmi's treatment of the woman's figure also suggests that we are seeing a process. Her naked, displayed body exists not in itself but in a set of relations that include the viewer and that change in time, as Simondon describes the circumstances of individuation.

We can also think of the pornographic scene in terms of Sadra's process-based critique of materiality and sense perception. All entities in the cosmos are engaged in a process of refinement as they draw away from matter, which has the least reality, toward God, who is the only reality. Minerals, plants, animals, and humans, in the many states of our souls from vegetal to intellecting to potentially angelic, are all undergoing transformation. Sadra emphasizes that each entity transforms according to its nature: "Everything betaking itself in a direction with respect to its own nature

inevitably has an essential final goal that is the most eminent state for it." He cites the Qur'an: "Surely unto God all things come home" (42:53).[28] This emphasis of Sadra's suggests that the process of transformation must proceed through the materiality of a thing, rather than try to transcend it immediately. The metamorphosing pornographic image in Fatmi's *Dieu me pardonne* hints at this kind of transformation that must begin in situ, where the thing is.

The process of transformation is also at work in Fatmi's videos *Muhammad Ali, le labyrinthe* (2010) and *Who Is Joseph Anton?* (2013). Both of these approach a famous man, the boxer Muhammad Ali and the writer Salman Rushdie, who has been trapped and hemmed in by the images created of him. Ali's entrapment has partly to do with the way his conversion to Islam was politicized and used to manipulate him, by the media and by people inside the Nation of Islam. Rushdie was entrapped in an image created by the fatwa against him for blasphemy – entrapped to such a degree that he famously had to go underground and take an alias, Joseph Anton (combining the names of his two favourite writers, Joseph Conrad and Anton Chekhov).

Who Is Joseph Anton? consists of an animation that we watch Fatmi produce. The artist's hands cut photographs of Conrad and Chekhov into masks. Hand-drawn lines, like preparatory diagrams for a computer simulation, map points on the writers' faces, while other, more crystalline diagrams map the shapes of skulls. Thus, in just a few seconds Fatmi captures the miserable condition in which Rushdie must live: threatened with death, while his creative career and he himself are reduced to a symbol.[29] This montage suggests that the writer lives between the matter of his threatened body, the political forces in which he is captured, and the space for imagination. It recalls Sadra's emphasis that humans are transformed by using imagination and thought to get closer to divine truth. Rushdie is an insistently secular writer, of course, but in his emphasis on freedom of imagination and thought he is struggling to actualize Sadra's observation, "Know that the soul is let loose in this bodily world with respect to one level and one potency – that is, her reflective and imaginal potency, which is what belongs to her in her essence."[30]

AZADEH EMADI ON SADRA'S SUBSTANTIAL MOTION IN PIXEL-BASED MEDIA

In 2011, having read my articles about atomist aesthetics and the life within the pixel, Azadeh Emadi, a media artist and scholar then doing her PhD at Auckland University of Technology, contacted me, interested to further develop an understanding of pixel-based digital media in light of Islamic concepts. Since then Emadi has articulated a synthesis of atomist thought and the philosophy of Sadra to shed light on the relationship between the pixel, the frame, and the world, arguing that the experience of the pixel models the process of renewal and transformation that Sadra terms "substantial motion." Emadi writes,

> In the Sadrian view, stability and form arise from motion (becoming, for Deleuze). Rather than many unmoved single frames appearing and disappearing to create a moving-image (as with analogue film), with digital-video there is only one image moving and changing as a whole. These changes are due to the internal elements of the digital-image, pixels. They occur in relation to the outside insofar as the code that is informed by the filmed external object, which moves and changes the related elements of the digital frame. Like people, pixels have "a destination that recapitulates all the destinations of the universe". As microcosms, they envelop "the seminal reasons of the macrocosm," and their "substantial renewal both fulfils and encapsulates the renewal of all natures and all souls" [citing Jambet]. Seen from the perspective of Substantial Motion, digital-video has the potential to render the reality of existence more truthfully because its pixels, as a unified internal multiplicity, are changing and moving in infinite time as well as forming a perceptual unit of moving-image.[31]

Emadi strongly expands my initial argument that the pixel in digital media closely approximates the point in atomist philosophy in that it reveals the sustained image to be an illusion, as well as Toufic's point that in cinema the cut between frames is more truthful than the continuity of movement. Furthermore, only the point has a real connection to the invisible world. In light of Sadra's concepts of temporal time and divine time, Emadi argues that the illusionistic video image exists in temporal time, while the pixel, annihilated and remade every second, relates to divine time. Thus a digital video can exemplify the relationship between temporal and divine time. She examines this idea in her own media artworks that isolate the pixels in digital video.

THE SUBSTANTIAL MOTION RESEARCH NETWORK

My first intended audience for *Enfoldment and Infinity* was new media artists and scholars in general, in order to share with them the "good news" that these seemingly new arts had a practical and philosophical heritage in the Muslim world. This news is beginning to resonate alongside other non-Western media art genealogies, as more people understand heretofore "Western" arts and technologies to be inextricable from long histories of intellectual and artistic exchange. Artists who work with process appreciate the dynamism of enfolding–unfolding aesthetics. Scholars of comparative philosophy who, like me, seek to restore the mutually informative relationship between Islamic and Euro-American thought responded warmly to *Enfoldment and Infinity* and subsequent writings on philosophy. Intellectual historians respond to the book's model of history as itself a process of enfolding and unfolding. However, the warmest response to the book was from media artists of Muslim backgrounds. Many of them expressed satisfaction that the book brought

together two parts of their lives they had held separate, being a Muslim and being a media artist.

Azadeh Emadi and I entered a long intellectual collaboration. I joined her doctoral committee as her external supervisor. And in 2016 it was Emadi who convinced me that the scores of artists and scholars around the world who contacted me after the publication of *Enfoldment and Infinity* should form a research network, to abolish our isolation and support each other's work.

And thus the Substantial Motion Research Network (SMRN) was born. Emadi and I co-founded this collaborative, international network in 2018 to develop intercultural and non-Western approaches to media art and philosophy and to demonstrate the global heritage of media technologies. SMRN's growing membership includes scholars and artists from seventeen countries. We are art historians, media scholars, anthropologists, curators, and artists working in painting, film, video, sound, performance, and interactive media. About a third of SMRN's members work on art and philosophy in the Muslim tradition, with a focus on Persian and Ottoman histories. Others plumb Islamic, South Asian, East Asian, and West African philosophy, art, and vernacular practices for media genealogies. Others trace the travels of art, philosophy, and politics along the former Silk Road, through the Caucasus and the Western steppes to de-Westernize the history of European art. Still others sneak Islamicate processes into what looks like contemporary abstraction. A map on the SMRN home page, substantialmotion.org, shows our locations all over the world. The site not only publishes our collective activities but also allows network members to share and collaborate in private, on the model of a secret society. SMRN members hold workshops on "De-Westernizing your Media Practice," sharing the SMRN method with local audiences. We create podcasts on the Creative Disturbance channel.

SMRN members hold thrilling meetings online monthly to share work in progress, putting our name in action as we give each other feedback based on our diverse backgrounds and knowledge. These intense feedback sessions are bearing fruit as members complete the works they were developing, such as Javad Khajavi's book on calligraphic animation, abstract painter Steven Baris's numerous exhibitions of works based on diagrammatic process, Cigdem Borucu's electroacoustic compositions for early Ottoman newsreels, Navine G. Khan-Dossos's exhibition of apparently ornamental wall frescoes based on UK government's "pre-crime" surveillance policies, Siying Duan's work on the "empty shot" in Chinese and Western cinema, my book chapter on talismanic images, and many other projects.[32]

On the video conferencing interface, it is beautiful to see everybody's faces as they listen and respond to the presenter: engaged, curious, smiling, or sleepy, since we are connecting across every time zone, and morning in Vancouver is afternoon in Istanbul, evening in Guwahati, and the wee hours of the night in Auckland. Emadi proposed that we model the network on Sadra's concept of substantial motion, whereby an entity transforms from within by drawing on energies from without. And indeed we experience a generative process as each member's ideas and practices

individuate and refine in the light of our colleagues' generous responses: energies that may not be divine but that certainly ground us in the collective, immanent infinity of this world.

NOTES

1 By "Islamic," I do not refer to all art made in predominantly Muslim societies but art made primarily for religious purposes or contexts. By "classical," I mean those periods in which artists in Muslim societies developed sustained bodies of work that corresponded, however lightly, to the religious and political views of their time and place, such that one can speak of Abbasid art, Safavid art, Andalusian art, and so on.

2 Bergson, *Matter and Memory*; Peirce, "The Principles of Phenomenology"; Deleuze, *The Fold*; Bohm, *Wholeness*.

3 For Bergson, Deleuze writes that "Image" is identical with movement: "The material universe, the plane of immanence, is the *machinic assemblage* of *movement-images*." See Deleuze, *Cinema 1*, 58, 59.

4 I have since explored these questions in Marks, "A Deleuzian *Ijtihad*"; "Real Images Flow"; "'We Will Exchange Your Likeness'"; and "Lively Up Your Ontology."

5 Deleuze, "What Is an Event?" in *The Fold*, 76–82.

6 Stiegler, *Technique and Time*, 2: 134; Bensaude-Vincent and Stengers, *A History of Chemistry*. On Stengers see Schuppli, *Material Witness*.

7 Crary, *24/7: Late Capitalism*; Beller, "Pathologistics of Attention"; Valiaho, *Biopolitical Screens*.

8 Marks, *Enfoldment and Infinity*: "Baghdad, 830: Birth of the Algorithm," 153–88; "Baghdad, 1000: Origin of the Pixel," 189–218; "Cairo, 972: Ancestor of the Morph," 219–52; "Herat, 1487: Early Virtual Reality," 253–88; "Karabagh, 1700: Seeds of Artificial Life," 289–316.

9 On causality in atomist thought see Leaman, "Creation and the Controversy over the Nature of Causality," in idem, *An Introduction*, 94–106.

10 Mahdi, "The Rational Tradition in Islam," 52.

11 Discussed in chapter 9 of Marks, *Enfoldment and Infinity*.

12 Josh Ellenbogen, "Review."

13 Discussed in chapter 10 of Marks, *Enfoldment and Infinity*.

14 Toufic, *Forthcoming*, 64–75.

15 Genetic algorithms are digital simulations of biological genetics: see Whitelaw, *Metacreation*.

16 This was the premise of "Abstraction Unframed," Fourth Annual Conference of AMCA, NYU Abu Dhabi and Barjeel Art Foundation, Sharjah, 22–24 May 2016.

17 Simondon, "The Genesis of the Individual."

18 Deleuze, *Francis Bacon*.

19 Morewedge, "The Neoplatonic Structure." See also Goodman, *Avicenna*, 62.

20 Sadr al-Din al-Shirazi, *Divine Witness*, quoted in Jambet, *The Act of Being*, 75.

21 This paragraph is borrowed from Marks, "Real Images Flow."

Jambet, Christian. *The Act of Being: The Philosophy of Revelation in Mullā Sadrā*. New York: Zone, 2006.

Khajavi, M. Javad. *Arabic Script in Motion: A Theory of Temporal Text-based Art*. Palgrave Macmillan, 2019.

Khan-Dossos, Navine G. "There Is No Alternative." Showroom Gallery, London, July 4–27, 2019.

Leaman, Oliver. *An Introduction to Classical Islamic Philosophy*. Cambridge and New York: Cambridge University Press, 2002.

Mahdi, Muhsin. "The Rational Tradition in Islam." In *Intellectual Traditions in Islam*, edited by Farhad Daftary, 43–65. London and New York: I.B. Tauris, 2000.

Marks, Laura U. "A Deleuzian *Ijtihad*: Unfolding Deleuze's Islamic Sources occulted in the Ethnic Cleansing of Spain." In *Deleuze and Race*, edited by Arun Saldhana, 51–72. Edinburgh: Edinburgh University Press, 2013.

– *Enfoldment and Infinity: An Islamic Genealogy of New Media Art*. Cambridge, MA: MIT Press, 2010.

– *Hanan al-Cinema: Affections for the Moving Image*. Cambridge, MA: MIT Press, 2015.

– "Lively Up Your Ontology: Bringing Deleuze into Sadra's Modulated Universe." *Qui Parle?* 27, no. 2 (December 2018): 321–54.

– "Real Images Flow: Mulla Sadra Meets Film-Philosophy." *Film-Philosophy* 20 (2015): 24–46.

– "Talisman-Images: From the Cosmos to your Body." In *Deleuze, Guattari and the Art of Multiplicity*, edited by Radek Przedpełski and S.E. Wilmer. Edinburgh: Edinburgh University Press, forthcoming.

– "'We Will Exchange Your Likeness and Recreate You in What You Will Not Know': Cinema and Intercultural Process Philosophy." In *The Anthem Handbook of Film Theory*, edited by Hunter Vaughn and Tom Conley, 119–41. London: Anthem Press, 2018.

Morewedge, Parviz. "The Neoplatonic Structure of Some Islamic Mystical Doctrines." In *Neoplatonism and Islamic Thought, Ancient and Modern*, vol. 5, edited by Parviz Morewedge, 51–72. Albany, NY: SUNY Press, 1992.

Peirce, Charles Sanders. "The Principles of Phenomenology." In *Philosophical Writings of Peirce*, edited by Justus Buchler, 74–97. New York: Dover, 1955.

Rizvi, Sajjad H. *Mulla Sadrā and Metaphysics: Modulation of Being*. London: Routledge, 2009.

Sadra, Mulla, *The Elixir of the Gnostics*. Translated by William C. Chittick. Provo, UT: Brigham Young University Press, 2003.

Schuppli, Susan. *Material Witness: Forensics, Media, Evidence*. Cambridge, MA: MIT Press, 2020.

Shabout, Nada. "Contemporaneity in the Arab World." In *New Vision: Arab contemporary art in the 21st century*, edited by Hossein Amirsadeghi, Salwa Mikdadi, Nada Shabout, 14–21. London: Thames and Hudson, 2009.

Simondon, Gilbert. "The Genesis of the Individual." Translated by Mark Cohen and Sanford Kwinter. In *Incorporations*, edited by Jonathan Crary and Sanford Kwinter, 296–319. New York: Zone Books, 1992.

Stiegler, Bernard. *Technique and Time*, 2 vols. Stanford: Stanford University Press, 2009.
Toufic, Jalal. *Forthcoming*. Berkeley: Atelos, 2000.
Tymieniecka, Anna-Teresa, ed. *Islamic Philosophy and Occidental Phenomenology on the Perennial Issue of Microcosm and Macrocosm*. Dordrecht: Springer, 2006.
Valiaho, Pasi. *Biopolitical Screens: Image, Power, and the Neoliberal Brain*. Cambridge, MA: MIT Press, 2014.
Virilio, Paul. *The Vision Machine*. Indianapolis: Indiana University Press, 1994.
Whitelaw, Mitchell. *Metacreation: Art and Artificial Life*. Cambridge, MA: MIT Press, 2004.
Winegar, Jessica. *Creative Reckonings: The Politics of Art and Culture in Contemporary Egypt*. Palo Alto, CA: Stanford University Press, 2006.