[INTRODUCTION TO ANIMATION] Medieval animation and animable images have for a long time been relegated to the field of "superstition" – a term in itself loaded with ambiguity – and until recently excluded from the study of art history. In this book, we wish to revitalize animation and the study of the living image. We argue that in the Middle Ages animation and animism were cultural – albeit debated – facts, and that we need to take the experiences of the past seriously if we wish to understand the principles of life that characterized the power and agency of images. The book investigates three interrelated types of animation – magic, miracles and mechanics – which will form the point of departure of the ensuing chapters and their attempt to recover our – lost? – perception of the living image.

This page is protected by copyright and may not be redistributed

INTRODUCTION

The Concepts, Definitions and Historiography of Animation in Medieval and Post-Medieval Times

The Magic-Miracle-Mechanics Complex of Animation

An object posing as an oracle may seem a miracle. Or it may seem magic, depending on its operation and reception. It may even turn out to be a mechanical artifice, that parades as a man-made miracle or a marvellous work of magic. Whether its oracular speech is produced by magic, miracle or mechanics, the talking image exerts a numinous spell through its wonderous marvel of animation. It speaks to us, addresses us, loudly animated by sonic movement and verbal presence to suggest that it is somehow sentient and alive. Endowed with phonetic communication, the artificial head talks, the painted or sculpted crucifix cries, the Madonna mourns, the prophet's bust predicts. The audibly animated image wants us to listen to it and know that it is alive and present, readily reaching and calling out for us. Hear, it has something to say – or rather: "I'm here and I have something to say". We need to lend our ears to its prophecies about the magical, mechanical and miraculous nature of images. In its prophetic call to us, various levels of reality communicate and coalesce, as when Christ spoke to St. Francis and moved him to action through the famous crucifix in the church of San Damiano, physically moving its lips and raising its voice (ill. 1): "Francis, go, repair my house" (Thomas of Celano: *The Second Life of St. Francis*, VI; ed. Habig 1972, p. 370). Following this pictorial exclamation, the edifice to be "repaired" or restored in the present volume is the living, speaking, listening, moving, touching, exuding and absorbing image, the very structure of animation. Like Francis, we will listen to the speaking *imago* and hear what it is that it has to say to us, in order to

This page is protected by copyright and may not be redistributed

understand its living reality and manifest animation. We will attempt to open our sensory perception to the plethora of ways in which living images address us.

Let us first lend our ears to an antique predecessor within the historical category of talking imagery: one that seems, on the face of it, to make use of a principle of animation wholly different from the audiovisual miracle of *Franciscus alter Christus*. The object in question is a sculpted portrait of the Greek philosopher and sage Epicurus (341–270 B.C.), housed since 1890 at "Glyptoteket" in Copenhagen. It consists of a marble reproduction of an intense and insightful visage with an especially evocative and vociferous appeal (ill. 2). At some point in late antiquity, the original first-century figure was made into a ventriloquized oracle when it was hollowed out and furnished with an internal speaking tube leading through the bust and out to an opening in the mouth, discreetly – but visibly – ending in a little hole between the lips. Unlike the miraculously speaking crucifix of Franciscus, this talkative face made itself heard through an inserted mechanism of manufactured speech. At some later date, all visible signs of the locutory ability of the bust were eradicated to leave the face with a nice, clean, impenetrable surface. When these adjustments were discovered and the orifice reappeared during a restoration in the 1940s, the acoustics of the resonant head were tried out with a 12 m bronze pipe, producing a powerful and

[Ill. 1] A paradigm of *hagiophonic animation,* combining oral, aural and visual movement: The sounding image of Christ crucified that "moved its lips and spoke" to St. Francis in the church of San Damiano, outside Assisi, is a 12th-century crucifix painted on a solid wooden plate or block of considerable proportions (190 × 120 × 12 cm). Even though it carries a two-dimensional depiction, a so-called "crucifix icon" in the Byzantine style local to Umbria, the hanging cross as such presents a powerful material presence that would have overwhelmed beholders in the tiny, humble oratory of San Damiano. It was not a lifelike, mimetic rendition of the stiffly painted Corpus Christi but its bodily materialization in the tangible object that would have seemed to "speak" to believers when they kneeled below the imposing cross, which was leaning forward to overshadow them in all its might. Today, the once-animated corpus has been transferred to the Oratorio del Crocifisso in the church of Santa Clara in Assisi, where it hangs suspended in mid-air, heavy with latent power, and just seems to await another awakening or eruption into life, speech, movement and animation.
Tempera painted on walnut wood with cloth, c. 1100.

This page is protected by copyright and may not be redistributed

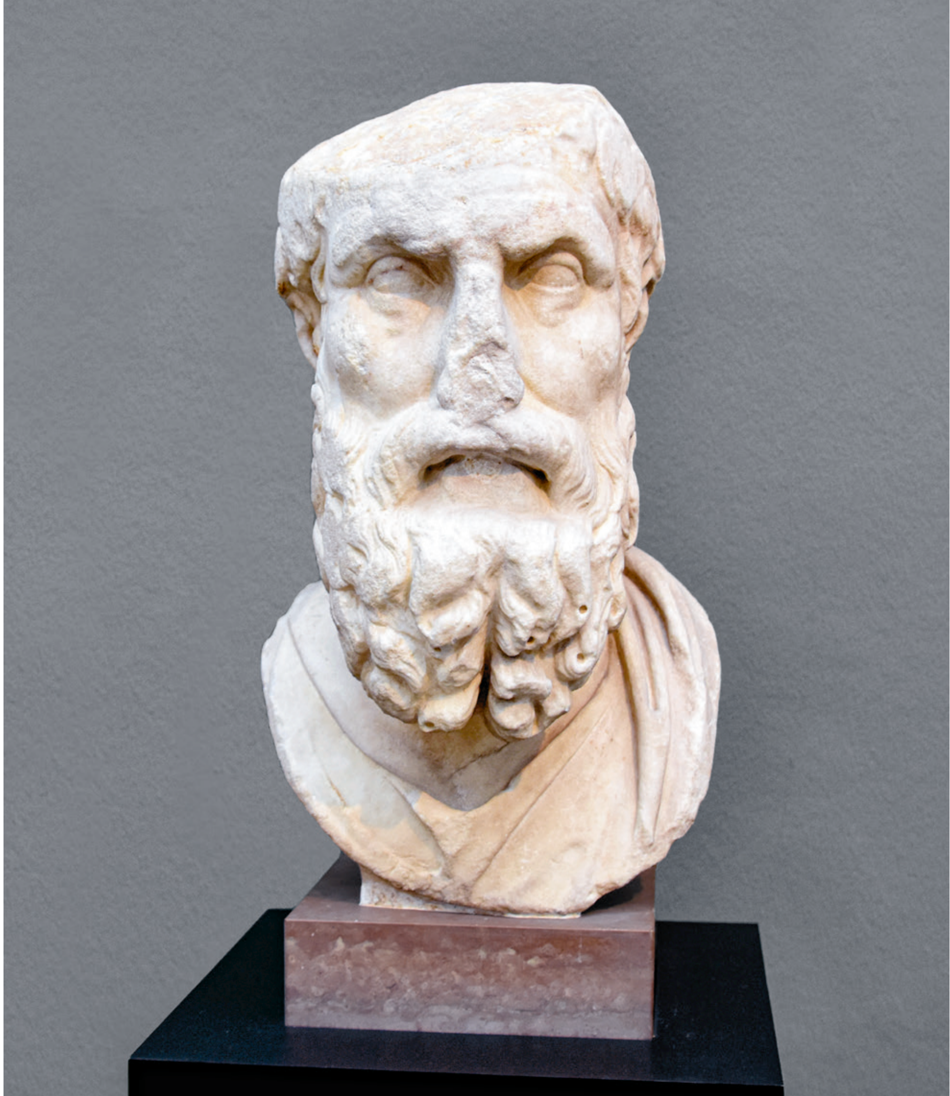
IHS NAZARE
REX IVDEORV
S IOANNES
MARIA

strange effect with a sound experienced as both "mysterious and weird" (Poulsen 1945, p. 183). Back in its day, the perforated bust would have facilitated the transmission of secretive whispers, mystic murmurs, enigmatic locutions and obscure omens, perhaps even accompanied by scented vapours and incense to increase the mystique of distant, ineffable sounds. The stern-looking thinker was known to possess a revelatory knowledge of the inner atomic secrets of nature. Maybe that is why he was animated as a divine or divinatory image, enabled to emit suggestive pronouncements or speak hidden truths to worshippers. Or maybe the austere face – not exactly sporting an "Epicurean" attitude in the usual sense – was transformed into a mystic, a magus or even a saint, speaking god's unheard words of wisdom. He was not Christ, but like Christ he had sacred words to say, and he readily made use of an image as a hagiophonic channel.

Writing about such talking, weeping and bleeding sculptures, Frederik Poulsen considered this manipulated mantic miracle in the context of "pagan miracle tricks", "craniomanty", "ventriloquism" and "pagan statuary fraud", all in all a "naive kind of religious propaganda", that would – despite early Christian reluctance – eventually lead to a proliferation of medieval "statue miracles" with "the statue as a mouthpiece of god's voice" (Poulsen 1945, pp. 185–87, 191, 194–95). He deemed this oral and aural practice to be "religious fraud", a "magic arrangement", allowing a priest crouched behind a wall or in a clandestine chamber to act "as a veritable oracle" with a mysterious-sounding voice distorted by the deceitful duct: "Superstition of every kind flourished in late antiquity, including a belief in talking statues and sculptures, and therefore it is reasonable to assume a similar magic use of this pierced bust, whereby Epicurus, the enemy of superstition, was utilized for an oracle fraud" (Poulsen 1945, pp. 178, 182, passim; Poulsen 1951, p. 293).

But was this "oral magic" really a "deliberate fraud" – merely a "miracle trick of the priests"? Was the oracular animation simply fake, devoid of any possible divine presence? Was the use of such sonorous mechanics only a cunning deception, that cancelled the validity of any supernatural experience channelled by the vocalized image? No, it was not, for this is a specifically modern evaluation, an alienated, disenchanted, rationalist scepticism that flattens historical conceptions of magic and miracles into invalid "superstition", unworthy of religion proper (Kristensen 2013, pp. 39–40, 46). Any belief in talking heads must have been naïve and flawed, so it is assumed, an erroneous theurgy with no real magic – and much less a miracle. Along this disenchanted line of reasoning, the forged oracle can only be seen as trickery and pretence without any supernatural reality, a man-made mechanical device arranged

This page is protected by copyright and may not be redistributed



[Ill. 2] Philosopher-cum-mystic-cum-oracle: First-century marble bust of Epicurus, later perforated by an internal channel for a speaking tube allowing a hidden speaker to give voice to the visual and verbal animation of the talking head. Subsequent mutilations and restorations eventually silenced the auditory animation but have been removed to disclose the little oval hole used for funnelling sound through the pierced lips. Perhaps the fractured, now missing portions of the lips may somehow have accommodated the animated effect of oral-aural movement. The bust is now at Ny Carlsberg Glyptotek in Copenhagen.

This page is protected by copyright and may not be redistributed

to produce the “sacred” voice animation. Its arcane speech is thus reduced to a staged make-believe preying upon the credulity of gullible viewers and listeners supposed to be ignorant of its material cause or bewildered by its baffling effects. The mechanically and performatively produced animation would have been disguised as a magical or miraculous animation, meant to suggestively mislead its mystified onlookers and its poor, perplexed devotees. Such pejorative views may have been the cause for the later cover-up job – and, we might add, if visitors to Glyptoteket see the bust today, its vocal magic has again been obliterated. Accused of fraudulence, it has stopped speaking.

However, these simplified assumptions about magic, mechanics and supernatural realities may have to be revised in view of recent research into the workings of animation. In *The Secret Life of Puppets*, Victoria Nelson compares our sculpted speaker to Hermetic practices of animation and theurgic ensoulment, historical practices and theories that will also feature in this volume:

> To its practitioners, ventriloquism of the kind demanded by the bust of Epicurus would not have been a ruse at all, but rather a tool by which the priest possessed by the god could give utterance to the god’s words through the statue. [T]heir belief in the experience of divine possession, even as they manipulated the statues, was genuine and not the cynical fakery assumed by modern researchers (Nelson 2001, p. 41).

Worshippers might in fact know very well about the more or less visible aperture in the verbose head, about the amplifying props, the holy act of puppetry and the entire enactment of sonic revelation. But the patent mediation did not detract from the spiritual value of the divine apparition-audition, because the mouthy bust, the conductive speaking tube and the inspirited priest lending his voice to the figure were *all media* – or “mouths” – for the godly message. God spoke through the puppet, through the pipe, through the priest and the whole animation, all part of the sanctified broadcasting system. It was exactly the mediated character of the sagacious sounds that ensured their transmission of higher truths beyond normal human understanding.

In this book about animation between magic, miracles and mechanics, we will listen to the puppets and their inspired ventriloquism. We will try to understand the historical nature(s) of animation through the magic-miracle-mechanics complex: a matrix of interwoven natural and supernatural causes, entwined physical and spiritual effects, inseparable material and immaterial sensations. These circumstances and

This page is protected by copyright and may not be redistributed

conditions of animation could not always be neatly separated into compartmentalized modern categories because they did not obey such a clear-cut, rationalized division of labour. Thus, we will discuss "magical animation", "mechanical animation" and "miraculous animation" as fluid and flexible categories that can only be applied with considerable caution and acute attention to their mutual overlaps. In animated imagery and auditory statuary of the Middle Ages – the main concern of the book – magic might spill into both miracles and mechanics, while mechanical animation might have supernatural causes as well, and miracles might intervene in, or reproduce, mechanical states and affairs. Articulated crucifixes – moving feats of mechanical animation – could imitate, emulate and themselves become miracles of autonomous movement, action and speech. Ancient techniques of animation, only one of which was the speaking tube, were initially denounced by Christian resistance to the pagan cults of living images and talking statues, but found new, extensive and ever-increasing use during the High and Late Middle Ages.

From Sacred Image to Idol and Idolatry

Before we delve into the medieval concepts and practices of animation, we find it necessary to give a short overview of the layers of disapproval these images have been subjected to by a choir of post-medieval voices and to which the fate of the epicurean oracle testifies. First of all, the living image was effectively dethroned as a result of the Northern European Reformations and the vociferous polemics about images that came with them. Protestant rhetoric propagated an "othering" of animation, treated as fraudulent examples of the ridiculed papism and its superstitions. These polemical topoi flowed into the general scholarly study of culture, when historians used superstition "as a sort of shorthand for pre-Reformation Catholic practices or late medieval and early modern popular religion" (Parish & Naphy 2002, p. 3). On top of this, the living image fell victim to displacement as an abjected other with the rise of "art" in the early modern era. These images did not – perhaps for obvious reasons – make the cut into the privileged category of aesthetics controlled by serious art historical discourses. In the Enlightenment period, the attitude to living images was, according to Horst Bredekamp, that "[a]n image, in as far as it consists of anorganic matter, can of course have no life of its own. Accepting this is of particular importance for an art historian, whose duty it may be to detect even the deepest layer of under-drawing in a painting and to explain this in strictly material terms" (Bredekamp 2018, pp. 7–8). This relegation was further augmented by Enlightenment theories of a "history of

This page is protected by copyright and may not be redistributed

progress" which came to associate the living image with so-called "primitive" societies in a childish stage of culture. 19th-century anthropology reinforced the pejorative assessment of animation and animism and made attempts to explain these kinds of imagery as merely symbolic representations – against all appearance. Animate objects were effectively relocated to the newly construed intellectual categories of "popular religion" and "folklore" (Walsham 2008; Parish & Naphy 2008; Laugerud & Ødemark 2020).

The living image was simply sidelined and repressed, and the vocabulary originally used to describe its doing was completely displaced. The animated image is still there, but our access to it has been seriously obfuscated. Only recently have scholars of religious and material culture begun to retrieve its original meaning from under the layers of garbled transmissions (in the works of Bynum, Belting and Kopania, among others). In search of a solidary explanation of animation that does not merely echo or reproduce the suspicions of the past, our contribution will take magic and miracles as seriously as mechanics and treat the supernatural as just as historically real as the natural. We will consider magic on its medieval terms, bordering on miracles and wonders. This calls for caution though: when we use the term "magic", for example, it should not be taken to mean what it has come to signify in modern use, a drained and somewhat enfeebled adaptation of the term with all the connotations of exoticism and superstition glued to it. In recent years, scholars from various disciplines and countries have strived to revitalize the concept of magic, dust it off for academic use and divest it of the pungent flavour of something mysterious, shadowy, occult and witchy (Collins 2015; Page & Rider 2019). Several studies have shown that so-called magical practices – as they were categorized by post-Reformation writers and in 18th–19th century anthropology and history – were in fact accepted in medieval culture. Today, historians "generally agree that there was a shift towards positive attitudes to learned magic in the Late Middle Ages, despite increasing concerns with witchcraft" (Page & Rider 2019, pp. 9, 6). In a medieval context, magic would describe specific, well-defined, supernatural forces, such as demons and spirits inhabiting, inspiriting and animating images: in short, a demonology of living imagery (as we shall see in chapter 1). But it could also just refer to learned magic or *magia naturalis*, which simply defined the study or utilization of the amazing workings of nature (Kieckhefer 2000, pp. 8–17) – including natural forces employed in or for animation (as we will also return to in chapter 3). As a term, magic is thus both extremely capacious and wide-ranging, while it carries an entangled history of ideological debate and conflicts of implementation and reception. In our exposition of

This page is protected by copyright and may not be redistributed

these overlapping forces of animation, the marvellous mechanics of talking heads will be examined alongside miraculously moving Madonnas and automated Christ figures, as well as tales of saintly miracles of a rather physical, not to say "mechanical" character. While we look for the multifarious wonders of animation, we also probe other available concepts of animation. This volume of living images seeks a historical and conceptual rehabilitation of magic and miracles in their intricate relationship, and contrast, with the mechanics of animation. It is a return to animism, not just as a model of explanation but also as a celebrated, if contested, part of reality.

Towards a Reinvigorated Animism

Living images and animated imagery composed an enticing, yet literally unsettling, reality during the Middle Ages, believed and disbelieved, physically experienced and questioned, soundly sensed and doubted. Whether sentiments towards "animated materiality" were sceptical or affirmative (Bynum 2011, p. 21, passim), animation haunted and defined the visual culture of late medieval Latin Christendom in sacred as well as secular contexts. Whichever mode or principle of animation was operative – magic, miracle or mechanics – self-propelled figures moved both themselves and the souls of their viewers. Various forms of figuration might actualize this potential and act out their latent potentiality to be or come alive. Even though only a few select ones did, it could indeed occur in any kind of image or depiction. The attribute of "animability" was part of the medieval concept of an *imago* or *ymage*, used extensively for visualizations in manifold media such as painting, fresco, icons, retables, figural reliquaries, statuary, mechanized sculpture, automated bodies, dolls, puppets, tableaux, displays and representational scenes.

In describing this ample culture of visual and sensual spectacle, Michael Camille suggestively conveyed

> [...] a sense of the wonder and enjoyment in the representation that breaks the bounds of representation and enters into life itself. [...] In a world where rare and artificially constructed images moved and seemed to speak, [...] representations that come to life are revealing of this aesthetic of immanent movement in the image [...] an *aesthetic of animism* that was rife in medieval culture (Camille 1989, pp. 250, 252, on manufactured marvels; our emphasis).

This page is protected by copyright and may not be redistributed

Committed to an animist approach, the present co-authored book seeks to take seriously the life of these vibrant images and gesticulating effigies, conceived as a material, aesthetic and anthropological quality in them. We wish to listen to the images that speak, to interact with the moving automata, to taste the substance of exuding sculptures and to meet the gaze of Christ or the Virgin Mary as they manifest themselves in magical, mechanical or miraculous animations. We want to respond to the agile aliveness, the multiple motions and the resourceful actions of images. We hope to feel their full pictorial impact, not from a viewpoint of modern scientific alienation – as criticized by David Freedberg in 1989 – but rather through an acknowledgement of the social, cultural, historical and anthropological reality of the life, or modes of life, inherent in some kinds of material imagery.

Animated pictures or figures, and the understanding of images as having agency, is not confined to medieval visual culture, but relates, we contend, to a more general sense of and attitude towards imagery. The living figuration keeps coming back and resurfaces in guises both old and new. Today, we create images of all kinds that do not just mimic but also emulate, respond to, interact with and surpass human life – such as so-called "live media", augmented reality, digital avatars, social robots, AIs and love dolls. Late modern visual culture raises questions about the nature of the "animate" as opposed to the "animated", articulated within approaches such as new materialism, new animism, actor network theory, object-oriented ontology, distributed agency and image anthropology. The current reappraisal of the living image as a topic for scholarly enquiry is perhaps a symptom of this, but if we wish to understand our own media culture it is, in our opinion, most useful to go back to a time and a culture with a more permissive understanding of images and a less restrictive attitude toward their ability for animacy. This epistemological manoeuvre calls for a need to return to the discourses of the pre-modern period when such aspects were integrated in the creation, perception, interaction and materiality of images. Medieval voices, historical visual practices and vibrating material objects may provide us with a detailed and calibrated vocabulary to understand the "inner life" and workings of vivified imagery or statuary.

Our approach addresses what we find missing in many contemporary scholars' attitude to the broad spectrum of visual culture, sometimes expressed as a kind of embarrassment on behalf of the past one studies. As Donald Preziosi and Claire Farago observe: "Religious theories of images have been considered irrelevant largely because we have mined the history for ideas that are recognizably modern" (Preziosi & Farago 2012, p. xi). This is what Herbert Butterfield in his classic study in 1931

This page is protected by copyright and may not be redistributed

defined as the "Whig fallacy", viewing the past through the lens of modern thought: an idea of progressivism that projects itself upon the past (Butterfield 1931, p. 24). We, however, want to take the past seriously, accept what medieval people actually held to be true and consider their belief systems as rational and real in their own right (Skinner 2002, particularly pp. 27–56). We wish to return to those vivid images and sacred objects, physically mobile and movable figures, that identify figuration with animation, and animated figure with animate life. Images gesturing, either in the picture plane or in the space around it, call for a reinvigorated animism. An animist approach, or rather sensibility, is needed not merely to restore our animate contact with medieval image culture, but also to reinstate its relevance for the study of pictorial phenomena in general.

Only *AS IF* they were Alive? (Modern Questions, Medieval Answers)

Animation is not always, not merely or not ultimately, we contend, a projection or attribution stemming from the human viewer himself or herself, produced by their enchanted experience of and engagement with the image. This is what is usually implied by the term "living presence response", that is, a response to depictions only *AS IF* they were alive, a life-like experience in reality effected by the viewer who endows the charged image with liveliness, for instance as a psychological reaction within the beholder. The notion of "real presence response" or "living presence response" suggests that it is all in the response and that animation, however convincing, in fact primarily happens in an animating reception of a (thus animated) figure. The responsive and enlivening treatment of what is in reality only "dead form" was already proposed by Freedberg in his seminal work on *The Power of Images: Studies in the History and Theory of Response.* In this primer in animation, he set out "to plot responses, and [...] consider why images elicit, provoke, or arouse the responses they do; the issue is why behaviour that reveals itself in such apparently similar and recurrent ways is awakened by dead form" (Freedberg 1989, p. 20).

The experiential explanation has subsequently been further developed and is very successful due to its rightful stress on viewer–image reciprocity and interaction. It is presented perhaps most succinctly by Caroline van Eck: "Speaking to statues or paintings, kissing or beating them, claiming that works of art in their turn look at the viewer, talk or listen to them, move, sweat or bleed; or feeling love, desire, or hatred for images: all these reactions to works of art are part of a large complex of viewers'

This page is protected by copyright and may not be redistributed

responses in which artworks are treated not as the inanimate objects they really are, but as living beings, whose presence is felt to be genuinely akin to that of a living being" (van Eck 2010, p. 643; further elaborated in van Eck 2015, pp. 51–55, discussing Gell 1998). Along similar lines, scholars have declared that the image is a *sign* of the real and should not be mistaken for the real itself, although there may be a connection based on likeness in appearance or potency (Pinkus 2014, p. 179). The living image is simply the result of the artist's ability to make pure matter appear as living flesh, which makes the beholder marvel at it because something made of stone is so seemingly alive (Barolsky 2014, p. 39). Reflecting on Bernini's statue of *Apollo and Daphne* (ca. 1622–25, Galleria Borghese, Rome), Paul Barolsky states that "it is hard to believe that what we are looking at is not animated, since what it depicts is so seemingly and convincingly mobile" (Barolsky 2014, p. 41). The statue depicts a metamorphosis, but it does not perform one, we understand. If we believe so – as did Pygmalion in another tale from Ovids metamorphosis – it is simply the result of "our [...] childlike capacity to fall under the spell of art's illusions" (Barolsky & D'Ambra 2009, p. 23). The living presence response has been bolstered by recent studies in neuroaesthetics that investigate behavioural interaction with images in order to trace the "deep psychological factors that have their roots in specifiable neural relationships" (Freedberg 2016, p. 70). We should be constantly aware that images are merely images, although they beget "every sort of experience and action related to perception" and that it is "only human" to demand more – life – of them (Bredekamp 2018, pp. 283, 8).

Consequently, it is up to art historians to unmask and strip images of their trickery, when they "appeal to us through illusion" (Jurkowlaniec 2006, p. 355). Despite attention to reciprocity, the living image response tends to locate the life of images in the mind of the beholder where the act of vivification is assumed to ultimately take place. The general premise of the response-perspective is that "only when the locus of living presence is moved from the object to the viewer's experience can such responses become understandable" (van Eck 2015, p. 53; van Eck 2010, p. 646; see also the discussion in Maniura 2018). Understandable to whom? Presumably the estranged modern spectator and commentator who has all too often explained away the living image as a product of such illusion, not to say delusion, superstition, primitive belief or even child's play (as argued by Freedberg 1989, p. 284; Moshenska 2019). To be sure, this is an expected and predictable assumption – albeit not one that dares to meet the object on equal terms, beyond the safe haven of biocentrism and anthropocentrism.

This page is protected by copyright and may not be redistributed

But what if there has been, and actually still is, an independent and inherent agency within images? What if the historical beholder were actually right in experiencing such a property embodied in the living thing? We should not forget that it was the perceived entity itself that willingly offered, enacted and instigated this experience. For the pre-modern observer, the locus of power and presence was liable to be *the animated object per se*, based on a deeply rooted – if, of course, not uncontradicted – understanding of imagery and statuary as (potentially) alive. Not until later was the muted image restrained as a subdued, silent and inert object of science and scrutinizing inspection. If indeed we want to understand the historical notion of animation, we should accept the possibility of its effective reality and try to open our horizon towards other worldviews that entertain more flexible and plastic ontologies of things, pictures and material bodies. This means avoiding the modernist gesture of "othering" past historical cultures by subjecting them to one-way observation. On the contrary, animism approaches medieval artefacts with a post-colonial attitude, listening to their voices, admitting their co-presence, accepting their empowerment (in line with Liepe 2003). We should not be so certain about the underlying assumption concerning images: "the logical and factual impossibility of inanimate matter being animate" (van Eck 2010, p. 648). Neither should we be so convinced that their enigmatic being may be reduced to their human reception, that it is we who bestow life upon them, and that it is really only "as if they were alive", "as if they are living beings", a "response to inanimate objects as if they are animate, acting persons" (van Eck 2015, pp. 52–53).

The crucial "as if" sustains a viewer-centred model of animation as only being *quasi,* in other words, an imagined state or condition: subjectively experienced, yes, but objectively real, no. This is an anthropocentric understanding of animated phenomena based on what is in the end an asymmetrical notion of real life with an uneven distribution of agency and animacy between persons (animate) and things (inanimate, exanimate), even if these may be conceived as social agents mediating person-like agency, in Gell's terms. Yes, viewers certainly partook in what may accordingly be called phenomenological or experiential animation, to which we shall return in a moment. But that was not the exclusive effective cause in the historical life of images. It is not merely "the onlooker who makes the picture", as Marcel Duchamp radically formulated in 1957 (Gamboni 2004, p. 9). Other principles of life, vitality and animation also existed and contributed to making imagery work and go. Potent pictures played their part and acted on their own. So why not take "the

This page is protected by copyright and may not be redistributed

power of images" seriously, at least as one part of the equation, instead of reducing it to the product of a responsive imagination?

In trying to understand the living image, we should turn to the image itself and ask about its distinct potency. What is it in its "image-ness" – its iconicity and visuality, its mediality and materiality, its corporeality and presence-as-object – that meets and affects its recipient? What is it in its being as image that makes it interact with its user as a living entity? The image possesses a subjecthood that is present – or co-present with us: it meets our gaze and looks back at us (Holly 1996, p. 15). It calls out for us and summons us, as much as the other way around. It wants something from us, as W.J.T. Mitchell argues in *What do Pictures Want?* (2005) where he compares imagery to organic life and self-propagating lifeforms. Most importantly, however, we must revisit the historical engagement with images as witness to the perplexing paradoxes of animism.

The Sense of Living Things: A Believed and Believable Reality

In the multitude of pictorial and sculptural animations reported during the Middle Ages, the reality of life was comprehensive enough and plastic enough to encompass not only human beings of flesh and blood but also many other classes of beings, physical objects and corporeal conditions. The life of pictures, figures and statues was real enough, we suspect, even as it was contested and questioned: a manifestation of living presence at different levels of reality, dependent on the causes of animation, which we shall address in this volume as a whole. As historians of images, we need to accept that our sense of reality is *not* epistemologically superior to or more truthful than that of the periods we study (Skinner 2002, pp. 29–32). In the Middle Ages, images exhibited various signs of spiritual, bodily and even organic life according to hosts of witnesses who took such occurrences to be undeniably true and genuine, albeit of a transgressive nature exceeding mundane normality. Who are we to claim that this was just "as if"? Who are we to pretend that medieval viewers could not tell the difference themselves, but that we can? Or that pictorial animation merely took place in recipients' response, without them being aware of this lapse and themselves recognizing the supposed slippage from animist experience to animate presence? That bleeding crucifixes and lactating Madonnas seen and touched by throngs of pilgrims were only apparently performing their conspicuous exudations, by some collective delusion?

This page is protected by copyright and may not be redistributed

To explain animated cult imagery as just some mythical, pre-cognitive fantasy of pre-modern man in a credulous "child-like" state of cultural infancy, prone to believing in oracle fraud, illusions of magic or deliberate trickery, easily manipulated by "crafty monks", is to wholly miss the point. This "colonial" position ("we know what they don't") ignores "Christianity's central claims about the ontology of sacred objects and images. To suggest that [...] the divine authority of relics and authentic cult images [...] was left unexplained [...] is to disregard a very considerable body of evidence on Christian thought" (Preziosi & Farago 2012, p. xiii). By all accounts, it is factually incorrect that medieval recipients and lay practitioners were generally naïve and easily exploited by cunning priests or clerics. On the contrary, there is plenty of evidence to support the simple fact that miracles, sainthood and visions were always surrounded by discussion and argument, even miraculous occurrences with papal authorization, like the stigmatization of St. Francis, Christ's living image in the flesh. Supernatural animations were probed and examined, their natural transgressions investigated. As Steven Justice underscores: "Doubt and controversy not only attended miracles but were actively cultivated in defining them". Proper procedures for canonization were developed in the 12th and 13th centuries, assisted by a common-sense recognition that some events were a result of natural processes whereas others were miraculous. Evidence had to be presented for verification of supernatural claims (Justice 2008, p. 6). Everyone knew that visions and mystical experiences could be faked or demonically induced, that relics could be false and miraculous animations forged by magic or mechanics. For this very reason, miracles had to be convincing and the people reporting them trustworthy. Proof was demanded and far from every story was believed. The veracity of miracles was a crucial question, not just a blind supposition. Miracles were a part of reality, but this did not mean that everything presented as such was accepted. Transgressions of the natural order – such as animation – needed authorization to be credited as believable. That is precisely why we should take instances of medieval animation seriously and seek to explain them as a believed and believable reality in their own right. Animated imagery was not a hoax, but a carefully tried, tested and proven fact of life, however unusual and transgressive.

A vast majority of historical cultures have acknowledged, authorized and worshipped various forms of animation, which have fascinated and puzzled scholars of religious studies, historians, art historians, ethnologists and anthropologists for centuries. Considering the pervasive historical and cultural prevalence of animation, could it not be we who betray ourselves in denying its reality? We cannot simply ignore the possibility that our modern assumptions – and their accompanying epis-

This page is protected by copyright and may not be redistributed

temic asymmetry – may be reversed, and perhaps should be brought to the test. Because what if the original beholders were right in their animist sensibilities and their sensitivity towards pictorial presence? What if images were – and are – in some sense alive? What if we moderns have lost the ability to really see and hear pictures, a property of perception which we ought to recover by learning from and listening to the past (as opposed to speaking on behalf of a silenced past)? What if animism is not a failed epistemology of the simple-minded and unenlightened? (Bird-David 1999, p. 70). What if we have just repressed this living potential of images out of fear, to exercise control over the Other or power over dangerous cultural ideas that may threaten to destabilize the habitual anthropocentric order of things? What if the term "art" and its institutional container, the museum, are just a way of hedging in the taboos related to the "magic" of image-making, as Ernst Gombrich has suggested? (Gombrich 1959, p. 98). In this vivacious (we hope...) volume, we propose that instead of staying safely aloof from dreaded animism, we should plunge in, immerse ourselves and try to learn from historical insights into the vital and vivified nature of images. As proposed by Gell (1998, pp. 96–97), we should not explain away "idolatry" but rather ask what distinguishes and characterizes the social and individual life of effigies, icons and idols.

The Fundamental Concepts and Principles of Animation

In the present volume, "animation" will be used as a unifying term designating a broad range of sensory transformations, physical manifestations and actual movements taking place in images or other corporeal objects, brought about by highly divergent causes and motors. There are different ways to be animated and to be brought into a state of animacy, some of which have been current in particular historical periods, like the Middle Ages, while others have had their heyday in other cultural eras. Each culture is characterized by its prevalent principles of animation and its preferred modes of mobilization and vivification, even though the modes may readily coexist and cooperate in any given situation. At least four basic principles or modalities of animation may be identified within a continuum ranging from mechanical motorization to organic creation, from supernatural invocation to phenomenological exchange. These modalities may easily be, and have often been, confused with one another. For that very reason, we need a coherent and systematic theoretical framework for the study of animation, both medieval and modern, historical and

This page is protected by copyright and may not be redistributed

contemporary. In the following, we will briefly outline a tentative typology of the *four fundamental concepts of animation*, a taxonomy of underlying operative modes that has also been presented at other occasions (ill. 3; – see earlier versions in Jørgensen 2016; Jørgensen 2017; and a further elaboration in Jørgensen forthcoming).

These elemental means of operation, or *modi operandi*, may be distinguished in principle and in theory, but in practice they always tend to coincide and coalesce, gradually sliding from image as mechanism to image as organism, from image as numinous power to image as social agent. The need for an ordering taxonomy of recognizable principles thus arises from the perplexing multitude of entangled phenomena about which we tend to use the term "animation". Nevertheless, the purpose is not to establish distinct and mutually exclusive categories, but to be able to address the blurred continuum of living and moving images, where seemingly separate techniques of animation concur and overlap. In most medieval instances of animation, two or more modes merge, cooperate or spark off one another. Medieval writers themselves distinguished between different operational modalities of animation, but, as we shall see, not necessarily their effect and affect. If we want to discuss and understand the deeper workings of animation, we need categories in order to describe precisely how and why they fuse and blend into each other.

Characteristically, some medievalists primarily investigate *mechanical animation*, and later chapters in this book also take a particular interest in physically and technologically animated imagery, kinaesthetics and the dynamics of bodies in actual or potential motion. Mechanical animation produces *artificial life in the image*, sometimes staged merely as a manufactured illusion or appearance of life, sometimes more radically as an active performance of the power to engage in self-induced movement, transformation and communication. Its *mechanism of life* may be fabricated and artefactual, yet it is also factual and materially real, not just a ghost in the machine, but authenticated in tangible signs and potencies of life. The image lives as an automated or self-propelled *mechanical being* made to work and go on its own: a "medieval robot", "robot saint", "Teufelsautomat" or "*dyabolus artificiosus*" (Truitt 2015; Swift 2015; Giovanni Fontana in Kranz 2014). It is set in motion by internal works and motors – like an automaton – or by external physical agents – like a puppet or marionette. This manifest motion fosters an *artifice of life* or an *act of life* in the image, although, as we shall see, the lines between artificial and real are blurred and interlaced. Such mechanized acts of life are liable to be performed in outward bodily action, comprised of patent mobilization and automation, perceptible postures and gestures, facial expressions, visible gesticulations and audible sound effects. The act-

This page is protected by copyright and may not be redistributed

A taxonomy of the four fundamental concepts of animation

Mechanical animation – artificial life in the mobilized image

- The image simulates and enacts (a kind of) life; it lives in the mode of a *mechanical being*: a mechanism of life, artifice of life, act of life or performance of life
- The image is set in motion by internal works and motors – like an automaton or robot – or by external physical agents – like a puppet or marionette
- Principal medieval technologies to produce figural and bodily locomotion are:
  1) kinetic or machinic *dynamics*, as in clockwork, action figures or jointed dolls
  2) *hydraulics* powered by fluids and liquids in motion, as in waterworks
  3) *pneumatics* operated by air, wind, gas, steam or vapour under pressure
  4) *pyrotechnics* driven by fire and fireworks, as in rocket-propelled figures
- The life of the image is an artefactual – yet factual – reality, authenticated by outward gestures, manifest movement and tangible, visible or audible action

Supernatural animation – life power in the magical or miraculous image

- The image comes to life as an *ensouled being* imbued with preternatural power: *anima,* vital spirit, virtus, potentia, praesentia, charisma, numen, mana, aura
- The capacity for animation resides within the sacred image itself – when it is identified with the living god as such – or it stems from a *supernatural intervention in the image*, an unworldly or other-worldly interference: *miracle* or *magic*, divine incarnation or inhabitation, demonic possession or conjuration, Hermetic ensoulment or enchantment, ritual consecration or numinous epiphany
- Due to its empowering vivification, the image may possess properties of life and agency of its own: it may perform by itself action or movement, motion or emotion, exterior or interior, exogenous or endogenous, physical or spiritual
- The life of the image is an immanent or transcendent reality, authenticated by cultural conventions and codified beliefs integral to the prevailing worldview

Biological animation – organic life in the corporeal image

- The image lives as an organism, creature or body, a *corporeal being* capable of self-induced motion, transformation, growth and other functions of life (*bios*)
- *Natural and synthetic creation* interact to produce living imagery and *biopictures* (W.J.T. Mitchell), animated in cybernetics, biotechnological reproduction, genetic engineering, digital cloning, visual autopoiesis, viral duplication, replicating life forms, biblical creation myths, cyborgs and images made flesh
- The life of the image is a biological reality, substantiated by bodily materials, somatic effusions, physical effluvia and manifestations of an organic nature, such as blood, sweat, tears or the lactation of oily substances by a liquid icon

Phenomenological animation – experienced life in interaction with the image

- The image lives as an *experiential phenomenon,* encountered as being alive
- The image is animated in the viewer's *reception* of it: it is perceived, addressed, treated and used *as if it were alive*, when we kiss it, caress it, bathe it, feed it, dress it, crown it, celebrate it, walk it, talk to it, listen to it or make love to it
- The image is invested with life in our *reciprocal interaction* with it: our personal and interpersonal exchange with it furnishes it with social agency, animacy, personhood and shared co-presence with us, like a social person or agent
- The life of the image is a phenomenological reality, authenticated by the viewer's immersion in his or her own *experience* of, engagement with and commitment to the image (aka *living presence response*)

This page is protected by copyright and may not be redistributed

ing effigy may ambulate, roll, fly, hover, rotate, ignite, grimace, howl, cry, speak, weep, bleed, exude a liquid, emit steam, exhale vapor, play an instrument, pull a face, point a finger, strike a clock or flap its wings. These expressive moves and poses can take place for instance in theatrical enactments, plays, processions, pageants or rituals, both sacred and secular, that employ a rich repertoire of action figures, articulated dolls and stage machinery. "Articulating figures were […] techno-mythological objects that distilled the wonders of engineering and holiness. […] Both like and unlike human beings, robots and androids occupy a nebulous perceptual realm between life and death, animation and inanimation" – as Christopher Swift writes, relating a geared, jointed and remote-controlled Madonna and child to a post-medieval conception of the android and the humanoid (ill. 23; Swift 2015, p. 52).

In the Middle Ages, the technological means for conveying figural locomotion made use of the four elements: earth, water, air and fire. Some technologies instrumentalized the powers of nature and employed natural energies as the driving force, while others spectacularly exploited mechanics and automatics to work against nature. It was not only devices of demonic design but also man-made, mechanized contrivances that would appear to operate "*contra naturam*" (Friedrich 2003, pp. 102–3, 109). Movement on, along or above the ground (earth) was mainly based on kinetic or machinic dynamics, as in equestrian ensembles of rolling animals on wagons with anthropoid riders or in weight-driven clockworks parading hourly displays of promenading figures and animated "clock-jacks". Hydraulic systems (water) were powered by fluids and liquids in motion, led through pipes, tubes and channels to move waterworks, tears flowing from the weeping eyes of many a Mater Dolorosa or fountains of the suffering Christ bleeding red wine or surrogate blood through his wounds. Pneumatics (air) operated by bellows, wind, gas, steam or vapour under pressure to produce figures with sound, ethereal mobility and bodily effusions, for instance in crowing cocks or blowing "Püstericher" and "aeophiles" (or "aeolipiles", i.e. fire-blowers), shaped as whistling heads with "breathing" mouths (ill. 4; Mac Gregor 2007; Weinryb 2016, pp. 159–63). Pyrotechnics (fire), finally, used the burning force of flames and fireworks, for example to make mouths burn and blow smoke or to make figures fly lifted by rockets, while fiery light sources could produce magic

[Ill. 3] A tentative taxonomy of the four fundamental concepts and principles of animation.

This page is protected by copyright and may not be redistributed

lantern projections and cause silhouettes, surfaces and glowing eyes to vibrate in flickering shimmer.

An apparently contrasting or opposing principle of animation forms the other major interest of this book. Not surprisingly, some historians of religion, art or ideas try to unravel the enigmas of *supernatural animation*, which define parts of medieval culture. Various miraculous and magical occurrences of ensoulment or enchantment, vivification or conjuration, play a vital role in the doctrines and sources discussed in

This page is protected by copyright and may not be redistributed

[III. 4] Bursting with inner life and playful animation: c. 25-cm-tall *Püsterich* or fire-blower of bronze from 12th-century Italy. The anthropomorphic figure could be filled with water through a hole in the nape of the neck. When placed in the embers or over fire, the small *aeophile* or *aeolipile* would blow steam through holes in the mouth and nose, as if it were breathing out living *pneuma* – i.e. the vital spirit that animated its inflated countenance. With its small corpulent body, squatting position and curiously thin arms, the ludic figure would have appeared playfully jocular, bizarre and lively. The burning hot steam spurting from the oral, aural and olfactory organs was perhaps even complemented by a whistling sound, like an old-fashioned kettle in an audible outburst of *autophonic animation*. It may have served practical duties, but its sonic, pneumatic and pyrotechnic (multi-)animation would certainly also have made an entertaining spectacle. As a feature of secular visual culture, the construction of a fire-blower was described in the work of magician-mechanicians and/or scientists like Albertus Magnus and Konrad Kyeser. It has even been suggested that fire-blowers were used to foretell the future, not unlike oracles (Weinryb 2016, pp. 159–63). The hole in the chest of this specimen is due to later damage, perhaps a gesture of violent exanimation and deflation. Kunsthistorisches Museum, Vienna.

our following chapters. Without a man-made mechanical motor empowering it from without, the image may *be alive* on its own, and *eo ipso* possess properties of life, sentience, subjectivity and agency exerted from within, due to its indwelling *anima* or vital power. The image thus comes to life as an *empowered being in itself*, an inspirited and enlivened creature, imbued with a sacrosanct source of energy: "*virtus*", grace, spirit, charisma, numen, mana or divine presence. The existence of this invisible life force is authenticated and codified by ritual, cultural and sensorial conventions integral to the prevailing worldview. The charged effigy is endowed with a numinous aura of *potentia* and *praesentia,* which it embodies, transmits and enacts in transgressive actions and animations (Mitchell 2010). This capacity for animation resides within the living idol itself or stems from a *supernatural intervention in the image*, which allows it to perform both exterior and interior movement, both motion and emotion (i.e. exogenous or endogenous animation).

By the designation "supernatural", this would appear to be the very opposite of natural animacy, and yet they are continuous. The Christian God has repeatedly intervened in his natural creation to invest sacraments, relics of saintly persons, pictures of sacred prototypes and other material mediators with living power and Holy

This page is protected by copyright and may not be redistributed

Spirit. In a sacramental view of reality, the saturated image, object or body incarnates and incorporates a transcendent force, a preternatural potency for miracles – or magic. Whether holy or unholy, this unworldly or other-worldly interference is responsible for transfiguring animations and inhabitations of the physical entities in question. In other belief systems, the animated corpus, idol or deity may even be identified with the living god as such, and the supernatural may reside in the natural world itself, wholly immanent and inherent. Since its early years, Christianity mostly opposed this kind of animism, but the powerful model of idolatry was soon to trigger a deep fascination among Christian iconodules and iconoclasts alike. Even if medieval authorities still struggled to maintain a theoretical distinction between divine intervention and demonic possession, miracles and magic occasionally tended to coincide as cause of animations.

The first two principal modes alone, however, do not account for all instances of animation between magic, miracles and mechanics. Other operations were involved as well at times, partly overlapping or integrating each other, yet identifiable as categories. Hence, a more radical notion of *biological animation* is also needed in our descriptive typology of analytic concepts: an ability to produce *organic life in the image,* or to animate an artefact with or from "natural" life. This biotic mode is exemplified most clearly in the work of W.J.T. Mitchell, who regards as forms of image-making all of the following: species reproduction, autopoiesis, biogenetic engineering, cyborgs, cloning (of genetic or digital codes), viral duplication (of replicating life forms or digital imagery) and biblical creation myths (man as God's clone, copied as an animated *persona* in a sculptured body). These animist "biopictures", archaic or contemporary, prosper and multiply in a biocybernetic paradigm of visual reproduction techniques, where natural and synthetic creation blend and interact to produce living imagery (Mitchell 2015, pp. 20, 60; Mitchell 2011, pp. 69ff.). In the Bible as well as in the laboratory, the animation exists as a synthesized creature inclined to perform select functions of life – or *"bios"* – that bridge differences between image and being.

This may seem to be complementary to the mechanical principle, until we recall that historically, an organism has also been conceived of as a kind of mechanism, an anatomical structure animated by its internal physiological workings and executive organs. The corporeal character of the image makes it react to bodily impact and contact, capable of independent motion, transformation and growth, responsive to sensory stimuli and pain. The organic life of the picture emerges as a biological reality, to the extent that it is substantiated by outward somatic actions, such as the

This page is protected by copyright and may not be redistributed

physical emission of effluvia and secretions of a visceral nature – typically blood, sweat, tears or the lactation of oily substances. Medieval images could indeed behave as natural bodies and exhibit some of the most basic and irrefutable signs of life, like bleeding crucifixes whose animate effusions made apparent the inner circulation within such fluid imagery. When a vital flow of real blood was pouring out from the suffering cross to flesh out its carnal nature and identity with the Corpus Christi, it seemed to verify that it also had a real heart in the depth of its body with a functioning organ to circulate the liquid of life and make it seep from its oozing wounds. The intestinal workings and sanguine actions of the body were known from physicians, alchemists and *scientiae magicae,* who investigated both dead and living bodies in their endeavour to produce organic life and *homunculi* through the use of natural magic. In addition, biological materials such as skin tissue breathing beneath tattoos, hair or human residue in bewitched dolls, body-part relics within body-shaped reliquaries, skulls made into portraits of the dead and mummies celebrating their afterlife in anthropoid coffins and tombs would all animate the resulting bodily images with actual corporeal presence and a spark of life, present or past.

The three major principles of animation mentioned so far are all related in that they pertain to the picture itself: the mechanics of the image, the organics of the image, the nature vs. supernature of the image. Whereas they all stem from the production of the image, the being of the image or the "birth" of the image, the fourth and last type differs. This mode is different in principle, although it is always to some extent present and operative in conjunction with the other modes. It is generated not in the origin or production of the picture, but in the reception of the image and in the recipient's use of it or encounter with it as an image. It may perhaps best be called *phenomenological animation*, when this term is used in the broadest possible sense that includes all kinds of response and reaction to imagery, internally as well as externally, cognitively as well as perceptually, affectively as well as materially, psychologically as well as socially. It is indeed the working principles of this user-oriented approach to pictures as the source of animation that has been studied the most, as shown above. Here, life does not reside *within* the image itself or inhabit it, but is projected onto the picture in our reciprocal *interaction* with it. From the "social" point of view, it takes a participating audience to bring an object to life or make it act *as if alive*. The image is invested with life and brought into the range of the living *in our very experience of it*, which makes its vivid being phenomenologically real to us. We socialize with it, sense it and feel it. The living image *happens* in our animation of its bodily medium (Belting 2005, pp. 302, 307, 311; Belting 2011). It is ani-

This page is protected by copyright and may not be redistributed

mated by being perceived, addressed and treated *as if it were alive*, for example when we kiss it, caress it, bathe it, change it, feed it, dress it, crown it, celebrate it, walk it, talk to it, listen to it or even make love to it. In addition, the performance of shifting spatial, temporal and sensorial relations, for instance lighting of surfaces, can cause a "synergy of a moving viewer and moving image" that makes it transform and change its dynamic appearance relative to the beholder, as would a living being (Pentcheva 2016, pp. 225, 210, on "phenomenal animation"). It is the viewer's immersion in his or her own experience of, engagement with and commitment to the image that allows a "living presence response" or "real presence response" to take place. A mirroring reciprocity is realized in our mutual interchange and efficacious interaction with the portrayed figure. Our own personal and interpersonal exchange with it furnishes it with social agency, animacy and personhood. We imply its shared co-presence with us when we treat it as a social person or agent (Gell 1998). It lives because we want it to, because we demand it to. It lives because we experience it as being alive and interact with it as if it is. We ourselves perform and authenticate its animation, perhaps unknowingly, perhaps complicitly.

The phenomenological investment in *any* animation on the part of the recipient, who must themselves recognize and face its living presence, has, however, led to the erroneous assumption that *all* animation is *only* phenomenological and experiential. This we regard as a watered-down meaning of the term, that does not account for a multitude of medieval animations in their historical reality, but ignore or rationalize away the animism at the heart of many manifestations of life in past images. All modes of animation ought to be considered in their own right as well as in their historical presence and efficacity. In particular, we should note the continuity between the interrelated, amalgamated and overflowing modes of animation, that complement and sustain each other to surround us with co-present life forms. To sum up, the conceptual difficulty of this blurred confusion (animated/animate/animal) is exactly the reason why we need differentiating concepts of animation, so that we are able to describe the flux between principles and operative modes that spill into each other. The interrelations and transitions between the variant modalities of animation are fluid in their interplay. Animism flows – and so must we, if we want to understand it.

This page is protected by copyright and may not be redistributed

Animation Defined: Mobilization and Empowerment of the Image

It follows that animation may seem to be the result of magic or a miracle, even when its causes are mechanical or natural. Even if a miracle (e.g. thaumaturgy) could in a modern anthropological sense be construed as a competing variant of magic, we will maintain the medieval distinction between magic and miracles in order to be able to understand the historical operations of animation on their own terms. What is implied in the designation "animated" is an ensoulment or invocation: the permeation of an otherwise – or seemingly – lifeless object, a not-yet-living image or statue, with *anima* – that is, literally a "life", "spirit" or "soul" (from Latin: air, breath, breathing, life spirit, soul, vital principle). In their immobile condition, physical objects, such as two- or three-dimensional images, would appear to be inert material bodies, but through their animation they might nonetheless be activated and come to realize their innate potential for vitality and motility. The yet inanimate is animated to harbour the spirit of life, a living embodiment of *pneuma* in both a spiritual sense (pneumatics as the ethereal movement of *spīrĭtus* within an organism) and a physical sense (pneumatics as the branch of mechanics producing air-driven movement).

To animate is thus to breathe life into, to bring into active presence, to mobilize and invest with a motive force, to empower, inspirit and enliven. Whether inherent or invoked, this life power or "*virtus*" saturates the image and endows it with autonomous agency and a capacity for external or internal motion/emotion, so-called *exogenous* or *endogenous animation* (according to Jørgensen 2017; see also Jaeger 2012). Admittedly, a still and static body does not qualify as an *animam viventem atque motabilem* – a "living creature that moveth", defined as a locomoting thing, a mutable organism, in the *Vulgate's* translation of Genesis 1:21. But *anima* may be injected into or stored in matter as when relics are lodged inside images, or holy water mixed into paint (Gell 1998, p. 128). There is an anthropomorphic and dichotomic ring to this – the outer *corpus* of the reliquary as a substitute skin that houses the holy bones as a divine *anima* inside (Pinkus 2014, p. 181). Animation is often described in humanizing terms, as if merely the result of a projection of the self onto the object, the "as if" perspective previously discussed. Nevertheless, if the image is moved in one way or another, internally or externally, from within or from without, or if it obtains the ability to move by itself and change state, it may acquire a whiff of *anima*, a driving force or impetus to ambulate and transfigure. The exogenous and endogenous mobilization of the aroused image makes it share with breathing creatures both

This page is protected by copyright and may not be redistributed

their vagrant existence and some sort of “soul”, powerful character or potential personhood, encountered as an animate presence in the movable visual body.

Animation is in other words a liminal condition of movability, mutability and transformation, as is life itself: a process of transgression and transition between what are only seemingly opposed states, such as being “dead” or “alive”, object or subject, thing or person, patient or agent, absent or present. Most animated figures are neither entirely lifeless nor fully alive, at least in the biological sense, but somewhere in between, across the fluid continuum connecting the living with the non-living. This entails a subtle gradation of what is meant by “life”, not as an absolute category in a polarized dichotomy, but as a gradient of being within a continuous spectrum with different degrees of vitality determined by variable criteria (Jørgensen 2016). Medieval debates about living matter continued an ongoing philosophical and theological controversy. Whether miraculous or mundane, magical or mechanical, animate images do somehow live – or at least they did in their historical reality, which possessed sufficient plasticity for accommodating variances of definition and actualization. In their charismatic impact on contemporary beholders, they challenged and nuanced historical categorizations and classifications of life and the living. Some types of figuration conflated the states of *showing* something (representation, staging), *being* something (realization, presence, life) and *doing* something (agency, action, enactment). Animation performed, enacted and realized life in the image.

Agency and Personhood

Worshippers did something to the image, and it did something to them, reciprocally. This power of images has recently been acknowledged and examined by utilization of the concept of agency, which we have also used extensively in the above reflections. Agency is closely related to the so-called material turn in anthropology, art history and sociology. Studies of agency depart from the merely iconographic, aesthetic, symbolic or biographic studies of art and artefacts, focusing on the material and social properties of objects, things, agents, actants, etc. In acknowledging how “things” approach and affect us, scholars such as Bruno Latour, Alfred Gell, Horst Bredekamp, W.J.T. Mitchell, Bill Brown, Jane Bennett, Graham Harman, Donna Haraway, David Morgan, Lambros Malafouris, Caroline Walker Bynum and many others have introduced a less hierarchical ontology to distinguish between, and connect, different entities, both human and non-human. It has been argued that art and material objects exhibit a kind of power or vitality that plays a central role in the formation

This page is protected by copyright and may not be redistributed

and reproduction of the social nexus or network. And it has been declared that human and non-human entities should be treated non-hierarchically: "things" are no less agentive and no less sensitive than living beings.

The term animation, which we prefer in the present study, differs from agency on some fundamental points, especially use and reception. Agency is often applied, we find, to point to functionalistic aspects of images, in particular how things are made to move by manipulation from the outside, how humans distribute personhood, how various rituals or cultural practices serve to enable "things" and to put them in the service of humans. Some studies along these lines have aimed at "locating and defining the original and secondary functions of things", with inspiration from Alfred Gell's distinction between the primary subject and the secondary object (Jurkowlaniec, Matyjaszkiewicz & Sarnecka 2018, p. 8). Ultimately, the study of agency often admits to a certain hierarchy: things are created by humans and fulfil human intentions. Things – images – do what they are created to do in the service of humans. As such, studies of material agency tend to dislocate medieval animation outside the object as a result of manipulation or asymmetrical interaction – be it in puppeteering mechanics or personal devotion. But this is only a half-truth, at odds with the animist cosmology often expressed in the medieval material itself. Agency is inclined to introduce an unfortunate distinction between body and soul and it has affinities with the "living presence response", which may be said to belong to the broad category of phenomenological animation. Theories of materiality continuously warn us against such anthropocentric assumptions (Malafouris & Renfew 2010, pp. 1–12; Bennett 2010; Bynum 2020, p. 43). By insisting on the term *animation* – as opposed to agency – we undertake to foreground the tabooed animism, reappraise it and save it from the denigrating association with something culturally infantile, erroneous and unsophisticated. Animism is a model, not a mistake.

The perspective offered here seeks instead to study the various entities of animation and the interplay between them, how they experience and affect each other, how various bodies, thinghoods and personhoods intermingle and interchange. Conceptions of the (human) body as a closed and impenetrable unit belong to pre- and postmedieval times with an aesthetic of bodily integrity that reflects a "humanist" ideal of the self-contained, autonomous individual (Bird-David 1999). In the Middle Ages, by contrast, matter and body were open entities, closely bound together in interaction. We study these entities and their fluid objecthoods and subjecthoods in the process of interaction and reciprocation. We investigate the interstice between them while attempting to avoid a hierarchical ontology that sees humans as primary

This page is protected by copyright and may not be redistributed

agents and objects as only secondary. We are intrigued by the sensual, affective, spiritual, artistic, material and cognitive engagement between people and things (Bynum 2020, p. 43). It is thus not a study of how objects are instrumentalized, how they are empowered and manipulated or how they serve the subject. Nor do we focus on sensory objects as media between the material and the immaterial (on this mediation, see Jørgensen, Laugerud & Skinnebach 2015). Although animation may result from the mechanical manipulation or enabling of artefacts – such as winding a spring or moving the joints of a figure – we do not agree that medieval objects only "become powerful secondary social agents because of the intentions of the authors, patrons, recipients, or owner" (Jurkowlaniec, Matyjaszkiewicz & Sarnecka 2018, p. 10). In a medieval context, the roles of primary versus secondary, or of agent versus patient, are not determined but constantly shift during the process of interaction. Who enables whom, for example in the case of Margaretha Ebner (1291–1351), when her figurine of the Christ Child demands her to hold and suckle it? Who activates whom when her sweetly appealing baby doll itself takes action to trigger such an irresistible reaction (Hindsley 1993, pp. 132, 58)? At the core of this study lies the conviction that a distinction between the human subject and the non-human object is superficial and impossible to uphold since these are fundamentally woven together, imbricated within each other. With God as the supreme agent and the ultimate animator, all kinds of creatures – saints, humans, animals, things, images – are relegated to the same level of agency and the same order of animation (only subject to causal differences in mobility).

Medieval animation was not uniform and homogenous, neither in appearance nor operation. Empowered objects were enlivened by different principles and causes of animation, resulting from either their production and making (e.g. their institution by magic, miracle or ritual), their reception and use (e.g. participatory interaction with them in cult, devotion or spectacle) or their very objecthood and being as things (e.g. their vibrant materiality, their physical mechanics or their very imageness). Objects of animation could potentially be anything ranging from static painted images set in motion to unpainted *acheiropoieton* icons "not made by human hand", encompassing life-size sculptures, small movable figurines, winged altarpieces, jointed and articulated dolls, wire-controlled puppets, hydraulically controlled fountains, pneumatically controlled oracles and self-propelled automata equipped with technologies of visual and audial transformation. They represented a varied spectrum of movability, animacy, aliveness, lifelikeness and liveliness. They featured various degrees and kinds of imitation of the living organism, although imitation in

This page is protected by copyright and may not be redistributed

itself was not necessarily the gauge on which the living image was measured. Even though some types of figuration seem to have possessed a certain propensity for animation – at least to modern eyes – this potential was not always realized and put into practice. Conversely, other kinds of iconicity would not seem to be obvious candidates for vivification, and yet they thrived. A case in point was the experience of an unfortunate matron when she approached the image of the Blessed Virgin of Valdenz, according to Caesarius of Heisterbach. The figure was indeed not "fashioned with any skill" and the unimpressed matron went so far as to call the statue "old rubbish". Because of her lack of acknowledgment of the virtuousness and divine presence within the poor image, she was punished by the Virgin and despoiled of all her property and lands (Caesarius of Heisterbach: *Dialogus miraculorum,* VII, 44; *Sands* 2010, p. 151, further discussed by Laugerud in chapter 5). Visual likeness, artistic skills and "hypermimetic representation" (Jaeger 2012, p. 99) are often beside the point, as C.S. Lewis observes in his discussion of the similarity between the "ikon" and the "toy": "[…] its artistic merits will not make it a better toy or a better ikon. They may make it a worse one" (Lewis 1961, p. 17).

We should expect that all these modes of animation were exploited in performative contexts ranging from liturgical ceremony and pilgrimage attractions to courtly pageantry and urban spaces like the marketplace or the clock tower. Although modes were often mixed, each location had its preferences and paradigms of animation. The configuration of the material object, with its specific performance and specialized agency, inspired and vitalized various forms of interaction. In the following chapters, we will be dealing with these intermingled forms of animation, and in addition we will investigate diverse techniques of vivification and types of ensoulment. We will pay attention especially to the magic-miracle-mechanics complex, not because it was exhaustive but because it furnished the Middle Ages with their most paradigmatic modalities of animation. The study offered here places medieval objects in what we believe is closer to their original context, taking past ideas, sensibilities and materialities seriously in order to illuminate their animate potentialities. At the same time, we attempt to develop a terminology and theory of the living image, a historical epistemology of pictorial interaction and animation.

This page is protected by copyright and may not be redistributed

Magic, Miracle and Mechanics as Motors of Animation

This book of animation treats the subject through principal aspects of animated imagery conditioned by magic, miracles and mechanics. These three motors propel the most important principles and premises of medieval animation, which will be unfolded in more detail in the chapters that follow. Some chapters will bend towards one of the domains, but as the reflections above suggest, the boundaries between them are never clear-cut. We do, in other words, deal with slippery categories caused by the opacity inlaid in medieval categorizations to begin with. Magic could at its best be natural processes, but could at its worst entail demonic interposition, perhaps imitating the effects of true miracles. Mechanics could be based on knowledge of natural causes, but was equally prone to being perceived as magic or even miraculous happenings. Miracles could make use of nature and mechanics to transgress nature, not unlike the workings of magic.

As a consequence, these motors could all set objects in motion and contribute to worlds of wonder, vivified and transgressed by animation. This will be elaborated on in the first two chapters by Hans Henrik Lohfert Jørgensen, who initially considers a *contradictory doctrine of animation*: a controversial but influential and often-reproduced cluster of claims and utterances on "*statuas animatas*". These animated statues were deemed (un)godly idols of dubious status. This did not, however, prevent them from exerting a strong appeal on medieval believers who themselves felt the intriguing dangers of idolatry, which resonated with Christian cult practices at various levels. Their enthralling animism presented a vital model of living imagery that raised serious doubts about canonical and common-sense distinctions between animate and inanimate matter. "*Statuas animatas*" became associated with the world of magic, licit or illicit, and eventually also mechanics. Magically ensouled artifices, man-made gods, ingenious simulacra and talking idols were claimed to perform the most spectacular wonders and marvels of animation, much like their Christian counterparts.

Such marvels formed an important category of animation among works of nature, art or magic. Natural, artificial and magical forces might cooperate in various constellations, assisted by preternatural powers of either benign or malevolent nature. The heteromorphous domain of the preternatural constituted both a variegated repository and a privileged locus of animation. The Christian teaching of wonders thus managed to put a complex and miscellaneous variety of animated phenomena

This page is protected by copyright and may not be redistributed

into an understandable world order, an ontologically flexible and pliable order readily accepting transgressions and transmutations. What Jørgensen in the next chapter terms *the continuum of animation* allowed for sufficient plasticity, diversity and heterogeneity of the malleable categories of wonder, which comprised both *mirabilia* and *miracula*, marvels and miracles. This continuum implied both natural and preternatural causes of animation, to which natural magic, mechanics and miracles all occasionally belonged. In medieval collections of wonders, phenomena of animation were experienced and understood according to the classes of *naturalia*, *mirabilia* and *miracula*, exercised by contemporary admirers and collectors like Gervase of Tilbury. As we shall see from numerous examples of reported vivification, an aesthetic of animism grew out of the alluring sensibility for the enchanted life of images.

In the following two chapters on *moving matter* and the *potentiality of animation,* Laura Katrine Skinnebach enquires into the world of wonderous mechanical figures as a means for animation of religious imagery. This leads her to propose a theory of the power of images based on medieval theories of *potentia*. Skinnebach's first chapter studies mechanical images as liminal entities. Detailed knowledge of natural causes laid the foundation for the construction of mechanical wonders of animation, such as jointed dolls and talking heads, like the one allegedly produced by Albertus Magnus. The reception of these complex technical wonders was hotly debated. They could be regarded as godly objects made by the use of natural magic, or they could be denounced as illicit and demonic magic or fraudulent miracles. At the same time, their image-ness was extremely potent, stretched out, as they were, between movement and stillness, vitality and inertia, life and death. The potency of these objects forms the focus of the next chapter. Here, Skinnebach takes as her point of departure a medieval understanding of the occult powers of things in connection with historical debates on the actualization of these potentials. The main inspiration is the theology of Thomas Aquinas and Albertus Magnus who argued – encouraged by Aristotle – that all things have a specific potency that may, or may not, be actualized. The marvellous animation of jointed dolls was due to their potency to move according to their material affordance. From the perspective of potency, then, the animability of images was related to their materiality, form and construction, but in addition they always carried a potency for divine presence. In sum, medieval imagery expressed at all times a vibrant potency for some form of animation – whether by magic, mechanics or miracle. The image of Christ on the cross depicted a dead man *and* a potentially living God – even if this potential was not always actualized.

Henning Laugerud's first chapter will follow up on the miraculous, with Cae-

This page is protected by copyright and may not be redistributed

sarius of Heisterbach's *Dialogus Miraculorum* from the early 13th century as a point of departure. Caesarius recounts several stories about images of all kinds that come alive, where the line between image and vision is porous and permeable. The relationship between vision and animation is a significant aspect of medieval image-culture. Here, we encounter miraculously animated and active pictures with an agency of their own. These animated images transcend their seemingly "lifeless" materiality through divine intervention, acting as mediators between the Divinity and the devout person. They raise questions both of intention, that is, an agency on behalf of the image, and of interaction with the image "user" or beholder. Central to the argument is a rhetorical perspective on texts, images and the sliding or porous borders between what goes under the name of an "image". The subsequent chapter elaborates on the importance of rhetoric, and particularly how the medieval understanding of memory is productive in the context of animation. The "image" is charged with a physical recollective force, which alters the beholder or believer and brings him or her into a state of internalizing and experiencing the truth through the embodiment of memories. Visions and their implied experiences of animation are verified by their similarity to commonly known images and motifs that function as prototypes or *paradigmatic* images. Memory images also function to store and group experienced imagery as well as supplying a basis for human understanding that forms a part of human cognitive processes, implying animation. Seeking to unravel their exemplary quality, Laugerud will operationalize a media perspective on miraculous animations. Inspired by Marshall McLuhan and Marx Wartofsky, this approach aims to understand how images and texts, like those of Caesarius, produce paradigmatic images and *exempla* that modulate the viewer/user sensorium to "see" animated imagery, in which animation is embedded in the cognitive environment as a total cultural fact.

Together, our six chapters offer an insight into the living image and its many facets in medieval culture, society and thought. Animation was embraced and challenged, but first of all it was *real*. Even the most critical voices believed wholeheartedly in the possibility of animation – like Thomas Aquinas in his committed critique of "*statuas animatas*", which we will encounter in the first chapter. The living image taught medieval people about God's omnipotence and, ultimately, about life itself. Our epilogue serves to sum up the findings of the book as a whole and project them into the historical afterlife of medieval animation in the early modern era, when the living conditions of cult imagery gradually changed. Maybe today, witnessing ever so subtle biotechnological, biocybernetic, synthetic and prosthetic gradations of life, we

This page is protected by copyright and may not be redistributed

might – as indeed we should – learn from the history of animation, which can teach us a lesson about the nature of images and their relations to *bios* itself.

Equipped with these terms, concepts and insights, we will explore the realities of animation in medieval imagery. It is time to delve deeper into the visual culture of motion, mobility and movable images. It is time to embrace animism and acknowledge being animists.

This page is protected by copyright and may not be redistributed

[STATUAS ANIMATAS] The first chapter considers a *contradictory doctrine of animation:* a controversial but influential and frequently reproduced cluster of claims on "statuas animatas sensu et spiritu plenas" – *animated statues, ensouled and sentient, saturated with sense and spirit.* This Hermetic-Augustinian-Thomist phrase defined supernatural animation as it was related to magic, idolatry and pagan practices of animated imagery and statuary. Despite the dubious status of the occult *Hermetica,* "statuas animatas" had a strong appeal to medieval believers for whom they resonated with Christian cult and image practices. Their enthralling animism presented a vital model of living imagery and man-made deities (gods, idols, saints) that raised profound doubts about received distinctions between animate and inanimate matter. Their techniques of vivification and ensoulment – such as pneumatization, craniomanty and autophony – became associated with the world of magic, licit or illicit, and eventually also mechanics. Imaginative engineers, the likes of Giovanni Fontana, mechanized the preternatural to envisage demonic apparitions, robot devils, automated simulacra, artificial oracles and talking heads. "Statuas animatas" thus allow us to comprehend medieval animation on medieval terms, in its intricate relationship between magical, mechanical and miraculous images.

This page is protected by copyright and may not be redistributed