

# A metabolism of Adam and Eve

## Damien Hirst meets Edvard Munch

Evolution is a theme which crosses the boundaries of art, science and religion. In this paper the problematics of evolution are approached by analysing the works of Edvard Munch (1863–1944) and Damien Hirst (b. 1965). Key attention is paid to Munch's work *Metabolism* (1898–9) and Hirst's work *Adam and Eve Exposed* (2004), both of which relate to the thematics of the Fall and combine the perspectives of religion and science. The relationship between evolution and art is further discussed through a distinction between pictures and images and the concept of remediation.

### Introduction

In Edvard Munch's (1863–1944) work *Metabolism* (1898–9) the nude figures of a man and woman, or Adam and Eve, are standing next to the Tree of Life, which receives and transmits energy emanating from the dead bodies of a man and animal beneath its roots.<sup>1</sup> In Damien Hirst's (b. 1965) installation *Adam and Eve Exposed* (2004) the still breathing bodies of the two first human beings are resting under the sheets on the operating table, each in their own vitrine. While human beings in Hirst's work are artificially kept alive, in Munch's work life energy is received from nature and the dead bodies make new forms of life possible. Although both these works are based on the same biblical story of Adam and Eve and the Fall, the traditional narrative has been differently framed by Munch and Hirst. Both artists combine the religious narrative with scientific perspectives current during their own times – Munch

with evolution theory and monism and Hirst with the perspectives of medicine.

A thematics of the Fall in the works of Munch and Hirst can be explained through the concept of remediation. In Munch's *Metabolism* a more or less traditional painting of Adam and Eve is remediated by setting wooden frames, including unconventional visual symbols, around it. As described by Jay David Bolter and Richard Grusin, remediation did not begin with the introduction of digital media; we can identify instances of this process throughout the last several hundred years of Western visual representation. For example, innovations such as linear perspective can be understood as forms of remediation (Bolter and Grusin 1999: 11). In the context of Munch's work framing can be understood as remediation, while in the context of Hirst's work the problematics of remediation is even more evident because of contemporary technical devices through which the illusion of breathing human beings has been created.

Although Munch and Damien Hirst are in many ways different artists from different periods, there are shared themes – such as the story of Adam and Eve – in their works which make it possible to address the relationship between art, science and religion. Both artists have reflected on the relationship between science and religion, as can be observed through the following extracts from their texts and interviews:

I have recently been puzzling over the following: what we see and feel is dependent upon the instruments of sight and hearing and feelings that we have. The nature of our powers of sight, hearing and feelings reach only so far. If we possessed other, more finely tuned organs – or organs that were adapted in a different way –

1 This article was funded by Niilo Helander Foundation and Alfred Kordelin Foundation (Central Finland).

we would see and feel differently. ... Had we possessed different, stronger eyes – we would – like X-rays – be able to see our wicks – our skeleton. Had we possessed other eyes, we could have seen our outer, flickering aura – and we would have had a different shape. There is no reason why other creatures with lighter, more solvent molecules, may not move around like us. The souls of our loved ones – e.g. spirits. (Munch in Tøjner 2003: 108)

I'm more interested in religion filling a hole for people. That's how I look at it now. There's a hole there in people. In everybody. In me. A hole that needs filling, and religion fills it for some people. And art for others. I don't think religion is the answer, but it helps. I use art in a similar way to fill that hole. ... I wanted people to think about the combination of science and religion, basically. People tend to think of them as two very separate things, one cold and clinical, the other emotional and loving and warm. I wanted to leap over those boundaries and give you something that looks clinical and cold but has all the religious, metaphysical connotations too. (Hirst in Ueland 2015: 13–14)

In the Munch quotation the physiology of the senses is combined with spiritual questions. The problematics of evolution emerges when the artist reflects on what could be perceived and experienced through various instruments of sight, hearing and feeling. The written notes of Munch also reveal that he was interested in the relationships between the microscopic and the macroscopic, and that he saw connections between the parts of the human body and the constituents of the universe. Phenomena such as protoplasm, vitalism, auras, ether vibrations, radio waves and X-rays also captured his artistic imagination (Brain 2009: 92–117; Clarke 2009: 126; Tøjner 2003: 100–10). Hirst, in turn, draws parallels between art, science and religion. The combination of cold and rational science and warm and emotional religion is also present in many of his works, as in *Adam and Eve Exposed* (2004), which refers to the world of medicine.

The biblical story of Adam and Eve, the first two humans, which is treated both by Munch and Hirst, connects with the idea of evolution in ways which have been important since the end of the nineteenth

Wikimedia Commons



Edvard Munch, *Metabolism* (1898–9), oil on canvas.

century when Munch developed the motifs for his *Frieze of Life*. Although Munch came from a religious family and was familiar with the traditions of religious imagery, he was also interested in the questions of science. Munch was well acquainted with a number of people who had been educated in the natural sciences. For example, his father and brother were both doctors and his friend Stanislaw Przybyszewski (1868–1927), a Polish author, had studied physiology. At the turn of the nineteenth and twentieth centuries both of these artists lived and worked in Berlin. In Berlin Przybyszewski played an active role in introducing ideas from the natural sciences into the artistic and literary circle known as *Zum Schwartzten Ferkel*. Particularly, the idea of evolution captured Munch's artistic imagination, as can

be observed through his pictures and the writings discussed in this article.

W. J. T. Mitchell has metaphorically compared images with living organisms. As he has stated, physical and material pictures are created and can be destroyed, while mental and immaterial images are not subject to the same forces (Mitchell 2005: 6–11, 85). The image is the ‘intellectual property that escapes the materiality of the picture when it is copied. The picture is the image plus the support; it is the appearance of the immaterial image in a material medium’ (85). While images can be likened to species, pictures can be likened to specimens. In the context of pictures, it is possible to ask whether they are good or bad, a living or dead specimen, but in the context of images, a more important question is, ‘is it likely to go on and reproduce itself, increasing its population, or evolving into surprising new forms?’ (90).

While the works of Munch and Hirst can be understood as pictures in Mitchell’s sense, the more abstract image behind these works is the story of Adam and Eve. Through comparisons between these two artists the theme of evolution and the relationship between art, science and religion is discussed in this article. The goal is to clarify how scientific and religious ideas have been combined and how the idea of evolution is visually constructed by these two artists. To begin with, Munch’s *Metabolism* and Hirst’s *Adam and Eve Exposed* and their position in the artist’s oeuvre is described. After that attention is directed to the perspectives relating to contemporary science, associated by the artists with religious narrative of Adam and Eve using visual symbols as their tools. It is worth noticing that in the artist’s works the ‘scientific truths’ of their own time are juxtaposed with influences from other sources of knowledge such as art, poetry, religion and their own personal experiences.

In the context of Munch’s art the ideas of the German scientist Ernst Haeckel (1834–1919) concerning the relationship between evolution and religion were important – in particular, Haeckel’s text *Monism: As Connecting Religion and Science. The Confession of Faith of a Man of Science* (1892), which is discussed in the context of Munch’s *Metabolism*. On a more general level the relationship between art, evolution and Darwinism is approached through an anthology entitled *The Art of Evolution. Darwin, Darwinisms, and Visual Culture* (2009), edited by

Barbara Larson and Fae Brauer. In this anthology Munch’s relationship to certain Darwinian themes such as the idea of protoplasm and sexual selection is discussed (Brain 2009: 92–117; Larson 2009b: 173–90). Mitchell’s ideas of pictures and images are approached through the texts *What do Pictures Want?* (2005) and *Image Science* (2015) and the concept of remediation through Jay David Bolter and Richard Grusin’s *Remediation: Understanding New Media* (1999). In addition to texts mentioned above, many investigations of Munch’s and Hirst’s are used as background literature in this article.

### **Munch: *Metabolism* as a part of the *Frieze of Life***

According to Reinhold Heller, in the context of his *Frieze of Life* works Munch was grappling with the problem of how to present notions of immortality in an age whose faith in science and evolution had replaced faith in the Christian tradition. Theories of evolution introduced Munch to a new kind of idea of immortality, which emphasized the continuation of human terrestrial life rather than an everlasting, extra-terrestrial salvation or condemnation. The themes of Christian iconography which had nourished Western European art for over a thousand years had become as historical as had the faith, incapable of satisfying Munch’s desire for contemporary content and expression (Heller 1973: 22–3, 34).

*Metabolism* is one motif in Munch’s *Frieze of Life* series. Munch started to develop the frieze while staying in Paris in 1889. *The Frieze of Life* was exhibited in various formations from the end of the nineteenth century. It contains many key motifs of Munch’s oeuvre, such as *The Kiss*, *Madonna*, *The Dance of Life*, *Jealousy*, *Melancholy*, *The Scream* and *Death in the Sickroom*. The frieze has four themes – ‘The Seed of Love’, ‘Love which Flowers and Dies’, ‘the Angst of Living’ and ‘Death’. *Metabolism* is a part of the final theme – ‘Death’, but it has connections with many other motifs in the frieze. The red-haired woman depicted in *Metabolism* evokes associations not just with Tulla Larsen, who had become Munch’s fiancée at the turn of the nineteenth and twentieth centuries, but also with women depicted in Munch’s other motifs such as *The Dance of Life*. In addition, the composition of a man and woman separated by the figure of a tree is reminiscent of the composition of the work entitled *Eye in Eye*, where a man and woman are intensely staring at each other.



Thematically *Metabolism* has connections with, for example, *Jealousy*, in which a man and woman are standing in the garden near an apple tree. From the perspective of evolution there are also interesting connections between *Metabolism* and Munch's motif of the Madonna, as will be observed later.

Munch started to formulate his ideas related to the theme of metabolism, or the 'transformation of the matter', in his Paris diaries, written during the year 1890, and he continued to work on this subject during the 1890s while living in Berlin.

Munch thought of *Metabolism* as one of his principal motifs. He described it as a picture of the powerful constructive forces of life and as the 'belt buckle' for his *Frieze of Life*. (Munch 1918: 2–3)

Munch described his experiences of the cycles of nature as follows:

The damp earth steamed – it smelt of rotten leaves – and how quiet it was around me. Then I seemed to feel how the damp earth with those rotten leaves fermented and was filled with life – even the naked branches. Soon they would germinate and come alive and the sun would shine upon their green leaves and the flowers, and the wind would bend them in the sultry summer weather./

I felt the greatest pleasure in knowing that I would be returned to this earth – this always fermenting earth – always to be shone upon by this living sun – alive. I would be at one with it – and out of my rotting corpse would grow plants and trees and grass and plants and flowers and the sun would warm them and I would be a part of them and nothing would perish – that is eternity.' (Munch in Tøjner 2003: 92; see also Gilman 2006: 212)

During his career Munch produced numerous pictures where he dealt with the idea of natural cycles, such as *The Flower of Love* (1896), *The Blossom of Pain* (1898) and *Life and Death* (c. 1902). At a general level these works seem to suggest that pain and death enrich the soil in preparation for something new. Munch also worked graphically with his *Metabolism* motif during the 1890s. In these works a skeleton or a corpse below the ground is depicted, nourishing the plants and trees above it. In the background of these works many literal sources have been

recognized – one of the most important of these is Charles Baudelaire's (1821–67) *Les Fleurs du Mal* ('The Flowers of Evil', 1857). When compared with Munch's graphic versions of the motif, the painting entitled *Metabolism* relates more closely to the themes associated with the Fall because of its human figures evoking associations with the story of Adam and Eve. However, in Munch's *Metabolism* the traditional imagery of the Fall has been combined with scientific ideas from the end of the nineteenth century. For example, the skulls of a man and an animal in the wooden frame of the work, below the Tree of Life, evoke associations with evolution. In addition, the silhouette of Munch's home town, Kristiania (now Oslo), depicted in the upper part of the wooden frame, can also be seen as a kingdom of immortality which can be reached after death through the process of crystallization (e.g., Kuuva 2010: 141–2, 162–4).

It is known that Munch was fascinated by the themes of evolution. From this perspective Munch was not particularly exceptional; Darwinian ideas were well known in artistic circles in the late nineteenth century. Darwinism was adopted by many popular science writers, who sometimes infused his work with agendas of their own. In Germany Darwinism was embraced not only by the scientists, but also by the media and the general public. One of the most famous followers of Darwin was Ernst Haeckel who was zoology professor at the University of Jena and who popularized the ideas of Darwin, combining them with philosophical, monistic ideas. The scientific quality of Haeckel's investigations has been discussed for decades (Larson 2009a: 8; Morton 2009: 59–67). Munch, in turn, was interested in the writings of Haeckel. He was familiar with Haeckel's *Anthropogenie. Oder, Entwicklungs-geschichte des Menschen* (1874) in which Darwin's theory of natural selection is advocated (Clarke 2009: 126; Cordulack 2002: 60–77). Besides the materialistic theory of evolution the idea of an afterlife was important for Munch, who came from a religious family and who had lost his mother, sister and father. In monism immortality was explained in new ways, as can be observed through following words of Haeckel:

As regards immortality, it is well known that this important idea is interpreted and applied in a great variety of ways. It is often made a reproach against our Monism that it altogether denies immortality; this is, however, erroneous.

Rather do we hold it, in a strictly scientific sense, as an indispensable fundamental conception of our monistic philosophy of nature. Immortality in a scientific sense is conservation of substance, therefore the same as conservation of energy as defined by physics, or conservation of matter as defined by chemistry. The cosmos as a whole is immortal. It is just as inconceivable that any of the atoms of our brain or of the energies of our spirit should vanish out of the world, as that any other particle of matter or energy could do so. At our death there disappears only the individual form in which the nerve-substance was fashioned, and the personal 'soul' which represented the work performed by this. The complicated chemical combinations of that nervous mass pass over into other combinations by decomposition, and the kinetic energy produced by them is transformed into other forms of motion. ... [I]f any body seems to vanish (as, for example, by burning), or come anew into being (as for example, by crystallisation), this also is simply due to change of form or of combination. (Haeckel 1892: 5–6, 16)

Munch reflected on the idea of immortality in his notes in very similar ways to Haeckel:

It is foolish to deny the existence of the soul; after all, that a life begins cannot be denied. / It is necessary to believe in immortality, insofar as it can be demonstrated that the atoms of life or the spirit of life must continue to exist after the body's death. But of what does it consist, this characteristic of holding a body together, of causing matter to change and to develop, this spirit of life?/Nothing ceases to exist; there is no example of it in nature. The body that dies does not disappear. Its components separate one from the other and are transformed. (Munch in Heller 1984: 62)

Particularly the Haeckelian idea of gaining immortality through crystallization was important for Munch, who frequently reflected on it in his notes. He combined the idea of a crystal and crystallization with art and artworks, for example, as follows: 'Art is crystallization ... An artwork is a crystal. A crystal has a soul and a mind, and the artwork must also

have these' (Munch in Tøjner 2003: 88, 100). Through comparisons of Haeckelian monism and Munch's notion of metabolism it can be stated that in Munch's art traditional symbols of the Fall are re-historicized through the ideas of evolution and crystallization. The work expresses Munch's ideas of a transformation of energy between life, death and the afterlife through the trunk of the tree. Traditional Christian meanings are transformed by means of the wooden frame of the painting. Without the frame, Munch's works would be a somehow traditional depiction of the Fall. The traditional narrative of Adam and Eve is literally re-framed by Munch with popular scientific ideas from the turn of the nineteenth and twentieth centuries. Framing is also an essential part of Munch's lithographic version of *Madonna*.

In addition, *Metabolism* was also repainted by Munch somewhere between the years 1903 and 1918. As suggested by X-rays and a photograph of Munch's exhibition in Leipzig in 1903, there had originally been a flowering bush between the figures of the man and woman, the bush shielding a human foetus. Although the postures and positions of the two nude figures have not been significantly modified in the context of repainting, the dynamics of the painting have changed. In the former version, the bush shielding the human foetus functioned as a certain kind of womb and the female figure seemed to stretch her hand towards it. While the human figures of the original version seemed to look towards the bush, in the latter version they seem to look towards the ground; Adam and Eve appear to be more shameful in the latter version. Furthermore, the title *Metabolism* was not used in the context of the painting before 1914. The original name of the painting was *Adam and Eve*, and in 1902 its name was *Life and Death* (Cordulack 2002: 95–100; Gilman 2006: 212; Høifødt 2003: 54; Kuuva 2010: 162–3). From a certain perspective the titles of Munch's work, such as *Madonna*, *Adam and Eve*, *Love and Death* and *Metabolism*, can be seen to be framing his pictures.

Munch combined the idea of crystallization not just with artworks, but also with the thematics of human life and death: 'The crystals are born and formed as a child in its mother's womb – and even in the hardest stone, the flame of life burns. / Death is the beginning of a new life. / Crystallization. / Death is the beginning of life' (Munch in Tøjner 2003: 104).

In Munchian thinking death is paradoxically a new beginning and new life develops through the process

of crystallization. The same idea can be linked with Munch's lithographic version of *Madonna* (1895–1902) which also contains the figure of a foetus.

In this work the figure of the Madonna is framed by the figures of an embryo and spermatozoa. Munch's motif of the Madonna appeared to be very provocative at the turn of the nineteenth and twentieth centuries. The provocativeness of the motif can be explained in terms of the long tradition of Madonna imagery in Christian art. Munch made numerous versions of his motif of the Madonna – drawings, paintings and graphic works. Besides *Madonna*, the Norwegian and German titles *Elskende kvinne* and *Liebendes Weib* ('Woman in Love' or 'Woman Making Love') have also been used in the context of this theme. The combination of two names opens up two perspectives on womanhood; the conflicting images of the Madonna and a woman making love assimilate into each other, and the titles also open up opportunities for linking Munch's pictures with the character of the Virgin Mary and fallen Eve. In addition, in German exhibitions the title was sometimes corrupted to *Monna*, because the title *Madonna* appeared to be too controversial in the early 1900s (Cordulack 2002: 11, 18; Eggum 2000: 9–10; Hofmann 1983: 578; Kuuva 2010: 58–9; Woll 2009: 352).

Munch's *Madonna* can be associated with the mystical-erotic cult of the Madonna and it has connections with many traditional motifs of Christian art such as the Annunciation, Incarnation, and Immaculate Conception, even with Mater Dolorosa, Dormition and Assumption (cf. e.g., Birnbaum 1989: 38, 40–4; Hall 1979: 326–7; Heldaas Seland 2010: 41–3; Hofmann 1983: 578; Ringbom 1962: 326–30; Schiller 1980: 155–7; Stratton 1994: 3, 12–34, 39–46, 58–60, 76–8, 92–7, 145; Tikkanen 1916: 4; Tresidder 2004: 506–7, 509; Vuola 2010: 36–42). It has received various interpretations over the years. Both the sexual and religious aspects of the work have been stressed, and it has been linked with the themes of conception, birth and death. It has been assumed that the woman is either making love or giving birth (Bruteig 2004: 61; Clarke 2009: 80; Eggum 2000: 189; Heller 1984: 129; Kuuva 2016a, 2016b). Munch also wrote prose poems which echo this motif.

Moonlight glides across your face – which is full of all earthly pain and beauty. Your lips are like two ruby-red serpents and fleshy as carmine fruit – They gently part as though in pain, a



Edvard Munch, *Madonna* (1895–1902), lithograph.

corpse's smile – Now the chain which links one generation to another is forged – As one body, we glide out upon a great sea – on long waves whose colour shifts from deep violet to blood red. (Munch in Eggum 2000: 200)

Although there is certainly variation between different versions of Munch's *Madonna* text, in every version the narrative starts from a beauty illuminated by the moon and continues towards death and the notion of a chain linking the generations (e.g., Munch in Eggum 2000: 195–6, 200). Munch emphasized the religious aspects of his Madonna theme in many contexts. For him the *Madonna* represented 'the mystique of entire evolution brought together' (Munch in Cordulack 2002: 62–3, 74). In Munch's lithographic version of the Madonna theme different stages in the evolution of specimens are combined – from spermatozoa to embryo. In addition, as the



prose poem of Munch suggests, the moment of conception is not only associated with the evolution of specimens, but also with the species when the chain links one generation to another.

According to Munch's own testimony, his *Frieze of Life* works deal with the themes of love, evolution, and the life of the soul. In a chapter entitled 'The Embryology of the Soul' Haeckel described five stages in the development of psychic activity in man: 1) the soul of the newborn infant, 2) the soul of the boy or girl, 3) the soul of the youth or maiden, 4) the soul of the grown man and the mature woman and, 5) the soul of the old man or woman. Haeckel's idea was that the psychic life of man runs along the same evolutionary process as every other vital activity in his organization. As Shelley Wood Cordulack has stated, Munch's *Frieze of Life* works can be thematically arranged to fit a similar progression where the life of the psyche parallels the physiological life (Cordulack 2002: 60). Haeckel also introduced several illustrations of embryos which may have captured the artistic imagination of Munch. Even Stanislaw Przybyszewski reflected the idea of embryonic development echoing evolutionary development, for example, by writing: 'I am the Beginning, because I carry myself the entire process of evolution, and I am the End, because I am the last link' (Przybyszewski in Cordulack 2002: 60). When the *Madonna* of Munch is compared with *Metabolism* it seems that in the latter work evolution is being observed from wider perspective: evolution does not just bind one generation to another; it also binds human beings to natural and supernatural forces. Munch's *Metabolism* also has connections with a later work of his, the murals for the Festival Hall at the University of Oslo (1911–16). In these murals a man and woman are depicted in sunlight, surrounded by the instruments of chemistry. Cordulack has described the relationship between Munch's *Metabolism* and *Chemistry* as follows:

In *Chemistry* the man and woman, now on opposite sides, no longer bear the burden of identification with Adam and Eve but are now modern man and modern woman. Gone is the darkness of the wood; they stand bathed in full light. The man is no longer self-absorbed, the woman no longer solely absorbed in the child. Now both are absorbed in trying to understand the fundamental meaning of life. Death and love, the main themes of the *Frieze of Life*, are

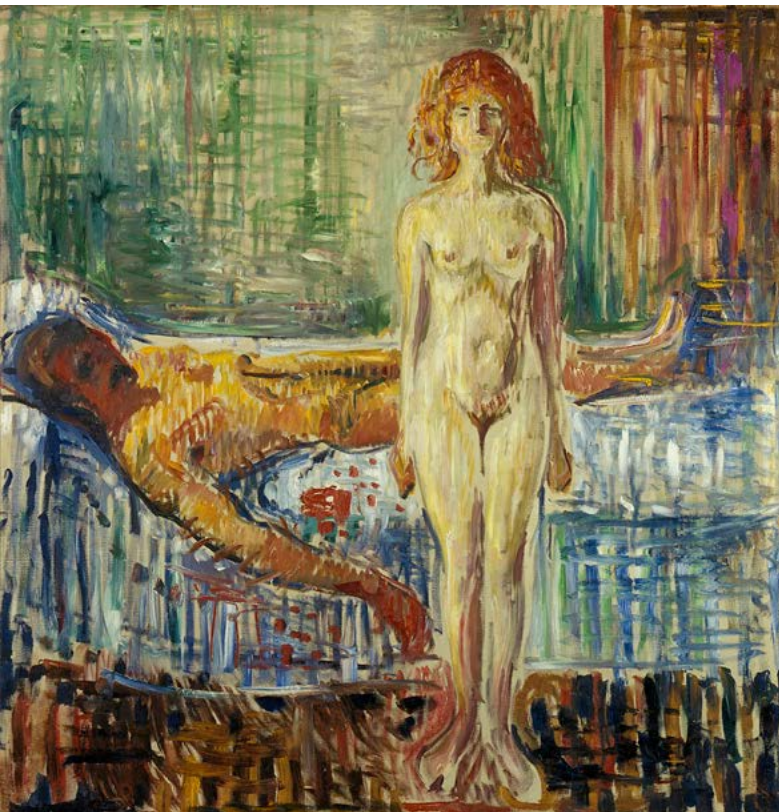
no longer even nominal sources of the fundamental meaning of life, but chemistry is. (Cordulack 2002: 102)

Therefore, when Munch's ideas of evolution are studied in the context of his different artworks it seems that at the turn of the nineteenth and twentieth centuries he starts to study man and his destiny from a more general standpoint. Particularly in his murals for the University of Oslo, natural and supernatural forces are partly replaced by history and science. Like Munch, Damien Hirst has also asked questions relating to a combination of science and religion.

### Hirst: variations of the Fall

Hirst has worked with the story of Adam and Eve in his six vitrine works which examine various stages of human decomposition. Hirst himself has stated that he regards the series as a metaphor for both the life cycle of modern man and the challenges inherent in a relationship between two people. In Hirst's work *Adam and Eve Exposed* (2004) Adam and Eve are lying, each in their own vitrine, on operating tables, covered with blue surgical sheets. Furthermore, at the foot of each table there is a metal tray with medical equipment such as latex gloves, scalpels and personal belongings, such as a watch and wedding rings. Only the fig-leaf shaped holes in the sheets around the genitals of the figures reveal that they are male and female. While fig leaves covered sexual organs in the biblical story of Adam and Eve, in Hirst's work the leaves expose rather than conceal. The operating tables suggest that the figures are on the way to, or coming back from, the surgical unit. However, both figures still seem to be breathing, as their chests are rising and falling under the sheets (Colard 2015: 8; Möllenhoff 2015: 45–6; Ueland 2015: 13). The work is ambiguous. According to Ueland, 'Is this a representation of the victory of medical science over the finite human being, or are we witnessing a divine intervention?' (Ueland 2015: 13). In *Adam and Eve Exposed* Hirst's interest in scientific techniques is combined with religious metaphors. As does Munch, Hirst re-utilizes clichéd symbols in fresh, innovative and thought-provoking ways (cf. 13–14).

Hirst's work *Adam and Eve Exposed* evokes associations with Munch's work *On the Operating Table* (1902–3) and *The Death of Marat* (1907). These works are based on Munch's relationship with Tulla Larsen,



Edvard Munch, *The Death of Marat II* (1907), oil on canvas.

which ended dramatically in 1902 with a shooting accident in which Munch's finger was broken (e.g. Müller-Westermann 2005: 73). By means of the red-haired figure of the woman depicted in *The Death of Marat* these works link with Munch's *Metabolism* and the story of Adam and Eve. In both the works of Munch and Hirst the human figures are still breathing, although the works also point towards the possibility of death.

As stated by Möllenhoff, two different belief systems are brought together when Hirst combines the motif of Adam and Eve with the world of medicine: 'the religious belief in life after death and the promise of medicine to heal us, although it actually merely postpones our inevitable fate' (Möllenhoff 2015: 45). This theme is further developed by Hirst in the work *Adam and Eve Together at Last* (2000–4) where the parts of the dead bodies can be seen under the surgical sheets (Dillon 2012: 28; Möllenhoff 2015: 45). As suggested by Möllenhoff, Adam and Eve are combined with science and religion in Hirst's works, but they also represent two archetypes of humanity and refer to a love relationship between two people: 'Like many of Hirst's artworks, it is characterized by a dual-

ity and tension between opposites. The two parts of the vitrine embody the separation between a pair of individuals that humans try to overcome. There is also a palpable duality between life and death in the work, as the two figures hover in a sphere between these states. Thus the work addresses aspects of each of the four things Hirst has defined as being important in life: religion, love, art and science' (Möllenhoff 2015: 45). As seen earlier, these themes are also crucial in Munch's *Frieze of Life*.

On a more general level, comparisons between the works of Munch and Hirst open up two perspectives on the relationship between art, science and religion. Although Munch and Hirst have to some extent worked with the same religious motifs and combined them with contemporary science, their methods and artistic solutions are quite different. While Munch has literally framed Adam and Eve with contemporary scientific and religious perspectives, Hirst's motifs are not necessarily that religious at first sight; rather, they have connections with conventions of representation in museums of the natural sciences and cultural history – vitrines filled with objects from nature or man-made artifacts. The religious connotations of Hirst's work usually open up through the titles of his works as well as through the juxtapositions of his works in exhibitions. Although both Munch and Hirst combine visual expression with language, for Munch the picture is always more central than the language. Although the compositions of certain works of Hirst, such as *God Alone Knows* (2007) with its three 'crucified' lambs, are reminiscent of compositions in Christian iconography, in Hirst's *Adam and Eve Exposed* connections with Christian iconography can only be detected in the fig-leaf shaped holes around the genitals of figures – and the contrast that in many traditional images of Adam and Eve it is just the genitals of nude figures which are covered by fig leaves.

Hirst's family was religious, as was Munch's. Hirst was brought up as a Catholic (Hirst 2012: 94; Wilson 2012: 215). According to Andrew Wilson, the artist 'sees religious belief as just one aspect of the matrix of ideas and issues that in some way provides a rationale for the way in which we all deal with daily life, and movement, the passage of time, the construction of identity, altered states, the rational and the irrational, science and art, logic and its absence, belief and its disappearance' (Wilson 2012: 216). Wilson sees Hirst's position somewhere between rationalism and romanticism. Although the artist knows that art,



religion or science cannot give one definitive answer to Paul Gauguin's questions – Where do we come from? Who are we? Where are we going? – it is nevertheless necessary to pose such questions. As suggested by Wilson, Hirst proposes a correlation between the religious person seeking salvation and the sick person looking to science and medicine for a cure (216). As formulated by Hanne Beate Ueland, 'Faith in itself, regardless of whether it is related to religion, science or art, is a means of defence against fragility and ephemerality. ... Religious symbolism is often the catalyst for a natural yet ruthless theatre that amplifies the visual force' (Ueland 2015: 17–18). Recently, religious themes have also been present in Hirst's works, such as *Romance in the Age of Uncertainty* (2003), *New Religion* (2006), *Superstition* (2007) and *In the Darkest Hour There May be Light* (2007).

Although Hirst does not believe that 'religion is the answer', he anyway reflects upon its possibilities (cf. Ueland 2015: 13–14). Munch, in turn, wanted to update traditional religious images by means of his contemporary scientific ideas.

### Remediation and metabolism in traditional imagery

According to Jean-Max Kvaran, the multi-semantic nature of the objects in Hirst's works invites the spectator to interpret the works symbolically (Kvaran 2015: 6). Although Hirst's works cannot be described as narrative as such, certain kinds of narrative may be constructed by the viewer (cf. Colard 2015: 8). In general, Hirst's works express a wide range of aesthetic presentation, both in terms of multimediality and multi-semanticity. Although remediation is more evident in the context of Hirst's art, it also plays important role in Munch's *Metabolism* where a combination of a painting with a sculpted frame modifies the meanings of the traditional story of Adam and Eve. Munch's texts associated with the theme of metabolism, discussed above, relate to the problematics of remediation. Remediation can associate new threads with traditional artistic themes. For example, through a juxtaposition of a painting, a wooden frame and written notes relating to the metabolism theme Munch brings a temporal dimension into his work, as Hirst does in his *Adam and Eve Exposed*, by means of his references to metabolic process of breathing.

The works of Munch and Hirst discussed in this paper can be seen as examples of a metabolism of visual symbols (cf. Kuuva 2010: 10). In their works

Munch and Hirst have used conventional symbols of Christian art in unconventional ways. While depicting Adam and Eve as exposed and juxtaposing them with an embryo, human and animal skulls, and instruments of medicine, the artists have created metaphorical tensions through which new meanings have become associated with traditional Christian imagery, so that Munch's and Hirst's ways of using the symbols extend to some extent the reservoir of meanings associated with the Christian symbols they utilize (cf. 53–6). The works of Munch and Hirst discussed above can be seen as certain phases of a migration of Christian imagery, where religion meets contemporary questions or problems which are being debated in science.

As the title of Munch's *Metabolism* suggests, traditional imagery can have an influence on the ways in which new theories are understood, and vice versa. The creative aspects of the imagination which are needed in artistic thought were also emphasized by Darwin. According to Sara Barnes and Andrew Patrizio, imaginative projection is the most fruitful link between the methods of Darwin and of today's creative artists. In this context projection refers to the art of transference, gap-vaulting, and bringing aspects of the world together in surprising new combinations (Barnes and Patrizio 2009: 309). For Darwin the imagination was 'one of the highest prerogatives of man' through which 'he unites, independently of the will, former images and ideas, and thus creates brilliant and novel results' (Darwin in Barnes and Patrizio 2009: 309).

Mitchell, in turn has described the problematics of the imagination and 'new images' from the perspective of surrealism as follows:

The efforts of surrealists are especially instructive in this regard, for their wildest innovations are invariably discovered to be novel conjunctions of already existing images. One could call these 'new images,' but only in the sense that a sequence of words that are themselves not new can constitute a 'new sentence' in a language. Perhaps we should say, then, that new combinations of images can be created, and even new images in the sense that we speak of 'coinages' in language (which are invariably old, recognizable words 'morphed' into something new). If an image (or a word) were *completely* new, how would we recognize it? (Mitchell 2015: 32–3)

From Mitchell's perspective the works of Munch and Hirst in which science and religion meet each other can, thus, be understood not as completely new images but as new visual sentences which are constructed out of elements we already know. Although components of Munch's and Hirst's pictures are not new, their juxtapositions of visual elements are. In this way, the storage of meanings associated with visual symbols, the building blocks of images and pictures, expands.

Mitchell has discussed the relationship between images and species through the concept of fossils. As he states, the destruction of a species does not necessarily mean the destruction of its image, but the extinction of a species is conversely a precondition of its resurrection as an image in the form of fossil traces. Mitchell sees the fossil record as a material and pictorial record, as a vast iconic and indexical archive of species that have inhabited the globe. The fossil is the product of a slow process of petrification, reversed by resurrection and reanimation in the paleontological imagination. For Mitchell the fossil is an allegorical image, a premonition of the mortality of our own species. From that perspective the fossil is a 'dialectical image' in Walter Benjamin's (1892–1940) sense. By capturing history at a standstill the 'deep time' of the geological record is projected backward through the entire history of life on earth and towards the spectre of our own extinction (Mitchell 2015: 35–6). As described by Mitchell:

The fossil image is what survives the death of a species, just as the corpse is what survives the death of the individual specimen. The sciences of natural history are the species equivalent of the rituals of mummification and preservation of effigies of the dead that find their place in the ethnographic wing of the natural history museum. Both are sciences of resurrection and reanimation, an effort of life-forms, bodies (our own), to manage mortality by means of images. (Mitchell 2015: 18)

Mitchell's ideas concerning fossils match well with the works of Munch and Hirst discussed in this paper. In Munch's *Metabolism* the theme of death is explicitly present as the skulls of a dead man and an animal can be seen under the feet of a living couple who are looking towards the ground – the destiny of man. In Hirst's *Adam and Eve Exposed* the biblical

couple representing humanity are in certain kind of liminal space between life and death; people artificially kept alive. Both Munch's *Metabolism* and Hirst's *Adam and Eve Exposed* can be seen as representations of evolution where the narrative of the first two human beings is combined with contemporary scientific threads. In these works death and the afterlife are reflected upon as being part of the evolutionary process. In Munch's work death and the powers of nature provide the possibility for new life, but in Hirst's work man-made medicine maintains the metabolic process of breathing, although the spirit has already left the body. ■



**Sari Kuuva, PhD** (in cognitive science, 2007 and art history, 2010) is a post-doctoral researcher who works at the Department of Art and Cultural Studies at the University of Jyväskylä. She has studied the relationship between art, aesthetics

and psychology, particularly the concept of the symbol and the problematics of experiencing and creating visual art. Among Kuuva's main publications relating to the art of Edvard Munch are: *Symbol, Munch and Creativity: Metabolism of Visual Symbols* (University of Jyväskylä 2010); 'Emotional creativity in art: case scream' in *Mind and Matter: Selected Papers of Nordic 2009 Conference for Art Historians* (Helsinki, Society of Art History, 2010); 'Metabolism of visual symbols: case Madonna' in *The International Journal of the Image*, 7:2 (2016).

## References

- Barnes, Sara, and Andrew Patrizio, 2009. 'Darwin on the threshold of the visible: contemporary art and evolution' in *The Art of Evolution: Darwin, Darwinisms, and Visual Culture*, eds Barbara Larson and Fae Brauer (Hanover, NH, Dartmouth College Press), pp. 288–312
- Birnbaum, Britta, 1989. 'Maria. En värld av symboler' in *Mariabilder*, ed. Görel Cavalli-Björkman (Stockholm, Nationalmuseum), pp. 7–12
- Bolter, Jay David, and Richard Grusin, 1999. *Remediation: Understanding New Media* (Cambridge and London, The MIT Press)
- Brain, Robert Michael, 2009. 'Protoplasmia: Huxley, Haeckel, and the vibratory organism in late nineteenth-century science and art' in *The Art of Evolution: Darwin, Darwinisms, and Visual Culture*, eds Barbara Larson and Fae Brauer (Hanover, NH, Dartmouth College Press), pp. 92–123
- Bruteig, Magne, 2004. *Munch. Drawings*, tr. Hal Sutcliffe (Brussels, Musée d'Ixelles; Oslo, The Munch Museum)

- Clarke, Jay A., 2009. *Becoming Edvard Munch: Influence, Anxiety, and Myth* (The Art Institute of Chicago; New Haven, Yale University Press)
- Colard, Jean-Max, 2015. 'Pop mortem' in *Damien Hirst in the Astrup Fearnley Collection*, ed. Gunnar B. Kvaran (Oslo, Astrup Fearnley Museet), pp. 8–12
- Cordulack, Shelley Wood, 2002. *Edvard Munch and the Physiology of Symbolism* (London, Associated University Presses)
- Dillon, Brian, 2012. 'Ugly feelings' in *Damien Hirst*, ed. Ann Gallagher (London, Tate Modern), pp. 21–9
- Eggum, Arne, 2000. *Edvard Munch: The Frieze of Life from Painting to Graphic Art*, tr. Hal Sutcliffe and Torbjørn Støverud (Oslo, Stenersen)
- Gilman, Claire, 2006. 'Catalogue of plates' in *Edvard Munch: The Modern Life of the Soul*, ed. Kynaston McScine (New York, The Museum of Modern Art), pp. 201–19
- Haeckel, Ernst, 1892. *Monism: As Connecting Religion and Science. The Confession of Faith of a Man of Science*, trans. J. Gilchrist (London, Black)
- Hall, James, 1979. *Dictionary of Subjects and Symbols in Art*, revised edition (New York, Harper & Row)
- Heldaas Seland, Eli, 2010. 'Travelling images: Our Lady of Loudres in popular piety and art' in *Mind and Matter: Selected Papers of Nordic 2009 Conference for Art Historians*. Jyväskylä, 17.–19.9.2009, ed. Johanna Vakkari et al. (Helsinki, Society of Art History), pp. 33–49
- Heller, Reinhold, 1973. *Edvard Munch: The Scream* (London, Penguin Press)
- 1984. *Munch: His Life and Work* (London, John Murray)
- Hirst, Damien, 2012. 'Nicolas Serota interviews Damien Hirst, 14 July 2011' in *Damien Hirst*, ed. Ann Gallagher (London, Tate Modern), pp. 91–9
- Hofmann, Werner, 1983. 'Das 20. Jahrhundert' in *Luther und die Folgen für die Kunst*, ed. Werner Hofmann (Hamburger Kunsthalle) pp. 572–656
- Høifødt, Frank, 2003. 'Edvard Munch: style and theme around 1900' in *Edvard Munch: Theme and Variation*, eds Klaus Albrecht Schröder and Antonia Hoerschellmann (Albertina, Hatje Cantz), pp. 53–65
- Kuuva, Sari, 2010. *Symbol, Munch and Creativity: Metabolism of Visual Symbols* (University of Jyväskylä)
- 2016a. 'Metabolism of visual symbols: case Madonna', *The International Journal of the Image*, 7(2), pp. 9–14
- 2016b. 'Munch ja Madonnan evoluutio', *Tähti: Taidehistoria tieteenä*, 3
- Kvaran, Gunnar, B., 2015. 'A redemptive beauty: Damien Hirst in the Astrup Fearnley Collection' in *Damien Hirst in the Astrup Fearnley Collection*, ed. Gunnar B. Kvaran (Oslo, Astrup Fearnley Museet), pp. 3–6
- Larson, Barbara, 2009a. 'Introduction' in *The Art of Evolution: Darwin, Darwinisms, and Visual Culture*, eds Barbara Larson and Fae Brauer (Hanover, NH, Dartmouth College Press), pp. 1–17
- 2009b. 'Darwin's sexual selection and the jealous male in fin-de-siècle art' in *The Art of Evolution: Darwin, Darwinisms, and Visual Culture*, eds Barbara Larson and Fae Brauer (Hanover, NH, Dartmouth College Press), pp. 173–93
- Larson, Barbara, and Fae Brauer (eds), 2009. *The Art of Evolution: Darwin, Darwinisms, and Visual Culture* (Hanover, NH, Dartmouth College Press)
- Mitchell, W. J. T., 2005. *What Do Pictures Want? The Lives and Loves of Images* (The University of Chicago Press)
- 2015. *Image Science: Iconology, Visual Culture and Media Aesthetics* (The University of Chicago Press)
- Möllenhoff, Therese, 2015. 'Adam And Eve exposed 2004' in *Damien Hirst in the Astrup Fearnley Collection*, ed. Gunnar B. Kvaran (Oslo, Astrup Fearnley Museet), pp. 45–6
- Morton, Marsha, 2009. 'From Monera to Man: Ernst Haeckel, Darwinismus, and nineteenth-century German art' in *The Art of Evolution: Darwin, Darwinisms, and Visual Culture*, eds Barbara Larson and Fae Brauer (Hanover, NH, Dartmouth College Press), pp. 59–91
- Müller-Westermann, Iris, 2005. *Munch by Himself* (London, Royal Academy of Arts)
- Munch, Edvard, 1918. *Livs-frisen* (Kristiania)
- Ringbom, Sixten, 1962. 'Maria in Sole and the Virgin of Rosary', *Journal of the Warburg and Courtauld Institutes*, 25(3/4), pp. 326–30
- Schiller, Gertrud, 1980. *Iconographie der christlichen Kunst*, Band 4:2: *Maria* (Gütersloher Verlaghaus Gerd Mohn)
- Stratton, Suzanne L., 1994. *The Immaculate Conception in Spanish Art* (Cambridge University Press)
- Tikkanen, J. J., 1916. *Madonnabildens historia och den kristna konstuppfattningen* (Helsingfors, Lilius & Hertzberg)
- Tøjner, Poul Erik, 2003. *Munch: In His Own Words*, tr. Jennifer Lloyd (Munich, London, New York, Prestel)
- Tresidder, Jack (ed.), 2004. *The Complete Dictionary of Symbols in Myth, Art and Literature* (London, Duncan Baird Publishers)
- Ueland, Hanne Beate, 2015. 'I am going to die and I want to live forever: on religious symbolism in the art of Damien Hirst' in *Damien Hirst in the Astrup Fearnley Collection*, ed. Gunnar B. Kvaran (Oslo, Astrup Fearnley Museet), pp. 13–18
- Vuola, Elina, 2010. *Jumalainen nainen. Neitsyt Mariaa etsimässä* (Helsinki, Otava)
- Wilson, Andrew, 2012. 'Believer' in *Damien Hirst*, ed. Ann Gallagher (London, Tate Modern), pp. 203–17
- Woll, Gerd, 2009. *Edvard Munch: Complete Paintings. Catalogue raisonné*, I–IV, tr. Robert Thomas Ferguson et al. (London, Thames & Hudson)