This article conceptualises instances of posthumanism in Matthew Barney’s Cremaster cycle (1994-2002), a multi-part work that combines film, sculpture, drawing, photography and performance to generate complex non-linear visual narratives. In order to analyse self-referential system of the cycle, a recurrent theme of the “hermetic state” in Barney’s project is considered from perspectives drawing on second-order systems theory as articulated by its central thinker Niklas Luhmann, specifically his notions of self-referential autopoietic systems combining operational closure and structural openness. Looking at the theme of the “hermetic state” in both the formal aspects of the cycle as well as the narrative content is especially pertinent for situating the work in the context of recent posthumanist perspectives. Furthermore, I will argue that the Cremaster cycle embodies a complex self-referential narrative in tension between differentiation and undifferentiation, where ideas of biological development as well as conventional species boundaries are disrupted through a radically nonanthropocentric depiction. Finally, through the specific embodying and animating of potential nonhuman beings, through their mode of presentation from a certain perspective in conjunction with humans, for instance, or via nonlinearity of the narrative, use of media, the Cremaster cycle, I propose, generates new theoretical paradigms central to the larger posthumanist debate.

In my usage of the term posthumanism, which does not constitute a unified field, I refer to a critical discourse set against anthropocentric philosophical and ethical frameworks of humanism and its speciesist structures that reproduce the normative human subject through the dichotomy of humanity/animality. I rely on Cary Wolfe’s definition of posthumanism which, to my mind, is theoretically rigorous and systematically engaged with alternative articulations of this discourse while it combines perspectives from systems theory and poststructuralism. Wolfe has been writing on the topic of posthumanism firstly in relation to biologists Humberto Maturana and Francisco Varela’s, as well as Luhmann’s work since mid-1990s.¹ Posthumanism – different from “transhumanism” and the figure of the “posthuman” – is not about “surpassing or
rejecting the human” but rather it is premised on a rethinking of “the human and its characteristic modes of communication, interaction, meaning, social significations, and affective investments […] by recontextualizing them in terms of the entire sensorium of other living beings”; at the same time, posthumanism acknowledges that the human “is fundamentally a prosthetic creature that has coevolved with various forms of technicity and materiality, forms that are radically “not-human” and yet have nevertheless made the human what it is.” Posthumanism is focused on the decentering of the human subject as well as challenging the ontology of the human based on animal-human distinction that substantiates the discrimination and subjugation of nonhuman as well as human beings. Wolfe insists that posthumanism is not something that comes after human, or after a transcendence of embodiment, of which it is critical; rather it can be situated both before and after humanism. It is, importantly, not a figure, unlike the posthuman; it is a theoretical direction, critical engagement, the way of rethinking humanist anthropocentric assumptions. In Wolfe’s articulation of this field, the concepts developed by Luhmann, who introduced posthumanism into social theory, constitute a significant intervention. Luhmann’s theory of social systems offers one of the most sustained and nuanced critiques of the humanist anthropocentric view of society, its systems and environments. His rejection of the centrality of human subjectivity, introduces a radically posthumanist theoretical view, as it reconceptualises functioning of the processes of cognition, communication and observation as not only or primarily human.

Drawing on this theoretical framework, I probe the nonanthropocentric orientation in the Cremaster cycle as it surfaces in the use of specific materials, media, modes of display, and in the narrative. Through the analysis of the works, we can observe, how these theoretical paradigms destabilising humanist notion of subjectivity have been taken up in contemporary art. The consideration of the images where humanity/animality divide, and anthropocentrism are radically rethought, is particularly important and interesting, as these visual representations allow for immediate experiential engagement with the alternative perspectives they offer. Through the direct engagement of our perception, these images are a powerful tool contributing to the wider theoretical orientation of posthumanism.

Since the early 1990s Matthew Barney’s elaborate multi-media art has attracted significant critical attention as well as criticism, especially in the United States and Western Europe. The recurrent themes in Barney’s art picked out by the critics include
biological development and gender differentiation, athleticism, competitive sports and prosthetics, mythology, Masonic references (terms and symbols) and Mormon doctrine, precision dancing and escapology. Barney's *Cremaster* cycle with its wealth of references and contexts teleported into contemporary art creates a very complex, self-contained, and highly coded system. For instance, *Cremaster 3* combines the scenes of Richard Serra creating a Process Art piece with the performance of the famous hardcore punk and thrash metal bands Agnostic Front and Murphy's Law, and also tap dancing women. The artist has articulated specific terms now associated with his works: some related to biological processes or sport jargon, some to known historical figures (such as Houdini as a character of self-restraint and closure), or other more abstract ones such as “field emblem” or his system of “situation”, “condition” and “production”. Writing on Barney’s works tends to wrestle with their complex symbolism and terminology, which is beyond the scope of this paper. His work, however, has not been extensively linked to pertinent posthumanist concerns, thus my interpretation focuses on reading the *Cremaster* cycle in relation to the posthumanist problematic.

The title of the *Cremaster* cycle illustrates the importance of biological analogy for understanding its narratives. The term ‘cremaster’ has existed in English since the seventeenth century to refer to “the muscle of the spermatic cord by which the testes are suspended in the scrotum”, and is “associated with the descent of the testes into the scrotum in the seventh month after conception, at which point the gender of the foetus is definitively male.” Moreover, the cremaster muscles protect the male reproductive system by controlling the height of the testicles in response to fear or changes in temperature. So, for example, in response to a cold temperature the testicles are drawn into the body to retain a stable temperature level.

The sexual differentiation of an embryo takes place with the change in the chromosome structure followed by the change in the height of the gonads. In the first six weeks of foetal development gonads are undifferentiated, later they develop into testicles or ovaries. The downward development of the testes occurs as late as the seventh month. Structurally the *Cremaster* cycle follows the trajectory of sexual differentiation and resistance to it, employing this model of biological development of the embryo with its possibilities of ascent or descent during sexual differentiation.

The *Cremaster* cycle is usually displayed as a single or multi-channel video installation, and/or in combination with sculptural objects, production photographs and drawings. As
a film series it consists of 5 works that were not produced in chronological order: *Cremaster 1* (40 minutes) was made in 1995, *Cremaster 2* (79 minutes) in 1999, *Cremaster 3* (182 minutes) in 2002, *Cremaster 4* (42 minutes) in 1994 and *Cremaster 5* (55 minutes) in 1997. The narratives of the individual works are tied by the visual representation of events and details of landscapes, architectural structures or sculptural objects where the events unfold, while dialogues are reduced to a minimum and there is little character development. Parallel narratives that cut across individual films are experienced as repetitive, due to the overall unhurried pace, which could even be felt as painfully slow despite the spectacular backdrops.

As the *Cremaster* films consist of a complex web of narrative events, writing full synopses of the films would require more than ten pages. In *Cremaster 1*, two large Goodyear zeppelins float above the blue playing field of Bronco football stadium in Boise, Idaho, where Barney comes from. There are four airhostesses on each (representing a descending and ascending team), and two identical tables under which resides Goodyear played by Marti Domination (a fetish dancer and an actress) – a doubled character simultaneously occupying both blimps. She choreographs and coordinates the movements of a team of precision dancers on the field by using grapes from the table. At some point the dancers form the “field emblem” – a symbol representing an oval form and a narrow rectangular bar splitting it horizontally in the middle, it reappears in numerous works by Barney including all five films of the *Cremaster* cycle. Eventually the dancers reproduce the shape of two zeppelins, which also resemble the shape of undifferentiated gonads of an embryo.
In *Cremaster 2* the story of Gary Gilmore (played by Barney) is reenacted. The narrative cuts across different points in time and moves backwards in chronological order from the year of Gilmore’s execution (1977) to Harry Houdini’s (Normal Mailer) performance at the World’s Columbian Exposition (1883), as a possible moment of his meeting with Gilmore’s grandmother and the conception of Gilmore’s father. The narrative comes back to Gilmore’s origin in a circular loop. Gilmore’s judgment takes place in the Mormon Tabernacle Choir, referring to his murder of a Mormon gas station worker. And his execution is staged in the Utah salt flats (the flooded Bonneville Salt Flats) as a rodeo where Gilmore is executed through a bull ride. The landscape plays an important role in the narrative construction.

*Cremaster 3* has a chronologically more linear narrative, but is complicated by several digressions. The main focus is the construction of the Chrysler building in New York interpreted through the Masonic legend of Hiram Abiff – chief architect of King Solomon’s Temple. He becomes the architect of the Chrysler building (played by Richard Serra) with whom the Entered Apprentice (Barney) competes in order to reach the status of Master Mason. As in the Masonic mythology, here too the Architect is killed. The Apprentice gradually moves up in the building by scaling elevator shafts, and becomes a Master Mason by cheating. He is punished for his deeds – all of his teeth are broken, yet he is redeemed by the Architect who fits him with dentures. 7 After that the Apprentice’s intestines fall through his rectum, in this act of disembowelment he separates from his lower self, and he soon escapes to climb to the top of the building. He murders the Architect who also climbs to the spire in an ambitious fit, but then Apprentice’s head is pierced by the metal attachment of the building. There are parallel narrative digressions in
the film (e.g. Celtic tale of a struggle between two giants). At the same time, the undead corpse appears from the foundations of the Chrysler building, as a reference to Gilmore’s death. The longest interlude is the Apprentice’s climb inside the rotunda of the Guggenheim building called *Order: Five Points of Fellowship*, where he overcomes five different challenges for the Masonic initiate. In this scene different events unfold on different levels such as cheetah-human hybrid (played by Aimee Mulins, a model with prosthetic legs) attacking the Apprentice, and Richard Serra reenacting his splashing works from the late 1960s (the molten lead replaced with liquid petroleum jelly).

![Video stills from *Cremaster 3*, 2002 (Copyright Matthew Barney).](image)

*Cremaster 4* focuses on a racing competition between the ascending and descending teams on the Isle of Man where a Tourist Trophy motorcycle race takes place. Barney plays the Loughton Candidate, an animal-human hybrid that resembles the island’s native ram species (a Loughton ram). The horns of the ram – two upward and two downward – represent the female and male possibilities of embryo development, a system in equilibrium. The Candidate has four sockets in his head from which potentially the horns can grow. Three fairies played by female bodybuilders attend to the preparation for the race as well as to the Candidates’ tap dancing, which results in him falling through the floor on to the seabed. The scenes of the race of the two teams going into opposite directions are intercut first by the dancing Candidate and later by his arduous and long climb through the petroleum jelly smitten visceral channel. The final scene shows that the
downward development has started: in the close-up shot we see a scrotum emerging out of mass of petroleum jelly, tightened and pierced with clasps. Later there is a shot between the legs showing the cords attached to the Ascending and Descending Hacks. Following the general circular spirit of the works, the film begins and ends on the same scene of a building on the pier, where the race cars are parked.

Cremaster 5 is an operatic piece with baroque aesthetics set in Budapest. Jonathan Bepler with whom Barney collaborated for Cremaster 2 and 3, composed the score for this lyrical opera. It is a tragic love story between Queen of Chain played by Ursula Andress and her Magician played by Barney. Barney also enacts two other characters: her Diva and Giant. The Queen rests on the throne in the royal booth of the neo-renaissance Hungarian State Opera House, underneath which the thermal baths are located where the narrative of descent unfolds. In the baths a garland of ribbons carried by Jacobin pigeons is attached to the scrotum of Giant, an animal-human-plant hybrid. His testicles descend in the warmth of the baths, and the pigeons fly upwards. Following this, the Queen’s beloved Magician wearing shackles leaps off Lánchíd Bridge to his death, resembling famous jumps by Hungarian-born Houdini. The Queen of Chain dies from her grief.
As can be seen from these synopses, the narratives of these works function as loops, as in reverse chronology of Cremaster 2 or repetition of the beginning at the end of Cremaster 4. The linear narrative is replaced by a circular system that lacks narrative closure. Moreover, the narratives of the Cremaster cycle are continuously interrupted by digressions, and strictly speaking outside of the artist’s own logic, the narrative events are only loosely connected or at times could seem as totally unconnected (as Celtic legend of the Giants and the construction of the Chrysler building). In terms of filmic language, Cremaster series play with viewer’s perception via the use of close-ups (especially on body parts), or at times a disruption of the sense of scale (for instance, when the close-up of a scrotum fills the entire screen and the parked race-cars are shot from between the legs in the closing scene of Cremaster 4).

If we consider that the Cremaster films are to be viewed in a gallery rather than in a linear fashion of a cinema, the experience of them could be very diverse, ranging from just a quick viewing for several minutes at any given point of looping videos to a patient, time-consuming, and quite immersive viewing. The resolution of the individual works,
whether as single or multiple-channel videos, is interrupted via looping. The video screens are physically encountered in the space of a gallery where it is not necessarily dark and where each viewer has choice over bodily proximity or distance. The length of the looping videos also invites the viewers to exit or re-enter at different points of the screening. Importantly, the Cremaster videos are often exhibited together with the related sculptures, production photographs and drawings, which enhances the embodied engagement of the viewers with the video screen or screen as another sculptural object. In other words, the use of diverse media engages viewer’s body by inviting a physical interaction with objects and representations in the gallery space. Thus, viewing of the Cremaster cycle would be different from an immersion characteristic for audiovisual consumption in the cinematic context, where audience cannot alter the experience of viewing to a similar extent, and viewers are presented by the visual continuum within the limits of the screen.

Also, the Cremaster cycle could be perceived very differently depending on whether one encounters a single-channel installation of one of the films or a multi-channel installation. With regards to the five-channel video installation of the Cremaster cycle exhibited at Sammlung Goetz (Goetz Collection, Munich) in 2008, Brandon Stusoy has pointed out how it is visually impossible to keep up with five monitors simultaneously, although sounds can be more easily absorbed. This, he argues, could invite a viewer to close their eyes and engage instead in close listening that “offers a new point of entry, a new architecture, or at least another way to view the complexity of the CREMASTER Cycle” and focus on “a field of sensibility, issues of noise, performance, and collaboration.”

When the Cremaster cycle is played as one piece, the sounds and noises mingle to create a new acoustic experience. As the films are of variable durations, different overlaps throughout the screening period emerge, creating a feeling of never-ending cycle. This enhances the perception of the circular nature of the works, as a loop. Thus, a diverse, open and nonlinear viewing experience of the cycle is possible depending on specific modes of display.

The Cremaster cycle functions as a complex autonomous system both closed in its self-referentiality – the work refers to itself and its elements using a private language, and open in its non-linearity (and openness to diverse interpretations). It is this structural complexity, as well as complexity in terms of the content, that makes it interesting to enlist second-order systems theory as an interpretative device, which helps us to understand the
emergence and operation of complex systems, as well as the interrelationships of their elements.

Characters populating the *Cremaster* cycle are not made into articulated and coherent individual protagonists. At the same time, however, the landscape and architecture become important protagonists in the narrative, like in the case of Chrysler Building punishing the Apprentice. Barney’s characters have sculptural quality as he uses different organic or inorganic matter and body parts inspired by different species to create hybrids – numerous animal-human or animal-human-plant hybrids or amalgams with inorganic matter. They are performed using elaborate prosthetic devices, costuming, choreography and athletic equipment that results in crossing the boundaries of the biological category of species and the human/animal, flora/fauna, organic/inorganic distinctions. Barney uses his own body as a medium in his performances, as his work engages with the tradition of body and performance art of the 1960s and 1970s, and unsurprisingly he also performs countless characters in his films. Body imagery whether human or nonhuman is central to the *Cremaster* cycle, as is the focus on male anatomy and narratives of biological development, as well a challenge of polymorphous fictional amalgams to human embodiment in terms of definitions, borders, wholeness and organicity. Beings are depicted in a non-hierarchical, nonanthropocentric manner, as are the architectural and organic bodies.

In addition to biological development, bodily performance as a process of the accumulation and release of energy is a recurrent topic in the *Cremaster* cycle. It is linked to what artist describes as “hermetic state”. The hermetic closure is a realm of potentiality, of the possibility of form: if the cycle of the discipline and desire related to accumulation and storage of energy in the body “goes back and forth enough times something that’s really elusive can slip out – a form that has form, but isn’t overdetermined.” What is presented here is a possibility of a self-referential, hermetic bodily state, where a system closes upon itself in a cycle between flow of energy and its restraint, a tailspin in a tension between the discipline and formless energy. The “field emblem” which features prominently in Barney’s works – a type of signature or a stamp – is linked to the idea of the closing off of an orifice, restraining, imposing resistance and thus, also a hermetic state. The field emblem again challenges the distinction organic/inorganic as it is both a field and stadium for actions (e.g. *Cremaster 1*), and the body.
The tension between the idea of hermetic closure, on the one hand, and openness and permeability of other aspects of the *Cremaster* cycle seems to be an interesting aspect of these works. There is a tension between self-imposed resistance, a restrained body enacted in his performances, and the possibilities of depicted boundary crossings between inside/outside, human/animal, natural/artificial, organic/inorganic dichotomies. For illuminating this tension, a complex understanding of the relationship between systems and their environment, and specifically operational or autopoietic closure of the systems described within second-order systems theory can be fruitful. Understanding of closure is especially interesting, as it is not the opposite of openness. In fact the two are linked in operation of any system whether biological, psychic or social. Considering the *Cremaster* cycle from this theoretical perspective, allows us to think beyond the intricate symbolism and private mythology of these pieces, and the authorial intention more generally.

Niklas Luhmann’s theory of social systems rethinks the concept of human agency, and rejects the centrality of human subjectivity. System/environment distinction is the key coordinate in this theory, where a system’s environment is seen as always more complex than a system. Systems cannot come into existence without the reduction of complexity, which is a basic process of differentiation. The starting point of this antifoundationalist theory and its end point is difference. Self-referential systems continuously “make a difference between the system and its environment”; this difference is reproduced by any operation of the system directed at self-reproduction, and it is in this sense that Luhmann talks about operationally closed systems. There is no single all-encompassing environment in Luhmann’s theory; each system constructs its own environment “according to what makes sense to that system in the application of its unique coding.”
and in this sense environment is “internal to the system but the system sees it as external and delimits what is system and what is environment”.14

Each social system, be it art, economy, or religion employs its own unique coding that is essential for its process of differentiation. The binary code such as art/nonart in case of the art system is the bases for differentiation. The codes used by a system have to be unique to it, as these determine the system’s specificity and difference from other systems.15 While the yes/no codes of any given system are stable, the system itself is impelled to constantly oscillate between the two values – a negative and positive one of the code, and it refuses to settle for either.16

For Luhmann both psychic systems (that operate in the form of consciousness) and social systems are self-referential objects. 17 In Luhmann’s theory self-reference as it were replaces the concept of the subject.18 In this framework, the centrality of the conscious carrier of an operation is displaced, as self-reference “truncates the search for the who or the what” is the subject of observation, description, knowing, distinguishing, and so forth.19 He defines system’s self-reference as the operation of reference that is included in the system which it indicates.20 “Self” refers to both the self-referentially operating system, and an operation through which a system distinguishes itself from its environment.

In Luhmann’s discussion of autopoietic systems, self-referentiality forms and unifies these systems, and they are necessarily closed. Autopoietic systems are self-organising systems that produce their own structures as well as other components such as elements, processes, boundaries, and even the unity of the system, i.e. they constitute their own “identities and differences.”21 The idea of operational or autopoietic closure in Luhmann is based on Maturana’s study of the operation of nervous systems and the definition of living organisms as closed systems that construct their reality though their perception. Varela and Maturana defined a circular organisation of the nervous system, where the processes are determined by a system’s own internal dynamic, as autopoiesis.22 Major implication of this theory is that closure of biological systems is essential for them to be alive.23

Luhmann takes up this articulation of autopoiesis within biology as “operational closure” of social and psychic systems. In his definition autopoiesis is understood as “a general form of system building using self-referential closure”, which can be abstracted from life.24 For Luhmann psychic systems are based on consciousness rather than life (they self-referentially “reproduce consciousness by consciousness”).25 Furthermore,
observation does not presuppose life, and neither is it generally tied to consciousness, but observations generate consciousness of a system.\textsuperscript{26}

Autopoietic reproduction is based on self-description, which is carried out through operational closure. Autopoietic systems are constructing their own stability out of unstable elements. So, a system owes its stability to itself, it “constructs itself upon a foundation that is entirely not ‘there’, and this is precisely the sense in which it is autopoietic.”\textsuperscript{27} On the one hand, closure of systems is only possible within an environment, closure, however, is a prerequisite of interaction with the environment. In this framework, the classical “distinction between “closed” and “open” systems is replaced by the question of how self-referential closure can create openness.”\textsuperscript{28} In another instance, autopoietic closure is defined by Luhmann as “the recursively closed organization of an open system” that “postulates closure as a condition of openness”.\textsuperscript{29} He argues: “All openness is based on closure, and this is possible because self-referential operations do not […] conclude, do not lead to an end, do not fulfill a telos, but rather open out.”\textsuperscript{30} So, operational closure stipulates potentiality of the system.

This relationship between closure and openness – operational closure and structural openness to environmental complexity – is interesting for the discussion of the \textit{Cremaster} cycle. The cycle could be conceptualised as a self-referential autopoietic system. First of all, it has a complex narrative construction that employs diverse references, whether it would be from biology or history of art, in order to refer to itself. Numerous dissimilar references, such as the football field in \textit{Cremaster 1} and racing ground on the Isle of Man, are filtered through the codes of the \textit{Cremaster} as a system. What connects all of them is the final analogy of the biological development of the embryo, the circular unresolved narrative of sexual differentiation. So, the \textit{Cremaster} as an artistic system selects the specific references based on its own internal logic and workings.

Systems cannot include everything from their environment due to its overwhelming complexity, so they operate by selection while remaining closed to the information from the environment. System’s self-referential code – a basic filter between system and environment – determines the selectivity. In the case of the \textit{Cremaster} cycle it is possible to think of the ascent/descent or female/male development of the potential organism functioning as a selection code of the system. This prism of a biological narrative of embryonic development reduces the complexity of branching out narratives and ensures
the unity of the different elements from the five films, as well as related sculptural and other artistic material.

The drama of sexual differentiation unfolds in the cycle, as the five videos present a narrative of movement from a sexually undifferentiated state to full descent. The process of formation – sexual differentiation – is set into motion in the first film. While this film is supposed to represent the state of equilibrium (an androgynous state of the embryo), the symmetry is severed when the process of articulation of the form within the work begins. The doubled character of Goodyear creates choreographic patterns with the grapes that are reproduced by the dancers on the stadium; the scenes of her manipulations are cut with the aerial views of the performers forming different shapes. They shift between two parallel lines to a narrow rectangular bar, forming the “field emblem”; or they form two circles out of a larger one. These movements introduce a closure – orifice and its closure in the form of the “field emblem” and closure of the circles – as a state of potential.

This biological narrative is subverted by a struggle against differentiation in-between, by a constant oscillation between female and male states, and at the same time by a crossing of species boundaries. This recalls Luhmann’s discussion of continuous oscillation that takes place in autopoietic systems between its binary codes. In Cremaster 4, for instance, there is an intense struggle in the form of the racing competition unfolding between the ascending and descending teams. Their race through the Isle of Man takes place in the opposite direction to signify the opposite directions of development. At the same time, the opening and the closing scene show the race cars parked on the pier, to create closed circularity where oscillation between male and female states remains unresolved.
Luhmann discusses potentiality of “oscillator function” and process of border crossing within the system that keeps the possibilities for the system open.\textsuperscript{31}

With the oscillator function the system holds its future open […] with regard to the fact that everything can arrive different; and this not arbitrarily, but depending on the distinction being used, which, because it includes what it excludes, indicates what in any given case can be otherwise.\textsuperscript{32}

The oscillation between ascent and descent taking place in the \textit{Cremaster} cycle, one could argue, points at the possibilities for this normally fixed biological narrative to be otherwise.

Interpreting the descent in \textit{Cremaster 5} and thus the male direction of the development of the organism as possibly a false descent or returning back to the undifferentiated state is relevant here, and it goes along the circular nature of the cycle’s narratives. The scene I am referring to unfolds in the Gellért Baths in Budapest. The Giant enters in the fourth act while the Queen rests looking down into the baths through the openings next to her throne. The Giant’s legs are thigh-high lily blossoms, he lacks the external signs of sexual differentiation other than abstracted scrotum, his long moustache is a streaming curly crystal, his hair – differently sized glass bubbles, and his drooping ears – lilies. The pigeons that surrounded the Queen fly down through the opening carrying yellow and blue satin ribbons and the sprites make a garland out of them. The sprites gather around the Giant and fasten the garland to his scrotum, and the close-up shot shows testicles descending – pointing to the element of differentiation. But, simultaneously, the pigeons fly upward and pull the ribbons as an affirmation of a movement toward a female direction of development. This possible descent is enacted not by a human agent, but by a hybrid creature and involves other animals (pigeons). This descent counterbalanced by an ascent shows differentiation as a process that continuously oscillates between the states. The \textit{Cremaster} cycle imagines differentiation and difference (in this case sexual) as having an ongoing complex dynamic irreducible to either of the sides on the continuum, but rather oscillating between male and female and androgynous states.
Thus, the ending scene of the *Cremaster 5* does not pose an attempt to return to the undifferentiated state; the emphasis is away from the “either or” states, but on oscillation, on distinction that does not disappear. In the *Cremaster* cycle the viewer encounters an insistence on the process of transformation, against fixation on the final states, as the cycle focuses on the sexual development that is uncompleted, that remains in tension between female and male possibilities for an organism. The linear understanding of sexual difference is replaced by disruptive oscillation. One could argue that biological model of gender differentiation in the *Cremaster* cycle is employed to visually unsettle this linearity and fixity of difference, to emphasise the transformational aspect within the human development, rather than to present a biological narrative as a metaphor. As a result, a dislodging of foundational narrative of biological development is achieved. The work makes the process of anatomical formation akin to the creation of form in art and its metamorphic quality while relying on the elements from these two distinct systems as its media.

In addition to challenging the hierarchies of species and organic/inorganic distinctions on the literal level (for instance, how the characters are represented), as well as the linear narrative structure, with their circularity and self-reference, the *Cremaster* videos embody a structurally non-hierarchical nonanthropocentric system that does not privilege site over organism, human over animal. Within the framework of autopoiesis, the combination of
hybrid porosity and hermetic closure in *Cremaster* cycle gains critical potential. As it emerges both in Barney’s and in Luhmann’s work, the system’s closure is a prerequisite of possibilities: which is the creation of form in case of Barney, and vital operation of differentiation in autopoietic theory.

Luhmann emphasises that “in the self-referential mode of operation, closure is a form of broadening possible environmental contacts.” More, as he demonstrates, under specific conditions “self-referential closure enables a more complex view of the environment.” The theory of autopoietic systems – treated as a general theory rather than a functioning model in living organisms – allows Luhmann to question the importance (and relevance) of human agency for social and psychic systems. The centrality of (human) rational influence is dislodged, as well as “the anthropocentric foundations of action theory and liberal or humanist postulations of individual and collective agency”. That is why it is interesting to consider “hermetic closure” in this framework, as the concept of autopoietic closure presents us with a posthumanist notion of potentiality.

At the same time, autopoiesis is a very dynamic and even inherently restless process. Luhmann describes how the prerequisite of autopoiesis is “a recurring need for renewal”. Perpetual dissolution is the cause of autopoietic reproduction: “Disintegration and reintegration, disordering and ordering require each other, and reproduction comes about only by a recurring integration of disintegration and reintegration.” Barney’s signature material petroleum jelly used consistently in his sculptures, performances and videos is interesting in this context, as its use embodies the movement or oscillation between order and disorder. As Scheidemann emphasizes in his discussion of Barney’s use of the material: “When heated it is liquid, pourable, and unpredictable. When refrigerated, it becomes hard and crystalline, disciplined.” It is sometimes frozen to take a strict sculptural shape, or it oozes in liquefied melted form. Or the material alternates between the frozen and melted disintegrated state, like in bigger scale petroleum jelly molds created for *Drawing Restraint 9*, refrigerated with the intention that the sculpture would collapse when the mold was removed, and the collapsed work exhibited. In *Cremaster 3*, Serra uses the material in a liquefied form in his splashing performance in the “Fifth Degree” of the film, and a sculptural installation with the solid collapsed molds titled *Cremaster Field* was prepared to be exhibited along with the film. The centrality of this material can be explained by its particular metamorphic quality that oscillates
between the states of disintegration and reintegration. Petroleum jelly features as it were in-between the process of solidifying and liquefying, briefly taking on a fixed state. It escapes once the harness solidifying it into a form is removed. Thereby, through the use of this particular material the boundaries of the work itself are destabilised, while it moves between a state of form and formlessness. It is also a material that can resemble organic substances changing through pressure and temperature.

Video stills from Cremaster 3, 2002 (copyright Matthew Barney).

One of the most recurrent characters in the cycle, through which the topics of closure (“hermetic state”), self-discipline and transformation take shape, is Harry Houdini, the famous escape artist, an illusionist, a master of disciplined training and metamorphosis. Houdini who through exercise and discipline achieved extraordinary bodily flexibility, enough to open any lock is related to the idea of self-imposed resistance and closure. He is a character representing training that leads to alteration of form: an ideal representation of defying the boundaries of physical abilities. His self-restrained, resistant and closed-off body is a site where creative potential is played out. His body is a raw sculptural material, elastic and mutating. Its flawless performance ability, however, is coupled with failure: as was described in the synopsis of Cremaster 5, Houdini reappears in the guise of the character Magician who dies following a leap into the Danube wearing shackles and weighted balls.
The most relevant appearance by Houdini in the *Cremaster* cycle, however, is the scene with his performance at the World’s Columbian Exposition. Houdini used to famously perform his transformation into a woman, by switching places with his wife while escaping from various constraints. In *Cremaster 2*, Houdini’s transformation is reimagined through the social structure of bees – the relationship between the Queen bee and her drones – the only function of which is to mate with the queen bee and die. Here Houdini’s transformation is an attempt to avoid the destiny of a drone, and the Queen bee (Gillmore’s grandmother) attempts to prevent the metamorphosis and so Houdini’s possible ascension to her throne. The viewer does not learn the outcome of this conflict. The transformation is not completed in a different manner than when the Apprentice is interrupted in the process of his transformation into a Master Mason in *Cremaster 3*. While metamorphosis into a woman is not concluded, so the division, as well as the difference and possibility to move between the two states – male and female – remain. It could be described as oscillation independent of the ideas of synthesis; oscillation that opens possibilities for the autopoietically closed systems. As “the closure of the self-referential order is synonymous here with the *infinite openness of the world.*”\(^{41}\)

In a rare instance of dialogue in the *Cremaster* cycle, Houdini describes his transformation: it is not about mere physicality, each time he challenges himself to escape from the locks, real transformation takes place. Within the metamorphosis Houdini is fused with the cage that contains him: he digests the lock, it becomes part of him and the walls that imprisoned his body come open. The metamorphosis realised through self-imposed resistance and closure, becomes a condition through which openness is achieved. Metamorphosis is a means of resistance and escape from subject-hood, from the shackles of normative human subjectivity.

Video stills from *Cremaster 2*, 1999 (copyright Matthew Barney).
In the nonanthropocentric setup of the *Cremaster* cycle, the characters often transform to match their environment or architectural sites, such as for instance the three androgynous bodybuilder-fairies from *Cremaster 4*. They change their guises according to the different settings they attend to, so have no pronounced individuality, in this metamorphic curtaining of subjectivity. The metamorphosis of forms – whether sculptural, architectural or that of characters – is an important theme throughout the cycle. In a reversal of traditional narratives of metamorphosis, the posthumanist transformations taking place in the *Cremaster* cycle are focused on the process itself, at times interrupted, at times completed, but never reversed. 42

Video Stills from *Cremaster 4*, 1994 (Copyright Matthew Barney).

The use of metamorphosis in Barney’s works can also be understood as art’s self-reference, as art itself is a metamorphic process.43 As Luhmann argues, art unlike any other social system both orients itself historically and can break abruptly with the past: “art can consciously and ruthlessly create discontinuity” and “is not compelled to
continuity. [...] This is why art often produces anticipatory signals in social evolution which can be read retrospectively as prognoses.” While the Cremaster project engages with creating discontinuity in its structure and formal aspects, in use of diverse media, with the themes of creation of form and metamorphosis, with focus on the process and oscillation between different states, and most importantly, with a posthumanist orientation, it introduces more complexity into the art system, and sends anticipatory signals regarding the broader social context.

What is at stake in the Cremaster cycle is the questioning of the notion of human subject with his/her exceptional position in the hierarchy of living beings. The nonanthropocentrism of the works emerges in the use of media and circular narrative, characters and sites, autopoietic closure and process-oriented nature, oscillation between female and male, and human and animal states. The human body is an arena for events to unfold and its boundaries are unfixed. The focus on biological processes destabilises the boundary between human and nonhuman bodies. The body becomes a malleable and permeable structure. There is also a defamiliarisation of the landscape which is shown to be oscillating between organic and inorganic, between internal environment and external setting, between sharp solid forms (of the Chrysler building) and something that is about to start oozing or decomposing (the foundation of the building where undead Gilmore emerged from). Landscape becomes analogous to a body whose boundaries are always permeable. The defamiliarised settings are also doubled with the defamiliarising perspectives of the camera, such as mentioned usage of a human body as a frame (the body becoming nonanthropomorphic).

In the Cremaster cycle conventional representations of the human body are destabilised – the body is fragmented and hybridised, and the viewer is invited to observe the landscape rather than the human as the central presence. At times the work itself actively invades the space of the viewer, the gallery space or the filmic space, as for example in the sculptural use of petroleum jelly. Distinctions between nonhuman and human are constantly thrown into question, roles are inverted, our fixed ideas are destabilised, but difference never disappears: no higher synthesis of different elements is produced or promised, there is no evolution to a higher unity or state. The resulting posthumanist vision opens a space for challenging some of the categories and hierarchies ingrained in humanism.

In discussing the Cremaster cycle in conjunction with non-hierarchical, non-human-centred posthumanist thought, what emerges are new possibilities for rethinking the
nonhuman and human alike. The model of self-referential closure moves towards genuinely not (human) subject-centred autonomy in the understanding of systemic reproduction and operation. That is why this article considers the cycle’s circular narratives with its hermetic logic in the light of the self-reproducing autopoietic closure of a system operating according to structures that it has itself produced. Barney’s project follows a similar non-linear logic of restless circularity, in which there is a co-presence of ordering and disordering, alongside interrupted narrative events, and disappearing and sometimes resurrecting characters. This systems-theoretical organisation of the works allows for a fundamental questioning of the centrality of human subjectivity, as well as of artistic subjectivity, a questioning which also has interpretative implications for how we view, understand and communicate about art. The Cremaster films together comprise a closed system, in a way that makes encountering them in open and unexpected ways possible, and where the idea of hermetic closure corresponds to posthumanist notions of potentiality. These issues surfacing in artistic production give added urgency to the need for rethinking humanist, speciesist frameworks.

1 See Cary Wolfe, What is Posthumanism? (Minneapolis: University of Minnesota Press, 2010), xii.
2 Ibid., xxv
3 See ibid., xx.
4 For example, Nancy Spector’s influential catalogue essay for Barney’s famous exhibition at the Guggenheim in New York emphasises the significance of the analogy of sexual differentiation for understanding the structural composition of the Cremaster cycle. (Nancy Spector, “Only the Perverse Fantasy Can Still Save Us,” in Matthew Barney: The Cremaster Cycle (New York: Guggenheim Museum, 2002), 33.) She argues that the cycle imagines the prospect of suspending the phase of sexual undifferentiation, depicting an internal struggle of an organism. Spector’s interpretation focuses on the importance of biological metaphors in Barney’s art, but not the cluster of concepts and themes featured in my analysis. An example of authors who analyse the Cremaster cycle purposefully departing from Barney’s notions and symbolism is Alexandra Keller’s and Frazer Ward’s article in which the authors argue that Cremaster encourages us “to consume it as high-end eye candy […]: meaning, that is, is no longer a necessary component to art production or reception”. (Alexandra Keller and Frazer Ward, “Matthew Barney and the Paradox of the Neo-Avant-Garde Blockbuster,” Cinema Journal 45 (2006): 13.) They undermine the critical possibilities of the project (for instance, the questioning of biological narratives and narratives of gender formation) that Cremaster cycle offers, as they dismiss the biological metaphor from the beginning of their article. Marquard Smith has discussed the topic of prosthetics and the erotics of the body of female amputee in Cremaster 3, and the aesthetic use of the disabled body. Whereas Smith offers a pertinent critique of how “the figure of the disabled body has […] become a living, shining embodiment of posthuman existence in prosthetic times”, pointing at its potential dangers, I concentrate on the posthumanist orientation of the work and its elements, as articulated by Wolfe. (Marquard Smith: “The Vulnerable Articulate: James Gillingham, Aime Mullins, and Matthew Barney,” in The Prosthetic Impulse: From a Posthuman Present to a Biocultural Future, ed. Marquard Smith et al. (Cambridge: The MIT Press, 2006), 46.) To my mind, bringing out the posthumanist aspects within the cycle, opens wider ranging critical possibilities of nonanthropocentric vision presented.


7 Barney perpetually exposes his artistic body, and often has it literally invaded in his performances since early 1990s; unsurprisingly this is also carried on into the fictional filmic setting of Cremaster.


10 This argument is based on Barney’s articulation of field emblem. (Spector, “Perverse Fantasy,” 7.)

11 See Spector’s discussion of anthropomorphic and architectural connotation of the field emblem. (Spector, “Perverse Fantasy,” 7.)


16 Ibid., 188.

17 Luhmann, Social Systems, 437.

18 Ibid., 439.

19 Ibid., 439.

20 Ibid., 442.


25 Luhmann, Social Systems, 262.


27 Ibid., 48.

28 Luhmann, Social Systems, 9.


30 Luhmann, Social Systems, 447.


32 Ibid., 510.

33 Luhmann, Social Systems, 37.

34 Ibid., 11.

35 King and Thornhill emphasise that Luhmann’s work on the concept of closed systems is linked to his critique of human agency, “individualism” and “action theory” in the context of sociology. (King and Thornhill, “‘Will the Real Niklas Luhmann Stand Up, Please’,” 278-279.)

36 King, “Real Niklas Luhmann,” 284.


38 Ibid., 9.

39 Christian Scheidemann, “Notes from the Laboratory,” in All in the Present Must be Transformed: Matthew Barney and Joseph Beuys (Berlin: Deutsche Guggenheim, 2006), 132.

40 These are normally described as “collapsing sculptures”. (Scheidemann, “Notes from the Laboratory,” 125.)

41 Luhmann, Social Systems, 62.
One could describe such metamorphic narratives as posthumanist. Bruce Clarke makes a case for a transformation of ideas about metamorphosis throughout history and elaborates notion of “posthumanist metamorphosis” in literary and visual narratives. For him, such a narrative has to imply a certain form of “symbiosis and the potential for sociality” with posthuman agents. (See Bruce Clarke, Posthuman Metamorphosis: Narrative and Systems (New York: Fordham University Press, 2008), 37.) The narratives of metamorphosis staged by Barney are not followed by a destruction of posthuman metamorphs that affirms the human status quo, or a reinstitution into a natural order; in Clarke’s terms the “humanist assumptions” do not preclude the “posthuman possibilities”. (Clarke, Posthuman Metamorphosis, 10.)

According to Clarke, metamorphoses in mythical or fantastic narratives is a mode of self-reference inherent in transmission of stories. (Ibid., 46.) Barney’s work can be observed as a self-referential autopoietic system – the work reproducing its own components, employing its binary code – that makes a theme out of the self-referential nature of art as a system.