Dancing toys: The quest for mechanical life

VASSILIKI BARBOUSSI

University of Peloponnese, Nafplio

EVANGELIA KOURTI

University of Athens

Abstract

Toys or objects that come alive and interact with human beings fascinate children, academics and philosophers, but also artists. In this study we investigate plots, myths or fairy tales as well as the historical and cultural contexts that inspired the presence of animated toys in three ballets. An analysis of the results, and a comparison of these objects with modern relational artifacts demonstrate that the ongoing quest for mechanical life, in art as well as in technology, can be conceived of as a quest for subjective omnipotence and the suspension of objective reality.

KEYWORDS: mechanical life, relational artifacts, animated toys, ballet

A popular and fascinating theme in children's literature is where toys or objects become alive and lead their own lives. Many are stories that never seem to lose their popularity, such as: *Alice in Wonderland*, *Winnie the Pooh*, *Pinocchio*, *the Raggedy Ann and Andy Stories* and the folk tale *The Little Gingerbread Man*. This is also a theme that fascinated adults. The 18th century was a golden age of fascination with automata, which were an exceedingly popular topic for philosophers [e.g. Descartes' (1644/1953) formulation of man as a machine] and

inventors. The best example here are Jacques de Vaucanson's automata, a clockwork duck, flutist, and pipe-and-drum player that thrilled Paris. The first one seemed genuinely to excrete after being fed, while the second one breathed rapidly and the third one played faster than any human.

Toy makers, and toy industries later on, were always interested in every new invention and technology in relation to forms of "mechanical life". As technology evolves, toys also change and contemporary dolls have functions and characteristics of human beings: they talk, eat, walk, recognize and identify objects and the voice of their owners, and choose from among hundreds of preprogrammed phrases with which to respond.

Toys become more interactive and a child's world today is more and more filled with animated toys, forms of "sociable machines" or "relational artifacts" as Sherry Turkle et al. (2006) call them to describe machines able to communicate, interact, and apparently understand. Powered by invisible technologies, which give them a kind of "mechanical life", these toys are designed to relate to people in human-like ways and "behave" like human beings. At various levels of sophistication, "these objects give the impression of wanting to be attended to, of wanting to have their 'needs' satisfied, and of being gratified when they are appropriately nurtured" (Turkle et al., 2004, p. 1). They present themselves as having "states of mind" affected by their interactions with human beings and become "AniMates" (Ackermann, 2005), as they exhibit creature-like qualities, thus implying more and more "interaction" between the toy and the player / user.

The idea of toys and / or objects becoming alive and relating to human beings as well as the human quest for "mechanical life" has also fascinated artists of all epochs. The theme of animated objects / toys interacting with their users and others appears as a popular topic in ballet literature. The purpose of this article is to investigate the role of mechanical toys and puppets in the myths or fairy tales that inspired certain ballets (*Coppelia*, *Nutcracker* and *Petrouchka*) at a specific historical period; to discover how they and their creators were represented in ballets in movement; and to evaluate the possible relationship between the quest for "mechanical life" in ballet and modern animated toys. One also could pose questions from a different point of view, about what it means to "be human", to "think", to "be alive", and about the boundaries between what is alive and not alive, natural and artificial, human and non-human.

1. Animated toys in ballets

In ballet "mechanical life" took the form of animated toys, popular in the 18th, 19th and 20th century. Three ballets, *Coppelia*, *Nutcracker*, and *Petrouchka* share

common motifs: man – through manipulation – gives life to toys. Puppets and toys become animated as if they were human beings.

Coppelia, or The Girl with the Enamel Eyes, was the first ballet based on the animation of a toy / puppet. The Libretto derives from E.T.A. Hoffmann's *The Sandman*, a nocturnal fantasy. The piece takes place at night during a marriage festival. Dr. Coppelius is a toy maker, creator of a puppet, Coppelia, which sits in his house window, holding a book. Franz, the fiancé of a villager, Swanilda, falls in love with the puppet. The young girl, jealous of Coppelia, breaks into Coppelius' house, full of life-size toys, which she winds-up, and they begin to move in staccato mechanical movements; so she realizes that the object of her jealousy is only a puppet. When Coppelius enters the house, Swanilda hides. Franz enters and confesses that he is in love with Coppelia. The two men start drinking; the young man gets drunk and falls asleep. In the meantime Swanilda wears Coppelia's clothes, and begins to dance. Coppelius thinks that through magic he "transformed the life force" from Franz to Coppelia but he realizes that he has been tricked as Coppelia / Swanilda is not a well-behaved puppet, but a naughty, capricious girl, who does not obey Coppelius' manipulation / orders.

The Nutcracker's Story derives from a fairy tale written also by Hoffman: The Nutcracker and the Mouse King. The text is an enigmatic story, in which familiar daytime actions differ from alien nighttime life. The ballet begins on Christmas Eve, when the impossible can happen through children's fantasy and magic, in an upper class home. Herr Drosselmeyer, a magician, enters and gives toys to the children. Life-size wind-up dolls move in linear, staccato, two dimensional movements. The magician offers the girl a nutcracker-toy soldier, a phallic symbol according to Sigmund Freud's interpretation (Kuznets, 1994). Her brother takes it away from her and breaks it. After the festivities, the girl, Clara, sleeps for a while and she wakes up with the Nutcracker toy, re-fixed by the magus, in her arms. At midnight, she dreams that Nutcracker turns into a young man. After a fight he has with animated toy-mice he becomes human, and leads her to a deep forest where the handsome young man keeps lifting her up, an image that reflects sensual wishes (see Denby, 1968, pp. 98-102). The girl's nighttime adventure and the metamorphoses of the toy into a man in flesh and blood, who shares with her a secret life, bring her into the adolescent world and unconscious sexual symbols and desires.

Petrouchka, based on the story of a Russian traditional puppet, takes place in a street fair during "Butter-week", a Russian carnival where people celebrate fertility and welcome spring (the holiday is known as *Maslenitsa*). During the festivities people feel psychological release, and usually hide behind masks. The opening of *Petrouchka* reveals a street fair in St. Petersburg in 1830, filled with performers, peasants, policemen, street dancers, gypsies,

a hurdy-gurdy player and a show booth that is a stage within the stage. A show-man-magician steps in through the curtains; he plays a mysterious tune on his long pipe and gives motion to three puppets: Blackamoor, Ballerina, and Petrouchka. As a puppeteer, he sets their mechanisms in action, makes his dolls move, then dance. Ballerina dances in pizzicato movements on pointe; the Blackamoor with his legs turned out; Petrouchka with his legs turned in. The puppets jerk their arms and legs and run off into the crowd, with the owner chasing after them. Here, "all movement and gestures are limited to a flat and rigid single plain; they propose mechanical, semi-automatic regularity" (Kirstein, 1971, p. 195).

Petrouchka and the Blackamoor are both in love with the Ballerina. Petrouchka is kicked down by Blackamoor and his eyes, the eyes of a man, deplore the brutality of the world. He dances with a groan, crescendo and diminuendo movements, which leads to an outburst of feeling. Petrouchka, chased by the Blackamoor, finally gets struck by its scimitar. As a man or a puppet he lies on the street, asking not for help but for sympathy. The magician pushes his way through the crowd and shakes the ragged body. There is blood on the snow. As the crowd leaves, marveling at the hallucination they have witnessed, Petrouchka re-appears alive above the booth, with his unbending arms. He is immortal, "a metaphor of the human spirit, which though often oppressed cannot be extinguished" (Reynolds & McCormick, 2003, p. 49).

2. Mechanical life in the ballets: historical and cultural context

The romantic ballets *Coppelia* and *Nutcracker*, as mentioned before, were based on Hoffmann's fairy tales. Ernst Theodor Amadeus Hoffmann (1776-1822) was a theatre manager, draftsman, poet, composer, and inventor, and was inspired by Heinrich von Kleist's ideas (1777-1811) from the essay *On the Marionette Theater* that all matter has a soul, an animistic approach. Marionettes, in Kleist's case, were seen in a spiritual way. According to Nelson (2001), he argued that Grace is a state "of 'weightlessness' that emanates from the transcendental world – that is best expressed not only by the human alone but in this externalized soul embodied as the puppet" (p. 64). Like Kleist (but also Goethe), Hoffmann was an enthusiast of puppets and automatons and owned puppets, which he presented to his guests. Hoffmann's philosophy about automata is found in the two stories he wrote, *Automata* from 1814 and *The Sandman* from 1816. Hoffmann kept alive the debate over the presence of the soul in matter in the new intellectual environment of the 19th century. Later, his stories, especially *The Sandman*, influenced Sigmund Freud and his theory on uncanny

experiences, which occur when surmounted primitive beliefs seem to be confirmed again (Freud, 1919 / 2003)¹.

In Romanticism some main themes were the conflict between man and nature; society and the supernatural; the exotic worlds of far off lands, etc. It was a time of profound social upheaval, when radical ideas were influencing society. Artists rebelled against old fashioned forms and celebrated feeling and passion. The Romantic era of ballet (1830-1870), where the two ballets belong, reflects parallel tendencies in arts and society (Anderson, 1979). It focused on the desire to connect life not with rational but with supernatural powers. This required magic, sought in legends emphasizing the emotional and intuitive rather than relational aspects of human nature, and the use of complicated mechanisms that enabled supernatural entities to fly through the air. The industrial revolution and the evolution of sciences also opened new horizons in life and ballet.

The third ballet, *Petrouchka*, while created in 1911, was based on Russian tales of a traditional puppet that comes alive. Forty-one years later after *Coppelia*, magic, as in Romantic era, still inspired artists. At the same time in the 20th century, a new term 'Modern art' was used to place emphasis on representing emotions, themes, and various abstractions in art. Artists started using the masks and mime of ancient theatre, the "stage-within-a-stage" as well as commedia dell'arte; in *Petrouchka* the tradition of acting in commedia dell'arte is shown in elements from Pierrot, Harlequin, Columbine, and in the use of masks.

In her essay on Nijinsky, Krasovskaya (1979) analyses how the power of evolution in civilization is evident in *Petrouchka's* first performance in Paris where the puppet is caught between the physical restrictions of a puppet and all the emotions of a living human being. The inherent futility and impossibility of such a being are represented in the movements and gesture. The turned-in position of Petrouchka's legs suggests "a structural impossibility of the body because the thighs are held as if the knees had been tied tightly together. This strange convention suggests an *avant-garde* reversal of the traditional, fundamental 'turned out' leg positions of ballet, commenting on the way in which ballet technique 'mechanizes' or 'dehumanizes' the body of the dancer" (p. 183). Petrouchka is supposed here to have no desire. It is an inanimate object manipulated with the illusion that it is a living being. Krasovskaya considers that in a reversal of identity, the character of Petrouchka suggests that "in the face of technological advances, the anxiety of modern people is that they are rendered as controlled by the dictates

¹ Ernst Jentsch, a German psychiatrist who first proposed in 1906 the term 'uncanny', noted that "in storytelling, one of the most reliable artistic devices for producing uncanny effects easily is to leave the reader in uncertainty as to whether he has a human person or rather an automaton before him, in the case of a particular character" (see Jentsch, 1906 / n.d.).

of the Machine Age, as Petrouchka was by the all-powerful magician puppetmaster" (p. 184).

3. The magus and his creative power

In the ballets discussed here, conceived or inspired by Romanticism, the dancing / animated toys replicate humans and reflect human emotions. This animation in the ballets is associated with human creativity in arts and science.

In England (Nelson, 2001), puppets were known as "motions" and puppeteers as "motion men" or "motion masters". In that sense, the magician is the mediator between two worlds – the animate and the inanimate – as he animates the inanimate. In *Coppelia*, the toy maker / inventor is the one who through magic controls the fate of his creations and has their devotion (Coppelia the puppet is obedient / Swanilda the human being is disobedient). In *Nutcracker* and *Petrouchka*, the magician / showman gives life to the puppets through touch or through the magic of music. As a puppeteer, he holds the strings and sets inanimate objects in motion – gives life and soul to them.

In the Renaissance, according to Nelson (2001), the man of knowledge became split into three exclusive figures: theologian, philosopher, and scientist. A fourth figure, the magus, the one who creates "magic", was considered as a manipulator of the forces of nature usurped by the scientist. As mentioned by Nelson, during and after the Renaissance, some of the magus energy was also transferred to artists and writers as they acquired more cultural prominence: "The good magus role, with its benign demiurgic powers first divorced from divine inspiration, then aestheticized and psychologized, was ultimately absorbed into the figures of the artist and the writer; the bad magus role with its supernatural powers linked to the dark grotto of the underworld, was absorbed into the figure of the scientist" (p. 8).

In these ballets, the "motion men" have both sides: they are showmen and craftsmen and they represent in people's minds both the good magus (artist) and the bad magus (representing science and technology). Their physical representations in the ballets as well as people's attitudes to them are ambivalent: they fascinate people but at the same time the audience is afraid of them as the magus introduces them to "uncanny" situations.

In these ballets, there is a special time at which magic occurs: *Coppelia* takes place in the street during a marriage festival, *Nutcracker* on Christmas Eve, and *Petrouchka* during a spring festival, a carnival, where magic is again evoked. According to Bowden (1999), the festivities of *Maslenitsa* "retained powerful links with the ancient pagan beliefs of the Slavic population. Thus,

Petrouchka's dance as an episode of this particular festival, fused puppet magic with the superstitions of the ancient Rus, pre-literate theater and the sorcery of the *skomorokhi* (Russian minstrels)" (p. 31). Festivities but also love appear in these ballets as important moments to give life to inanimate toys / puppets.

4. Magic and transitional spaces

Roger Caillois (1958) writes that festivities are about Chaos, rediscovered and remodeled in a new way. Ritual festivities provoke "creative license", a period of intermission, a suspension of order in the world. During the festivities, the desires of people can be realized in the same way as in their dreams. According to Freud (1913), dreams are the realization of desires. In this sense, anything can happen without influencing the real world. During the festivities, the participants are in an intermediate area of 'experiencing', to which both their inner reality and external life contribute. As phrased by Donald Winnicott (1971), "it is an area that is not challenged, because no claim is made on its behalf except that it shall exist as a resting place for the individual engaged in the perpetual human task of keeping inner and outer reality separate but interrelated" (p. 2). This is the domain of the illusory, which is neither subjective nor part of the outer world, a domain of great importance to the child and to the artist.

So, what the magus – as an artist – is creating is pure "moments of illusion" in Winnicott's terms, which means the infant's belief that his wish for the object precisely creates that object. In a retelling of Hoffmann's story *The Nutrcracker and the King of Mice* (Walden, 1996), Maria's mother tells her that the toy became alive because she likes it and when someone loves something very much, it is always alive. What a magus – as a scientist – is creating through "relational artifacts" are moments of regression in the *subjective omnipotence* phase where the babies consider themselves to be all-powerful, the very centres of existence, as their wishes are met (Winnicott, 1971). In this sense, the term "relational artifact" evokes mostly the psychoanalytic tradition as it emphasises the meaning of the person / machine / object / toy encounter. Turkle (2007) believes that "relational artifacts" are the new "uncanny" in our computer culture. This concept, first used by Ernst Jentsch (1906 / n.d.), is defined as "doubts whether an apparently animate being is really alive; or conversely, whether a lifeless object might be, in fact, animate". And this is where we find again all the preoccupations of Hoffmann that

² In Margaret Williams Bianco's story *The Velveteen Rabit*, the Skin Horse tells the Rabbit "when a child loves you for a long long time, not just to play with, but REALLY loves you, then you become Real" (as cited in Kuznets, 1994, p. 59).

inspired the two ballets described but also the tale that inspired *Petrouchka*. In this sense, "the quest for mechanical life" in art and modern animated toy technology could be seen again as a quest for subjective omnipotence and a refusal to accept objective reality.

Conclusion

This article has examined the role of toys and puppets as objects that can be animated and take on human qualities including feelings, illustrated in three ballets. The animation of these toys / puppets relates to cultural preoccupations and to the historical context of the ballets. The animation is realised at critical times of ritual change and ceremony. The role of the magician / puppet master / magus in these ballets is fascinating in that the scientist and the artist are represented in one figure, responding to the human quest for mechanical life that they can control. Animated toys, like people, express emotions and suggest in their movements an inner life, as they fall in love, suffer, live, and die.

Contemporary societies are seeing the reinvigoration of relational artifacts, social objects, in many forms, from robots to dolls, which are increasingly more interactional. The magus is still a scientist, the engineer of fantasy, searching always for a breaching of the barriers between being and illusion or fantasy in animated toys where play and creativity meet.

REFERENCES

Ackermann, E. (2005). Playthings That Do Things: A Young Kid's "Incredibles"! Retrieved from: http://web.media.mit.edu/~edith/publications/2005-playthings.pdf.

Anderson, J. (1979). Dance. New Books: New York.

Bowden, S. (1999). The Avant-Garde Politics of Petrouchka: Retrieving the Performance Text of 1911. In J. Adshead-Lansdale (Ed.), *Dancing Texts. Intertextuality in Interpretation* (pp. 26–53). London: Dance Books Ltd.

Caillois, R. (1958). Les Jeux et les Hommes. Paris: Gallimard.

Denby, E. (1968). Looking at the Dance. New York: Horizon Press.

Descartes, R. (1644/1953). *Principes de la Philosophie*. In R. Descartes, *Œuvres et Lettres* (pp. 553–690). Paris: Gallimard.

Freud, S. (1913). *The Interpretation of Dreams* (3rd ed.). (A.A. Brill, Trans.). New York: The Macmillan Company.

Freud, S. (1919/2003). The Uncanny (D. McLintock, Trans.). London: Penguin Modern Classics.

Hoffmann, E.T.A. (1967). The Best Tales of Hoffmann. (E.F. Bleiler, Trans.). New York: Dover.

- Jentsch, E. (1906/n.d.). On the Psychology of the Uncanny (R. Stellars, Trans.). Retrieved from: http://art3idea.psu.edu/metalepsis/texts/Jentsch_uncanny.pdf.
- Kirstein, L. (1971). Movement and Metaphor: four centuries of ballet. London: Pitman Publishing.
- $Kleist, H.\ von (1812).\ On\ the\ Marionette\ Theater.\ Retrieved\ from: < http://ada.evergreen.edu/~arunc/texts/literature/kleist/kleist.pdf>.$
- Krasovskaya, V. (1979). Nijinsky. New York: Schirmer Books.
- Kuznets, L.R. (1994). When Toys Come Alive: Narratives of Animation, Metamorphosis and Development. New Haven: Yale University Press.
- Nelson, V. (2001). The Secret Life of Puppets. Cambridge: Harvard University Press.
- Reynolds, N., & McCormick, M. (2003). *No Fixed Points: Dance in the Twentieth Century.* New Haven and London: Yale University Press.
- Turkle, S. (2007). Authenticity in the age of digital companions, Interaction studies 8(3), 501-517.
- Turkle, Sh., Breazeal, C., Dasté, O., & Scassellati, B. (2004). Encounters with Kismet and Cog: Children Respond to Relational Artifacts. Retrieved from http://web.mit.edu/~sturkle/www/encounterswithkismet.pdf.
- Turkle, S., Taggart, W., Kidd, C.D., & Dasté, O. (2006). Relational artifacts with children and elders: the complexities of cybercompanionship. *Connection Science* 18(4), 347–361.
- Walden, D. (1996). The Nutcracker (adapted from the story by E.T.A Hoffmann). Philadelphia: Courage Books.
- Winnicott, D.W. (1971). Playing and Reality. London: Tavistock Publication.

Vassiliki Barboussi, associate professor at the Department of Theatre Studies in the University of Peloponnese, Nafplio, barbousi@uop.gr

Evangelia Kourti, associate professor in social psychology specializing in communication issues at the Department of Early Childhood Education in National and Kapodistrian University of Athens, ekourti@ecd.uoa.gr

Tańczące zabawki: w poszukiwaniu mechanicznego życia

Abstrakt

Zabawki i przedmioty, które ożywają i wchodzą w relacje z ludźmi fascynują dzieci, naukowców, filozofów, lecz także artystów. W niniejszym artykule badamy fabuły, mity lub bajki, jak również historyczne i kulturowe konteksty, które zainspirowały obecność animowanych zabawek w trzech przedsta-

wieniach baletowych. Analiza wyników i porównanie tych przedmiotów ze współczesnymi artefaktami relacyjnymi pokazują, że wciąż trwające poszukiwanie mechanicznego życia w sztuce, jak również w technologii może być postrzegane jako poszukiwanie subiektywnej wszechmocy i zawieszenia obiektywnej rzeczywistości.

SŁOWA KLUCZOWE: mechaniczne życie, relacyjne artefakty, animowane zabawki, balet