

***Jette Lund***  
*Puppets and Computers*

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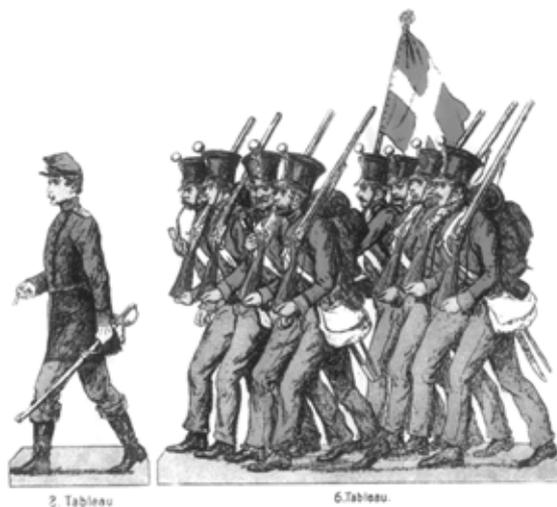
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## Puppets and computers

When Jørgen Callesen first contacted me two years ago, he was working on a theory of understanding and improving the so called "autonomous agents" of the computer game by looking at them as "actors". Discussing the topic with a friend, who happened to be a puppeteer and one of my former students, he was told: "Oh no - they are not actors, they are puppets".



**Figure 1** Alfred Jacobsen, *Figures printed on paper for "The little bugler"*

The purpose of our work together e.g. in the project "The Family Factory", and of our discussions, has been to explore this thesis, and to see, if it really would help to understand and improve the interactive stories, plays and games of the computer - our new medium - and perhaps to offer the old medium - the stage of the puppet theatre - a new material. We are only at the beginning of this process.

Traditional theatre theory has seen the puppets as "wooden actors". Modern theory sees the puppet as more than an actor and places the puppet in a wider psychological and semiotic context. It is not possible here to go further into the discussion of the aesthetics of the puppet theatre - which after all - as Michael Meschke

has pointed out - hasn't very often been discussed or even described.



**Figure 2** Soldiers from the strategy game "Ages of Empire".

But in order to use the knowledge of the puppet in a new context one will have to deal with the aesthetics of puppet theatre: roughly speaking, what unites the different forms of puppet theatre in the anthropological, ethnographical, and historical dimensions? What is the essence which they all share?

The puppet has been with man for a very long period of time. One might even argue, from the beginning of mankind.

Seen phylogenetically<sup>1</sup> - or historically - the puppet is a part of funeral rituals and death cults. The puppet is a symbol of fertility - as described by Herodotus c. 500 years B.C. - in the form of phallic figures carried by priests, or straw figures, as known in different cultures, now for sale as tourist souvenirs e.g. in Greece. In Danish there is no special word for the theater doll, like in English "a puppet".

Etymologically "doll" or Danish "dukke" means a bundle of something, e.g. a sheaf (of corn), which may be sacrificed in a harvest ritual.

As the primitive dolls of straw, found in several civilizations, show us, the step to the doll

<sup>1</sup> Phylogenesis – the genesis of a species

intended for children's playing is not a particularly large one.

The concept of the toy doll leads us to the field of human psychology. Seen ontogenetically<sup>2</sup> or psychologically the puppet/doll according to D.W. Winnicott means a "transitional object": the thing - the teddy bear, the dummy - or something else, which helps us, still in our first two years of childhood, to realize and control the connection and the difference between inner and outer reality.



*Figure 3 Goddess of rice growing and fertility, Bali*

In this context a puppet/doll may be defined as "something, which in a given situation "is" something else than it is - for someone" (an adaptation of Peirce's definition of signs).

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<sup>2</sup> Ontogenesis – the genesis of the individual of a species



*Figure 4 Indian toy doll*

So we can see the Lara Croft of the computer game "Tomb Raider" as a puppet (Figure 5) - if not exactly the same type as the 13.000 year old "Venus from Willendorf", catholic images of the holy saints, the portrait porcelain-doll of the late Princess Diana, 45 cm high, and to be paid for in "easy monthly rates", the Lego-monster, the famous Barbie - or the teddy bear. Lara is not "analogue" but "digital", she is not wood, porcelain or plastic, but a combination of sophisticated programme codes, shown on a screen by electrical impulses; and in this aspect "material".

The biggest difference is that even if you can control her movements you can't touch her, hence the production and sale of various merchandise which is attempting to compensate for this.



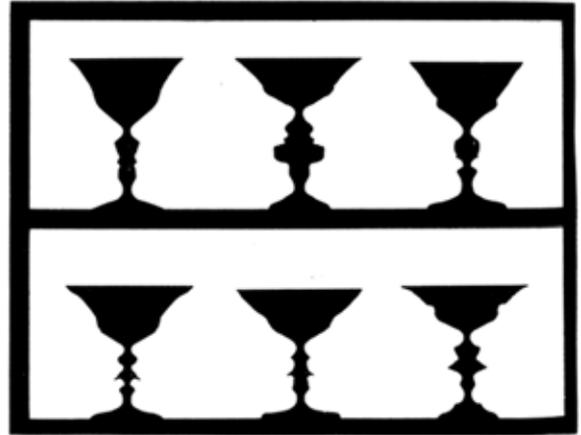
**Figure 5** Lara Croft – the heroine from the action game "Tomb Raider".

In the game or the play she is however - as any other doll/puppet - "something else" as a programme code or an image formed by electrical impulses - she is a symbol of strength, ingenuity, courage - for the game's player. Is she a toy? Is she a cult-figure? She is in fact "worshipped". As a puppet/doll she serves and strengthens the immersion of the player in the universe of the game, another "reality".

Konstanza Kavrakova-Lorenz determines this connection between the player and the puppet/doll as "the specific of the puppet-play", its "smallest unit". From another point of view Steve Tillis talks about "double vision", Henryk Jurkowski says "opalescence" and Werner Knoedgen "Subjektsprung". You might call it a metamorphosis, or a change of picture, as seen in the well known picture of "Rubin's Vase".

I shall not try to make these theorists sound more unanimous than they are, however, one might easily see, that their common theme is indeed this duality in the play with the doll or the puppet: It "is" - and it is not.

You may call it "magic". But like in the conjurer's show, there might be a reasonable explanation, even if you fail to see it.



**Figure 6** Rubin's vase.

The comparison between the computer medium and the puppet theatre present us with a field of aesthetic possibilities, which one might investigate:

- the effect of the different ways of creating a connection between the player and the universe behind the screen, from the "Pac-Man game" to the self-chosen identities in arena-games (or chat-rooms) – through a play-station or through "Motion Capture technique".
- the "breach", which is a powerful agent in the puppet theatre, both in classical and modern forms. What happens, when Lara Croft turns around and tells you to mind your own business?
- the recognition of the possibility, that the formal "likeness" with the depicted (the scale-model) is perhaps not so important as the inner or metaphorical likeness (the analogue-model)
- the investigation and the exploitation of the specific "materiality" of the computer medium.

The comparison between the computer medium and that form of puppet theatre, which we call "model theatre" (English: toy theatre) challenges us with the possibility of creating a wide range of characters and dramatic situations, which might be put together as in a psychological laboratory, which go far beyond the "Sims": the simulated persons of the computer, for whom you - like fish in an aquarium - may play "God".

*Figure 7 Simulated family members from the strategy game "The Sims".*

This is a challenge, which up until now the three year old human being with his/her analogue dolls and figures is far more capable of tackling than the computer programme. The question is of "artificial intelligence" or rather the question of what human intelligence is: Perhaps the ability to depict ideas and the ability to recognize and exploit the possibility of something being, what it isn't.

We owe our knowledge of the puppets of ancient Greece to the fact that philosophers and the fathers of the church used the "puppet-metaphor": as the puppet is a prisoner of its strings or rods, so man is a slave of his emotions or his vices. So the puppet of the computer universe is doomed to a life in the computer.

This message is very strong. A puppet book of 1932 from the fascist movement: „Kraft durch Freude“ shows us a picture of a little girl admiring the beautiful puppets of the Salzburg Puppet Opera:

“Wir reden nur , wenn wir wirklich und tätig im Spiel sind ! – Sonst bleiben wir friedlich hinter der Bühne und sind ganz still. Keiner meckert und alle sind zufrieden. Die Menschen können

sich immer und zu jeder Zeit ein Beispiel an uns nehmen”.

*“We speak only when we really are active and in play. Otherwise we stay peacefully behind the stage and are quite still. No one is grumbling and everyone is satisfied. People should always and at all times take our example.”*



*Figure 8 Puppets of the Salzburg Puppet Opera.*

One might hope for an ironic dimension, not recognized by the fascist censorship - but it might be just too much to hope for. So the puppets of the picture speak with two tongues. In his memoirs the great clown Grock takes another view:

*“So long as I can remember, the things have been looking at me with reproach and whispering: “Take us, and make us into something else - we are so terribly bored!”*

As the teddy bear looks lonely and lost without its loving child, so the puppets of the computer screen are waiting for us to play them.

Very roughly speaking you might see the theme of the dance theatre as the human body, the theme of the opera as the human voice, and the theme of the actor's theatre as human social life. Because of the duality of the puppet, and because of its need for manipulation, you might

see the theme of the puppet theatre as human existence itself: "to be or not to be" - dependent or free, alive or dead, good or bad, one person or several personalities at the same time.

In our culture we tend to avoid the term "playing", in the sense of children's playing, in connection with adult people. Adults don't play. But in fact they do. Yet theater is a play. The comparison between the computer medium and the toy and children's playing might lead us to remember, that one certainly learns from playing, but one doesn't play to learn. We need also to investigate the purpose and the function of playing.

Animals are training their body and senses in "play", they are making sport. But humans are playing with their ideas too. The human need for and ability to imagine and simulate might have more to do with humanity than we think. Humans are animals playing puppets and acting: making "theatre". They are making art.

"Artificial intelligence" implicates the matter of human intelligence and so the difference between man and animal. Two scientists at the University of Copenhagen are dealing with this matter from different points of view: Niels Engelsted as a psychologist, and Jesper Hoffmeyer as a biologist. When speaking of an "artificial intelligence" for the "autonomous agent" one shouldn't overlook their theories. Through the foil of theater science and for me especially the puppet theater science, you might be able to see very interesting possibilities.

By making the well-known "strange" - what Brecht called "Verfremdung" - you might be able to realize, what you took for granted. That is in fact a well-known agent of the puppet theatre, which you may see as a "permanent Verfremdung". (Kantor)

In this discussion it is a reminder too of a well known fundamental rule of science: You can't explain the theater as ritual and the puppet through its duality - you will have to find another angle, another foil to look through.

For instance as in this attempt: That of psychology or biology.

In a smaller and more modest scale the experiment "Family Factory" did that. Putting the animated agents of the computer on the stage together with trained puppeteers made it possible to see connections and possibilities, which were invisible when familiar and taken for granted. Now we have been able to recognize them and to use them - or to choose not to use them - knowingly and consciously.

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