Puppets between Human, Animal and Machine: Towards the Modes of Movement Contesting the Anthropocentric View of Life in Animation

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Abstract

In this PhD thesis, I challenge animation studies' conventional notion that animation can bring something inanimate to "life". This emphasis on animation's capacity to make a figure appear to move on screen has led to the problematic notion that movement has a synonymous relationship with life. Contesting these discourses, I show in this thesis that not every animated figure suggests the impression of life. In order to prove this, I put forward as a critical focus the puppet-as-puppet figure, that is, the figure of a puppet depicted as a puppet per se in the film diegesis, which problematises the impression of life even if appearing to move on screen. A related focus in my thesis is the mode of movement which functions as a visual and physical parameter in order to analyse what an animated (or static) figure is intended to look like, instead of reducing it to a question of life.

Through case studies of these puppet-as-puppet figures, which I classify into four groups, I examine the varying ways in which they are depicted as inanimate or sub/nonhuman, even when in human form, in contrast to human or (anthropomorphic) animal figures, both in terms of their mode of movement as well as their appearance. Examining how these depictions demonstrate anthropocentric views of puppets, I consider religio-philosophical, scientific and aesthetic discourses on puppets and human/animal simulacra. Further, I explore a selection of puppet-as-puppet figures as alternatives to these anthropocentric conventions, examining their defamiliarisation of the animating human subject's mastery over the animated non/subhuman object, and the non-anthropocentric sensations which their movements arouse on screen in the relationship between humanity and materiality.

Acknowledgment

For this thesis, I have been *animated* and also *re-animated* by many people, scholars, professionals, colleagues, friends and my family. I am deeply indebted to all of them, and afraid in these few pages that words might elude and escape from me.

I appreciate my fantastic supervisors, Suzanne Buchan, Stewart Martin and John Timberlake. Suzanne was always strict as well as passionate about my research. I spent many years and hours talking to her about the issues and questions that I need to focus on, make clear and develop for this thesis. And I learned so much from Suzanne about what being a scholar should be like. In retrospect, thanks to her, I could determine to start this research because I was sure that she would understand what I was aiming at in it; I was right. Stewart has shown not only scholarly rigour but also great patience, in particular, while my research suffered vagueness and confusion at its early stages. As a modest person, he always addressed crucial questions and intriguing issues, which kept stimulating me to rethink and clarify the direction and central issues of this thesis whenever I seemed to get lost. At the later stages, Stewart's evaluation of my thesis in progress helped so much me keep going on this long journey to the end. John was a late addition to my supervisory team, but it did not take so much time for him to grasp a full picture of this thesis because we had ever spent a fascinating time talking about my research subject and others about two years before he joined the team. I was inspired and energised whenever talking to him about more issues than required in this thesis to the extent that I lost track of time.

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Introduction

This PhD thesis begins with the questions which occurred to me from my particular experiences of viewing two animated characters—the details of each character will be given later in this Introduction and the following Chapters. First, why should the wooden puppet boy character Pinocchio be finally transformed into a human boy of flesh and blood? Second, how can the high-tech android character Astro Boy be given the equal-to-human rights by legal amendments? But the wooden Pinocchio seems to already have as flexible a body as human characters on screen. The same can be said of Astro Boy. However, both are considered as "not-real" and "not-human" at an early stage in the film diegesis. These narratives have raised quite an intriguing issue in me as a viewer because animation is said to bring anything inanimate to "life", but the narratives with those two characters function to deny this notion of animation. My thesis is an exploration of the questions and issues surrounding those animated figures as puppets and human simulacra that can contest and jeopardise the definition of life and humanity, and the conventional notion of animation as well.

Motivation and theoretical paradigms of my research

Primarily in this thesis, I contest a well-known discourse which has been reiterated in animation studies as well as in the field of animation filmmaking. The discourse is that animation can bring anything to life on screen, in which the term of life is

not defined in a rigorous way. However, my central concern is not to define the very concept of "life" but to examine critically the ways in which animators deal with specific figures in terms of the discourse. Drawing in the main on the neoformalist method developed by Kristin Thompson and David Bordwell, I seek to provide alternative viewing skills to viewers of animated figures on screen, without resorting to the overarching discourse which I will criticise in this thesis.

For this immanent research, I focus on the "puppet-as-puppet" figure, or the figure of a puppet which is presented as a puppet per se in animation film. In this thesis, the puppet-as-puppet figure refers to the diegetic on-screen presentation of a drawn or built puppet; it does not refer to the puppet used in production or shooting. Like Pinocchio in Disney's animated film of the same name (Ben Sharpsteen and Hamilton Luske, 1940, US), the puppet-as-puppet figure serves well to problematise the discourse because it should be perceived as an inanimate object, even though looking like and further moving like an animal or a human on screen. In other words, the puppet-as-puppet figure is required to provide the impression of not being alive, or of simultaneously being alive and not being alive, in contrast to a figure of a human or an animal providing the impression of simply being alive.

These impressions are what I am most concerned with in this thesis where animation film is considered as a form of visual art/media. As they are composed of a plethora of aspects, in particular, I place emphasis on the aspect of "movement", or the "mode" in which the puppet-as-puppet figure appears to move, because animation is the art/media capable of constructing apparent movement, using frame-by-frame photography. Describing and analysing the puppet-as-puppet

figure's mode of movement that works as a visual cue of not being alive on screen, I

also contest another problematic discourse in animation studies, as found in Alan

Cholodenko (2007) and Thomas Lamarre (2013). It claims that moving is

equivalent to, or synonymous with "coming to life" in animation film.[1] Arguably,

such a discourse ignores that there are cases, I will examine later, which do not

warrant the synonymous relationship between the two terms. Ignorance of

contradictory cases shunts discussions of animation on to a larger scope of visual

media or philosophy. Supporting the concept of media specificity and extending the

neoformalist approach, my analysis will shed light on the varying ways in which

the puppet-as-puppet figure is depicted to move, which are not necessarily

associated with the impression of being alive.

     For this analysis, I select emblematic cases of puppet-as-puppet figures

from four groups: (1) hybrid films of hand-drawn animation and live action, (2)

hand-drawn animation films, stop-motion animation films with (3)

anthropomorphic[2] puppet-as-puppet figures and (4) non-anthropomorphic[3]

puppet-as-puppet figures. These four categories function to contextualise a

puppet-as-puppet figure, its impression of not being alive, and the way in which it

is dealt with to provide such an impression. In the first category, I aim to

foreground the power relationship seen on screen between the animating human

creator and his animated human/animal-like creation, thereby revealing the

contradiction in which despite his demiurgic performance of bringing a figure to

life, the animator-creator on screen considers and deals with it as a non-living

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[1] This kind of discussion goes beyond the scope of animation studies or media studies.
[2] In this thesis, my use of the term, anthropomorphic, considers the way in which a figure
moves on screen, as well as what its shape looks like.
[3] The application of the term, non-anthropomorphic, to the puppet draws on Buchan (2011).

object. In the second and third categories, I focus on several typical cases of puppet-as-puppet figures which are depicted as inanimate or non-living in conventional films—I will give the details later in the section on Methodology in Chapter One—respectively of hand-drawn animation and stop-motion animation. In this sense, the use of the problematic terms, life and alive, is delimited by the intention of signifying the way in which the puppet-as-puppet figures are depicted in contrast to the human or animal figures which represent living humans or animals in the film diegesis. In the fourth category, I bring to focus the non-anthropocentric, as well as non-anthropomorphic, aspect of unconventional stop-motion animations.

The puppet-as-puppet figures of each category elicit questions of "subhuman" or "nonhuman" objects, particularly when they are either completely or partially in human form. I employ the term, subhuman, to qualify the very way which deals with such puppet-as-puppet figures, in accordance with Per Schelde (1993: 40), Victoria Nelson (2001: 261) and Torben Grodal (2009: Kindle 1533), to name a few, who use it to describe respectively mutants in *This Island Earth* (Joseph M. Newman, 1955, US), the robot Maria in *Metropolis* (Fritz Lang, 1927, GER), and zombies in *Night of the Living Dead* (George A. Romero, 1968, US) and other horror films. The questions of subhuman objects on screen bring me to the locus of religio-philosophical discourses, along with their relevant traditions, of such objects which have been made in the real world. The discourses constitute the backgrounds with which the filmmaker and the viewer, both as human agents, are involved in producing and perceiving the puppet-as-puppet figures, not to mention the motivations of the former agent. Reviewing the terms and concepts which I find

relevant to religio-philosophical discourses in the literature of animation practices and animation studies, I interpret and evaluate how some cases serve to reproduce or extend them and how others demonstrate alternative concepts challenging them. In this exploration of the cases, I also seek to conceptualise the terms working for them in a more proper way than animation's conventional vocabulary of life or alive, as well as elucidating the aesthetic and the ideological implications of animating the puppet-as-puppet figures in film.

In this thesis triggered by the two puppet-as-puppet figures Pinocchio and Astro Boy along with their functional equivalents, I consider in the first place René Descartes who in his 1637 treatise, *A Discourse on the Method*, discerns the human being from the "automata" in human form, identifying this mechanical object with the animal in terms of movement and behaviour. As I will demonstrate with three groups of cases, respectively in Chapters Two, Three and Four, the Cartesian view of humanity has had a great influence on the formation of the way in which puppets and human simulacra in contrast to human beings are depicted and narrated, not only in animation film but also in live-action film (Schelde 1993). Its far-reaching influence is indicated and often criticised in philosophies of objects and materials (Nelson 2001), religious studies (Harvey 2006) and cosmology (Funkenstein 1986). What is highly interesting to me in Descartes' 1637 thesis is that defining and privileging humanity, the philosopher refers to the way in which automata and animals move, act and speak. I will bring into play Descartes' characterisation of automata's movement and behaviour in my analysis of the puppet-as-puppet figures employed to function on screen in an anthropomorphic and anthropocentric manner. In my thesis, Descartes will also appear as one of the

Enlightenment thinkers who around the seventeenth century, imagined new cosmologies and the ways in which the Creator exerts His power on the world and His creations (Funkenstein 1986). In reference to their views, I discuss and keep in mind the ways in which animators exert their power on puppet-as-puppet figures, either on screen or in production, throughout the four Chapters where I will conduct case studies.

Analysing how such figures instantiate the Cartesian dualism, I also draw on Julien Offroy de La Mettrie who in his 1747 treatise, *Machine Man*, challenged his materialist predecessor, Descartes, by claiming that human beings, too, are machines or automata (Vartanian 1999). I believe that La Mettrie's notion of "man-machine" helps to reinterpret puppet-as-puppet figures and the film narrative with them in an alternative way to what simply identifies them, not as being human but as assuming subhumanness, not as being real but as implying fake-ness. This pertains to the aims of my thesis include to provide different viewing skills of figures and characters performing puppets in animation as well as to clarify and tackle conventional viewing skills of them.

In this sense and focusing on the three-dimensionality of stop-motion figures which enables animators or human beings to exist with and touch them in the real world (Buchan 2006), I work with the Romantic view of puppets and recent studies of it. Centring on Heinrich von Kleist and E. T. A. Hoffmann, the studies bring to light anxiety and longing which both in fictional worlds and the real world, human beings experience viewing and interacting with puppets or human simulacra that in terms of body movement, threaten the sense of human subjectivity at the same time appearing as an idealistic or transcendental form

(Wilson 2006; Scullion 2009). The Romantic attitude and discourse pertain to what I find happens in a complicated way between the stop-motion animator and the animated model in Chapters Four. Their complicated relationship is found when he or she seeks to deal with a stop-motion model as a puppet in the narrative, while all the models including it *are* literally puppets to work as characters in one and the same film.

The three-dimensionality of stop-motion models also provides a much stronger impetus for observing them in terms of phenomenology rather than the two-dimensionality of hand-drawn figures on which Buchan remarks:

> Although they offer ample spatial cues that can mimic our lived experience of space, and techniques like the Multiplane camera and planar focus shifts can actually introduce 3D space and perspective to graphic animation, the worlds that conventional 2D animation represents do not have a corollary in our lived experience. (2006: 20).

In contrast to two-dimensional hand-drawn animation, Buchan goes on to suggest the formal elements of stop-motion animation as "are extant, tangible and constitute a part of the real world" (p.21), at the same time identifying these traits in live-action film. As encouraged by Buchan (pp.26-27), the strong need of a phenomenological approach to stop-motion animation is due to the human-like or animal-like models' three-dimensional inorganic bodies that can above all work as media to which human beings connect and extend, as McLuhan notes that "all media are extensions of our own bodies and senses" (2013: Kindle 1678). With his

notion of media in mind and conducting the case studies of stop-motion models in Chapters Four and Five, I take stop-motion models as bodily and sensory extensions of animators and also spectators, aiming to shed light on the intersubjective aspect of the relationship between the animated object and the animating subject. This phenomenological approach to stop-motion animation comes to involve the agency of spectators as well as animators, and I will discuss the former agency as an issue pertaining to the entirety of this thesis after explaining main philosophical paradigms which I will draw on specifically for analysis of non-anthropomorphic and non-anthropocentric stop-motion models in the last and fifth Chapter.

Although non-anthropomorphic stop-motion models are usually viewed within the context of stop-motion animation (Buchan 2006), in my thesis they are classified as different from the stop-motion models which are manipulated to represent living beings like humans and also animals in accordance with narrative motivation and other conventions. Such models are primarily intended to present themselves as they are: objects, and further, as objects challenging human awareness of them. This perceptual and cognitive strategy demands viewing those models/objects from aesthetic and religio-philosophical perspectives specifically developed in a non-/pre-/post-Cartesian way for objects, including puppets, and the relationship between these and human beings. Working with discourses of minimalism (Batchelor 1997), Neoplatonism (Shaw 1995; Wallis 1995), new animism (Harvey 2006) and Shintoism (Yamakage 2006) which I have found to be object-oriented and non-anthropocentric in varying ways, I will borrow much from "vital materialism" as a recent and comprehensive perspective which Jane Bennett

(2010) develops to propose a horizontal relationship between human beings and materials. I claim that her project pertains to an unconventional relationship which animators or animating agents explore and demonstrate interacting with objects presented as objects on screen in a human or nonhuman form—the cases of such objects will be analysed in Chapter Five.

The relationship between animator and object should be connected with that between spectator and object, as noted by Buchan (2006) who drawing on neoformalism and phenomenology, discusses "animation spectatorship" with emphasis on the physicality of puppets and objects in stop-motion animation. Referring to the neoformalist concept of the "consciously aware viewer" suggested by Robert Stam *et al*.,[4] Buchan (2006: 21-22) elaborates animation spectatorship in which the spectator can form his or her viewing skills in a specific way to each of two traditional animation categories, drawn animation and stop-motion animation, as well as being able to learn and assume the production process of each category—this formative ability of the spectator is one of the central assumptions in the neoformalist approach (Thompson 1988; Christie 1998).

Building on Buchan's (2006) study of animation spectatorship which is focused on the point of view in film, I extend it to animated figures' on-screen movement. As indicated in Buchan's (2006) above-cited differentiation of stop-motion animation from drawn animation in terms of dimensionality involved in the profilmic materials and events of each category of animation, in my thesis the viewer is considered to differ in the way in which he or she perceives and responds

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[4] Buchan cites Robert Stam, Robert Burgoyne and Sandy Flitterman-Lewis (1992) *New Vocabularies in Film Semiotics: Structuralism, Post-structuralism, and Beyond*. London: Routledge: 146-147.

to animated figures' on-screen movement between the two animation categories. But what comes into the viewer's conscious awareness when he or she focuses on an animated figure moving on screen in either category of animation? In paper or cel-based hand-drawn animation, for example, she is aware that *it* cannot be touched by any human being; it is only paper or cel, often with colours applied, that can be touched. In stop-motion animation, on the other hand, she is likely to expect that she can touch and interact with it, possibly going on to guess how its body is constructed for the manipulation of stop-motion animation in the real space. Here I do not intend that hand-drawn animation lacks something that stop-motion animation does not. As I will show with drawn figures presented as puppets in this thesis, rather, "drawn-ness" enables them to show body movements the degrees and modes of which seem to be quite impossible for stop-motion figures which are composed of solid parts and surrounded by the gravitational field.

With these two types of animation spectatorship in mind, I define myself as a "hypothetical viewer" who in terms of neoformalist approach, is supposed to interact with and respond to formal cues in viewing film (Thompson 1988: 30). My function as this kind of viewer is not only to articulate what takes place in a viewer of puppet-as-puppet figures on screen in animation. It is also to contest or develop the ways in which those figures and their movements (or rest) on screen are viewed.

Research contributions

To achieve my aim in this thesis, animation studies' problematic terms such as life

and coming-to-life need to be contested and redefined in a rigorous manner. In the Literature Review, I define and contextualise the main terms, including those two ones, with which I will work in this thesis. The definition of such working terms in animation studies is a crucial issue which Andrew Darley addresses, remarking on Cholodenko's theorising of animation as "rhetorical extemporization: a kind of poetical 'riffing' with theoretical concepts and ideas that bear very little relation to the real-world practices into which they are being 'shoe-horned'" (2007: 71).

As I stated above, in this thesis I work on specific results of the real-world practices of animation, in particular, on the puppet-as-puppet figures of the four groups, and this will show that the very discourse of 'animation-can-bring-anything-to-life-as-motion' makes invisible something that animation does not or even cannot bring to life. Indeed, the impression of the puppet-as-puppet figures being alive on screen is not warranted by motion, but rather their subhuman or nonhuman state in the films' narratives as not a real life is demonstrated and accentuated in contrast to that of human and (anthropomorphic) animal figures by specific modes of movement from an anthropocentric perspective. This will lead to revealing that not every figure is depicted and/or perceived to be "alive", despite its illusory on-screen state of motion in animation film.

Further, I challenge the concept of the animating human subject's artistic mastery over the animated sub/nonhuman object that will be illuminated examining the group of hybrid films of hand-drawn animation and live action. The concept is found both in production and on screen because in this group of films such as *Gertie the Dinosaur* (Winsor McCay, 1914, US), live-action human performers play animators or artists, when the animator or artist of each of the

films does, or is supposed to, play himself. This double status of the on-screen live-action human performers helps me observe the concept of the human mastery over subhuman or nonhuman objects at the profilmic and diegetic levels.

Questioning the concept in relation to the religio-philosophical discourses and backgrounds that I find to be relevant to it, I seek to show that the convention of "animation-can-bring-anything-to-life-as-motion" is based on and even has been exploiting the anthropocentric view of matter as inanimate or "dead", in light of the political philosopher Bennett who exploring a non-anthropocentric sensibility of objects and materials, criticises that "the image of dead or thoroughly instrumentalized matter feeds human hubris and our earth-destroying fantasies of conquest and consumption" (2010: Kindle 89).

For an alternative to this view, I investigate the puppet-as-puppet figures of the fourth group that on screen embody a non-anthropocentric, intersubjective relationship which the human animators seek to build in production and show on screen working with objects and materials. This investigation will contribute to advancing the study of animation beyond the terms, movement and life, those which are not necessarily specific to animation, towards findings from the cases of animation practices. These findings will possibly inform other fields and disciplines, in particular, where scholars take an interest in such a subject as movement or life.

Drawing on interdisciplinary methodologies ranging from film studies to religious studies, I am inspired by Paul Ward who suggests that animation studies can and should inform other disciplines the scholarship of which is applied to animation, in his indication that "[a]nimation's overlapping relationship with film

and other media has meant that the theoretical paradigms applied to these other areas are often applied to animation, without first fully thinking through how animation's theory and practice might inform them" (2006: 235). I believe that animation studies has seen a host of scholarly achievements along with this vision of Ward's, but it seems to me that the terms, movement and life, still tend to act as an alibi for "theorising" of animation, despite Darley's criticism (2007: 71), or even as a pitfall in the discipline. My pursuit of the implications of the puppet-as-puppet figures' different modes of movement as a signifier of inanimacy has the express aim of stimulating animation studies into engaging with specific cases of animation by means of the terms and methods which I employ, instead of attributing them to life, and further informing other disciplines the scholarship of which I build on in this thesis.

Thesis organisation

This thesis consists of this Introduction, five Chapters and the Conclusion. In Chapter One, I problematise the terms of life and also movement by revisiting discussions made of them by animation scholars, animators and animation filmmakers, and then contextualise the central terms, like "puppet" and "force", which I will work with in this thesis. In the Literature Review, the second part of Chapter One, I introduce and define the terms with which I will work to examine and analyse the four groups of cases in the following Chapters. In the Methodology, the third and last part of the Chapter, I discuss and develop the methods which will help me classify, analyse and interpret puppet-as-puppet figures.

Chapter Two	Group INT	Hand-drawn animated figures of human or animal simulacra as puppets appearing together with live human actors on screen
Chapter Three	Group CEL	Hand-drawn figures of puppets as puppets in conventional cel animation
Chapter Four	Group STM	Three-dimensional models of puppets as puppets in conventional stop-motion animation
Chapter Five	Group PMT	Three-dimensional models of puppets as puppets in unconventional stop-motion animation

Table i. Organisation of the four Chapters in my PhD thesis

Chapters Two to Five are organised to correspond to each of the four groups (See Table i) into which I classify the puppet-as-puppet figures selected for a corpus from countless designs and representations of puppets throughout animation film history—the method of this classification will be explained later in the Methodology section.

Chapter Two focuses on a group, which I call Group INT (Interaction), of puppet-as-puppet figures each of which appears on screen along with a live-action human being who performs the animation of his figures by drawing on paper as if he creates human-like or animal-like life forms in the film's diegesis, as seen in *Out of the Inkwell: The Tantalizing Fly* (Max Fleischer, 1919, US; See Figure i-a). In this Chapter, I examine the way in which as a puppet-as-puppet figure, each creation interacts with its creator on screen in terms of the binary oppositions: human vs.

sub/nonhuman, master vs. slave and live action vs. hand-drawn animation. My examination in Chapter Two is intended to reveal the power relationship between animator and animated, creator and created, as a basis for application to the cases in the subsequent Chapters.

In Chapter Three, the puppet-as-puppet figures classified in Group CEL (See Figure i-b from *Pinocchio*) are pictorial representations of puppets and human/animal simulacra in cel animation, which in the diegesis appear along with hand-drawn figures of humans or (often anthropomorphic) animals. With the Cartesian view in mind, I investigate the way in which non/subhumanness and fake-ness are demonstrated by the puppet-as-puppet figures, using techniques of
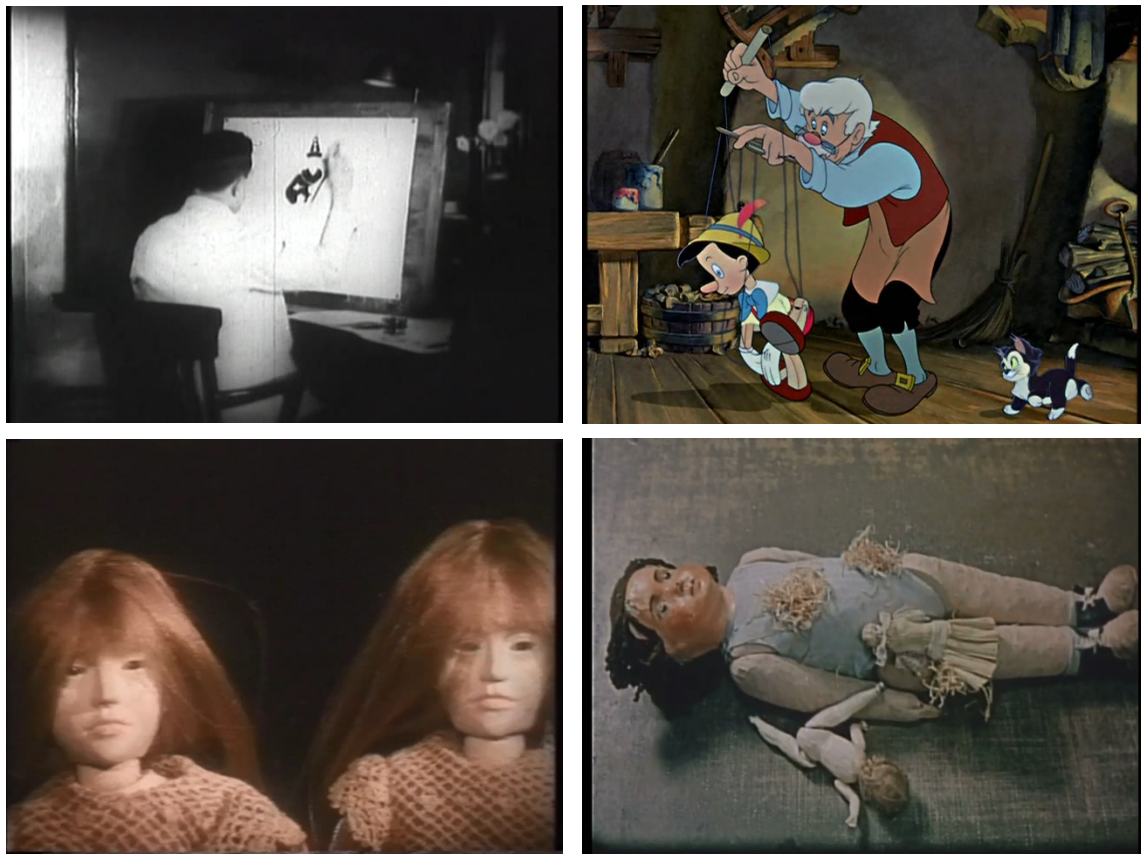
Figure i. Examples of the four Groups;
top-left (a), top-right (b), bottom-left (c), bottom right (d)

cel animation, in contrast to humanness and realness. This investigation will show that Descartes' (1637/2006) view of humanity is a dominant ideology under which many of the hand-drawn figures of puppets per se in Group CEL are subsumed, with the element of movement separated from the notions of life, in the films' narratives, and further how effectively La Mettrie's (1747/1996) view of humanity functions as an alternative to contest Descartes's dualism.

Chapter Four centres on puppet-as-puppet figures in stop-motion animation. Unlike those of Group CEL, the puppet-as puppet figures I classify in Group STM (Stop-motion) are not only three-dimensional representations of puppets and human/animal simulacra but also are materials-based real puppets of a form at the profilmic level, as seen in *The Bachelor Machines* (Dokushinsha No Kikai) (Tenshi Iwai, 1998, JPN; See Figure i-c). In the film diegesis, the three-dimensional puppet-as-puppet models are dealt with in contrast to the same materials-based three-dimensional models built to represent humans and (often anthropomorphic) animals. Extending the questions which I raise with Group CEL in Chapter Two and applying them to Group STM in Chapter Three, I bring into focus the material bodies of puppet models, as intersubjective, to which the animating human subject's body, usually unseen on screen, is connected and extended in the production of stop-motion animation. Here, one of my concerns is that as I will prove, such an intersubjective relationship between artist and artefact develops to the extent that the latter threatens the subjectivity of the former.

Proceeding with the concept of intersubjectivity, in Chapter Five I employ the philosophical framework that Bennett (2010) has developed which she terms vital materialism, possibly embracing post/non-Cartesian and East Asian views of

objects in relation to the concept of life, as an alternative to the binary opposition between human and non/subhuman, subject and object, animate and inanimate. As with the puppets moving on screen in *Jabberwocky* (Jan Švankmajer, 1971, CZ; See Figure i-d), the three-dimensional models of puppets which I classify in Group PMT (Parametric) feature their own materiality and objecthood in terms of the mode of movement. Building in the main on the vital-materialist concepts put forward by Bennett (2010), I will describe and analyse the non-anthropomorphic and non-anthropocentric ways in which those puppet-as-puppet figures move on screen. In this Chapter, I explore the ways in which moving on screen, the puppet-as-puppet figures do not present themselves as alive nor as lifeless from the Cartesian, anthropocentric, perspective, while the animating human subject's sense of mastery over objects and materials seems to be missing in production. This exploration is also to conceptualise the terms which instead of the grand term of life, inform us of something yet unknown about the specific cases of puppet-as-puppet figures seen in animation films.

Based on the analysis of Chapters Two to Five, in the Conclusion I summarise and evaluate the varying ways in which the puppet-as-puppet figures of each Group appear to move on screen. I also attempt to apply the central findings from the analysis of Group PMT for re-interpretation and re-evaluation of the rest of the Groups. This will serve to highlight my academic achievements in exploring the puppet-as-puppet figures and their modes of movement in animation film.

Chapter One

Criticising the "Life" Discourse and Contextualising the Puppet in Animation

In this Chapter, I explain what my thesis calls into question and aims at, what terms and concepts I work with in this thesis while reviewing the literature and scholarship relevant to them, and what methods I adopt to find answers and achieve the aims. First, I problematise the two conventional notions of animation studies. One is that (1) animation can bring something and even anything to life, and the other is that (2) movement has a synonymous relationship with life in animation. Then, I define the puppet-as-puppet figure and the mode of movement as my critical foci, by locating them in the theories and discourses of life and humanity, puppets and human simulacra, and movement and force. Finally, I discuss why I adopt the following methods, classification, iconology, neoformalist film analysis and film vector analysis, and how I revise and develop them in a way specific to animation.

1.1. Main Research Questions and Hypotheses

Problematising the use of the term of life in animation

As a category of visual art, animation provides a variety of aesthetic experiences to spectators. Their responses to such experiences tend to converge on a dramatic,

often pedantic, compliment to the movement which the art represents or presents on screen in projection. In this PhD thesis, I call into question animation's convention, claimed by two significant filmmakers, Sergei Eisenstein and Osamu Tezuka, among others, in which such a compliment exploits the overarching terms, life and also soul.

In his influential volume, *Eisenstein on Disney* (1988), the Russian film director and theorist Eisenstein observes, "The degree to which—not in a logically conscious aspect, but in a sensuously perceiving one—we too are subject every minute to this same phenomenon becomes evident from our perception of the 'living' drawings of none other than Disney" (1988: 54-55). In response to the impression of animated drawings as living on screen beyond his knowledge of their material and technical reality, the director continues to stress the effect of animation:

> We *know* that they are . . . drawings and not living beings.
>
> We *know* that they are . . . projections of drawings on a screen.
>
> We *know* that they are . . . 'miracles' and tricks of technology, that such beings don't really exist.
>
> But at the same time:
>
> We *sense* them as alive.
>
> We *sense* them as moving, as active.
>
> We *sense* them as existing and even thinking! (1988: 55)

For Eisenstein, animated drawings not only arouse the sensation of life in the

viewers. He goes so far as to state that they *are* brought to life:

> That which is known to be lifeless, a graphic drawing, is animated.
>
> Drawing as such—outside an object of representation!—is brought to life.
>
> (1988: 43)

Outlining six traits[1] from Disney's hand-drawn cel animation at another place in the volume, Eisenstein links animation furthermore with the concept of soul as well as life, when observing that Disney's drawings of animals are anthropomorphised. Elements of Eisenstein's theories are evident in the remarks which the Japanese animation filmmaker Tezuka made in a 1986 filmed interview:

> I think animation originates from animism. In a sense, animation is the art of imbuing something inanimate with life. Something not alive, the drawing, totally static, created by the human being using a pen, moves freely and unlimitedly, with voice and sound, and with colours, as if it were alive, and further, even something unexpected appears to move in animation. Drawing something, I feel superior as if I were the Creator. At the same time, something alive, such an interesting point is that I have brought it to life . . . The very attraction of animation is I feel really as if it were a living child of my own creating, even though on the two-dimensional plane. When it comes

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[1] The six traits observed by Eisenstein are as follows: "A. They are animated drawings; B. Stroke drawings; C. Humanized animals; D. Further animated (with humanlike souls); E. Absolutely synesthetic (audio-visually); F. Metamorphic, and again in two (both) senses—both as subject and as form" (1988: 41). In my reading, they also suggest a multiplicity of aspects which a viewer can perceive in animated figures, in particular, representing animals.

to manga, it is only a drawing because it is static. However, when it begins to

move in a three-dimensional sense and speaks to me, it looks really like a

life form existing in the world, and further, a performer and actor

entertaining audiences, set free from my hands. (2003; English translation

mine)

Eisenstein's and Tezuka's notion about animation and life is focused on two-

dimensional hand-drawn cel animation, but a similar account is also found in the

book, *Stop Motion: Craft Skills for Model Animation*, where the author Susannah

Shaw begins by introducing, "If you want to make great animation, you need to

know how to control a whole world: how to make a character, how to make that

character *live* and be happy or sad" (2004: 1; emphasis mine). This exemplifies that

the term of life is a discursive convention prevailing in animation.

Acknowledging that animation provides the viewers with a medium-specific

experience not commensurable with other art/media forms, I argue that the

material and technical conditions of animation which enable such an experience

are neglected in those discourses where animation is reduced to the terms, life or

soul. More importantly, my central argument which I will prove in this thesis is that

the life or soul with which animation is alleged to imbue a figure is an

unquestioned concept of the art form in which in reality, a plethora of figures are

also depicted as lifeless or soulless even when appearing to move on screen.

In animation studies, the relationship alleged between animation and the

problematic term, life, is theorised by Alan Cholodenko (2007), Thomas Lamarre

(2013) and other scholars. They have in common a tendency of seeking to theorise

that animation brings something or even anything to life. Such theorising has been criticised within disciplines related to media as well as animation, as seen in Darley (2007) and Alexander Zahlten (2013). Regarding the rhetorical convention of life as one of the perennial prejudices in animation studies, Darley points out that in Cholodenko's philosophical approach to animation, this art form "is no longer a complex object of study and understanding but becomes, rather, an alibi for so-called theorizing" (2007: 71).

My project has nothing to do with the kind of theorising which Darley criticises. I do not focus on a general discussion of animation's capacity of "bringing something to life". Rather, I ask a specific and contesting question: why and how are some figures depicted and perceived as *lacking* a quality called life or soul even if appearing to move on screen in projection, while the others are depicted and perceived as suggesting it? This question is central to my research aim to address the multiplicity of animation practices which Darley (2007: 71) suggests is disregarded by Cholodenko and other animation theorists.[2] My approach is to place animation and find its meanings within socio-historical and ideological contexts in relation to the material and technical conditions of the art form. In this sense, I also examine discourses—ranging from physics and philosophy to religion and religious studies—relevant to my research questions, in which the concept of life is associated with movement, a term indicated in Eisenstein's and Tezuka's above-cited account of animation.

As a critical focus in this interdisciplinary exploration, and also as the

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[2] Darley notes that such theorists are involved in "a deliberate collapsing and liquification of distinct categories and senses of the idea of animation" (2007: 71).

substantial momentum for my PhD thesis, the puppet will serve to epitomise the different ways in which a specific figure is *not* depicted or manipulated in specific techniques and types of animation to provide the viewer with the impression of life or soul. In an accurate sense, I employ the term, the puppet-as-puppet figure, to refer to a figure which is depicted or presented as a puppet per se in human or animal form, yet different to human or animal figures, in an animated world seen on screen.

Puppets as a critical focus of animation-bringing-something-to-life

Why the puppet? It is because the puppet-as-puppet figure problematises the impression of hand-drawn or constructed material figures looking and/or moving like a human or an animal, yet remaining as a "lifeless" object in projection. The term of puppet raises a further question: how can the hand-drawn figure of a puppet with a human appearance—for example, the wooden puppet in *Pinocchio* (See Figure i-b in the Introduction)—be discerned from the hand-drawn figure of a human being on screen—Geppetto in the same film—when both figures are based on the same material condition of drawn lines and colours on cel? The same kind of question can be raised with the puppet-as-puppet figure in stop-motion animation; for example, it is almost impossible for the viewer to identify which is the figure of a human girl and which is the figure of an android—a form of puppet in my definition of this term given later in detail—in *The Batchelor Machines* (See Figure i-c). In stop-motion animation, both types of figures are constructs of physical materials and parts like wood, metal, cloth, armatures, nuts and bolts.

In this sense, the puppet-as-puppet figure in human or animal form does not only reproduce the audience's perceptual convention of puppets. It can also contest and complicate conventional definitions of puppets like: "a model of a person or animal that can be moved either by strings or by a hand inside it; a person under someone else's control" (*Oxford American English Dictionary and Thesaurus* 2009). The first definition can help bring into focus the material and technical aspect in which a puppet-as-puppet figure is depicted or manipulated to move on screen. When the hand-drawn figure of the wooden marionette appears to be moved by Geppetto using strings in *Pinocchio* (See Figure i-b), all its movements are a result of the frame-by-frame photography and screen projection; there are no physical but drawn strings on screen. The second can draw attention to human agency in the profilmic processes of animation. Not only the puppet-as-puppet figure but also the human or animal figure on screen is under the control of the human agent in front of the camera. Another interesting point about the second definition is that in the real world, even a human being can be described or perceived as a puppet when being under an external power.

These conventional definitions should be augmented by religious and philosophical accounts of the puppet which serve in a rigorous way to connect the object to the problematic term of life in animation studies. Among an expanded scholarship on the puppet is Nelson's *The Secret Life of Puppets* (2001) in which she makes inquiries into the cultural implications of puppets and human simulacra with which the creation of life is envisaged and narrativised in science as well as philosophy and religion. In her historical coverage ranging from Ancient Greek and Roman sculptures of gods to modern cultural products like comics, video games,

and live-action and animation films, including the puppet animation of the Quay Brothers and Jan Švankmajer, Nelson places emphasis on "[looking] at discourses about puppets and other human simulacra rather than puppets in performance" (2001: 60). In an attempt to illuminate the religious and philosophical implications of the puppet-as-puppet figure in animation film, I work with Nelson's discussion of puppet-related discourses, which include Neoplatonism, Gnosticism and Christianity, that pertain to my main question of how a puppet-as-puppet figure in human or animal form is (or is not) made to appear different from a human or animal figure in an animation film. Of great relevance to my thesis is this question she poses: "[I]s the great mystery of instilling life and motion an ability reserved for the gods, Hellenistic priests and philosophers wanted to know, or can humans replicate the process?" (Nelson 2001: 35). As an answer to the question, Nelson puts forward the "attempt of man to know God by the art He uses in order to create men" (2001: 35).[3] I take this phrase as indicative that puppets as puppets are considered as inanimate, or *not-yet-animated*, objects by animators in the real world, as well as by human (or anthropomorphic animal) figures in the diegetic worlds of animated films.

Further, I take into account the religio-philosophical views on puppets in East Asia, because they help understand different cultural and religio-philosophical implications of the objects. According to a Shinto priest and writer Motohisa Yamakage (2006), for example, *hitogata*, a kind of puppet in human form—*hito* means human and *gata* means form in Japanese—serves as an artefact called

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[3] This phrase is given by Nelson as Moshe Idel's paraphrase of "the *imitatio* dei by *generatio animae*", for which she refers to Idel (1988: 69-70) Hermeticism and Judaism. In: Merkel, Ingrid and Idel, Allen Moshe (eds) *Hermeticism and the Renaissance: Intellectual History and the Occult in Early Modern Europe*. Washington: Folger Shakespeare Library.

katashiro to mediate between human beings and deities in Shintoist rituals. Yamakage claims, "There is a mysterious belief that if our sincerity and prayer is contained in a *katashiro*, then it can be transformed into a great offering in the world of Kami" (2006: 74). In a Japanese religious tradition called Shintoism, the puppet works as an object for deities, souls and spirits to directly dwell in or possess (NHK 2012). The Shintoist view, too, takes puppets as different from human beings which they resemble, but does not suggest human beings' attempt to bring it to life by a "demiurgic" art.

From this observation of the views of puppets, I establish three hypotheses. In an animation film, first, additional devices like drawn strings in *Pinocchio* are deployed to impart the impression of an inanimate object to a puppet-as-puppet figure with a human or animal appearance in contrast to a human or animal figure. Second, whether intended to look and/or move like a human being or as a puppet in the production phase, the impression of an animated figure is not only determined by its appearance but also by the way in which its movement is created. Specifically, I do not focus on movement itself, but rather the "mode" of movement which the animator chooses and creates in his or her intention with successive drawings of a figure or successive modifications to a stop-motion model. The third hypothesis is that the mode of movement embodies the way in which the animator envisions and executes power over the figure or the model as a material for his or her creative aims, and also the relationship which the human agent seeks to form with it.

Subproblems and questions with the puppet-as-puppet figure

My examination of the puppet-as-puppet figure in animation film also aims to reveal and interpret the ways in which such demiurgic attempts with puppets and their related forms, like automata and robots, are not only conducted but also contested. In this thesis, another critical way in which the puppet-as-puppet figure functions is to address the issue of its lesser rank, often given to it as subhuman or nonhuman in contrast to the human or animal figure in the film narrative. Observing the scene of the Blue Fairy bringing the wooden puppet to life in *Pinocchio*, Scott Bukatman raises a similar issue by asking, "What is it that makes Pinocchio *a real boy*? The easiest answer, for both book and film, is *morality*— morality defines the human" (2012: Kindle 3352). Expanding on Bukatman's question, I develop a further hypothesis that discourses of humanness serve as parameters with which the manner of a puppet-as-puppet figure's behaviour is created in production by the animators and perceived in projection by the viewers. What I focus on among philosophical accounts of humanness are *A Discourse on the Method*, the 1637 treatise by Descartes, and *Machine Man*, the 1747 treatise by La Mettrie; both define human beings in contrast or comparison to animals and automata with a human or animal appearance. Drawing on these two materialist thinkers, I assess their resultant influences on the conception of life and/or soul by analysing and interpreting puppet-as-puppet figures (centring in the main on Groups INT, CEL and STM) in animation.

In doing so, I criticise a discursive attempt to generalise or essentialise the relationship between animation and animism (Eisenstein 1988; Tezuka 2003; Cholodenko: 2007), and this criticism expands beyond the category of cel

animation to include the category of stop-motion animation. Instead, my approach with the concept of the puppet in animation intends to clarify the way in which a specific religio-philosophical view of humanity, as well as of life and soul, works or does not work in each case of puppet-as-puppet figures in contrast to that of human or anthropomorphic animal figures in the world of animation film; animism might work in one case but does not in another. This exploration leads to the examination of animism and other non-Cartesian religio-philosophical views of life and soul which I expect will help elucidate the meanings of the puppet-as-puppet figures in animation. These views under examination range from Homer and his contemporaries' Greek beliefs (Bremmer 1993), to Neoplatonism (Shaw 1995; Wallis 1995; Nelson 2001), Western spiritual traditions (During 2002), Japanese Shintoism (Yamakage 2006; Hosaka 2006), and the new animism and other non-Western religious traditions (Harvey 2006).

In the same intention to investigate factors influential on the sense of humanness and sub/nonhumanness, I also seek to tackle the concept of movement as the supposed correlative of life and soul, although primarily I focus on the mode of movement and behaviour demonstrated by on-screen figures and characters in animation. What I am concerned with are Cholodenko's (2007) and Lamarre's (2013) attempts, which I detail and challenge in the Literature Review, to theorise movement or motion as equivalent to life in a philosophical approach beyond animation or media studies. My intention is not to claim that movement is simply a physical term, but rather has different cultural implications, even in the hard science of physics, in particular, before and after Isaac Newton's mechanics (Crowe 2007). In this sense, I examine a scientific mysticism, which Max Jammer (1999)

considers as forgotten in the process of the systematisation of physics' central terms like motion and force. This examination aims at making clear that in animation studies, the question of the triad, motion-life-soul, has been dealt with in an insufficient or inadvertent way, which results in ignoring the specific practices and the material reality of animation. My PhD research seeks to connect these interdisciplinary findings to the way in which puppet-as-puppet figures are *not* depicted to appear "alive" or to "come to life" on screen, in relation to the material and technical conditions of the four groups of films: (1) hybrid films of live action and hand-drawn animation, (2) cel animation films, stop-motion animation with (3) anthropomorphic puppet-as-puppet figures and (4) non-anthropomorphic puppet-as-puppet figures. My corpus of the films and their classification into four groups are explained in the Methodology section.

1.2. Literature Review

Focusing on the puppet-as-puppet figure on screen, in this section I review animation studies' scholarship relevant to the concept of animation-bringing-something (or even anything)-to-life which I problematise in this thesis. In doing so, I introduce three terms: belief system, value system and power relationship. In particular, the third term will function as a key throughout all the four Groups: INT, CEL, STM and PMT. Another key term for them is sub/nonhumanness which in my hypothesis is demonstrated by a specific mode of movement on screen and leads to the suggestion that the figure is not intended to depict a real life but an inanimate

object in the film diegesis. In order to prove this hypothesis, I build on Grodal's

(1997) account of the sub/nonhuman figure in film, further, developing it towards

animation film because the film scholar's focus is on live-action film. Groups CEL

and STM share the issue of real and fake and other binary oppositions. The

framework for Groups STM and PMT involves phenomenological concepts of the

body and extension, and for Group PMT, I extend them, with the term of force

brought into focus, to pre/post-Cartesian and East Asian views of matter, materials,

objects and things as *not-necessarily-inanimate*. By and large, I set the scope of the

theoretical frameworks to converge towards Group PMT (See Table 1.1).

Group INT	Group CEL	Group STM	Group PMT
Power relationship			
	Binary opposition between real and fake		
		The body and extension	
			Objects and forces

Table 1.1 Scope of my theoretical frameworks

Revisiting animation studies' scholarship of life and movement

In his chapter, "Coming to Life: Cartoon Animals and Natural Philosophy", a recent

contribution to scholarship on the two concepts of life and movement, Lamarre

states, "The basic definitions of animation include both bringing to life and making

something move", going on to suggest, "Thus moving and coming to life appear

synonymous in animation" (2013: 117). On the basis of this premise, he addresses

and seeks to resolve the issue of movement-as-life as a general experience for the viewer of animation centring on the technique of cel animation. The issue of movement-as-life is also the main subject of Cholodenko's chapter, "Speculation on the Animatic Automaton", in which like Lamarre, the author proposes that "life and motion are always coimplicated; and they are coimplicated in the very double definition of animation" (2007: 498). Engaging with the illusion of life rather than that of movement, however, Cholodenko attempts to reduce the question of life to two terms, animistic and mechanistic, which he describes as opposite (p.489). In these discussions, animation is not seen as a material-based and technically-processed medium of filmmaking but rather, is replaced with ever-expanding derivatives of animation as a notion. Acknowledging a close relationship between the impression of life and that of movement in animation, in my thesis I contest the very hyphenated framework of movement-as-life in which the two terms are not necessarily synonymous. Unlike Cholodenko, I focus on movement and its mode, rather than the illusion of life, in animation as a form of moving image and filmmaking which should be first examined in technical and artistic aspects.

In this sense, I agree with Lamarre's approach, which is to investigate the movement and technical aspects of cel-based, hand-drawn character animation, importantly resisting the concept of movement as an illusion in animation. In terms of perception as experienced by the viewer, Lamarre states, "Movement in animation is not a matter of illusion or representation . . . It affords a real experience of movement, of actual movement" (2013: 127). As an essential stance of my research, this anti-dualistic view of perceived movement is supported by psychological findings. For example, in terms of the visual receptor of movement,

the film scholar Jacques Aumont notes, "After many experiments, it seems that complex (or proximate) stimuli in apparent movement are often dealt with via the same processes as real movement" (1997: 31). In his emphasis of perceived movement, Lamarre goes so far as to argue that "animation, as an art of movement, promises to bring anything to life" (2013: 132), thereby coming close to reiterating the conventional discourse of animation's life-creating capacity. Darley asserts, "Animation doesn't create life in any real or normal sense of the word", while admitting, "Even figuratively speaking, it doesn't do so, or at least no more than a host of other media such as painting, theatre, cinema and literature" (2007: 72).

Despite his contention of animation creating life, Darley suggests one possible approach to the controversial issue, which is to take the term, life, as figurative. At the same time, I challenge Darley's jumbling comparison of animation with other art forms in terms of creation of life as a figurative concept, because the former involves different techniques and materials than the latter and vice versa. In animation, furthermore, life as a figurative concept needs to be defined in a way corresponding to the technical and stylistic aspects of each different type of animation, e.g. hand-drawn animation and stop-motion animation. Providing in passing a hint of this issue, Lamarre comments that "when plants and brooms become mobile and animated, they tend to sprout limbs and sport faces, which makes for a sense of animal vitality and mobility" (2013: 135). This suggests that a figurative concept of life in animation tends to be demonstrated by figures mimicking animals or humans with respect to movement as well as appearance on screen. As Lamarre refers to "modes of anthropomorphism" (2013: 122), in this

Figure 1.1 Automata in *Pinocchio*

thesis I work with the two terms, anthropomorphic and theriomorphic,[4] to

describe the mode of movement demonstrated by the puppet-as-puppet figure. A

third qualifier that will function in contrast to them is one of my own coinage:

"mechanicomorphic" (See the two figures of automata, respectively in human and

animal form, yet suggesting mechanical-ness in term of look and movement in

Figure 1.1), which relates to mimicking a mechanical appearance and/or

movement.[5]

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[4] Not using the very term, Lamarre observes a theriomorphic mode, too, when describing the scenes of "dogs acting like human soldiers (or maybe it is human soldiers taking on features of dogs), the sun sprouting arms and other humanoid features, and a bed with humanoid face *galloping on four legs*" (2013: 122; emphasis mine) in *Private Norakuro* (Norakuro nitōhei).

[5] Conventional mechanicomorphic traits in live-action film are suggested in Grodal's (1997) and Schelde's (1993) conceptualisation of machine, which I introduce later in the Literature Review.

I also distinguish coming-to-life from life in the sense that the former relates to the transition through which a figure on screen changes from a lifeless to life-implying status at a specific moment in a film. In addition, it should be noted that the phrase of come-to-life has another signification both in animation and live-action film. Damian Sutton indicates, "Cinema relies on the photography that comes to life, of which the still and projected image are both constituents" (2009: 122-123). In this account, Sutton's concept of come-to-life in film pertains to a transitional moment in which the film strip is engaged and starts to move through a film projector.[6]

I term this kind of come-to-life as "kinematic transition", which should be discerned from the transition of come-to-life that Lamarre takes as synonymous with moving in animation. His concern is discrete figures depicted on cel, any of which in his view are expected to undergo the event of come-to-life on the start of projection or at a subsequent moment, which I term "animatic transition". Lamarre's idea in the same chapter that "anything can come to life in animation"

Figure 1.2 Primary and secondary animatic transitions in *Pinocchio*

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[6] A similar use of the phrase is found in Pathé's 1902 catalogue which advertises, "When the kinematograph appeared, its only goal was . . . to bring photography to life" (Gaudreault 2011: 96).

(2013: 135) is likely to mask much of the continuum on which different animatic transitions are found with hand-drawn figures, built models and other materials (See Pinocchio going under two different types of animatic transition in Figure 1.2). In this thesis, I aim to shed light on the varying ways in which those discrete puppet-as-puppet figures on screen are (or are not) made to undergo animatic transition by the artist's agency; they are not necessarily made to appear to, nor are perceived to "come to life" in projection, even if undergoing animatic transition, in the cases I will discuss in the following Chapters. This discussion will extend to address the question of whether and how animatic transition gives the puppet-as-puppet figures the same status as human or (anthropomorphic) animal characters in a film narrative.

Movement to performance, life to liveness

As outlined above, I will examine Groups INT to PMT in terms of perceived movement as a physical and visible parameter which enables textual description. In particular for Groups INT, CEL and STM, I draw on Crafton's (2013) conceptualisation of the hand-drawn character's body performance on screen, in which the animated character functions as a live performer on and often across screen. This helps find a larger range of vocabulary, instead of reiterating the terms like life or soul, to describe a specific movement demonstrated by a figure in animation film. As Lamarre does in his 2013 essay, Crafton challenges the dualist opposition between the two-dimensional hand-drawn character as illusory and the human actor as real; he claims that "toons are not living people, yet they exhibit

agency and liveness just as human movie actors do" (2013: 6). What is in contrast to Lamarre is that Crafton replaces movement and life, respectively, with the animated character's body "performance" and the sense of "liveness" experienced by the audience in their involvement. In this thesis, I work with performance as a concept which brings to light the manner in which the animated figure moves specifically before and/or after animatic transition.

Liveness in animation draws to attention the way of enacting and dramatising a hand-drawn figure or a stop-motion model as a performer on screen to involve the audience. What Crafton (2013: 72-73) refers to as liveness is the effect of the viewer's physical, corporeal and immediate immersion in a constructed world. As he notes using the term of "co-animator" (2013: 75), this immersion depends on a belief system in which animators and viewers are ready to take part. Ranging from the religious or philosophical tradition to the governing ideology to the code of film genre, belief systems pertain to the way in which puppets and other human/animal simulacra are perceived by the viewer both in the real world and animated worlds. This is why I replace the term of life with liveness in this thesis. The latter calls to attention the perceiving viewer's role and the background of a belief system in the sensation aroused by an animated figure's body performance.

Observing the animated cartoon character acting in what he calls the "Tooniverse", the zone in which a belief system works well, Crafton (2013: 22-23) indicates how the two acting modes, figurative and embodied, demonstrate the notion of humanness as a belief system, in an attempt to discern between these two modes by addressing the issue of humanisation. Citing an anonymous Disney

supervisor's comment in relation to the embodied mode that "animal and inanimate objects had to be humanized, not just physically but mentally as well" (2013: 19), Crafton advances that the animated character needs to perform emotion and intellect in order to motivate the viewer's empathy with its action (p.44). In contrast, noting that "Disney . . . belittled what I am calling the figurative approach as shallow or primitive (p.22), Crafton points out that "[r]ather than providing insight into a character's psyche or suggesting a moral, the narratives of films adhering to the figurative approach make their points through repetition and symbolic visuals" (p.32). In other words, the animation scholar suggests that an animated character's repetitive body movement is related to the lack of mind and morality. This implies that modes of body performance in animation are judged and ranked in a specific value system, in which Crafton is not as interested as in the system of belief. In this sense, I suggest that humanness is not only a belief system but also a value system.

I believe that puppet-as-puppet figures can tackle belief systems, in particular, Cartesian and anthropocentric, operating in the Tooniverse. As suggested in the use of the derogatory words, shallow and primitive, the value system addresses the issue of hierarchy—human and sub/nonhuman, in terms of the mode of body performance. For this issue, I draw on Grodal's (1997) discussion on the nonhuman behaviour in films centring on live action. In his *Moving Pictures: A New Theory of Film, Genres, Feelings, and Cognition*, Grodal posits the relationship between humanness and the mode of behaviour with respect to the viewer's perception situated differently in film genres. Examining the question of what mode of movement stimulates the viewer to perceive a fictional live-action film

character as nonhuman, he remarks, "Normally, schematic behaviour and schematic communication are sure signs of non-humanness: clowns walk with rigid steps and speak in a ritualized manner" (1998: 108).[7] Among such nonhuman film characters is the robot, which Grodal finds to be "controlled by simple models of behaviour" (1997: 108). In live-action films produced before digitally created CGI characters are put to use, of course, nonhuman film characters like robots are performed by human actors, who obviously differ from hand-drawn animated figures or stop-motion models.

In order that findings of the modes of body performance or behaviour work across different media forms, I adopt the concept of re-performance which Crafton (2013: 33) introduces to his discussion of figurative performance. For the concept, the animation scholar draws on performance theorist Richard Schechner's definition of performances as behaviour restored, rearranged and reconstructed in circulation independently crossing between the real world and constructed worlds. Restored modes of behaviour, according to Schechner, "have a life of their own" (cited in Crafton 2013: 33).[8]

This notion of re-performance is also found in Heather Crow's essay "Gesturing towards Olympia". Crow suggests, "Even though a turn of the head or the slow raising of a shoulder can be isolated and attributed to an individual subject, it cannot be owned by the subject, whose corporeal articulations are themselves subject to the systems of representation which render those articulations intelligible, to the bodies which make those movements possible"

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[7] This schematic mode of behaviour and communication is located quite close to the figurative mode of body performance conceptualised by Crafton (2013).

[8] Crafton cites Schechner (1987: 52) *Between Theater and Anthropology*. 3rd ed. Philadelphia: University of Pennsylvania Press.

(2006: 49). In her view, corporeal articulations, or modes of body movement, are subject to and circulated in such systems of representation as theatre, film, animation and puppetry through different forms of bodies—human actors, hand-drawn figures and stop-motion models.[9]

In the following sections, I review and introduce the accounts, the terms and the concepts in the preceding scholarship that I work with, considering the subjects and the aspects that I will bring into focus in each of the four Groups.

Group INT: Creator and created

Group INT is an epitome of the value system of humanness bound with the issue of power, in which a live human actor animates a hand-drawn figure of a human or an animal on screen in the double meaning—technical and metaphorical—of the verb. Discussing the way in which Disney animators depict Minnie Mouse in the hand-drawn animated short, *Blue Rhythm* (Burt Gillett, 1931, US), Crafton observes, "The animator-animated power distribution evokes that of master and slave" (2013: 123), while suggesting that animated figures are not completely under their animators' control (p.6). This means that the relationship between the live-action animator and the hand-drawn figure shown in Group INT can imply that between

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[9] In circulation across different nations and communities, culturally specific modes of body movement are also reperformed, inflected and reproduced in the value system of humanness, the system in which "others" in Asia and Africa are ranked subhuman from the perspective of Orientalism. In his seminal book, *Orientalism*, Edward Said indicates that Western people are self-qualified as "a true human being . . . and anthropocentrism allied with Eurocentrism" (1995: 108). Connecting this postcolonial issue of power with animation, Kim (2013) indicates that in the US animated cartoon series *Private Snafu* (1943-1945) produced as propaganda during World War II, repetitive body movements found in Japanese society are exploited to impose subhumanness on the human characters representing Japanese soldiers and people.

master and slave, possibly in relation to socio-political concepts like race, gender or class. I examine how such a power relationship is demonstrated in Group INT and will apply the findings to the rest of the Groups.

Of much relevance to my central concept of the puppet is Bukatman (2012) who focuses on the power relationship between human-subject and machine-object on screen. Taking cartoon or animated characters and even human actors on screen as what he calls the "disobedient machine" (2012: Kindle 342), Bukatman provides conceptual hints of the mode of behaviour which they show in fictional worlds of comics, and animation and live-action films. Disobedience or autonomy is a dominant feature in terms of which Bukatman accounts for the relationship between animated and animator, created and creator, as indicated by Koko the Clown and Max Fleischer in *Out of the Inkwell: The Tantalizing Fly* (See Figure i-a). However, Bukatman's appreciation of disobedience and autonomy tends to ignore such hand-drawn creations' mechanical, sub/nonhuman aspect, which I illuminate in this thesis, in contrast to their creators assuming the agency of an animator, not least because as with Lamarre (2013), he is quite engaged with how much quality of "living" they suggest on screen (2012: Kindle 330). With this in mind, I scrutinise the enslaved, sub/nonhuman aspect of the on-screen animated creations, as a puppet-as-puppet figure, in relation to the on-screen live-action creators' demiurgic performance with which the process of animatic transition takes place in film.

The concept of machine, too, is as central as that of the puppet throughout my thesis in a couple of senses. In a narrow sense, many of the puppet-as-puppet figures which I examine in this thesis represent mechanical puppets like robots,

automata, wind-up toys and marionettes. In a wide sense, the concept of machine serves to challenge the value system of humanness which is a crucial issue for the puppet-as-puppet figures in animation films. Machine has more implications than Bukatman (2012: Kindle 977) suggests by taking it as a metaphor of the labouring human body in industry since the mid-nineteenth century. "The comparison of the universe to a great machine", Amos Funkenstein points out, "is an old metaphor that referred to the regular circular motion of the heavens", continuing, "Complicated astronomical clocks were designed and built that visualized, represented, and facilitated the computation of celestial orbits" (1989: 317). Machine did not only imply the operation of the universe but also that of the human body. In the seventeenth century when the fusion between theology and physics culminated in the West (Funkenstein 1989: 72), automata, clockwork-embedded puppets or sculptures, appeared as a conceptual model "to understand the actions of living bodies" (Chene 2001: 14).

The seventeenth-century discussions of the machine address the relationship between God the Creator and the universe as His creation. Significant among them are the opposing positions of Descartes and Newton on God's mode of exercising power. According to Funkenstein, Descartes assumes, "God imparted a constant quantity of motion to the universe and then left it to its own devices", going on to conclude, "God is not even needed; all we need is the quantity of motion" (Funkenstein 1989: 74). This suggests that the world-as-machine obtains autonomy once created and put in order and the demiurgic power is not engaged in it any more. Unlike Descartes, Newton argues, focusing on the issue of acceleration as an external force in change, that God keeps engaged in the motion

of the world because "[a]ll the bodies in space would collapse into one body, unless God held them apart: since holding them apart would have to be in proportion to the attractive force, this would presuppose an additional law of repulsion" (Funkenstein 1989: 95). In this thesis, I term Descartes' view of the Creator's power as the mode of "retreat" and Newton's as the mode of "intervention", which I appropriate to primarily the animator-as-creator's performance interacting on screen with the animated character-as-creation in Group INT. My finding from this discussion of power relations in Group INT will underlie my examination of the rest of the four Groups.

My investigation of power relations goes on to bring into focus the materiality of the puppet-as-puppet figures. This is an attempt to challenge the discourse, quite prevalent yet problematic, of the animator's supposed omnipotence, as Eisenstein argues:

> What magic of reconstructing the world according to one's fantasy and will! A fictitious world. A world of lines and colours which subjugates and alters itself to your command. You tell a mountain: move, and it moves. You tell an octopus: be an elephant, and the octopus becomes an elephant. You tell the sun: 'Stop!'—and it stops. (1988: 3)

This view is criticised by Darley in a proper way. Observing that "there has been a tendency . . . to laud it as a kind of super medium limited only by the imaginations of those who practice it", the media scholar states, "All media are limited (and limiting): they enable certain things and constrain others" (Darley 2007: 64), in

contrast to Eisenstein's optimistic view of hand-drawn animation, well known for his use of the term, plasmatic (1988: 70).[10]

With much emphasis on the term, Eisenstein ignores that both the drawing-based technique and the human agent are limited and remediated, for example, by pens, ink, paints, paper, celluloid sheets and other materials. Indicative in this sense is Richard Fly's (1976) account of the artist's changing relationship with materials in art history. Fly comments, "Even Michelangelo . . . cannot sustain godlike supremacy over his material, and in several provocative works he appears to acknowledge that the invincibility of inert matter can almost neutralize even his creative powers" (1976: 29). In this account, materials are supposed to act as a kind of agent in the creation of an artwork. By extension, I work with this view of Darley's and Fly's in analysis of the material aspect of Group INT and of the relevant cases of the other three Groups. In addition, Fly suggests a controversial view of the resisting material as "something *demonic* and negating in [its] ability to distort, frustrate, and debilitate the artist's effort at creation" (1976: 30; emphasis mine). This claim will be identified in my analysis of the first three Groups in which I classify the puppet-as-puppet figures dealt with in an anthropocentric belief system.

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[10] In his seminal essay on Disney, Eisenstein (1988: 54) also appropriates the Latin word, *anima*, in order to appreciate an aesthetic capacity of hand-drawn animation. For him, the capacity is imagined as demiurgic omnipotence supposedly given to the human agent through the method of hand-drawn animation. Such artists and theorists of animation have, Darley notes, "deliberately confound[ed] the techniques involved in producing moving images in a certain way with . . . quasi-theological speculation" (2007: 71).

Group CEL: Puppets between real and fake

What I am particularly concerned with about the puppet-as-puppet figures in Group CEL is that they are likely to raise the binary opposition between *real* and *fake*, as well as master and slave, in contrast to the figures representing humans or animals, because both are constructed through artists' drawings in cel animation.[11] An emblematic case is Pinocchio that I analyse with the Disney film of the same name in Chapter Three. Despite their human or animal appearances, the hand-drawn figures of puppets as puppets are depicted and narrativised as artefacts which are made of natural or processed materials, and are frequently owned by the hand-drawn figures of humans or anthropomorphic animals in film.

In addition to Bukatman and Grodal who I referred to as pertaining to the issue of machine above, I work with Schelde's (1993) study of machine figures in film. Concerned with the issues of power and labour engaged in the notion of machine as is Bukatman, Schelde delves into on-screen machine figures, going so far as to criticise the Cartesian definition of humanity. Centring on live-action films for the most part, Schelde (1993: 220) puts forward two different types of on-screen machine figures, "docile" and "evil", in relation to the characters of human masters. Obviously, such figures in live action should be distinguished in terms of media specificity from those in cel animation. Nonetheless Schelde's interpretation and typology of machine characters in live action are useful when I develop a typology to help analyse the puppet-as-puppet figures in terms of the mode of body performance, in particular involving human interests. On the one hand, Schelde

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[11] The same can be said with Group STM (of anthropomorphic stop-motion animations), the detail of which I will give below in this section of Literature Review.

defines docile as "not given to protesting, asking questions or other disruptive behavior that slows down the work process" (1993: 151), and on the other, describes evil as "faceless, unindividuated, totally homogenized" and as something "which we have no emotional or intellectual access to" (p.158). Building on Schelde as well as Bukatman, I develop a typology in terms of the way in which the puppet-as-puppet figures become involved with the figures of humans (or anthropomorphic animals) who invent, rule or own in animation films allocated to Group CEL.

Noteworthy is that when discussing on-screen robot figures moving and performing as much as human actors in live-action science-fiction films, Schelde does not engage with the issue of life, and further of coming-to-life. Instead, he focuses on soul as a key concept of humanness, asserting that "the soul is the locus of individuality, of self . . . Soul is *free will*" (1993: 20). These ethical and philosophical qualities resonate with Bukatman (2012: Kindle 701) who places emphasis on autonomy as a behavioural quality which should be distinguished from the traits of the movement that automata show up in the real world.

In order to explore the question of real and fake which the puppet-as-puppet figures raise in this Group CEL, I connect it with Descartes' (1637/2006) account of the automaton with a human or animal appearance. The philosopher states that "if any such machines resembled us in body and imitated our actions insofar as this was practically possible, we should still have two very certain means of recognizing that they were not, for all that, real human beings" (1637/2006: 46); one is language ability and the other behavioural flexibility (pp.46-47). In my reading, the two means are reduced to the automaton's lack of reason in his

description of the rational soul as proper to the human being (p.47). What is of great significance in Descartes is his contradiction of the concept of movement-as-life which as reviewed above, Cholodenko (2007) and Lamarre (2013) seek to theorise.

In contrast to these two scholars, Descartes equates animal lives with machines, and their natural movements with mechanical movements, different and inferior to human beings and their reason-ruled movements, when he claims that "natural movements . . . can be imitated by machines as well as animals" (1637/2006: 47). Aware that the automaton referred to by Descartes is not a hand-drawn figure in cel animation but a physical object located and moving in three-dimensional space, I aim to reveal that the Cartesian anthropocentric view still works with hand-drawn figures of automata, robots and other human (and anthropomorphic animal) simulacra in Group CEL. For this aim, I scrutinise, on one hand, the way in which using the technique of cel animation, animators depict those machine, or puppet-as-puppet, figures as not having reason, being irrational and soulless, and, on the other, the way in which some of the figures seemingly resists such a view in animated worlds.

My investigation of this latter way builds on La Mettrie's treatise, *Machine Man* (1747/1996), in which extending Descartes' view of animal-as-machine, the radical materialist philosopher goes so far as to regard even the rational soul as resulting from animal movement and thereby the human being as an automaton. La Mettrie claims that "the soul is only a principle of motion or a tangible material part of the brain that we can, without fear of error, consider as a mainspring of the whole machine" (1747/1996: 31). Contesting Descartes' anthropocentric concept

of animal-as-machine, I work with La Mettrie's view of man-as-machine to shed light on the meanings of the puppet-as-puppet figures which I argue have been neglected in animation studies.

Group STM: Connected and extended to the puppet

In Group STM, the stop-motion models of puppets as puppets have a number of material and technical traits in common with those of humans or (anthropomorphic) animals. In particular, both are located in three-dimensional space, like that which the audience inhabits. Further, their bodies are based on the same material and technical principles of constitution. In other words, all the models for stop-motion animation are made of tangible materials, on a range from solid to malleable.

This means that a crucial issue arises in this Group, which is that the models of humans or animals do not differ in profilmic materiality from those of puppets per se, even while the film diegesis is still intended to raise the issue of the binary opposition—real and fake, human and sub/nonhuman, and possibly master and slave. To put it another way, it is not the latter but the former that is likely to come to a crisis, exposing to the viewer their fake-ness, sub/nonhumanness and possibly enslaved-ness in projection. With this materiality in mind, and stretching the terms and discussions which I developed above for Group CEL to Group STM, I reconsider the Tooniverse to define its three-dimensional counterpart, I will call the "Puppetopos" in this thesis, as a zone where stop-motion models work as live performers in the convention of a belief system shared by the animators and the

spectators.

The Tooniverse put forward by Crafton (2013) involves the animator, the spectator, the place and the belief system. As suggested by "toon", part of the term, it revolves around classical hand-drawn animated cartoons, most of which were produced in the conventions of Hollywood with narrative or comic motivation. As I postulated two categories of spectatorship in two-dimensional and three-dimensional animations in the Introduction, the conventionality of stop-motion animation films has a different background from that of hand-drawn animation films easy to find in the Tooniverse. In terms of the active involvement—as he calls "co-animation"—of the spectators in the Tooniverse, Crafton (2013) goes so far as to cover Švankmajer's stop-motion animation, but this is an insufficient approach which is read as his not being concerned with phenomenological questions specific to each category of animation (Cook 2013: 307).

A stop-motion model's profilmic materiality of three-dimensionality entails tangibility and co-sited-ness, in terms of which the animator can touch and interact with its nonhuman body. These media-specific capacities are often reported, for instance, by Peter Lord, to embody a physical, personal, irreplaceable relationship between the animator and the model. The stop-motion animator and co-founder of Aardman Animations writes:

> Model animation has never been a crowded profession. It's always been a
> specialist area, very exclusive and slightly eccentric, populated by a
> handful of pioneers and geniuses . . . It's a form of film-making, which
> refuses to be mass-produced. In the early twentieth century 'classic'

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animation—the drawn kind—became big business precisely because

people worked out how to industrialize the process, but model animation

has always been a craft-based activity that won't be cloned. (Lord 2008: 9)

Here, Lord indicates that stop-motion animation differs from hand-drawn

animation in terms of the communities of the artists and the processes of

production—what is peculiar about his indication is the concept of a craft-based

activity, which I construe as emphasis on the embodied-ness and irreproducibility

of the relationship between animator and animated. Barry J. C. Purves, who did a

stint at Aardman studios, also notes:

The unavoidable truth about any stop-motion puppet or animated object is

that the animator is going to have to touch it for every single frame. This is

the most appealing aspect of the process. (2014: Kindle 1238).

Unlike the animator who replaces one drawing with the other by rendering

on a new sheet for every single frame in cel animation, it is noteworthy that the

stop-motion animator keeps a constant relationship with one and the same model

in a tactile way, while the former touching and being touched by the latter.

Maintaining such a relationship is seen as influential on the animator's

achievement of a puppet's resultant performance on screen, as Purves points out,

"[A]ssuming you are the only animator touching the puppet, this leads to strong

continuity in the performance" (2014: Kindle 389). In terms of animation

spectatorship discussed by Buchan (2006), I claim that spectators of stop-motion

animation build up a tactile relationship between themselves and three-dimensional puppets in projection through viewing experience.

Given that Purves' (2014) account is focused on anthropomorphic, narrative-oriented, stop-motion animation films which he refers to as illustrative cases, it is not that such craft-based characteristics have impeded the extensive production, reception and imitation of stop-motion animation films to the extent that they cannot form any conventions associated with Hollywood filmmaking and a zone where stop-motion animators and spectators work together with the conventions. As called "Walt Disney of the East" (Dutkar 2000; Harryhausen and Dalton 2008; 164), for example, Jiří Trnka was a central filmmaker of puppet animation in Czechoslovakia's state-owned film industry and abroad. In the country and other communist countries, interestingly, Nobuaki Doi notes, "the state-owned animation studios had a similarity to the market-oriented animation studios of the capitalist region in the sense that the former adopted the production system of the division of labour, with a large number of crews employed" (2016: 65). This is the sense in which I conceptualise the Puppetopos as the stop-motion counterpart of the Tooniverse. No matter how experimental or innovative Trnka's films have been evaluated to be, I claim that the puppets performing in them rely on anthropomorphism and narrative motivation for the most part. In the zone, film festivals, as well as theatres and television, have served as a locus in which puppets are supposed to turn into live performers on screen through the involvement of spectators. The Puppetopos will be a term in analysis of Group STM, not Group PMT, because the former Group is defined to involve anthropomorphism, narrative motivation and other conventions in this thesis.

In stop-motion animation inside and outside the Puppetopos, three-dimensionality not only allows animators in production to stay and interact with their stop-motion models, but also can evoke in viewers the sensation of physical access to and contact with the objects. This material trait of models, or puppets, for stop-motion animation is, indeed, a common issue which animation scholars and animators call to attention, leading me to address the profilmic specificity of stop-motion animation. Crafton indicates, "In filmed puppet shows and shadow plays, whether animated or not, the puppet bodies are images of objects that exist, or did exist, somewhere in our physical world", adding that "the puppets retain some of their residual corporeality in the imagined puppet space" (2013: 66). Concerned with the constructed-ness of animated worlds, Buchan, too, points out, "[A]lthough the events we see on screen *did not* occur, the objects *do* exist" (2006: 21).

Like Buchan, the stop-motion animator Purves places emphasis on the media specificity of stop-motion animation, suggesting that "stop-motion is different from most other forms of puppetry as it is not performed or filmed in real time, nor is it played in front of an audience and, unusually for puppets, the operators are not seen" (2014: Kindle 254).[12] In this emphasis, Purves provides practice-based, highly informing points on the material reality of the puppets/models as objects: "A puppet has limitations; it has a mechanical skeleton, which usually has far fewer joints than its human or animal equivalent, and it must contend with the force of gravity" (Purves 2014: Kindle 2655). In this account, the two parameters with which I will work in analyse of Group STM belonging to the

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[12] Purves (2014: Kindle 250) still admits a close relationship of stop-motion animation with the ancient tradition of puppetry.

Puppetopos are pointed out as generally influential on the body performance of a stop-motion model; one is the mechanical skeleton—the armature—that forms the central structure of the puppet body, and the other the gravitational field surrounding and affecting the puppet body.

Three-dimensionality also enables animators in production to physically touch and be touched by the puppet bodies, the bodies of stop-motion models, themselves—unlike them, hand-drawn figures allow animators to physically touch the sheets of paper in the first place on which they are drawn. Discussing the power of touch and its extension to the world, Marshall McLuhan indicates:

> It may very well be that in our conscious inner lives the interplay among our senses is what constitutes the sense of touch. Perhaps touch is not just skin contact with things, but the very life of things in the mind? (2013 Kindle 1545)

This intimates that through the sense of touch, an object can be extended and interconnected to a human subject. This is the sense in which Crafton (2013: 66-67) suggests that the puppet body can be an extension of the stop-motion animator when she or he animates it in production.[13] In his conceptualisation of the co-animator, it also follows that the puppet body in projection can be an extension of

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[13] Such extension is also found in animators' performance with two-dimensional hand-drawn figures, as discussed about Hayao Miyazaki by Kim (2014). In my PhD thesis, it is not only extension but also touching the body which I place emphasis on. Two-dimensionality does not give the animator and the audience any physical access to the supposedly three-dimensional body of the hand-drawn figure working as a live performer in Crafton's definition of the Tooniverse.

the audience.[14] Yet, Crafton tends to focus on how such puppets/models can successfully act as live performers on screen in a belief system. Emphatically, my concern is the models of puppets presented as puppets in film, whose diegetic status shifts or drifts between an inanimate object and something much like a live performer; some of them are not given the role of a performer but marginalised to be inanimate objects as meaningless to the audience. A crucial point in Group STM is that the puppet-as-puppet figures are regarded as inanimate objects *both* in the profilmic and diegetic levels.[15]

Focusing on the status of such puppets/models in Group STM tempts me to draw on Heather Crow (2006), who examines an incongruent relationship between the human body and body movement. In her view, the human being is a "haunted" puppet, rather than an ideal model, for stop-motion animators to possibly imitate with stop-motion puppets/models in terms of body performance. Observing live-action films and stop-motion animation films by the Quay Brothers, and taking the concept of the gesture as a wandering and haunting "ghost"—which in my reading, is distinct from a soul, Crow claims that "our gestures are some of our most

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[14] Similarly, Purves notes clearly that "the physicality of the puppets gives their actions . . . an immediate connection with the audience" (2014: Kindle 1214).

[15] In this sense, my research contests Fauzi Naeim Mohamed and Nurul Lina Mohd Nor's (2015) recent study focused on stop-motion puppets/models. In their essay, the authors discuss the way in which the puppets' on-screen gestures serve perceptual and emotional communication with spectators in terms of phenomenology and cultural context. Fauzi Naeim and Nurul Lina's concern is the puppets' communication with the human spectators through anthropomorphic and theriomorphic body movements which they consider are perfected in screening. The authors' emphasis on the puppets' successful imitation of life forms like human beings or an animal results in the reiteration of the conventional phrase, "come-to-life", without advancing towards the issue of the puppet body's objecthood, about which only in passing they indicate, "Despite their limitation as mechanical objects, rich meanings are still communicated to viewers thanks to the unseen puppeteers, the puppets' attire, background design, lighting and camera placements" (2015: 116). In my PhD thesis, the limitation of the puppets as mechanical objects is not taken as an issue of concession, as is the case in the authors, but rather as that of philosophical and aesthetic significance.

intimate performances of identity, and though we cannot own them, they are somehow our own nonetheless" (2006: 50), going on to note, "The bodies constructed cinematically, graphically, and sculpturally through [stop-motion] animation techniques unsettle conventional notions of a stable, bounded, coherent body" (p.51). According to Crow (2006: 55), this is exemplified by hysterical human bodies seized with mechanical repetition like convulsions, tics and grimaces; body movement is not entirely under the human subject's control.[16] Her view helps problematise the subjectivity of the stop-motion animator as a human agent in production, which is to say, the very animator is a mechanical object *animated* by gestures as a ghost. In other words, the animator's body *is* a resisting material, which can be experienced by him/herself in a tactile manipulation of stop-motion puppets/models—this can be alternative to Fly's notion of the artist's changing relationship with resisting materials that I reviewed above focusing on Group INT. I take such a doubled relationship—which I connect to the Romantic discourse later in this subsection—between animator and animated, in particular, for analysing Group STM in Chapter Four.

Interestingly, Crow (2006: 55) likens neurologist Jean-Martin Charcot and his hysteria patients respectively to an animator and animated mechanical puppets. This comparison reminds me of the way in which the Czech puppet animator Břetislav Pojar discusses puppet animation:

Animation is like hypnotism. But when you animate dolls you have to

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[16] A usual form of out-of-control body movement is termed as manipulator (or adapter) by Paul Ekman, the psychologist of human body movement, who observes people stroking, pressing, scratching, licking, biting and sucking, going on to indicate, "Manipulators appear to be performed on the edge of awareness" (2004: 43).

hypnotise pieces of wood. Puppets' movements are clumsy. Yet if you are a

good hypnotist you can make them come to life as if they are human beings.

(cited in Moins 1997: 202)[17]

Here, Pojar suggests that a stop-motion animator is a psychiatrist of patients with

psychogenic kinetic disorders rather than a creator of "life" in a literal sense of the

problematic term. In his view, stop-motion models/puppets should be considered

as repressed subjects with the potential of movement within themselves. However,

this psychological conceptualisation still retains an anthropomorphic and

anthropocentric view in which animators should seek human form as ideal for

puppets in terms of body movement, thereby proving that they are "good"

animators. The puppet-as-puppet figures contest such a self-figuration of a good

animator because they are stop-motion animated to show "clumsy" movements

which I will prove in the following Chapters. The account of the hypnotist and the

patient by Crow and Pojar addresses a further question: which in the phases of

production can the stop-motion animator be, the animating hypnotist or the

animated patient, the hypnotising subject or the hypnotised object?[18]

     With this question in mind, I proceed to review Richard Weihe (2006), who

reflects on the relationship of on-screen stop-motion puppets and objects with the

animator and the spectator in relation to two Romantic literary works respectively

about the marionette and the automaton. One is Kleist's essay, "On the Marionette

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[17] Philippe Moins indicates the source of this remark: Anonymous (1974) "Břetislav Pojar" in Retrospectives, brochure published by the Zagreb Festival, quoted by Giannalberto Bendazzi (1991: 495) *Cartoons*, Liana Levi.

[18] Crow raises the issue of power relationship in her comparison of Charcot's performance to animating touch, indicating that "the doctor would induce hysterical attacks through hypnosis or pressure on certain areas of his patients' bodies" (2006: 53).

Theatre" (1810), and the other Hoffmann's story, *The Sandman* (1817). In contrast

to Crow (2006) who focuses on Olympia, the gynomorphic automaton of

Hoffmann's story in psychoanalytic, feminist terms, in his short essay (2006) Weihe

attempts to observe the mechanical puppet in the novelist's contemporaneous

philosophy of subjectivity. "In 18th-century literature", he comments, "the

automaton becomes a prominent motif at a time when philosophy debates whether

the individual is autonomous or heteronomous, e.g. governed by external forces"

(2006: 42).

In "Kinaesthetic, Spastic and Spatial Motifs as Expressions of Romantic

Irony in E. T. A. Hoffmann's *The Sandman* and Other Writings" (2009), Val Scullion

advances such an interpretative attempt towards reading the ontological anxiety of

the human being, in particular, the individual artist, along with kinaesthetic motifs,

metaphors and imagery used by Romantic writers including Hoffmann and Kleist.

In comparison to the automaton's mechanical body, the so-called Romantic anxiety

is caused by the uncertainty of who or what the human body is controlled by.

Scullion writes, "The set of kinaesthetic motifs that Hoffmann weaves through the

narrative shows Nathanael failing to gain control over his body or to move it

forward" (2009: 4), continuing, "He admired their [automata's] ergonomics and

made use in his literary writing of that brief moment when the onlooker could not

be quite sure whether they were mechanical or sentient, dead or alive" (p.12).[19]

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[19] The Romantic anxiety lurks in the discussion of androids of some types by Eric G. Wilson, who seeks to find an answer to the question of "our own melancholy hovering between matter and spirit" (2006: 18) in the Western world. His typology of androids covers the mummy, Golem and the automata, and extends to the vampire's victims and the somnambulist. Referring to the term, *animated*, to discuss androids, Wilson does not mean any technical aspects of filmmaking, but connects it to Romantic thoughts in an attempt to overcome the dualism of body and soul.

Scullion's observation of the Romantic anxiety is of great relevance to my examination of Group STM in two ways. In stop-motion animation, first, the bodies of animators are intersubjectively connected and extended to those of puppets/models in production. In the definition of Group STM, second, the stop-motion puppets/models under analysis are presented and narrativised as puppets per se on screen. In my hypothesis, the contested and challenged subjectivity of the animators is implied by the puppet-as-puppet models' modes of movement in projection.

The motif of transcendence in Scullion's essay is another point that I find is highly pertinent to my research; the author refers to "the Romantic impulse to transcend or escape material, sensory constraints" (2009: 13). Indeed, in his fictional characters' conversation Kleist asserts that "a mechanical puppet can be more graceful than a living human body . . . where grace is concerned, it is impossible for man to come anywhere near a puppet" (2012: Kindle 244), because "consciousness can disturb natural grace" (Kindle 250). The marionette is even considered as transcendental, divine entity by the Romantic writer, who suggests:

> Only a god can equal inanimate matter in this respect. This is the point where the two ends of the circular world meet. (Kleist 2012: Kindle 245)

Scullion locates this Romantic notion of puppets and materials within the context of technologies, including "telescopic and optical lenses, electrical equipment for animal magnetism, and the vogue for building automata" (2009: 2). Her approach is not to reduce Kleist's essay to the psychoanalytic term, uncanny, as Crow (2006)

does, but to articulate its complex attitude towards objects and materials in change at a time when those technologies underwent remarkable development. "Whether one takes a historicist or psychological interpretive approach to Nathanael's downfall," Scullion stresses, "it is clear that the release of his repressed fears and desires is largely triggered by the incongruous movements of a mechanism that simulates human kinetics" (2009: 13). Taking this impact of mechanical engineering on human viewers who not only exist in the real world but also appear as characters in diegetic worlds, I consider the Romantic concept of transcendence when I seek to clarify the philosophical and aesthetic implications of the puppet-as-puppet figures' sub/nonhuman mode of movement in Groups STM and also PMT.

In Groups STM and PMT, the puppets *are* objects and materials while some of them are depicted as such in the film diegesis. Conversely, objects and materials are employed as puppets in the two Groups, as Purves indicates, "Sometimes [stop-motion] animators don't use puppets at all, but use objects or materials such as sand and salt" (2014: Kindle 1218). This material heterogeneity of stop-motion animation raises a question relevant to my research: how can such a variety of objects and materials in stop-motion animation be created and perceived as a live performer on screen? Similarly, Buchan asks the question: "How can a piece of metal be endowed with a gesture that moves us emotionally? . . . Or for that matter, what entails the experiential difference between a screw animated and one that we twirl in our fingers?" (2006: 36). Calling attention to the role of kinaesthesia working within the spectator's body, Rudolph Arnheim claims:

As a rule, it [the observer's muscular sensation] will be provoked only by

human figures or animals with "human-like" movements (bears, monkeys,

etc.). However, Rorschach says, occasionally there are subjects who are

capable also of kinesthetic empathy with animals of any kind, with plants,

and even with *geometrical figures and single lines*. (1966: 83; emphasis

mine)

This implies that non-anthropomorphic forms and further non-anthropomorphic

movements give kinaesthetic stimuli to spectators. What interests me here is that

Arnheim's focus is not the stimulating capacity of figures and lines in motion but

spectators' empathetic potential which he (1996: 83) terms M-response, because

this subjective aspect leads to the issue of the cultural context which influences

spectators' degree of empathy.

In this sense, Weihe's concept of "anthropomorphic leap" is contestable,

which means that spectators "shift from the perception of movement in the

inanimate figure to motion in human life" (2006: 39). While the concept is likely to

answer to anthropomorphic puppets or anthropomorphic movements in Group

STM, I suspect that it does not work for the movement of the screws which

observing a scene in *Street of Crocodiles* (The Quay Brothers, 1986, UK; See Figure

1.3), Weihe describes as "[a]ll of a sudden rusty screws wind themselves out of

dirty floor-boards, whirl across the surface like skaters, before gracefully re-

turning into the wood elsewhere" (2006: 44-45). This description seems to

reiterate animation's conventional discourse of bringing-anything-to-life, and

Figure 1.3 Screws in *Street of Crocodiles*

further, to be inconsistent with Jonathan Romney's remark, cited by Weihe, that

"the Quays do not so much animate dead matter, as dramatize the deadness of

matter" (cited in Weihe 2006: 47).[20] Romney focuses on matter itself and the way

in which it is presented on screen, rather than on the human agent's act of

animating. Yet, Romney's comment is still fettered by the Cartesian or

anthropocentric view of matter. In the next subsection, I review the existing

literature of matter with which I work focusing on Group PMT in which the human

agent manipulates puppets and/as objects in an unconventional, non-

anthropomorphic and non-anthropocentric, way.

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[20] Weihe cites Romney (1992: 25) The same dark drift. *Sight and Sound* 1(11) March: 24-27.

Group PMT: Objects and forces

As I explain in the Methodology, I classify and examine a selection of stop-motion animation films by the Quay Brothers, Švankmajer and Kihachiro Kawamoto in Group PMT (Chapter Five), each of which is located outside or drifting near the Puppetopos where Group STM is dominant. In this subsection, I review the existing literature, focusing on their idiosyncratic views on puppets and objects—in particular, they evince a non-anthropocentric intention which I will indicate below drawing on citations from them.

Despite his inconsistent tendency to privilege anthropomorphism as I pointed out in the preceding subsection, Weihe offers an insight into the way in which the Quay Brothers manipulate objects in *Street of Crocodiles* (Figure 1.3):

> In aesthetic liberation the screw has abandoned its actual purpose to join two independent objects. It is shown in its essential 'screwyness' and observed merely for the sake of its specific grammar of movement—a left-hand turn means appearing as shape, a right-hand turn means disappearing into the wood. (2006: 45)

What Weihe observes here is the literalness and the aimlessness—screwyness—of the mode of movement demonstrated by the object. For my use of the term, literal, I draw on David Batchelor who comments on three-dimensional objects by Minimalist artists that "they are quite literal: the materials are not disguised or manipulated to resemble something they are not" (1997: 11). What I mean by this

citation is not that the Quay Brothers, Švankmajer and Kawamoto are minimalists. Rather, literalness and the other concepts of Minimalism help locate the filmmakers of Group PMT within discourses about the human agent's relationship with objects and materials which can include puppets per se in animation production.

In his seminal 1968 essay, Minimalist artist Robert Morris (2000: 244) considers that the visibility of process leads to revealing matter itself, while an artistic process is usually made invisible by the finished form and its use. Among the process-oriented matter-revealing[21] methods which Morris (2000) puts forward are using tools in relation of materials, focusing on gravity and other ambient elements, accepting chance, rejecting forms and orders for things. I develop these concepts and methods of Morris's so that they serve to elucidate the way in which the puppet-as-puppet figures of Group PMT are manipulated both on screen and in front of the camera in time during shooting. In doing so, I also aim at developing concrete, non-mystical terms with which an animated figure's movement on screen can be viewed and described, instead of relying on the problematic ones, life and soul.

This aim is similar to what Buchan (2006; 2011; 2013) seeks in her study of the work of the Quay Brothers. Observing the movements of the puppets which she describes as non-anthropomorphic in *Street of Crocodiles*, Buchan (2011: 87) points out that they emphasise their own artificial or nonhuman condition, after claiming that "in distinction to most anthropomorphized animated puppets, they

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[21] In the essay, Morris suggests "the more direct revelation of matter itself" (2000: 244). This idea is part of his concept known as a post-object, process-oriented, type of work (Batchelor 1997: 40).

do not perform a soul" (p.33). This observation develops towards the introduction of vitalism which Buchan (2013: 151) considers to work well for explaining a quality of "life" in the Quays' animated mechanical objects.[22] Drawing on her significant study of the Quays' non-anthropomorphic puppets, I put into question Buchan's discernment of vitalism from animism which she rejects as a view which presupposes the concept of soul. The question is not of whether or not animism is a belief system in which the filmmakers' models, puppets and objects are successfully perceived by the viewer to assume a quality of life. Rather, my focus is on the revised definition of animism.

As regards the religious term, Graham Harvey, a scholar of religious studies, indicates, "[Tylor] picked up Georg Stahl's 'animism' but used it to refer to a theory of souls rather than of life-forces" (2006: 7).[23] Unlike Tylor, according to Harvey (2006: 3-4), the eighteenth-century scientist Stahl originally conceptualised animism not as a religion but as a vitalist theory, opposing materialism, in which anima is defined as the living stuff. Further, there was no determined principle for discernment of animism from vitalism, as Harvey notes, "[Tylor] seems to have reanimated the earlier notion so that many references to animism at least blend 'belief in spirits or soul' with 'belief in life-energies'" (2006: 7). Criticising Tylor's theory of animism as "old" animism, Harvey (2006: 3) puts forward the "new" animism as alternative to the predecessor. With this coined term, he (Harvey 2006: 20-21) reconceptualises animism as relational epistemology, a non-

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[22] Buchan terms the Quays' figures as vitalist machines, which in her definition, "are constructed using inanimate materials: wood, fabric and inorganic materials, including metal and machine parts" (2013: 144).

[23] For Tylor, as Harvey adds, "Evidence of [animism], formed at the beginning of human cultural evolution, is still found among the 'lower races' and in 'survivals' in the 'civilised nations'" (2006: 7). As indicated here, the term itself has been used for racist discrimination.

anthropocentric philosophy of relationship with animals, plants, rocks and places as well as human beings.

This theory is distinct from animism of the kind Bukatman (2012: Kindle 512) refers to as primitive in double quotes and makes use of when he examines comics and hand-drawn animation films in an attempt to revive the religious concept in a critical sense. Bukatman comments on animism, "Sometimes it referred to a belief that inert objects possessed a soul; sometimes it referred to the attribution of 'living character' to those inert objects—one was innate, the other projective" (2012: Kindle 521). "However", Harvey remarks on such a conventional view of animism, "it is a mistake to see this as a projection or attribution of human-likeness or life-likeness onto 'inanimate' objects" (2006: 18). As my focus is on the human agent's relationship with the puppet-as-puppet figures which I classify in Group PMT, what is eligible for this is the concept of the new animism and not that of the (old) animism which in my reading, Buchan and Bukatman draw on.

A specific concept of the "person" is one of the central terms which the new animism puts emphasis on. Mentioning what Irving Hallowell[24] found from the Ojibwe, one group of indigenous peoples in Canada during the first half of the twentieth century, Harvey states:

While they do distinguish between persons and objects, the Ojibwe also challenge European notions of what a person is. To be a person does not require human-likeness, but rather humans are like other persons. Persons

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[24] Harvey cites Hallowell (1960) Ojibwa ontology, behavior, and world view. In: Diamond, Stanley (ed.) *Culture in History: Essays in Honor of Paul Radin*, Columbia University Press, 19-52 (Reprinted in Graham Harvey (ed.) (2002) *Reading in Indigenous Religions: A Companion*, London: Continuum, 18-49).

is the wider category, beneath which there may be listed sub-groups such

as 'human persons', 'rock persons', 'bear persons' and others. (2006: 18)

The new animist concept of the person involves not only humans but also the objects which are spoken *with*—termed other-than-human persons by Hallowell— in contrast to those which are spoken *about* (Harvey 2006: xvii-xviii). The Canadian animists do not regard all objects as persons but those *who* they expect or learn to communicate with (Harvey 2006: 18).

Such emphasis on the relationship with other-than-human entities is where I try to draw on the new animism for analysis of the Quay Brothers' work. In correspondence with the critic Chris Robinson, the filmmakers state, "Puppets always held a strange mystique for us—the power of the mask, its 'otherness,' the fact that you had to 'read' them" (cited in Buchan 2011: 103). In this comment, puppets are something, located outside human beings' perception, or the human world, that calls for a philosophy of relationship which Harvey (2006) defines the new animism to be.

As Buchan associates the Quay Brothers' films with "alchemy into a 'world' that we experience, respond to emotionally and interpret" (2006: 25), I connect their view of puppets as material and objects—both in production and screen projection—to Neoplatonism, a philosophy which influenced alchemy.[25] In a

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[25] Given that Harvey (2006: 195) classifies Neoplatonic philosopher Plotinus as animist, Neoplatonism can be said to be a 'survival' in the Western civilisation. Nelson writes:

> In that critical [sixteenth] century, battlefield for the clash of what Keith Thomas aptly described as the "Neoplatonic versus Aristotelian views of the properties of matter," the Aristotelian view won, effectively removing *gnosis* belief in a supernatural world with causal and moral links to the material world as a cornerstone of Western intellectual culture. (2001: 56)

published interview, the Quays (2012: 23) intimate that puppets as matter have their own realm or universe, going on to state that "matter was never dead; the lifelessness was only for hiding unknown forms of life; that it was in a constant state of fermentation and migration" (p.25). In conversation about objects, including puppets, with Peter Hames, similarly, Švankmajer replies, "I prefer the kind of objects which, in my opinion, have some kind of inner life" (1995b: 110). Roger Cardinal comments of Švankmajer's stance of objects, "The implication may indeed be an alchemical one, that even base matter such as mud and clay is capable of transcending inertia, so that, nothing in the world can really be written off as dead" (1995: 89). Both filmmakers' mode of relationship with objects triggers me to review central Neoplatonists' concept of objects, either organic or inorganic.

Gregory Shaw's explanation on the theory of Iamblichus, a founding philosopher of Neoplatonism, is indicative of the relationship between humans, objects and the world:

> The continuity (*sunecheia*) and kinship (*sungeneia*) of the cosmos were essential to Iamblichus's theory of theurgy. Based on the principle that there was an unbroken continuity throughout the cosmos (*DM* 20, 5), Iamblichus could defend rites that used material objects. Theoretically, any object could connect the human soul with the gods because the entire world was their *energia* and therefore manifested their presence. As Iamblichus put it, the gods were "present immaterially within material

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Being defeated at the philosophical clash, however, Neoplatonism was influential in the cultural history of the West, according to Richard T. Wallis (1995: 173-174), in particular on Spinoza, Leibniz and Schelling on the one hand, and Willian Blake and British Romantics in the field of literature on the other.

things" (*DM* 232, 15-16), and therefore invoked the gods in accord with their different expressions (*DM* 30, 13). (1995: 133-134)

Richard T. Wallis also summarises a Neoplatonic principle expounded by Proclus, another founder of the religio-philosophy, which states that "the whole material world is the mirror of invisible divine powers; hence in virtue of the network of *forces* linking image to archetype, manipulation of the appropriate material objects brings the theurgists into contact with deities they represent" (1995: 107; emphasis mine). Justified with this doctrine is "theurgy", a ritual performance or process with animals, plants, stones and other objects. For Iamblichus, theurgy involves the act of evocation, which is to conjure the gods and their powers from objects in which they are already inherent (Shaw 1995: 177).

I appropriate the three Neoplatonic terms, theurgy, evocation and force, to theorise the unconventional and the non-anthropocentric of Švankmajer, the Quay Brothers and Kawamoto with respect to the mode in which their puppets appear to move on screen. First, I consider that these filmmakers are "theurgic" animators in contrast to the demiurgic animators, like Fleischer, who perform as creators on screen in Group INT. Second, the theurgic animators do not seek to make objects appear to come to life, but to "evoke forces" inherent in them on screen. Accordingly, I develop the hypothesis that the movements seen in Group PMT can give the viewer the impression of a non-anthropocentric (as well as non-Christian) origin from which they come, without being reduced to any anthropocentric purposes or concepts. I take force as one of the most influential on the non-anthropomorphic impression of movement. As a quality demonstrated and

visualised in a form of motion by puppet bodies in animation, this third term can replace life and soul, the terms which I criticised above as problematic in animation studies.

Today force is a quantitative physical concept of Newtonian mechanics—also called classical. In this modern science, the concept is defined simply in the equation, $F=ma$, in which the force on an object is equal to its mass multiplied by its acceleration; this is called Newton's second law of motion. Importantly, the English scientist's three laws of motion are highly influential on the way of dealing with figures of humans, animals and objects in stop-motion animation and also hand-drawn animation. Explaining the difference between a real human dancer's performance and a stop-motion puppet's on-screen performance, Purves refers to Newton's laws of motion:

> Many techniques from the world of dance can be used in stop-motion, as long as they are properly adapted. Dancers often 'pop' or 'snap' into a strong pose to accent it. This energetic flick is hard to translate directly into stop-motion as it would simply take too many frames, and it could easily look like an awkward jolt. However, it is possible to play with changes of rhythm that give the same effect. In dance, this movement works by suddenly stopping and seemingly ignoring the physical rules of inertia. With stop-motion, it is almost the opposite. A puppet's movement works when the audience sees it affected by gravity, weight and inertia, as long as the effects are expressed clearly and deliberately. (2014: Kindle 2681)

What is significant in Purves' account is that the effect of gravity as a force on a puppet body should be demonstrated and visualised with the frame-by-frame photography, in the process of which the body does not move in the same way as in live action. The body does not fall because it is held up or fixed at a position every time shooting.

There is a similar expectation of the effect of gravity in hand-drawn animation, in particular which pertains to Groups INT and CEL. In their book, *Timing for Animation*, focused on the production of hand-drawn and CG animation for entertainment industry, for example, the authors, Harold Whitaker, John Halas and Tom Sito, state:

> You can draw a circle and declare it to be anything from a soap bubble to a cannon ball. We the audience will only understand what it is when we see how it moves and interacts with its environment. Newton's first law of motion stated that things do not move unless a force acts on them. So in animation the movement itself is of secondary importance; the vital factor is how the action expresses the *underlying causes of the movement*. With inanimate objects these causes may be natural forces, mainly gravity. With living characters the same external forces can cause movement, plus the contractions of muscles but, more importantly, there are the *underlying* will, mood, instincts and so on of the character who is moving. (2009: Kindle 251; emphasis mine)

In this citation, the authors are concerned with the conventional way of

demarcating between figures animate and inanimate, by postulating that the latter lacks any underlying cause like will, mood and instincts. For them, force is an external condition rather than a cause underlying in a figure moving in animation.

However, Neoplatonic and other similar religio-philosophical traditions take force as inherent in objects, either organic or inorganic. Jammer summarises:

> As to the concept of force, taken originally in analogy to human will power, spiritual influence, or muscular effort, the concept became projected into inanimate objects as a power dwelling in physical things. Omitting at present some intermediate stages, the concept of force became instrumental for the definition of "mass," which in its turn gave rise to the definition of "momentum." Subsequently classical mechanics redefined the concept of force as the time rate of change of momentum, excluding thereby, at least prima facie, all animistic vestiges of earlier definitions. Finally, "force" became a purely relational notion, almost ready to be eliminated from the conceptual construction altogether. (1999: 7)

In my thesis, force works not only as a term defined in Newton's classical mechanics but also involving those non-Newtonian implications. In his wide-ranging study of the concept of force varying in the history of philosophy as well as science, Jammer remarks on the work of the seventeenth-century leading scientist Johannes Kepler: "Indeed, in one and the same work the concept of force is sometimes referred to as a soul and sometimes as a physical, almost mechanical corporeal quantity" (1999: 81). The German scientist's view is preceded by the

comparison of the motive force—termed "impetus"—with soul in pre-Newtonian mechanics, as Jammer writes of the discussion of the fifteenth-century philosopher, theologian and astronomer Nicolas of Cusa:

> In the continuation of this discussion the circular motion of the globe is compared to the soul inherent in the body. The impetus animates the globe as the soul animates the human body. (1999: 71)

Examining the puppet-as-puppet models which I classify in Group PMT, I focus on the term of force, as a material and nonhuman part of the force-soul comparison, which is regarded as inherent in all the objects, including the puppet-as-puppet models, by the filmmakers of the Group. This focus is pertinent to the case studies which I conduct in terms of movement, as a physical and visible parameter in animation, the mode of which varies from an animator or a human agent's view of objects to another's. My examination of Group PMT in terms of force is of the way in which the puppet-as-puppet models of the Group appear to inflect or elude the laws of motion taken for granted in the conventional production of stop-motion animation which I locate in Group STM.

I stress that force is not only a conceptual but also a *technical* issue, which draws to attention how the filmmakers of Group PMT manipulate and interact in a physical sense with puppet bodies in production to evoke a non-anthropomorphic and non-anthropocentric sense of movement. This issue brings me to the Quay Brothers who in the 2012 published interview, put forward "a 'listening eye'—one that would allow you to hear the infinitesimal hum inside the lips of the puppet"

(Quay Brothers 2012: 23). In the conversation, further, the Quays agree that fingertips become eyes *listening* to puppets' lips in the same way as Braille. For these filmmakers, touching objects does not merely mean to exert a physical force on, but rather to look at and listen to them in a synesthetic way.

The "tactile" and the "manual" are involved in the concept of concrete animation elaborated on by an experimental animation filmmaker George Griffin who proposes, "A brush stroke, a paper texture, a smeared pencil mark—all are evidence of human intelligence and labor" (2007: 260). Such evidence makes visible an artistic process with tools and materials, gravity and other ambient elements, and chance against forms and orders, in terms of Morris's (2000) process-oriented conceptualisation as I reviewed above.[26]

Švankmajer's film work is where Griffin observes the concept of touching objects in terms of concrete animation. Indeed, touch is the sense which the Czech filmmaker puts most emphasis on. In conversation with Hames, Švankmajer states:

> In addition to hermetic sciences, I believe in the "conservation" of certain contents in objects which people touch under conditions of extreme sensitiveness. The "emotionally" charged objects are then under certain conditions capable of revealing these contents and touching them provides associations and analogies for our own flashes of the unconscious. Thus, in several of my films I used an object or a whole group of objects which I "heard". (Hames 1995b: 110)

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[26] The concept of evidence in the artistic process is discussed in the use of the term, *faktura*. This will be explained in detail, when I analyse Group PMT in Chapter Five.

Like the Quay Brothers, Švankmajer believes that the sensation of touch enables him to hear what they speak. As touching a model, a puppet or an object in animation production takes place alternately with frame-by-frame shooting, in my hypothesis this artistic process can present itself as and results in a mode of a puppet's movement on screen.

I term as "trajectory" the mode, or the path, which the puppet-as-puppet figures of Group PMT follow on screen, to signify its two aspects. One is that it rejects a goal-oriented implication of animated characters' on-screen performance which Crafton conceptualises. As I reviewed above, the Quay Brothers and Švankmajer do not intend to make a puppet or an object on screen seem to perform what it is not. A possible alternative term to such goal-oriented performance might be "choreography" which the Quays use to indicate their work with models, puppets and objects as Buchan (2011: 99) discusses, interviewing them, in her study of their aesthetics. However, choreography is still too inclusive a term to signify the concreteness of non-anthropomorphic and non-anthropocentric details of the movement which the filmmakers of Group PMT seek to present on screen.

For this reason, I work with trajectory, a term involving the sense of evidence in which a stop-motion animator exerts action force on a puppet or an object, during frame-by-frame shooting, at the same time when the latter exerts reaction force on the former.[27] Given that the Quay Brothers and Švankmajer conceive their physical interaction with models, puppets and objects as communication with them, the trajectory which I describe and interpret in Group

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[27] This action-reaction pair is the way in which force works in Newton's third law of motion.

PMT should be discerned from the mechanical trajectory along which as formularised in Newton's classical mechanics, an object is supposed to move in the gravitational field.

Of the filmmakers I classify in the Group, I need to explain that as distinct from the Quay Brothers and Švankmajer, Kawamoto has an East Asian, Japanese, religio-philosophical background including Shintoism, in relation to Japanese theatrical traditions like bunraku and noh. As for Shintoism, a religion dominant in Japan, I draw on Yamakage who notes:

The sensitivity through which Japanese people can see the vital energy of Kami [deities of Shinto] in all of nature is also rich in spirituality, since it feels and perceives various kinds of spirits. From a Western point of view this way of perception is called pantheism or animism, which means a way that perceives the spirit in every living organism or natural formation. (2006: 31)

Like other animist traditions including Neoplatonism, this Shintoist view goes as far as to embrace puppets and inorganic objects. Here, I do not intend to equate the Japanese religion with Neoplatonism; this is not a subject in my thesis. What is pertinent to the thesis is a view, I find in common among them, of the relationship between human beings, objects and the world. Considering this commonality of the worldviews, and rejecting the binary opposition between the West and the East (Said 1995), I am also tempted to draw on Wallis (1995: 13-15; 86; 90; 130; 169; 175) who observing the history of Neoplatonism, frequently remarks that there

were relations in demographic and geographic terms between the philosophy and Eastern or "Oriental" mysticism. This allows me to discuss Kawamoto's Shintoist and other Eastern religio-philosophical backgrounds along with Neoplatonism which I find influential on the Quay Brothers and Švankmajer.

Influenced by Trnka's view of puppets during his on-the-job training at the Czech puppet master's studio in Prague in the mid-1960s, Kawamoto states of the puppet's movement for stop-motion animation in relation to bunraku:

> What matters is . . . simply speaking, animators should understand what the puppet is. The point is not to make it [the movement of the puppet] look like human, but create it . . . This issue is similar to that of bunraku. In their early days, bunraku puppeteers tried to make the movements of puppets close to those of human beings, but it was impossible. Instead, they turned to seeking the essence of movement by excluding unnecessary movements. I mean that the created action is not an imitation of human actions in which otiosity abounds, but rather the essence of movement. In other words, a puppet's action created by an excellent animator is more refined and essential than that of a human being. (2015: 113; English translation mine)

This view is found in the essay on bunraku by Donald Keene (1990), who also observes puppets used to perform for religious or folkloric traditions. Keene writes, "These Shinto puppets are not representations of divinities (in the manner of Buddhist or Christian images) but, rather, wooden creatures temporarily

"possessed" by gods whose actions they recreate, much as the medium herself is believed to repeat, when "possessed," words uttered by the god himself" (1990: 129). Kawamoto is located in and conscious of these religio-philosophical and theatrical contexts. Asked, "What is the puppet?", Kawamoto does not hesitate to answer, "It is a serving god" (Yokota 2007: 123).

Further, the Japanese animator suggests a non-anthropocentric stance of the material condition of the bunraku puppet's movement in relation to kabuki, a form of traditional Japanese theatre performed by human actors. In conversation with Kawamoto, Bunjaku Yoshida, the master bunraku puppeteer, points out:

When human bodies move, their movement usually begins at the shoulder. In kabuki, the actors move at the elbow as a viewpoint. I guess this came from bunraku in which the three-puppeteer system resulted in puppets moving at the elbow as a viewpoint. (2007: 114; English translation mine)

Bunraku puppets' influence on human kabuki actors in terms of performance is supported by Keene who remarks, "The supremacy of Bunraku was undisputed in Osaka, and in Edo, where Kabuki remained more popular, the actors felt obliged to borrow *jōruri*[28] texts and even details of performance from the puppets" (1990: 142). This implies that in Kawamoto's work, the puppet-as-puppet models are not only presented on screen to form a similar trajectory to bunraku puppets, but also that Kawamoto, the human agent himself, is part of the network of forces at the profilmic level to form such a bunraku-like trajectory in production.

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[28] This term is the older name of the puppet theatre in Japan.

Analysing Group PMT in Chapter Five, my aim is to show that when the filmmakers of the Group *animate* models, puppets or objects, they have unconventional concepts of animating which are not simply reduced to the conventional concept of "bringing something inanimate to life". The trajectory of forces exchanged between the filmmakers and their materials inflects, eludes and disturbs a sense of the gravitational field which conventional animation seeks to instantiate and reproduce in accordance with the belief system of classical mechanics.

This is where I am tempted to build on Bennett's politico-philosophical discussion of a non-anthropocentric relationship with and sensibility of objects and materials, as she suggests that "to *experience* the relationship between persons and other materialities more horizontally[,] is to take a step toward a more ecological sensibility" (2010: Kindle 452).[29] This worldview is termed "vital materialism" by Bennett (2010). What interests me is that in exploration of such a non-anthropocentric experience, the philosopher refers to "films, religious practices, news media rituals, neuroscientific experiments, and other noncanonical means of ethical will formation" (2010: Kindle 134). This suggestion supports my research of the non-anthropocentric of the modes of movement demonstrated by the puppet-as-puppet figures in Group PMT. At the same time, asking herself a question of how to develop the ability of sensing and perceiving such experiences, Bennett proposes, "One tactic might be to revisit and become temporarily infected by discredited philosophies of nature, risking 'the taint of superstition, animism,

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[29] The term, persons, is used along with people in Bennett (2010). In my reading, both basically signify human beings or a group of human beings; the term does not involve nonhuman animals, plants and objects that Harvey (2006) reports are referred to as persons in the context of the new animism.

vitalism, anthropomorphism, and other premodern attitudes'" (2010: Kindle 17).[30]

This wide-ranging scope in Bennett's discussion pertains to my research which revisits and reviews religio-philosophical discourses and traditions relating to the puppet and human simulacra. As Bennett develops recent thoughts in consideration of such premodern predecessors, I will foreground the former rather than the latter in analysis of the cases of Group PMT—for example, quasi-agency and thing-power, which I will explain later in Chapter Five which the Group is allocated to.

The trajectory of forces which the filmmakers of Group PMT evoke in a model, a puppet or an object in production results in creating and presenting another force field on and across screen. Such a physico-aesthetic sensation can be viewed within the context of film-making/viewing from Buchan's (2013) conceptualisation of a "cinema of apprehension". Focusing on the Quay Brothers' films, Buchan puts forward the term:

> Because the spectator's experience is one of uncertainty, indeterminacy and undecidability, apprehension is the name which I will give to this ambivalent oscillation. Apprehension is the cognitive condition of partial understanding (as opposed to comprehension which claims understanding of wholes), of grasping something with the intellect, but only partially. Apprehended knowledge can be: first-hand and sensory; knowledge that comes from *others*, or abstract concepts that conflict with our direct

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30 Here, Bennett cites W. J. T. Mitchell (2005: 149) *What Do Pictures Want? The Lives and Loves of Images*. Chicago: University of Chicago Press.

sensory—or phenomenal—apprehension. (2013: 160-61; emphasis mine)

The concept of a cinema of apprehension is helpful for discussion of Group PMT because it addresses the two aspects; one is the materiality of cinema as a medium and the other the communicative, yet unlikely to be fulfilled, relationship between viewer and viewed. Further, Buchan (2013) considers a cinema of apprehension in relation and contrast to the sensation aroused by filmed and photographed ghosts or sprits that Tom Gunning (2007) discusses. Buchan comments that Gunning's approach:

precisely targets the phenomenological, how ghosts present themselves to the living, their mode of *apprehension* if not perception. The mode of appearing becomes crucial with ghosts and spirits because they are generally understood, by both believers and skeptics, to be apparitions *rather than ordinary material objects*" [sic] (cited in Buchan 2013: 154-155).[31]

Discussing the sensation aroused in and by a cinema of apprehension, Buchan discerns the Quay Brothers' on-screen objects in terms of material existence from the images of ghosts allegedly signifying the human beings believed to no longer exist or be alive in the real world. Buchan indicates:

The Quay Brothers' objects, however, are not apparitions of this sort

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[31] Buchan cites Gunning (2007: 103). See the Bibliography for the detail of the reference.

[ghostly photographs]; they are experienced as cinematic actants made of ordinary materials that can be modally experienced as physical objects with the material and cultural origins of the matter they are made from intact. (2013: 155).

In much the same terms of materiality, in Chapter Five for Group PMT I will work with Gunning's (2007) discussion of ghosts in film and photography because such supernatural phenomena are associated with ordinary materials and objects in Jean-Claude Schmitt's (1998) comprehensive study of ghosts in the Middle Ages in the West. Schmitt remarks clearly:

But a ghost did not always have a human appearance. In reported tales, unlike autobiographical tales, the dead person sometimes took on the shape of a material object (a haystack) or, more often, of an animal—a bird, a dog, a reptile, or a horse. (1998: 196)

Similarly, material objects or artefacts as ghosts are given the name, *tsukumogami*, in Japan.[32] According to the *yokai* (ghost and apparition in Japanese) scholar Kazuhiko Komatsu (2003: 150), tsukumogami are ghosts which emerge from old artefacts or objects used by their human owners for a long time. The Japanese scholar's approach is similar to Gunning's in that both develop their study

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[32] The belief of tsukumogami in Japan is still alive in the religious practice known as *ningyo kuyo* (NHK 2012). Puppets and dolls are believed to have *tamashii*, a kind of soul, and this belief makes their human owners feel guilty when they want to dispose the objects. Rituals for such puppets and dolls are held for the sake of the owners both in Shinto shrines and also Buddhist temples.

of the paranormal or preternatural subjects by examining the mediated imagery of them; the former takes up *emaki*, the traditional Japanese scroll form of a narrative painting, and the latter photographs and films. Examining the stop-motion animation films of Group PMT in Chapter Five as alternative to Group STM, I explore with the concept of apprehension and ghosts the force, movement and trajectory evoked from the puppet-as-puppet models and other objects in a physico-aesthetic communication with the filmmakers who I refer to as theurgic in this thesis.

In the next section of Methodology, I explain how I will examine and analyse the cases I classify in the four Groups, not to mention the meaning and validity of the method of classification.

1.3. Methodology

My research focuses on the relationship between animation practices with and concepts of puppets specifically presented as puppets on screen. In other words, I explore the way in which such concepts are demonstrated, instantiated in animation practices, and further the way in which animation practices engender alternative concepts to conventional ones. This approach is inspired by Gilles Deleuze (2003) who in his book, *Francis Bacon: Logic of Sensation*, discusses the titular artist's paintings. In the Translator's Introduction, Daniel W. Smith comments on the French philosopher's approach to the paintings:

Yet art itself is an equally creative enterprise of thought, but one whose object is to create sensible aggregates rather than concepts. Great artists are also great thinkers, but they think in terms of percepts and affects rather than concepts: painters think in terms of lines and colors, just as musicians think in sounds, filmmakers think in images, writers think in words, and so on. None of these activities has any priority over the others. Creating a concept is neither more difficult nor more abstract than creating new visual, sonorous, or verbal combinations in art; conversely, it is no easier to read an image, painting, or novel than it is to comprehend a concept. Philosophy, for Deleuze, can never be undertaken independently of art (or science). (2003: viii)

As in this thesis I consider animation films to be created by filmmakers, I take Deleuze's approach in examining puppet-as-puppet figures and their movements on screen in animation.

Unlike Deleuze who scrutinises the paintings of Bacon alone and as referred to in Smith's above-mentioned account, I am not engaged in animation filmmakers, or animators, from the perspective of "great artists". Rather, one of my aims in this thesis is to revisit and criticise the puppet-as-puppet figures employed in conventional hand-drawn and stop-motion animation films (respectively Groups CEL and STM). As regards my stance on filmmakers and animators in relation to their work under analysis, I draw on Thompson's neoformalist assumption of filmmakers or artists, as she puts forward:

I want to make clear that neoformalism's stress on inventiveness and

originality does not place us back in the "Great Man" theory of history,

which would assume that the individual's inspirations are the source of all

innovations in art. Neoformalism assumes that artists are rational agents,

making choices they judge appropriate to an end they have in view. (1988:

35)

The neoformalist concept of the rational agent also provides the alternative view

to the concept of great artists' artworks. The view assumes that "films are artificial

constructs" and "involve a specifically aesthetic, non-practical type of perception"

(Thompson 1988: 35). These two assumptions help examine each case of the

puppet-as-puppet figures, which I select from the films possibly classified in

different categories, e.g. "children's film" or "art film", in terms of the way in which

it functions in the film narrative, instead of its being subsumed under the debate of

whether the film is artistic or creative. Following the neoformalist assumptions,

Thompson asserts, "[B]ecause playfully entertaining films can engage our

perceptions as complexly as can films dealing with serious, difficult themes,

neoformalism does not distinguish between 'high' and 'low' art in films" (1988: 9).

In this thesis focused on puppet-as-puppet figures in animation, I conduct

the studies of the cases which I find are emblematic of each of the four Groups. The

method of the case study has been referred to as valid and helpful by Darley

(2007) and Buchan (2014) within the context of animation studies. Criticising a

perennial approach—to distinguish animation from live-action film—in animation

studies, Darley stresses, "My point is that we must establish and explore these

differences and the implications they hold comparatively and *case by case* rather than through generalization based on essentialist claims to superiority in some respect or other" (2007: 67; emphasis mine).[33] The media scholar urges us to engage with different aesthetic motives and aims within a multiplicity of animation practices, and yet in my view, he does not give sufficient clues of how to work with those cases of animation practices.

In her essay, "Animation, in Theory", Buchan seeks to elaborate on how to conduct case studies in more detail. Building on Noël Carroll's (2009: 13) notion of criticism in art, she suggests that each different technique of animation "requires its own unique description, classification, and a set of suitable and applicable formal parameters that would allow analysis based on distinctive aesthetic qualities and technical properties of artistic media" (2014: Kindle 2577). This calls attention to three activities as a specific answer to the issue of method I addressed above. In short, they mean to (1) classify cases under examination, to (2) describe each of them and to (3) define formal parameters for analysis. Proceeding with case studies, I build on and develop the methods theorised by Carroll for classification; and by Thompson, Erwin Panofsky, Arnheim and Herbert Zettl for textual and visual analysis, focusing on hand-drawn and stop-motion figures and their movements. These methods should not be separated from, but rather be interwoven with each other when applied in the progress of research in the thesis.

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[33] This encouragement of case studies follows Darley's stress of the variety and difference of animation practices: "Practices which operate against or outside the established modes are also possible, indeed necessary: alongside the operation of traditional media systems, not just the perfecting but also the stretching or breaking of established rules or practices is part of the process" (2007: 64).

<u>Classification of cases in four Groups</u>

In this subsection, for the case studies I explain how to select and classify puppet-as-puppet figures or the films in which they appear. In my PhD research project, selecting and classifying them took place in quite a simultaneously way. The very method of classification is informed by Carroll (2009), who discusses the validity and effect of the method for the evaluation of disparate artworks. In his view, classification is "[f]undamental . . . because, once we know the category (or categories) to which the artwork belongs, we have a sense of the kind of expectations that it is appropriate to bring to the work—which knowledge, in turn, provides us with a basis for determining whether the work has succeeded or failed, at least on its own terms" (2009: Kindle 1207). For puppet-as-puppet figures, the subject of my thesis, there are no categories generally shared in animation studies. This situation requires developing and defining them in terms of appropriate criteria.

At the same time, I proceeded with selecting cases of puppet-as-puppet figures by means of neoformalist assumptions and concepts. One of the assumptions is that the viewer is active or consciously aware (Thompson 1988; Christie 1998; Buchan 2006). Over more than four decades, as such a viewer I have developed different sets of viewing skills for different categories of animation films circulated through television, theatres, video cassettes and discs, film festivals and other media platforms. In this experience of viewing animation and further, while conducting this PhD research, I found transtextual motivation with specific themes, across animation films of different types, one of which is puppets or

human/animal simulacra *animated* in the figurative sense of this term. This finding led me to inquire into the symptomatic meaning of the animated puppets on screen, that is to say, what belief systems or philosophical backgrounds are involved in the formal devices. And conversely, both transtextual theme and symptomatic meaning acted as a catalyst for me to define and focus on some groups of films and figures, and further, subgroups of a couple of groups, towards classification with criteria developed for these candidates.

In doing so, I decided to single out a set of cases as emblematic for each group or each subgroup. This decision was made in consideration of three factors, for which I am partially inspired by Carroll's (2009) account on criticism of the arts: historical significance, popularity and critical value, and each factor is interwoven with the other in the decision-making process. First, historical significance is a factor in terms of which we can assess how much influence a film or a figure had on its subsequent ones, either explicitly or implicitly, in time. The extent of influence can be usually identified in animation-related literature, filmmakers' interviews and other referential sources. For instance, *Gertie the Dinosaur* is so easy for animation scholars to find referred to as something like a pathfinder in early animation history. It also works as a case, rather than an example, which triggers my inquiry of the way in which animators perform as life-givers of their artistic creations on screen.

Second, I take into account the popularity of a film or a figure in the sense that it indicates the extent to which a set of transtextual themes are put into play within communities of film production and reception like the Tooniverse and the Puppetopos. This factor can be perceived through the investigation of the context

in which a film was produced—if it is a product by a "Hollywood" studio usually oriented for a mass audience, most of transtextual themes in it can be considered as already prevalent—as well as a viewer's own extensive viewing experience and publicity materials. For example, Disney's *Pinocchio* is my choice among many Pinocchio-themed counterparts like *The Adventures of Buratino* (Ivan Ivanov-Vano, Dmitriy Babichenko and Mikhail Botov, 1959, RUS), *The Adventures of Pinocchio* (Giuliano Cenci, 1972, ITL), the Japanese animated television series, *Pinocchio: The Series* (Kashi No Ki No Mokku) (Seitaro Hara, 1972, JPN), *Pinocchio 3000* (Daniel Robichaud, 2004, CND) and *Pinocchio* (Enzo D'Alò, 2012, ITL)—as I explain in the last subsection of the Methodology, digitally created films are excluded from my corpus in this thesis.

Yet, the phenomenon of popularity varies in magnitude and visibility between different zones like the Tooniverse and the Puppetopos, between leading, supporting and background figures. There might be some films or figures marginalised in the context which it belongs to. For instance, it is quite difficult to find *The Bachelor Machine* referred to in literature and materials relating to animation even in the Puppetopos, but the stop-motion animation film addresses the issue of perception of humanness or nonhumanness in a radical manner. When there are two equivalent candidates, *Manipulation* (Daniel Greaves, 1991, UK) and *Cat and Mouse* (James Richardson, 1987, US), my choice should be the former film because this criticises the way in which animators perform as life-givers of their artistic creations. Likewise, I select *Jabberwocky* among Švankmajer's many films, not because it is of historical significance or of popularity but because it abounds with dolls, objects and materials in motion on screen which resist any attempt to

reduce them to what they are not. For this reason, critical value should be considered to bring to the fore a film or a figure in terms of relevance to my research aims which include to elucidate and contest the convention of puppet-as-puppet figures in animation film, and to make clear how puppet-as-puppet figures of unconventional kinds work in an alternative way to them. Selected in terms of the three factors, all the cases are detailed with respect to what is specifically emblematic about them in the early part of each of the following Chapters.

The criteria for developing the typology of puppet-as-puppet figures can be derived in consideration of the three kinds of reasons—structural, historico-contextual and intentional—for classification that Carroll (2009: Kindle 2222) refers to as enabling an objective evaluation of an artwork. In my reading, first, the structural reasons suggested by Carroll relate to identifying the formal aspects of an artwork which is defined to be an artificial construct in the neoformalist assumption. A second kind of reasons that Carroll terms historico-contextual address the context within which an artwork is produced, as the scholar asks us "to situate it in its art-historical context—whether institutional or more broadly cultural" (2009: Kindle 2246). Third, the intentional reasons have to do with reading what categories an artist expected an artwork of his or hers to belong to (Carroll 2009: Kindle 2268). These three kinds of reasons indicate that it is possible to categorise or classify artworks in terms of formal elements, contexts and the human agent's intention.

In this vein, I define the criteria pertaining to the three reasons for my subject, and the categories which each of them engenders. For the formal aspect, I take into account the technique of animation which involves the dimension of

profilmic elements. Drawing on this criterion in relation to puppet-as-puppet figures in animation, I take three categories of films, hand-drawn (two-dimensional) animation films, stop-motion (three-dimensional) animation films and the hybrid (two- and three-dimensional) films with hand-drawn figures and live human actors.

What I bring into focus for the contextual aspect of the figures is the convention of classical Hollywood filmmaking, which Thompson regards as "one of the most pervasive and helpful backgrounds against which we can examine many films" (1988: 24). The film scholar continues:

Historically, the type of filmmaking associated with Hollywood from the mid-1910s to the present has been widely seen by audiences and widely imitated by other filmmaking nations all over the world. As a result, vast numbers of viewers have developed their most normative viewing skills by watching classical films. Moreover, many filmmakers who have worked in original ways have set up formal systems that play off and challenge those normative skills. (Thompson 1988: 24)

In light of Thompson, I derive two categories for my case studies; whether or not the film draws on the convention of Hollywood (or its equivalents like anime). Further, Crafton (2013: 22) conceptualises the Tooniverse, as the context focused on classical hand-drawn animation, that I introduced in the Literature Review. As a revision of the Hollywood context, the Tooniverse involves viewers, who Crafton (2013: 22) defines as collaborating with animators on the shared ground of a set of

belief systems. In addition to the Tooniverse focusing on the involvement of viewers, I have conceptualised the Puppetopos above in the subsection about Group STM in the Literature Review , in order to underscore the phenomenological aspect of the context within which stop-motion animation films are produced and received. In my thesis, Hollywood, the Tooniverse and the Puppetopos will work to signify the common context of "classical" filmmaking, in relation to the way in which each of three respectively stresses the contextual focus: the filmmaking convention; the viewer's involvement and the belief system; the relationship between the (animating and viewing) human agent and the profilmic object.

For the intentional aspect, I consider in what sense a filmmaker or an animator seeks to depict puppet-as-puppet figures in each film, because the focus of my analysis is individual figures rather than films themselves. As discussed in the Literature Review, there are two opposite intentions, anthropocentric and non-anthropocentric—respectively having a close relationship with anthropomorphic and non-anthropomorphic, in defining and depicting puppet-as-puppet figures in the film diegesis. One involves ranking them as human simulacra inferior and subject to, if sometimes challenging, human characters (similarly, as animal simulacra inferior to animal characters) in the film narrative. The other seeks to present an alternative to the way in which puppet-as-puppet figures are anthropomorphised and then marginalised under the order of such an anthropocentric hierarchy—master/slave and real/fake.

Both intentions differ from each other in terms of narrative motivation. This relates and is often due to the context of Hollywood. Observing hand-drawn animated films created in Hollywood, Thompson indicates, "Cartoons also imitated

live-action films, in that they quickly come to depend on stars (often derived from popular comic strips) and narrative" (1988: 110). The cartoon stars should be anthropomorphic, as Grodal (1997: 89) suggests that living or anthropomorphic figures play an effective role to keep mass audiences interested in films which they are viewing. I take these preferences as parallel to anthropocentric intention in which puppet-as-puppet figures and their movements tend to be subordinated to the film narrative and the characters that perform as living beings in it. In contrast, non-anthropocentric intention tends to foreground the formal and kinetic elements of figures of that kind in the intention of "parametric narration" (Bordwell 1985; Thompson 1988). Later, I will provide more detail of narrative motivation and parametric narration in relation to textual analysis.

The four Groups outlined under the subheading of Thesis organisation in the Introduction are defined with respect to the three kinds of criteria that I developed above (See Table 1.2). The following is the detail of the Groups in which I classify films in relation to the puppet-as-puppet figures appearing in them; the emblematic cases of each Group will be explained later in the beginning of the relevant Chapter.

	Formal aspect	Contextual aspect	Intentional aspect
Group INT	Hybrid of hand-drawn animation and live action	Hollywood or its equivalent/derivative contexts	Anthropocentric Anthropomorphic Narrative-motivated
Group CEL	Hand-drawn animation		
Group STM	Stop-motion animation		
Group PMT		Non-Hollywood	Non-anthropocentric Non-anthropomorphic

			Parametric

Table 1.2 Three aspects of classification for case studies

Group INT (See Figure i-a) centres on the hand-drawn figure of a human or an animal as a creation (e.g. Koko the Clown) in interaction with a live human actor playing its creator (e.g. Max Fleischer) on screen. In this Group, the term, puppet, does not refer to the literal meaning but rather the status of a human or animal simulacrum in the film narrative. Both the puppet and the human being appear on screen, yet separated from each other in terms of profilmic materiality; one is a hand-drawn figure in animation and the other an actor in live action. Within the Hollywood context are most of the films which I classify in Group INT.

Group CEL (See Figure i-b) is a corpus of hand-drawn figures of what I term puppet-as-puppet in hand-drawn animation based on the material of celluloid. In the film narrative, the puppet-as-puppet figures for the most part are presented or implied as inanimate object in human or animal form (e.g. Pinocchio), and ruled by human or anthropomorphic animal characters (e.g. Geppetto). The puppet-as-puppet figures of this Group often shift or drift between inanimate and animate in the development of the film narrative. What is important in Group CEL is that the puppet-as-puppet figures and the human/animal figures are part of a hand-drawn fictional world that share the same profilmic material conditions—in particular, cel. Among two-dimensional types of animation, cel animation was the most dominant in the film industry—e.g. Hollywood and Japanese anime—of the twentieth century (Thompson 1980: 107-108).

For this reason, there are plenty of candidates likely to be classified in this

Group; for example, you can find a human-like mechanical puppet figure in *Flip the Frog: Techno-Cracked* (Ub Iwerks, 1933, US), *Superman: The Mechanical Monster* (Dave Fleischer, 1941, US) and *The Nutcracker Prince* (Paul Schibli, 1990, CND). This situation encourages me to develop a typology of the Group. In my intention of the types of Group CEL as parallel to those of Group STM, I will explain how to define the typologies of the two Groups, below after defining the rest of the four Groups. Yet, it should be noted that not every figure does dovetails exactly and idealistically with one of the types, but rather, it can be analysed and identified by employing more than one type as a critical tool from the typology I develop for Group CEL (and Group STM as well).

In Group STM (See Figure i-c), my focus is on three-dimensionality and tangible materiality. There are a variety of three-dimensional types of animation, for example, puppet animation, clay animation and object animation. Primarily concerned with the three-dimensionality of these types of animation in contrast to the two-dimensionality of cel animation, I define Group STM as a corpus of puppet-as-puppet figures made, sculpted or built for stop-motion animation. Like those of Group CEL, the puppet-as-puppet figures of this Group are presented or implied on screen as inanimate object in human or animal form (e.g. the android Hadaly, one of the two indiscernible girl-like models in Figure i-c), and ruled by human (and possibly anthropomorphic animal) characters (e.g. Edison, the maker of the android Hadaly). Already being physical models/puppets with a three-dimensional body in space, they shift or drift between inanimate and animate as often as those of Group CEL in the development of the film narrative.

In Group STM, the puppet-as-puppets figure and the human/animal figures

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are part of a fictional world constructed under the same profilmic material conditions—three-dimensional objects or parts of wood, metal, cloth and plastic. In the Group, further, even the figure representing a human (e.g. Sowana as the android Hadaly's original, one the two girl-like models in Figure i-c) on screen is a physical puppet, which Donald Crafton (2013: 66) notes existed or still exists in the real world. In this thesis, I take as crucial this difference between Groups CEL and STM. Unlike those of Groups INT and CEL, it is possible that the puppet-as-puppet figures of Group STM (and Group PMT, too, for the same reason) not only appear on screen but also occupy three-dimensional space, along with live human actors, before the camera during shooting. In this case, the human actors can play the creators of the puppet-as-puppet figures—yet given different traits from the creators seen in Group INT—in the film narrative. Like Group CEL, I develop a typology of Group STM because a host of stop-motion animation films have been produced within the Hollywood context or on the grounds of its narrative convention over the twentieth century; for instance, you can find a human-like puppet-as-puppet figure in *The Nutcracker* (Takeo Nakamura, 1979, JPN) and *Treevil* (Aiju Salminen, Christer Lindström, Aino Ovaskainen, 2002, FIN).

Lastly, as extending but distinct from Group STM, Group PMT centres on the three-dimensional puppet-as-puppet figures (See the dolls in Figure i-d) manipulated to move on screen in the filmmaker's non-anthropomorphic and non-anthropocentric intention. This intention tends to make uncertain the stop-motion animator's technical and metaphorical mastery over models, objects and materials, which is a conventional view in and of stop-motion animation. As in the rest of the Groups, the human-like or animal-like shapes of the puppet-as-puppet figures

classified in Group PMT do not warrant the imitation of anthropomorphic or theriomorphic movement on screen, and further they do not present themselves as inferior to, or distinct from human or animal characters, if these appear on screen, in the film world not motivated by narrative. The films of the Group are easy to find outside of the Hollywood or other equivalent contexts.

Typologies of Groups CEL and STM

In order to develop a set of types of the hand-drawn puppet-as-puppet figures in cel animation, I propose two key criteria: (1) primary and secondary animatic transitions and (2) interaction with human characters in relation to the film narrative. When applied to all the four Groups, the two criteria make clear how Groups CEL and STM are different from the rest as seen below in Table 1.3.

	Animatic transition: primary and secondary	Interaction with characters in the film narrative
Group INT	Puppet-as-puppet figures do not undergo primary but secondary animatic transition	Each of them interacts with the on-screen live human actor playing the creator of it
Group CEL	Puppet-as-puppet figures undergo primary and secondary animatic transitions in many types of separate ways; some of them do not undergo any transition	Some of them interact with human or animal figures as performing characters in different types of situations or response; some of them do not
Group STM		
Group PMT	Puppet-as-puppet figures elude the definition of primary and secondary animatic transitions	No interaction in a conventional sense

Table 1.3 Four Groups in terms of two criteria

As addressed in the Literature Review, animatic transition signifies the moment at which an individual figure, supposedly inanimate at the profilmic level, gains movement on screen. In this thesis, I will call it "primary", when it does not function as the cue of life for the puppet-as-puppet figures, as does for human or animal characters, in the film narratives of Group CEL. For this reason, I put forward "secondary" animatic transition, which implies a cue of life for a puppet-as-puppet figure to come to function as much a character as human or (often anthropomorphic) animal characters; only when this happens, they can function as "live performers" of the kind which is conceptualised by Crafton (2013). The criterion of secondary animatic transition asks whether or not a puppet-as-puppet figure comes to be a character in the film narrative and in what way its secondary animatic transition is visualised and narrativised. Added to this criterion is the way in which the puppet-as-puppet figure interacts with human characters and/or their functional equivalents, or the latter responds to the former, in the film narrative. The figure's on-screen interaction with human and equivalent characters relates to what socio-cultural rank or status it is given in the film narrative.

	Animatic transition: primary and secondary	Interaction with characters in the film narrative
Type 1	Subtype (a) No transition: Stationary state	No interaction
	Subtype (b) Only primary transition: Passive mode of movement	

	Subtype (c) Only primary transition: Automatic mode of movement	
Type 2	Secondary transition's main principle: Shifting to an isolated world	No interaction except for supernatural characters
Type 3		No interaction except for the human owner and his/her animal friends
Type 4		No interaction except for animal or marginalised characters
Type 5	Secondary transition's main principle: Magic	Enchanted
Type 6		Cursed
Type 7	Secondary transition's main principle: Technology	Equivocal
Type 8		Deceptive

Table 1.4 Typology for Group CEL

In terms of the two criteria, I define eight types of the puppet-as-puppet figures in Group CEL (See Table 1.4). Type One is depicted as an inanimate object, with its status unchanged, throughout the film narrative. In this sense, Type One functions as the perceptual baseline from and in contrast to which secondary animatic transition is depicted to happen in the other Types. This suggests that the rest of the Types can always involve or imply Type One in the film narrative.

Type One consists of three subtypes in terms of primary animatic transition: (a) stationary, (b) passive and (c) automatic. Subtype (a) which I term stationary does not involve any movement on screen, in other words, lacking primary animatic transition. The passive and automatic Subtypes entail primary animatic transition, and nonetheless, no change happens to the status of an

inanimate object in the film narrative. The passive Subtype (b) refers to the mode in which a puppet-as-puppet figure is depicted as being moved only by external forces like gravity in the diegetic world of the film. In this fictional world, the automatic Subtype (c) signifies the mode in which it is depicted to move, for example, as a clockwork mechanism. Emphasis on their common diegetic status as an inanimate object is why I do not define each Subtype as a separate Type.

All the other seven Types involve secondary animatic transition, in which the diegetic status of a puppet-as-puppet figure usually shifts from an inanimate object to something close to a character in film. Defining each of the seven Types, primarily, I take into account the three principles for secondary animatic transition, that is to say, how it happens in the film narrative, which I find conventional within the Hollywood and equivalent contexts. A first principle is the shift from the real world to an isolated one; a second is magic; and a third is technology. My conceptualisation of these three principles are also much informed by Lois Rostow Kuznets (1994), Nelson (2001) and Schelde (1993). Observing the moment when puppets and toys "come to be alive" in the diegetic worlds of children's books, Kuznets (1994) focuses on the psychological states, "awareness" and "empathy", of human characters, in particular, children, who interact with the objects for playing. Nelson's (2001) study of puppets and human simulacra in religions and philosophies places the "premodern" concept of "magic" as central in human beings' involvement with the three-dimensional imitations of themselves. As regards "technology", of great influence is Schelde (1993), among others, who discusses "modern" types of human simulacra, robots and androids, in science-fiction films. In addition, I build on his binary opposition of machines, docile and

evil, in developing bifurcations between the ways in which human characters and their functional equivalents interact with or respond to simulacra of humans or animals in the film diegesis involved in technology and also magic for secondary animatic transition.

Certainly, I do not claim that all puppet-as-puppet figures in animation fit into my typology, but I believe that this should be a foundation for analysing many different types of puppet-as-puppet figures. Basically, this typology will be applied to Group STM with a partial modification according to the specificity of stop-motion animation.

When I conduct case studies in each Group using the criteria and the factors explained above, I make a selection of emblematic puppet-as-puppet figures or the films in which they appear. I will give the detail of the films and the reference of their emblematic-ness later in the beginning of each of the following Chapters to which the relevant Groups are allocated.

Textual analysis of animation films and puppet-as-puppet figures

Here I explain how to analyse the cases of puppet-as-puppet figures classified in the four Groups. My analysis centres on the mode of movement which each case is given by the human agents to function according to their intention in the film narrative. As any of those cases is located in the film narrative—constructed in different styles of narration, I will work with neoformalist film analysis developed and applied by David Bordwell in his book, *Narration in the Fiction Film* (1985) and Thompson in her book, *Breaking the Glass Armor* (1988). In my view, the

neoformalist approach is effective in analysing not only a film narrative but also a puppet-as-puppet figure functioning in it, because the theoretical stance is to acknowledge the role of the viewer who needs to perceive or recognise what appears on screen. Ian Christie comments on Bordwell:

> Drawing on cognitive psychology, he identifies a hierarchy of schemata by which the individual's perception is organized. Thus, following a film—like many other everyday yet complex activities—routinely involves the use of already learned prototype and template schemata to identify basic situations, characters, and events. (1998: 62)

Some of the puppet-as-puppet figures selected for my case studies function as characters, while some of them do not, in the film narrative. Further, they are so drawn or built, in varying styles and fashions, as to be photographed frame by frame in the production studio. This means that it is a critical process to identify and then describe such figures. In the neoformalist approach, they are considered to be as meaningful a device as photographic figures representing humans on screen in the film narrative.

Along with the artwork as an artificial construct, the "device" is one of neoformalism's central concepts, which I will adopt in this thesis. Thompson defines:

> [T]he word *device* indicates any single element or structure that plays a role in the artwork—a camera movement, a frame story, a repeated word, a

costume, a theme, and so on. For the neoformalist, all devices of the medium and of formal organization are equal in their potential for defamiliarization and for being used to build up a filmic system. (1988: 15)

This concept of device helps examine a variety of formal elements, without any solution prescribed, in terms of the way in which each of them functions and the motivation with which it is employed in the film narrative.

Thompson applies such an approach even to human actors, who undoubtedly, she considers within the locus of live-action films. She indicates, "However much they may strike us as being like 'real people,' we can always trace that impression back to a set of specific, character-creating devices" (1988: 41). In other words, a film character is a device, and this is also a construct made of multitudinous devices. For Thompson, the neoformalist analysis can and should defamiliarise such an impression as "real people", which is postulated to be the result of the perceptual process she calls becoming familiar or automatisation (1988: 10-11). In this vein, my analysis of the puppet-as-puppet figures seeks to defamiliarise the impression that they are something inanimate or sub/nonhuman on screen, as well as identifying what they are used to signify in the viewer's perception.

As suggested above by Christie (1998:62), neoformalism assumes that the film viewer is active. Thompson proposes, "The viewer actively seeks cues in the work and responds to them with viewing skills acquired through experience of other artworks and of everyday life" (1988: 10). In my reading, the cues are audiovisual materials, or devices, mobilised to stimulate the viewer to respond in

some way or other. As a kind of cue, the puppet-as-puppet figure's modes of movement are composed, using some of the techniques and the styles of animation, which I will associate with the way in which a hand-drawn or built figure is perceived as inanimate or sub/nonhuman in the diegetic world of the film.

From the neoformalist perspective, even techniques, not to mention styles, are not considered as dominant in the narrative-motivated film, and this is what I work with when examining how the techniques and styles of animation are involved in constructing the puppet-as-puppet figures of Groups INT, CEL and STM in which I classify narrative-motivated films. As regards the technical aspect of cel-based classical cartoon animation in her seminal essay, "Ideological Interpretation of Implications of the Cel Animation Technique", Thompson summarises:

> We have seen how cartoons use some devices which are potentially very disruptive (for example, mixtures of perspective systems, anti-naturalistic speed cues). As we might expect within the classical Hollywood system, however, narrative and comic motivations smooth over these disruptions. Even a film as radical in its devices as *Duck Amuck* remains quite readable to an audience accustomed to watching Daffy in his more characteristic films. As always, film techniques and technology are not in themselves radical; they become so only when used within the structure of a complete film. (1980: 118)

Such narrative motivation is a strong factor in Groups INT, CEL and STM. Unlike them, Group PMT deviates radically from the narrative-constructing tendency, for

which I work with the neoformalist concept of "parametric cinema". This type of films foreground or "bare" style-related devices or parameters on screen, which are defined by Thomson as "certain devices, such as colors, camera movements, sonic motifs, [which] will be repeated and varied across the entire work's form" (1988: 20). In this sense, Group PMT requires a different set of terms capable of describing in the first place the bared parameters of a puppet-as-puppet figure's movements unmotivated by narrative. However, neither Bordwell (1985) nor Thompson (1988) is as much concerned with animation film as live-action film. In the following, I explain two methods which will be effective for analysing animated figures and their movements.

Visual analysis of animated figures and their movements

The difficulty and the possibility of the visual analysis of animated figures are indicated by what Ward (2006) terms as "thickening". Observing animation films in which live-action footage was rotoscoped, Ward (2006: 125) points out that there is a complex, or thickened, relationship between representing and represented in animation. Mentioning Joanna Bouldin's account of such a relationship,[34] the animation scholar writes, "[It] stresses that although 'the real' has a different relationship to animated and live-action representations, with the latter having a privileged relationship by virtue of the indexical/conventional relationship noted earlier, we can never say that the real is completely absent or

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[34] Ward refers to Joanna Bouldin (2004) Cadaver of the real: animation, rotoscoping and the politics of the body. *Animation Journal* Vol.12: 7- 31.

banished from animation" (p.125).

Here, Ward's focus is on profilmic materials, as called the real, which existed before the camera for animated documentary filmmaking as his subject, but his discussion provide insight into how to approach animated figures which involve the multiplicity of materials, techniques and styles. Ward remarks, "It is the multiplication of what was originally *there*—the real people and the situations in which they are filmed—that generates meaning" (2006: 125-126). This view gives me impetus to take into account profilmic materials as part of animated figures' thickened, multiple aspects, as I am concerned with the way in which the human agents deal with materials for drawing or model-making in relation to their physical or mechanical conditions.

Central factors in hand-drawn or cel-based animation are the two-dimensionality of cel or paper—free from the gravitational field of the real world, cel's transparency and the fluidity of paints; in stop-motion animation, the three-dimensionality and mechanical linkage of models and objects surrounded in the gravitational field. These conditions or capacities are influential on the way in which a figure or a model is constructed to imply its diegetic status as an inanimate object on screen. Emphasis on the profilmic aspect is also the reason that my thesis does not cover films produced using CGI technologies—I will give readers the detail of the issue of medium in the last subsection of the Methodology.

My visual analysis also owes its key concepts in part to Panofsky's *Meaning in the Visual Arts*. In this volume, Panofsky (1982: 40) puts forwards three procedural acts for visual analysis in accordance with three strata of an artwork's subject

matters or meanings: natural, conventional and intrinsic. The three analytic acts consist of (1) pre-iconographical description, (2) iconographical analysis and (3) iconological interpretation. These are not conceptualised by Panofsky for analysis of animation and other forms of moving image, but rather, of painting and sculpture as the object of study. Despite or due to this supposition, I take them as effective because my analysis focuses on hand-drawn figures and three-dimensional objects at the profilmic level.

Besides, Panofsky's concern is with the static image of painting and sculpture, while mine is with figures and objects for the most part in motion on screen. Therefore, the method of visual analysis used in this thesis will be a revision and expanded development of Panofsky to include animation. Indeed, this possibility of revision is intrinsic to the art theorist's conceptualisation of the procedure because it is based on the results of his analysis of actions and dynamic events, as well as forms, which he observed in everyday life (Panofsky 1982: 26-28).

The first act put forward by Panofsky is to identify and describe the "primary or natural" subject matter of a visual artwork. Panofsky indicates:

> It is apprehended by identifying pure forms, that is: certain configurations of line and color, or certain peculiarly shaped lumps of bronze or stone, as representations of natural objects such as human beings, animals, plants, houses, tools and so forth; by identifying their mutual relations as events; and by perceiving such expressional qualities as the mournful character of a pose or gesture, or the homelike and peaceful atmosphere of an interior.

(1982: 28)

In my thesis, this will be a basic process of making clear how a puppet-as-puppet figure is made and what it refers to. The latter I term as "referential puppet" ranges from dolls to wind-up toys and robots, and each of them has much effect on the way in which the viewer recognises the figures of them on screen in terms of shape and motion; in case that a hand-drawn figure on screen intends to represent a *hina-ningyo*, the Shintoist ritual object for girls, it is necessary for her or him to distinguish a Barbie doll in kimono. In addition, I will attempt to identify and interpret the puppet-as-puppet figures at the profilmic level on the one hand and the diegetic level on the other: in the case of stop-motion animation, for instance, a clay model representing a robot as a kind of *puppet* is a puppet for the animator to manipulate at the profilmic level, while it should be regarded as a robot by the other characters at the diegetic level in the film narrative.

The second act is to examine the "secondary or conventional" subject matter of an artwork, as Panofsky notes, by "connect[ing] artistic motifs and combinations of artistic motifs (compositions) with themes or concepts" (1982: 29). The scholar (p.29) adds that visual images function as the carriers of conventional meanings. Examination of this kind of meanings in my thesis requires to make clear the way in which a type of puppet-as-puppet or subhuman figures have been employed in the history, in particular, of animation film and also live-action film. This pertains to the reason for which in reference to Carroll (2009), I classify those figures in the four Groups and develop typologies for Groups CEL and STM.

The third act is to interpret the "intrinsic" meaning of an artwork. Panofsky claims, "It is apprehended by ascertaining those underlying principles which reveal the basic attitude of a nation, a period, a class, a religious or philosophical persuasion—qualified by one personality and condensed into one work" (1982: 30). However, this idea of his was not entirely accepted by other scholars, as Aumont notes, "This essentialism in Panofsky's approach has been widely criticised, and, more recently, it has been modified to avoid the pitfalls associated with the notion of a *Zeitgeist*" (1997: 190). Such a modified approach is part of what I seek to achieve analysing the puppet-as-puppet figures in this thesis, in light of Aumont, who goes on to remark, "The interpretation of a work of art seeks above all to read the work historically by putting it in its most likely philosophical and ideological contexts (but also its material and political contexts)" (p.190).

Being evaluated to work well for analysis of films as well as the medieval arts which occupied much of Panofsky's scope (Aumont 1997: 191), however, the iconological approach presupposing historical conventions is not likely to provide sufficient clues to identify the stylistic or technical devices, or parameters, which are bared on screen in the cases I classify as unconventional in Group PMT. For this Group and in consideration of the parameters like motion and force, I will work with the method of film vector analysis, the focus of which is on vectors seen on screen. As a term of mechanics, a "vector" is composed of magnitude and direction and refers to quantities, like force and velocity, which are used to describe motion.

In the field of film studies, Zettl provides its definition with clarity: "A vector on-screen indicates a main direction that has been established either by implication—such as with arrows, things arranged in a line, or people looking in a

specific direction—or by actual screen motion, such a man running from screen-left to screen-right or toward or away from the camera" (2013: 127), going on to stress, "Once you have grasped what vectors are and how they interrelate and interact with other visual and aural elements, you can use them effectively not only to control screen directions but also to build screen space and event energy within a single frame or over a series of frames" (p.127). This account suggests that the film vector theory will be effective in analysis of animated figures, which are constructed with a series of frames, using the technique of the frame-by-frame photography.

As regards film vectors, Zettl (2013: 127) proposes three principal types: graphic vectors, index vectors and motion vector, which will help examine and describe a variety of on-screen motions in my thesis. In the thesis, I will make use in the main of two of them: index vectors and motion vectors. While the latter refers to something usually seen to move on screen in projection, the former includes, for example, a series of still shots which show blurred images of a running object like a motorcycle (See Figure 7.43 in Zettl 2013). It is possible to witness such index vectors at the same time seeing motion vectors on screen. Of course, this index vector of blur is generated by shooting in live action, and not by shooting frame by frame in animation, because in the process of frame-by-frame shooting any subject should remain still or be stopped before the camera. In this sense, the "blur-index vector" will be a significant token in describing and elucidating animated motion vectors from which it is absent. Drawing on the terms of film vector analysis, I will describe and analyse the kinetic or kinaesthetic parameters which the puppet-as-puppet figures present on screen, primarily for

Group PMT and also for relevant cases in the other Groups.

Medium of films under analysis

As suggested above in my explanation of the profilmic aspect in visual analysis, I work with films as an analogue medium based on photochemical celluloid (accurately, replaced by cellulose acetate and then polyester). Some of the animations under examination in this thesis were produced as a series to be broadcast on television, but they were made, using celluloid, in the same production processes of animation film for theatrical release, which therefore I refer to as animated television series or simply animation films. The issue of the analogue medium matters in that my research focuses on how materials-based drawings or objects are deployed and manipulated in the process of animating. The photochemical medium of analogue film warrants the photo-indexicality of the profilmic materials, while the environment of digital filmmaking I do not address in this thesis threatens it.

In addition, the technology of computer-generated imagery has substituted arrays of electrical signals for celluloid sheets in the production of hand-drawn animation. Of course, many hand-drawn animations are still created physically on paper and then input into the computer system. Models or puppets employed for stop-motion animation are still shot in space, frame by frame, with digital cameras and then stored in digital memory devices. Involved in both cases are animators' physical hands. Significantly, digital filmmaking technologies have much in common with traditional animation's techniques and processes of image

generation, as Lev Manovich observes focusing on the manual of digital

filmmaking:

> No longer strictly locked in the photographic, cinema opens itself toward
> the painterly. Digital hand-painting is also the most obvious example of the
> return of cinema to its nineteenth-century origins—in this case, the hand-
> crafted images of magic lantern slides, the Phenakistiscope, and the
> Zootrope. (2001: 304)[35]

Notwithstanding I focus specifically on the material-ness and profilmic-ness of

drawings and models before the camera, and in this intention, my research is not

engaged in ongoing debates of digital filmmaking. In the light of Manovich cited

above, however, I hope that my research results contribute to and stimulate

animation scholars into exploring the specificity and multiplicity of the ways in

which the images of human and animal simulacra are created, manipulated and

circulated through technological agency—in particular, digital technology—as well

as human agency.

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[35] Stressing a manual aspect of the image generation of digital filmmaking, Manovich also claims, "Digital cinema is a particular case of animation that uses live-action footage as one of its elements" (2001: 302), going on to declaim, "Born from animation, cinema pushed animation to its periphery, only in the end to become one particular case of animation" (p.30). This will address further debates of what the manual is.

Chapter Two

Interaction between the Live-action Human Animator and the Hand-drawn Figure in Group INT

In this Chapter, my central concern is the way in which the animator or the human agent deals with the hand-drawn figure in human or animal form, as if he can "bring it to life", yet as a puppet in the definitions and implications of the term reviewed in Chapter One. For this, I examine a group of films, called Group INT (Interaction) in this thesis, which foreground the interaction between a live human actor as animator and an animated figure as his artistic creation, both appearing on screen, but based on materially and dimensionally different realms.

Films of this Group are quite familiar in early animation history; Crafton observes that early animated films (which he calls classical cartoons) often had a tendency to depict and narrate "how animated characters come to exist" (2013: 70). This tendency involves the narrative device which Crafton terms the hand-of-the-artist motif (2013: 253). In my view, this device functions for the animator or the human agent to perform as a demiurgic creator with mastery over his creations. As reviewed in the Introduction, the animator's artistic or creative status tied in with the capacity of animation has been thought of as omnipotent or unlimited. Describing and identifying the status which animators or artists assume in the film diegesis in Group One, in this Chapter I connect it to the discussions of God and His omnipotence which focusing on the seventeenth century, Funkenstein

(1989) finds problematised and secularised by educated laypeople in strong disputes within the context of European religio-philosophies and sciences.

This connection aims to clarify how on-screen human agents in animation (and also animation studies scholars) appropriate the concepts of a demiurgic creator. Such appropriation took place in Christian theology where the concept of the Creator-God was influenced by Plato's discourse of a creator-god called the demiurge in the *Timaeus* (Cornford 1997: 34-35; Lee 1977: 7-9), centuries before animated media emerged. This historical background implies that animators' conventional self-figuration as a creator involves Platonic, as well as Christian, concepts of the term. What is intriguing with the animators on screen is further that they perform as agents of the kinds conceivable in the sciences and entertainments of their days and ours as well. Examining their on-screen performances of different kinds of agency, I discuss them in terms of the modes, "retreat and intervention", of the divine power that were debated by Descartes, Newton and Leibniz among Enlightenment thinkers (Funkenstein 1989). This is eventually for evaluating and tackling the ways in which the live-action animators interact and deal with their human/animal-like creations as non-living and non/subhuman objects rather than living humans or animals.

With this aim in mind, I analyse *Gertie the Dinosaur*, the *Out of the Inkwell* series[1] and *Manipulation*. Before entering the analysis, I outline why I select these films as effective in Group INT.

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[1] In this thesis, I focus on those relevant to my subject from the twenty-nine films in the *Out of the Inkwell* series that I examined. The list of all the films appears in the Appendix.

Selection of the emblematic cases from Group INT

First, I select *Gertie the Dinosaur* among classical cartoons which Crafton (2013) discusses in relation to the hand-of-the-artist motif. The animation scholar evaluates the hybrid film:

> Winsor McCay, the legendary comic strip artist and animated cinema pioneer, implicitly critiqued the distribution of animator-animated agency in films when presented his avatar as the impresario of an animal act. *Gertie* (Winsor McCay/Box Office Attractions, 1914) pairs the cartoonist with the dinosaur of the title. Do animators dominate their fractious creations just as animal trainers control their subject? (2013: 59).

Here, Crafton not only addresses the issue of domination and control, that is, the issue of power relationship, but also asks the question leading to one of the central questions I address in this thesis: in the film, does McCay deal with Gertie as if it/she were really a trained animal?

Second, the *Out of the Inkwell* series (1919-1929) features the hand-drawn figure named Koko in human form that interacts on screen with its human creator. The human-like creation makes a good contrast to the animal-like figure in *Gertie the Dinosaur*. Another distinct point is that the Koko figure appeared in more than one hundred films produced over around ten years. Crafton notes:

Fleischer's appearances in the films as the "artist" had made him a celebrity in his own right, as a talk on Chicago's station KYW demonstrated when it elicited 3,300 fan letters. Koko dolls were a national craze. (1993: 177)

I believe that such popularity of the series served to familiarise the self-figuration of the animator as a demiurgic creator and the way in which the puppet-as-puppet figures are exploited in animation films. In this sense, examination of both Max and Koko on screen will lead to a deep understanding of the understudied conventions.

Lastly, the relatively recent film, *Manipulation*, has in common the dominant tendency with the films which I selected from classical cartoons. Observing the interaction played out between Koko and Max Fleischer on screen in *Out of the Inkwell: The Tantalizing Fly*, Fabia Ling-Yuan Lin comments on *Manipulation*: "This strategy of expressing the contest between autonomy and subjection through materiality has been continued in more recent hybrid films" (2013: 104). *Manipulation* is more than a continuation of the interaction relying on the binary opposition. On the basis of the history of the animators' self-figuration, Greaves criticises the demiurgic performance of the on-screen human animator as creator. At the focus of his criticism is the material resisting the artist's creative mastery in quite a serious tone; the film's description provided by the director states that "the creator attempts to destroy him, but the character is having none of it and battles

with the creator to survive".[2] The film foregrounds and thematises the materiality of an animated figure which drawn in human form on paper, survives the artistic mastery, not merely creative but also destructive, of its on-screen human animator in live action.

2.1. Winsor McCay and His Girl named Gertie in *Gertie the Dinosaur*

In this section, I examine *Gertie the Dinosaur* by the animation pioneer Winsor McCay. Analysing this silent film, I am concerned in the main with its two specifics. One is the intertitled voice of McCay presenting himself as an animator on screen, and the other his way of intervening with natural history as well as the life of a dead animal. I take the former as functioning as an "acousmêtre" in Michel Chion's (1999) definition of the term, which as I will discuss is pertinent to the Judeo-Christian concept of God. As regards the latter, in reference to Funkenstein (1989) I draw on the debate made by Newton and others of the role of the Creator-God as a craftsperson in natural history, which will shed light on what is implied in McCay's on-screen demiurgic performance. Further, I go on to interpret the animator's world-constructing, as well as life-giving, performance in terms of what Funkenstein (1989) calls "ergetic" in his discussion of the seventeenth-century stance in science.

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[2] The film description comes from the director Greaves' website: https://www.daniel-greaves.com/manipulation (accessed 23 Aug 2019).

The film begins with a live-action prologue in which McCay and his friends drop into a museum of natural history to find the skeleton of a dinosaur exhibited. This museum scene is followed by the intertitle: "Winsor McCay bets . . . that he can make the Dinosaurus live again by a series of hand-drawn cartoons". The phrase of making a dinosaur live *again*—it does not simply refer to making it *appear* to live or move—has a double implication. One is to resurrect *a* dead animal against its material and natural condition: fossil bones. The other relates to the level of natural history. As shown in the museum scene, it should be noted that dinosaurs are a group of reptiles that became extinct from the earth.

In the early twentieth century when the film was made, the extinct reptiles were already known to the public through the exhibitions of their fossils as an attraction at eminent museums of natural history in North America (Colbert 1997). In the 1910s, furthermore, dinosaurs were featured in science fictions, pulp magazines and films (Glut and Brett-Surman 1997: 676). This historical background on the basis of which the film was produced and received is significant because on-screen McCay's bet in the film is likely to suggest that he will intervene in, or wind back, the natural history of the reptiles. I will engage later in the animator's mode of exerting power over nature, after I discuss his resurrection of an individual animal.

After declaring that he will make a dinosaur live again, McCay himself is shown on screen to draw a couple of backgrounds on paper and the subsequent intertitles give technical details of hand-drawn cartoon animation in which the animator is engaged. The details include the process in which his cartoon drawings

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are to be photographed, the huge number of the drawings he created and the incremental relationship between each drawing and the one following it. Despite some scenes in which we can see a stack of drawings made for his ambitious project, no drawing of a dinosaur is clearly shown on screen until McCay and his friends gather again in a restaurant where for the first time he introduces to them a dinosaur he names Gertie. This delayed appearance of the dinosaur figure is quite intentional in terms of the effect of McCay's on screen performed interaction with it.

The way in which the dinosaur figure makes its first appearance on screen is as crucial as the way in which McCay interacts with it, in terms of the animator's self-figuration as a demiurgic creator. It does not take the form of screening a film. McCay starts performing a lightning sketch, as Crafton (1993: 113) notes, in front of a large paper panel erected (Figure 2.1). What is the motivation for taking the form of a stage performance on screen, despite the preceding technical details of hand-drawn animation given to the viewers of the film? It is to emphasise the effect of liveness engaging film viewers, rather than the impression of a character appearing alive, as Crafton remarks, "Animation's early association with vaudeville also anchored the form in the framework of liveness" (2013: 80). Taking this effect of liveness, McCay intends and pretends to be someone more than a technical agent of hand-drawn animation the details of which were given to us/viewers. On his friends' call for making the dinosaur figure on the panel move, McCay tells them that Gertie will do whatever he orders; then he takes a step backward to disappear out of the screen to the left when the panel fits in the camera frame. In the

Figure 2.1 McCay drawing Gertie

subsequent intertitle, he speaks to *her*, "Come out Gertie, and make a pretty bow"

and finally the hand-drawn Gertie figure begins to appear to move out of a cave;

this is the moment when the animatic transition of the figure takes place.

Observing these consecutive scenes, Crafton comments, "In minutes McCay

convinces the audience that he has resurrected a tangible and lovable animal—a

triumphant moment for the animator as life giver" (1993: 113).

The life-giving, demiurgic, moment is reinforced by the device of voice. As a

silent film, of course, *Gertie the Dinosaur* does not deliver any voices in a literally

audible way, but texts assume voices by means of intertitles, double quotation

marks and editing, along with the live human actors performing as if talking on

screen. Chion writes of this assumed voice:

> [T]he silent-film spectator . . . imagined the film's voices, in his or her
> individual way. Voices in silent film, because they are implied, are dreamed
> voices. (1999: 8)

Here I am not so much concerned with the assumed voice alone as its "acousmatic" effect in the scenes in which the animated Gertie figure performs as told by McCay without his on-screen appearance. In Chion's (1999: 19) definition, an acousmatic voice is a voice, the source of which is not visualised on screen and performs a demiurgic role in film. Taking into account religio-philosophical backgrounds of the acousmatic voice, Chion points out, "This interdiction against looking, which transforms the Master, God, or Spirit into an acousmatic voice, permeates a great number of religious traditions, most notably Islam and Judaism" (p.19). Chion (p.21) gives the name, acousmêtre, to the device which performs an acousmatic function in film, going on to put forward the four aspects of its fearful power: "ubiquity, panopticism, omniscience, and omnipotence" (p.24). After disappearing off screen, and while staying in the live-action world until the hand-drawn figure of McCay appears in the same world as the Gertie figure, McCay himself performs as an acousmêtre that can exert his power on the drawing of a prehistoric world as well as that of the dinosaur, Gertie, because both are presented as drawn by his lightning sketch in the film.

It is not the fearfulness but pleasure of the power, however, that in the film the acousmêtre provides for viewers. The acousmatic power is combined with the

world-reconstructing power of McCay's hand-drawn animation. Seeing Disney's *Merbabies* (Rudolf Ising and Vernon Stallings, 1938, US) produced using the technique of hand-drawn cel animation, Eisenstein exclaimed:

> How much (imaginary!) divine omnipotence there is in this! What magic of reconstructing the world according to one's fantasy and will! (1988: 3)

In *Gertie the Dinosaur*, the pleasure of the divine power needs to be examined in the double structure—the live-action world of human beings and the animated world of hand-drawn figures created by McCay—of the film, along with the editing strategy. As McCay appears on screen before he becomes an acousmêtre, the viewers know that he is a human being the same as them. Based on this knowledge, the attraction of the power encourages them to empathise with him as an acousmêtre. As soon as the square frame of the screen is filled by the square paper panel on which the hand-drawn animation of Gertie is shown, with McCay disappearing off screen (Figure 2.2), the viewers are given the same viewing, overlooking, position as McCay or at least his reconvened friends in the film. They
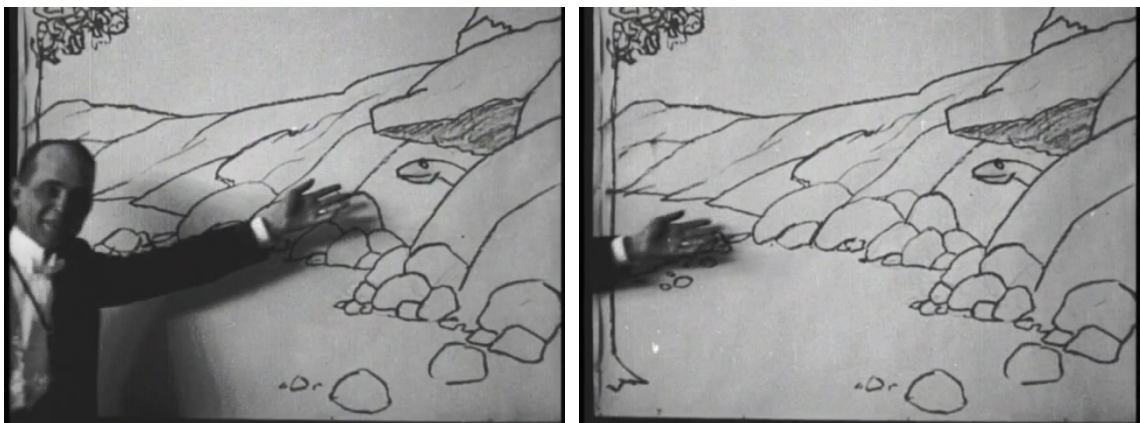
Figure 2.2 *Gertie the Dinosaur*

can see Gertie as McCay sees her/it and they can enjoy power over her/it as McCay enjoys.

Now I turn to the way in which McCay as an acousmêtre interacts with the Gertie figure. In terms of the traits of the character which he plays during the sequence in which the animation alone is shown on screen, McCay does not pretend to be a divine being or God as the greatest Acousmêtre (Chion 1999: 27), but rather an animal trainer (Crafton 2013: 59). This type of professional performance works well for McCay's strategy of presenting his hand-drawn animation to the audience both inside and outside the film, as if it were a live interacting show, and as if the dinosaur figure were a circus animal. In a later part of the Gertie animation sequence, the hand-drawn character of McCay appears literally as an animal trainer on screen and then rides on the dinosaur figure drawn far larger than the McCay figure. Focusing on McCay's circus-like performance, Crafton claims:

> Animal trainers stimulate humanlike behaviors in their subjects to facilitate audiences' anthropomorphic embodiment of the critters. Those vaudeville dogs, monkeys, tigers, and circus fleas go through their motions in a manner not unlike the way that toons enact the animators' scenarios. The trainer cracks his or her whip and the beast jumps; the animator moves the gorilla doll a bit, photographs it, repeats, and King Kong climbs the skyscraper. (2013: 59-60)

Indeed, it is possible to identify as anthropomorphic the following movements by Gertie: bowing to the audience, crying at being told "shame on you" by McCay offscreen, and nodding and shaking her head in the film's diegetic world. However, not every movement makes Gertie looks anthropomorphic. It often looks theriomorphic, when she catches a pumpkin and scratches her face and chin with her tail while sleeping. Despite no use of the term, theriomorphic, Crafton describes Gertie in exactly this way: "Her personality is a cross between a trained circus elephant and frisky puppy" (1993: 113).

Here, it should be noted again that in the film narrative, this animated hybrid imitation of human and animal is presented using the device of a circus-like performance, which as Crafton (2013:59-60) points out, involves the participation of the audience seeing the film in front of the screen. This participation is driven by the intertitled words shown as McCay's order to Gertie. They function in two ways. One is to define what each movement of Gertie means; the other to communicate with viewers in the real world. For example, when she is told to "bow to the audience" by McCay in an intertitle, a series of movements which Gertie shows are reduced to the verb, bow. This aims at the viewers who can read and understand what he says. Engaged in these devices, Crafton (2013: 59-60) as cited above compares the interaction between an animal trainer and an animal on stage to that between an animator and an animated figure in production, but this is likely to conflate circus and animation without helping viewers find the specificities of the case in question.

In this sense, I stress that the Gertie animation sequence in the film was

entirely produced before being presented to his friends and this is clearly indicated through the preceding live-action scenes and intertitles in the film. In a real circus show, I argue that it is impossible to put under a human trainer's control an animal that is an autonomous living being in the real world, or at least, real animals are as disobedient as animated animal characters like Gertie seem to be, as Bukatman (2012: Kindle 3150) claims, as long as they are depicted as acting autonomously in film. In contrast, Crafton is quick to reduce the issue of uncontrollability to the concept of asymmetrical alliance with which Chris Wilbert[3] characterises real animals, to argue, "'Accidental' and 'aggressive' behavior might be rehearsed, as when the creatures roar and menace as part of the act, adding thrills and enhancing the illusion of danger to trainer and audience" (cited in Crafton 2013: 60).

In my view, the Gertie figure is not disobedient nor autonomous; it cannot form an alliance with the live-action figure McCay. In *Gertie the Dinosaur*, no acts could be rehearsed but all the drawings were created, photographed, and then finished for screening—my central concern here is not a circus show but this animation of Gertie in the film. No disobedient behaviours Gertie shows on screen are accidental, but were designed to cause viewers' perceptual, emotional and cognitive response of fearing that the hand-drawn reptile figure might attack human beings. Such response from the viewers is what McCay aimed at by performing as an animal trainer in the film.

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[3] Crafton cites Wilbert (2000: 238) Anti-this—against-that: resistances along a human—non-human axis. In: Sharp, Joanne P. *et al.* (eds) *Entanglements of Power: Geographies of Domination/Resistance*. New York: Psychology Press.

As a device for communicating with and repositioning the audience as if they were in a circus theatre, the disguise of McCay as an animal trainer conceals an unrealistic aspect of his "live" depiction of the hand-drawn Gertie figure, when considered in terms of the realistic motivation of the Gertie animation sequence, as Crafton acclaims, "McCay's ability to stimulate natural movement was uncanny" (1993: 113). The animation scholar is right because, however natural some of Gertie's movements might look, they are the "hybrid" of a dog's or an elephant's movements, replacing those of a dinosaur which human beings have not seen alive in reality.[4]

Further, I find some of those movements violent against Gertie in terms of McCay's realistic motivation in two scenes. One is the scene in which the Gertie figure is depicted to devour a thick, tall, hard tree all at once (Figure 2.3), and the other to drink all the water in the lake. Both acts would be almost impossible for a real animal. If it attempted to do that, its throat, stomach and other organs would be damaged. Despite the realistic motivation, in the Gertie animation sequence McCay did not depict what would happen to Gertie's body when she swallowed the tree and the lake water in the scenes. This means that he had another motivation, which I classify as artistic[5] in light of Thompson, who defines:

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[4] John Canemaker tells a story of McCay who planning a scene of Gertie standing up, visited to hear from a museum curator or researcher about such a behaviour of dinosaurs and yet failed to obtain a useful information. This is cited in Hiromichi Hosoma (2013: 86-87), who indicates the source of the story: Canemaker (2005: 171) *Winsor McCay: His Life and Art*. Rev Exp edition. Harry N. Abrams.
[5] In the neoformalist definition, the artistic in this kind of motivation has nothing to do with the resultant response from the viewers.

Artistic motivation is the most difficult type to define. In one sense, every

device in an artwork has an artistic motivation, since it functions in part to

contribute to the creation of the work's abstract, overall shape—its form.

(1988: 19)

In the two scenes, indeed, McCay uses the formal capacity of the hand-drawn

animation which enables animators to manipulate lines and other geometrical

elements into any shapes, any figures. This pertains to the aspect which Eisenstein

(1988:70) terms *plasmatic* in his essay on Disney. What I am concerned with is that

McCay's artistic motivation with the two scenes ignored the physically negative

reactions which otherwise Gertie would have been depicted to show in accordance
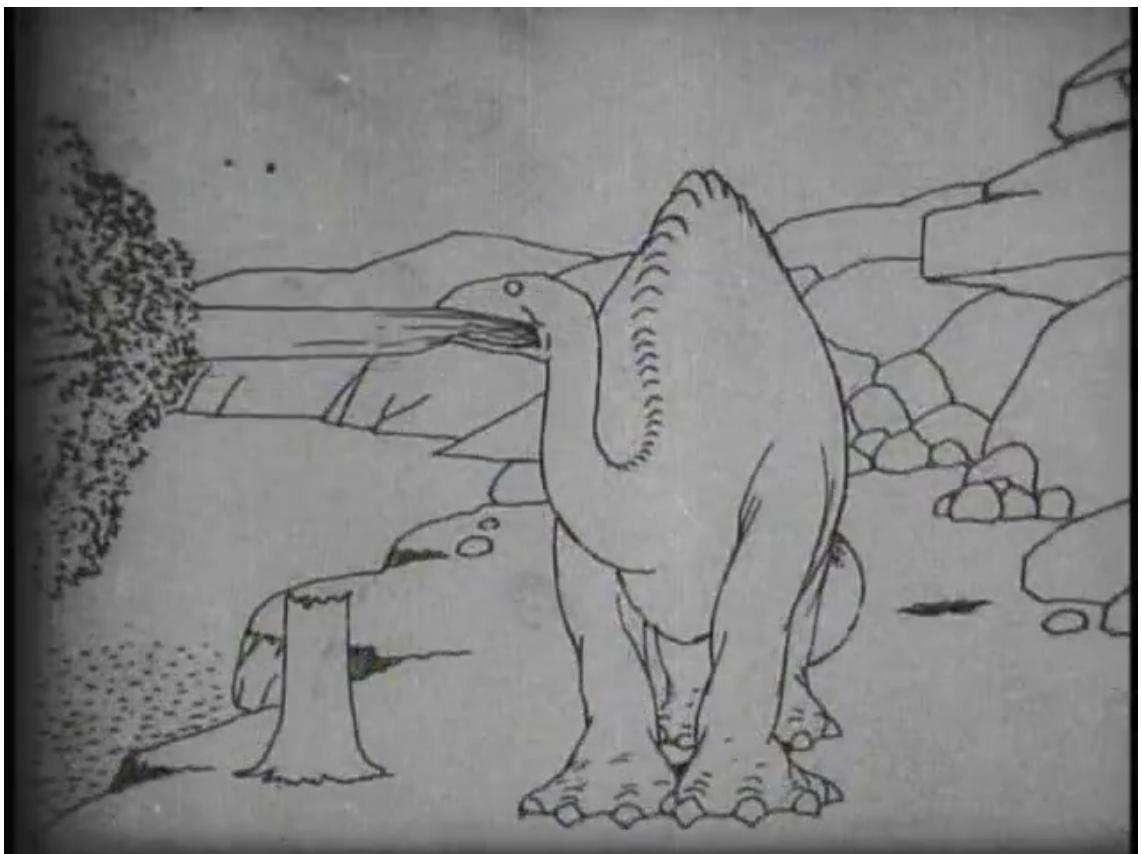
Figure 2.3 *Gertie the Dinosaur*

with his on-screen declamation of making the reptile *live* again. In this sense, I claim that in the animated world of his own making, McCay did not make a dinosaur live again but rather created a dinosaur-looking "preprogrammed machine" which cannot feel hurt by any physical damage.

Contesting Crafton (1993; 2013) and Bukatman (2012) who both tend to foreground Gertie as McCay's titular creation, I bring into focus the other animated figures; the sea serpent, the mammoth and the flying lizard, along with the lake and the mountains, all drawn on paper. They constitute the world reconstructed by McCay in the Gertie animation sequence. In the virtual world of the animation sequence, once extinct, dinosaurs and other prehistoric animals are allegedly made to live again by the animator. Reconstructing the natural world using techniques of hand-drawn animation brings us to the issue of the mode in which McCay performs as a demiurgic creator exerting power over nature, as well as a dinosaur, which I addressed above in this section. This expanded approach to *Gertie the Dinosaur* also builds on Jonathan Burt's claim that "the dynamic representations of animals on film were . . . an expression of an increased control over all aspects of life" (2002: 113).

As in my review of Descartes and Newton in Chapter One, there are two modes, retreat and intervention, of assuming the demiurgic status for an animator who wagers reconstructing nature. For the mode of retreat, I draw on the French philosopher's hypothetical cosmology in which God is not needed for nature or the world as a machine that, once set in motion, works autonomously (Funkenstein 1989: 74). In contrast, Newton views God as an industrious craftsperson who

continues to intervene in nature because he needs to justify force, motion and other mechanical quantities working between distant bodies which in space are not mediated by any materials (Funkenstein 1989: 95). Yet, what both and other mechanical philosophers of nature have in common is the idea that the human being can understand the way in which nature operates, by observing it from the mechanistic perspective, even if not knowing what nature itself is. As regards Descartes' view, Funkenstein remarks:

> The meaning of laws of nature changed. They became blueprints for the construction and reconstruction of nature, *more geometrico*, out of a homogeneous substrate. God constructed it; Descartes tries to reconstruct it; and only by so doing will he have understood creation. (1989: 191)

In terms of the epistemology of nature, Funkenstein points out that Newton has a similar stance to Descartes:

> Of God, Newton, like Descartes, More, or Spinoza, knows several things clearly and distinctly. Most of these matters pertain to God's activity more than they do to his essence. They add nonetheless to our knowledge of God, in the same way in which we may have precise knowledge of the attractive force between bodies without knowing its cause or essence. The attraction between bodies, Newton claims, is not an obscure quality, because we know precisely how it works: it obeys a universal, quantifiable relation. (1989:

90).

This analogy drawn between theology and natural philosophy leads to the postulation of *knowledge by doing* which Funkenstein terms *ergetic* knowledge (1989: 293). "This new ideal, somewhat elusive yet powerful down to our own days," Funkenstein writes, "was the ideal of knowing through *doing* or knowing by *construction*" (1989: 297). The ergetic ideal of knowing allows the human being to perform as a demiurgic figure, in other words, to imitate God, by constructing a natural world as a mechanical model, in animation as well as sciences.

Back to the issue of the two modes, retreat and intervention, of exerting such a divine power over the constructed world, the latter mode seems to be McCay's preference in *Gertie the Dinosaur*. If he intended to have retreated from the Gertie animation sequence as a world which he constructs in the film narrative, he should have screened the animation sequence as a finished work in front of his audience of friends. Instead, McCay assumes the role of an acousmatic animal trainer able to cross the material boundary between the live-action world of human beings and the animated world of hand-drawn figures presented by him as a live show, part of the former world.

His transgressive interaction on screen results in bringing back the dinosaur and other prehistoric animals to the early twentieth-century world of film. This is the way the demiurgic intervention is performed by the animator, which I term macro-intervention.[6] He acts as if he can and does go against the process of natural

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[6] I will discuss micro-intervention, in contrast to macro-intervention, later in this Chapter.

history. In the history of science, however, Newton's concept of intervention was renounced by his contemporaries and later natural philosophers and scientists. In particular, P. M. Heimann notes on the views of the Victorian era, "On the basis of the principle of the uniformity of nature, Charles Lyell had rejected divine interventions in the course of the history of the earth" (1972: 73-74). In discussion of the principle, He continues:

> [Newton's view] can be contrasted with Hutton's view of nature as a self-contained system, comprising the totality of effects in the universe. The activity of nature was intrinsic to the natural order, and the self-sufficiency of nature was not to be abrogated by any form of divine action or intervention. (1972: 76)

In this sense, analogously, the live-action McCay's on-screen interactions with Gertie abrogates a self-contained or autonomous universe which would be otherwise constructed in the Gertie animation sequence. However, this is not the case because the animation sequence is a completed film. McCay's intervention in and interaction with his animated world on the paper panel is given as ostensible and imitative in the film narrative, as the animator himself explains and shows the process of filmmaking to his on-screen friends and us as the audience viewing the entire film in front of the screen.

Of McCay's interventional attempts, the most critical one is where stopping being an acousmêtre, he makes a hand-drawn figure of himself as an animal trainer

to appear in the animated world of his own construction, and then shows off his

power over the Gertie figure on the top of its back (Figure 2.4). Significantly, the

figure which an animator represents of him or herself in his or her own film is

termed avatar by Crafton (2013: 277) in discussion of *Gertie the Dinosaur* and

other early classical cartoons. Crafton does not seem to be aware that avatar is as

much a mystical and religious concept as the incarnation of Christianity, and simply

refers to it as a device of animators' self-figuration. Like him, I do not intend to

discuss it in religio-philosophical terms, but according to neoformalist film

analysis. My emphasis is on the material aspect in which the McCay avatar—

existing along with other animal figures in the world all hand-drawn on paper—is

not McCay himself in the film. I argue that the McCay avatar should not be
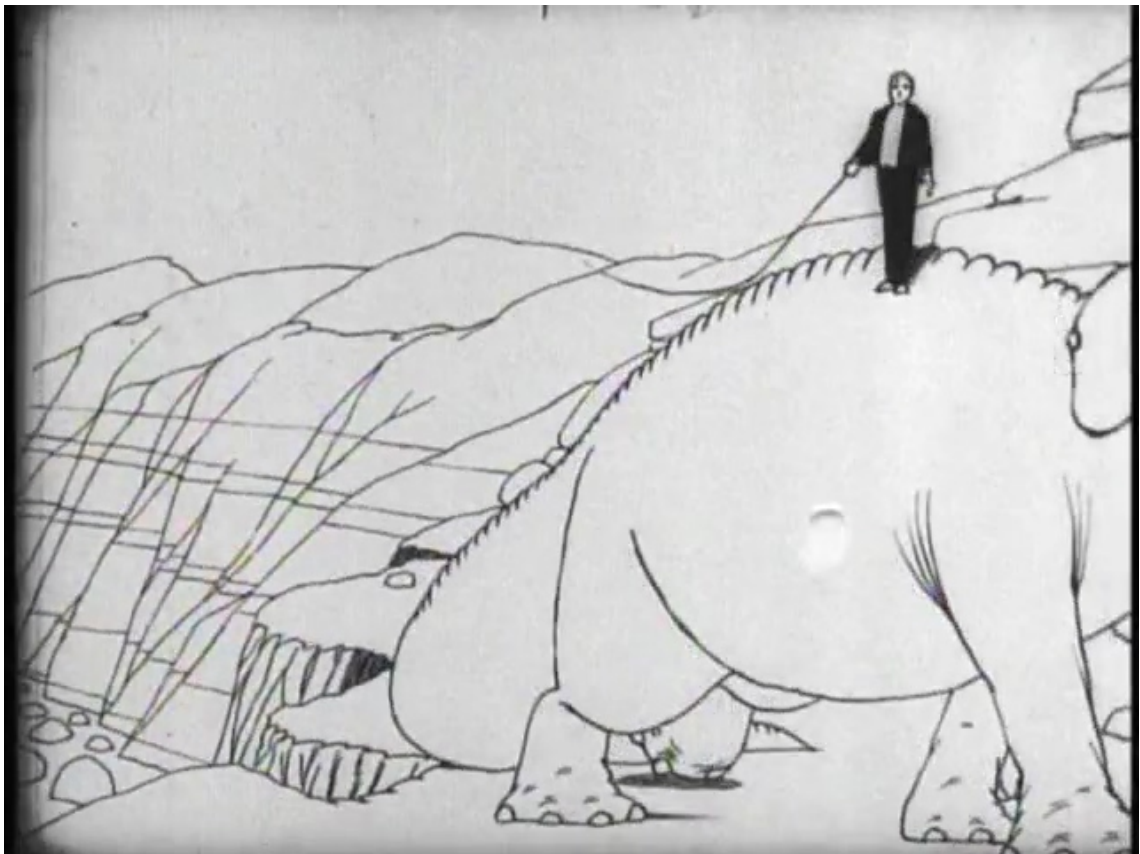
Figure 2.4 The McCay avatar and Gertie

identified as the animator but be viewed as an entity separated from him.

Given that the Gertie figure is a machine preprogrammed by McCay to move like an animal and to interact with the animator in the constructed world of hand-drawn animation, the avatar figure, too, is as preprogrammed a machine as the animal figure in terms of materiality and the narrative role, a machine in human form preprogrammed to move like an animal trainer whipping at the reptile figure. At the same time, the avatar figure can be regarded as if made to live again by McCay as Gertie is within the animator's own vision with the technique of hand-drawn animation. In these two aspects, it is possible to say that as a living figure suddenly created and thrown into the animation-constructed world, the animal trainer would be worried about how he can survive surrounded by those prehistoric gigantic animals.

McCay ignores this ontological issue of the hand-drawn human figure so that through narrative motivation, the viewers are likely to persuade themselves to assume that McCay himself comes into the animated world and then back to the live-action world. In terms of the size relationship between the paper panel and the restaurant, however, it would be quite unacceptable that whether visible or invisible on screen, McCay transforms into the tiny homunculus because this transmaterial and transdimensional event is much more likely to damage or disturb the reality of the film's diegetic world primarily based on live action. Indeed, there are no cues which suggest such a transformation. When the film cuts back into the live-action world of McCay and his friends just after the ending of the Gertie animation sequence, no longer at the restaurant is the paper panel on which

the prehistoric world ought to remain drawn (Figure 2.5). In the film, as a result,

the on-screen live-action animator ends up without confronting a critical situation

that creating life forms, in particular, a human simulacrum, will cause.

What is the critical situation about this? For instance, if the hand-drawn

animated figure as McCay's avatar remains to perform its own role on screen,

McCay will be no longer needed but replaced by the figure in the belief system in

which it/he is perceived as alive and also as live by his friends in front of the paper

panel and viewers in front of the film screen. In this belief system, at the same time,

it is easy to imagine that the avatar wants to stay *alive* in the animation-

constructed world after the stage show ends, even if resultantly threatening

McCay's status of mastery over it. As regards the eponymous subhuman character's

Figure 2.5 There is no paper panel in *Gertie the Dinosaur*

critical situation in *Frankenstein* (James Whale, 1931, US) in relation to the Judeo-Christian view, Schelde remarks, "The central issue is that Frankenstein transgressed on God's turf" (1993: 46). He connects this transgressive issue of creating human simulacra to Gershom Scholem, who writes:

> Golem-making is dangerous; like all major creation it endangers the life of the creator—the source of danger . . . lies in the tension which the creative process arouses in the creator himself. Mistakes in carrying out the directions do not impair the golem, they destroy its creator. (cited in Schelde 1993: 47) [7]

In his essay focused on animation filmmaking in terms of religious transgression, Robert Geal postulates the concept of "a prohibition about humans challenging God's monopoly on creating real life through the aesthetic representation of life, and the transgressively monstrous consequences of the breaking the prohibition" (2018: 70). These discussions of creating human simulacra such as Frankenstein and Golem suggest that the belief system is ambivalent in which something inanimate appears to be or to be made alive in animation film. The belief system might not always work well in the Tooniverse as Crafton (2013) claims. In the next section, I will develop this issue of aesthetic, as well as religio-philosophical, transgression while investigating the tensional interaction between animator and

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[7] Schelde cites Scholem (1969: 190-191) *On the Kabbalah and its Symbolism.* New York: Schocken Books.

animated, creator and created, live action and hand-drawn, depicted on screen in the *Out of the Inkwell* series.

2.2. Max Fleischer and Koko the Clown in the *Out of the Inkwell* Series

The *Out of the Inkwell* series features the on-screen interaction between the live-action human animator, performed by Max Fleischer, and the hand-drawn human figure, created (and later named Koko) by him.[8] The clown figure, Koko, is not simply hand-drawn but also involves a real human being's bodily motion as a crucial part of its multiple referents to be processed in the Rotoscope. This process and its resultant visuals have stimulated remarkable discussions of animation aesthetics in relation to the realism of animated documentary (Ward 2006a) and the perceptual effect of uncanniness (Miyamoto 2017).

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[8] It should be noted that Max's on-screen performance as the creator of the animated figure Koko raises an issue around the attribution of the film series. In other words, the question is raised as to whether he himself animated, drew frame by frame, Koko and other figures. Crafton's answer to this is: "Max Fleischer is only pretending to be the animator . . . Dave is the actual animator, at least in the early films" (1993: 298). Dave Fleischer is Max's younger brother, who also acted for Koko's body movements to be incorporated into the rotoscoping process invented by Max (Fleischer 2005: 18). To be accurate, further, Max's on-screen performance does not necessarily refer to an animator because he seems to be engaged in working with a sheet of paper only. While identifying Max on screen as a sketcher or cartoonist rather than an animator in *Vaudeville*, one of the film series, Crafton still observes of him, "Sketcher Max plays the role of artist-magician, drawing the clown and bringing it to life" (2013: 105), alluding to the Fleischer Brothers' transtextual motivation in the vaudevillesque lightning sketcher. The animation scholar adds that both Max and Dave "operate outside the fiction as the constructive agency behind the film, the performers of the animation" (p.105). Here emphasis is placed on the Brothers' common status of agency as the animator's function. Stretching Crafton's identification of Max in and outside the diegetic world of the episode, *Vaudeville*, I take the on-screen Max, through the twenty-nine films of the series under examination, as the functional equivalent of the on-screen animator McCay appearing in *Gertie the Dinosaur*.

In this PhD thesis, my primary focus is the clown's diegetically claimed status as a *hand-drawn* figure and accordingly, the way in which the on-screen creator Max as a human being deals with his creation in the narratives of the *Out of the Inkwell* films. In analysis of the human simulacrum assuming subhumanness on screen, I build on Grodal's (1997) study of subhuman characters and their mode of behaviour in film, which is quite pertinent to my research focus in that even if performed by human actors in live-action film, clowns are located within the film scholar 's scope of subhuman characters. What is of further interest to me is Grodal's (1997) discussion of "felt totality". Considering human bodies or figures which lack totality in the viewers' schematic perception, the scholar (1997) suggests that felt totality works as a key factor in the effect of uncanniness experienced in film and other media. In this section, the concept serves to explain the effect of Koko's rotoscoped body movement and how rotoscope techniques are involved in making the hand-drawn clown figure look subhuman as well as, or rather than, human.

Most of the episodes of the film series that I analyse in this thesis are set in the animator's studio where no audiences watch the interaction between him and his creation in the film's world.[9] In contrast to McCay, Max does not present his interaction with Koko as if it were a live stage show, in the episodes under examination. Rather, it is depicted in most of the film series to happen suddenly without any plausible explanation given as is by McCay on screen in *Gertie the*

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[9] In some episodes, live-action human characters get caught in the antics Koko plays in the studio and outside.

Dinosaur. Not explicit in the episodes is the declamation that the on-screen animator makes a human being live again, nor is the explanation of how he makes hand-drawn figures appear to move. "The playful struggle between the animator and his creation that typifies the plots", as Crafton summarises the *Out of the Inkwell* series, "is an allegory expressing the shift in importance away from the artist to the work" (1993: 298). This implies that in the series, the Brothers sought to structure self-contained narratives in which we see the struggle of power developed by the narrative devices of human figures, on the one hand performed by live human actors, and on the other processed by animation techniques.

Max Fleischer as a demiurgic circus master and a Taylorist scientist

The Tantalizing Fly, one of the earliest episodes of the film series, begins with Max alone drawing a clown on a paper panel in a studio (Figure 2.6). As if intended for the gaze of the film's viewer, the panel is set quite vertically—it would normally have been at a more horizontal angle. Further, the camera shifts quickly from an objective point of view to Max's subjective point of view, thereby encouraging the

Figure 2.6 Max drawing Koko in *The Tantalizing Fly*

viewer to identify him/herself with Max. As soon as the on-screen creator's

drawing takes the shape of a human clown, this hand-drawn clown figure Koko

shows quick reactions to the three-dimensional fly that has annoyed his creator at

work. Brought into focus in most of the episode, Koko's interaction with the fly is

as much a spectacular element as with Max in terms of body performance.

Processed by the Rotoscope which Max Fleischer invented for a realistic

representation of body movements (Fleischer 2005: 15-16), Koko's body

performance on screen displays enough instantaneous and continuous

improvisations to make it look like a live-action filmed actor. Crafton correctly

describes Koko's actions as actions which "the neutral movie camera supposedly is

recording" (2013: 105). However, the impression of live action perceived in the

clown's body performance does not necessarily warrant its humanness but rather

is exploited to make it look less human than Max.

Of relevance is Grodal's (1997: 106) notion that includes clowns as a group

of traditional nonhuman figures. The film scholar indicates that "if the emotions

repeat simple schemata to an excessive degree, they are perceived as non-human

and non-spontaneous in the commonsense psychology of films: for example, . . .

when clowns begin to cry or laugh by reflex" (Grodal 1997: 109). Given that the

Out of the Inkwell series is a type of comedy—the Fleischer Brothers' employment

of such a figure was motivated by the vaudeville entertainment in which

burlesques and other similar types of shows were enacted (Crafton 2013: 101-

102), the clown figure's nonhuman or subhuman status can be well seen from

Grodal's (1997: 121-122) account of military comedy films, among film genres,

that even live-action humans are "robotified", that is, depicted as mechanical, nonhuman, and lacking free will and other cues of humanness. These cues and the viewer's response correlate to each other. Grodal also remarks on comedy films that "viewers laugh at protagonist failures, thus rejecting empathic identification with the protagonists and their acts and motives" (p.176), adding that clowns in live action cannot help being a physical object (p.177). This discussion can cover the hand-drawn clown figure of the *Out of the Inkwell* series, whose actions display cues of its sub/nonhuman status as the on-screen human artist's puppet or mechanical object, rather than merely looking lifelike.[10] Importantly, Grodal's (1997: 122) study of film genres gives a further hint about the on-screen artist, too, whose role Max performs as a "higher force" which is mirrored by the hand-drawn clown figure's robotic body movements. In this series of comedy films, the viewers should be constructed to identify themselves with the real human Max, because he can function as a device for their real-world identification which Grodal (1997: 176) stresses it is crucial to establish for rejecting an empathetic relationship with and laughing at nonhuman performers.

In *Perpetual Motion* (Max Fleischer, 1920, US), Max on screen shows a mythological and religious body performance so that he might seem to be a demiurgic creator, or a higher force. Instead of drawing the homunculus figure on paper, he blows some drops of ink on his palm (Figure 2.7). This does not intend to dry out the inkblot but to suggest a conventional gesture with which a higher force

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[10] Crafton considers Koko's lifelikeness as what the Fleischer Brothers aimed at: "Dave wearing a clown suit would be rotoscoped to generate Ko-Ko's lifelike actions" (2013: 104).

Figure 2.7 Max in *Perpetual Motion*

like God is supposed to impart soul or life to human beings or human simulacra in

myths. In the caption of the relevant scene, Crafton describes the gesture as

"breathing 'life' into the inkblot clown" (1993: 168). Breath has long been used as a

metaphor for soul as Patrick Harpur indicates:

> 'Breath' is the original meaning of the Greek word *pneuma*, spirit, and a
>
> connotation of *psyche*, soul. The notion that the soul leaves the body with
>
> the dying person's last breath was a Roman belief—both *animus* and *spiritus*
>
> in Latin imply 'breath'—which persisted into Elizabethan times and beyond.
>
> (2010: Kindle 211)

As suggested above, breathing as the soul/life-giving performance is found in Greek mythology. Robert Graves writes of Prometheus' creation of human beings, "He used clay and water of Panopeus in Phocis, and Athene breathed life into them" (1992: 34). In the Judeo-Christian worldview, too, it is said that God "formed man of the dust of the ground, and breathed into his nostrils the breath of life; and man became a living soul" (Genesis 2:7). This Judeo-Christian text of the soul/life-giving performance is cited when human beings try to bring their humanoid creation to life in Yudl Rosenberg's 1909 story, *The Golem and the Wondrous Deeds of the Maharal of Prague*:

> When [the Maharal] was done, all three of us recited in unison the verse: "He breathed into his nostrils the breath of life and the man became a living creature," for even the atmosphere we inhale must contain fire, water, and air, which are the three elements mentioned in the *Book of Creation*. (2007: Kindle 386)

In this ritual of the Golem story, nobody is described as literally imitating God's soul/life-giving gesture, but in *Perpetual Motion* Max does quite explicitly in an attempt to make visible what he is in the film series. This figurative performance does not result from any religious motivation of the Fleischer Brothers but from the Western convention in which shifting from religious or mystic realms since the Reformation and the Renaissance, art and science have been qualified for the discourse and the practice, if metaphoric, of bringing human simulacra to life

(Nelson 2001; Newman 2007; King 2007).

It is not only a demiurgic status but also a master status that Max performs on screen, with the clown implied as Genie and the inkwell as the magic lamp or bottle. This performance can be viewed within the cultural context of the *Arabian Nights* which was introduced as a popular subject in Hollywood and the Western film productions (Bernstein 1997: 3) at the time when the *Out of the Inkwell* series was produced.[11] In those film productions with the subject, the genie figure says
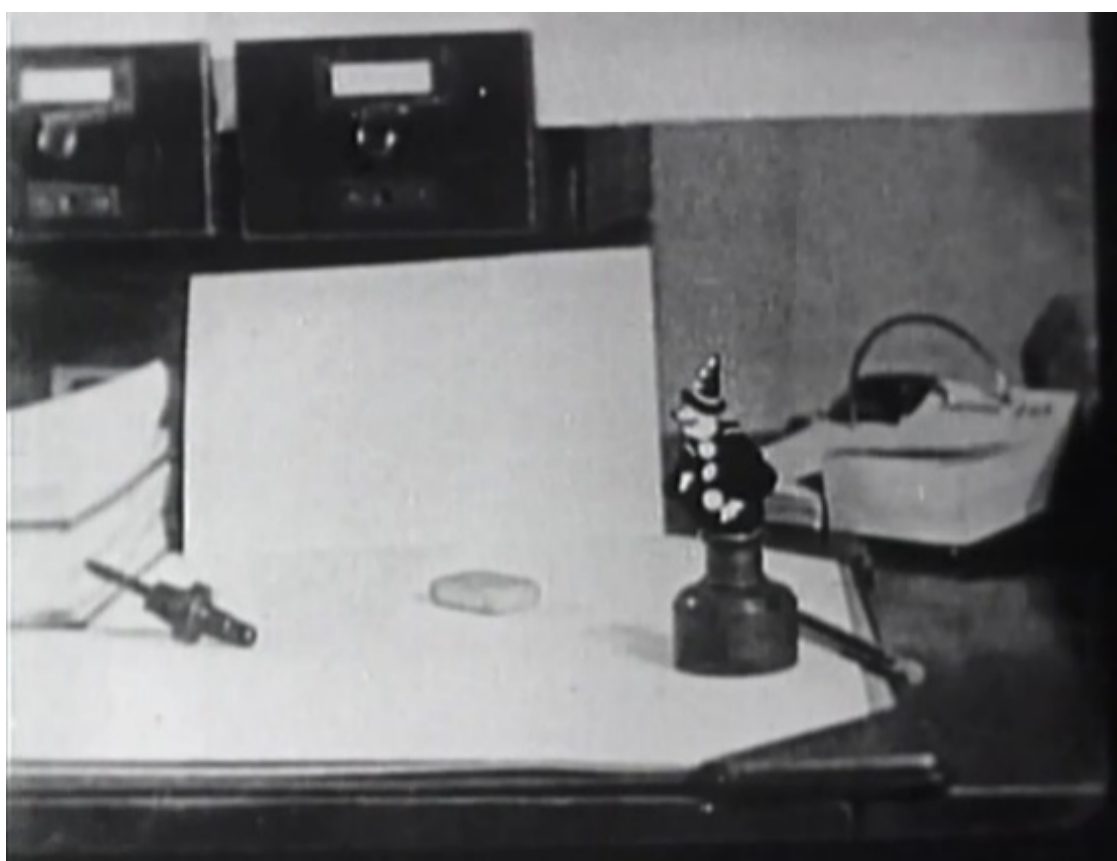
Figure 2.8 Koko like Genie in *The Tantalizing Fly*

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[11] The examples specific to Genie and the magic lamp include the live-action film *Aladdin and the Wonderful Lamp* (Chester and Sidney Franklin, 1917, US) and the animated feature *The Adventure of Prince Achmed* (Lotte Reiniger, 1926, GER), soon followed by the animated short *ComiColor Cartoons: Aladdin and the Wonderful Lamp* (1935, US) produced by Ub Iwerks, the animated advertisement *Aladdin and the Magic Lamp* (George Pal, 1936, NL) and the animated short *Popeye the Sailor: Aladdin and His Wonderful Lamp* (Dave Fleischer, 1939, US).

like this cliché phrase: "I am the Slave of the Lamp, Master".

The influence of Genie, the slave of the lamp, can be observed in *The Tantalizing Fly*, at the end of which Max on screen slips the clown figure on the back of paper into the inkwell (Figure 2.8). In this scene, Koko returns to being motionless and as a result, lifeless, but still looks slightly like a three-dimensional form while sliding down into the inkwell as a physical object located in the live-action world which Max inhabits on screen. The overtone of Genie as the magical humanoid entity is clearly found in *Modelling* (Dave Fleischer, 1921, US), *False Alarm* (Dave Fleischer, 1923, US) and other many films, produced after *The Tantalizing Fly*, in the series. In the films, Koko goes back into the inkwell on his own accord or in order to escape from trouble.

Sometimes this seems to occur under Max's control. At the end of *Cartoon Factory* (Dave Fleischer, 1924, US), for example, Max finally puts the cork into the bottle after Koko is thrown into it together with the mechanical soldiers, apparently by the human artist's will for settling the crazy burlesque of his creations. Functioning as the original and ultimate place in which he/it should belong, the small bottle imparts the animated homunculus figure with the status of a slave, and also that of the slave of Max who owns the object. Before discussing the complexity of the relationship between master and slave depicted in the *Out of the Inkwell* series, I bring to light a third face, quite distinct from, yet still overlapping with the previous two—demiurgic creator and master—of Max's self-figuration; he plays an engineer or scientist.

In *Cartoon Factory*, Max stops drawing manually and then tests an electrical
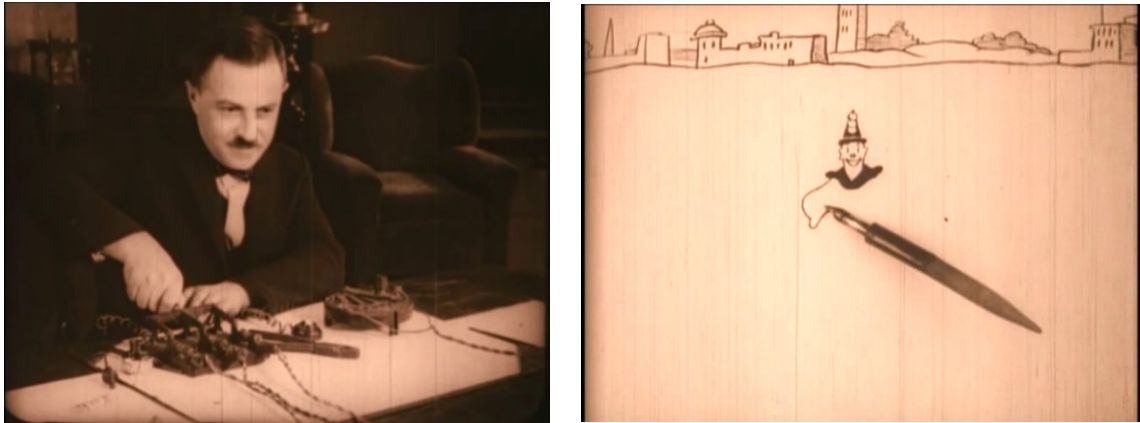
Figure 2.9 Max and Koko in *Cartoon Factory*

machine to control a drawing pen in a wireless way (Figure 2.9). Given that the

title includes the word, "factory", this film in the *Out of the Inkwell* series implies

that Max on screen seeks to develop a mechanical production system of animation.

Indeed, this was a goal of Max's invention of the Rotoscope, as suggested in the

inventor's remark on the technology: "An artist, for example, will simply sit down

and, with a certain character in mind, draw the figures that are to make it

animated . . . With only the aid of his imagination an artist cannot, as a rule, get the

perspective and related motions of reality" (cited in Crafton 1993: 167).[12]

Mentioning this comment in relation to the taylorisation of animation production

developed in the 1910s to the 1920s, Crafton summarises, "In the machine age,

empirical experience and observation were no longer trustworthy unless

corroborated, tutored, and reproduced mechanically" (p.167).

　　　Cartoon Factory can be considered as the epitome of the Taylorist idea

which Max and his contemporaries shared during the two decades. Completing the

figure of Koko with the drawing pen connected wirelessly to the knife switch

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[12] Crafton indicates the source of this remark: The inkwell man (1920) *New York Times.*
February 22.

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panel, Max connects a wire to the back of Koko, thereby electrifying and controlling

his creation (Figure 2.9). In the film, this technology is a realisation of the film

production system which enables human agents to draw and further animate any

figures mechanically on screen at any instant of time while they are working.

Following the introductory scenes of *Cartoon Factory* in which Max tests the

equipment of mechanically animating figures which he seems to have just

invented, the humanoid figure, Koko, is depicted as if brought to life by the human

inventor with electric shocks (Figure 2.10). In this moment, the animatic transition

of the hand-drawn figure is explicitly introduced as a narrative device, and from

the perspective of film history, it can be viewed as a precursor of the live-action

sci-fi horror film, *Frankenstein*, produced seven years after *Cartoon Factory*.

Figure 2.10 The wired Koko in *Cartoon Factory*

Not looking so mad as Doctor Frankenstein in the horror film, Max on

screen in this film conducts much the same experiment of giving life to a humanoid

construct with the same power or shock of electricity.[13] The character trait of an

engineer or scientist which Max on screen assumes is also seen with the other

humanoid figures as well as the wired Koko of *Cartoon Factory*. The wireless

drawing pen draws a machine which can make anything real by rendering it either

in a graphic or photographic way. Among what is rendered by the machine is a

mechanical soldier on a wheeled podium (Figure 2.11), which shifts from a hand-

drawn figure to a photographic cut-out, to a human actor performing as a robot

which is put into motion with a pull string mechanism, as is seen in Sheriff Woody

in *Toy Story* (John Lasseter, 1995, US).
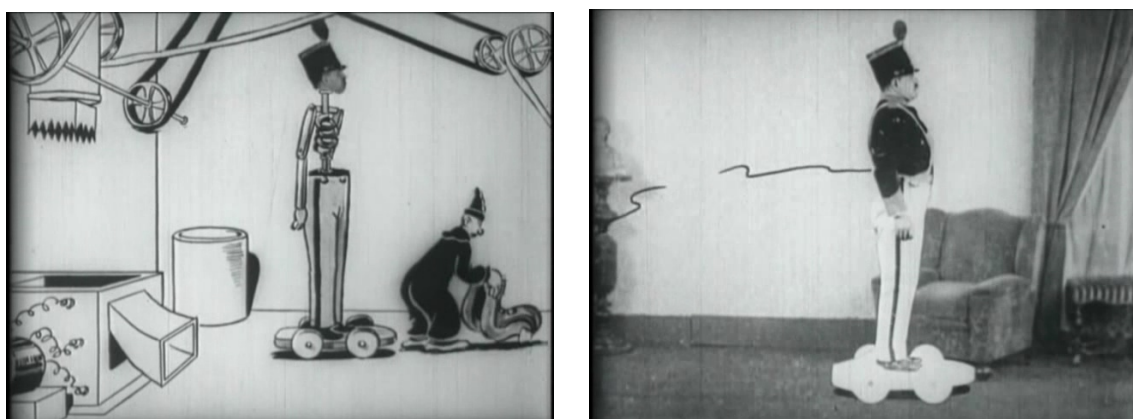
Figure 2.11 A mechanical soldier in *Cartoon Factory*

It should be noted that when discussing film genres, Grodal (1997: 122)

takes soldiers, along with robots and clowns, as a subhuman representation. The

final phase of the soldier figure apparently performed by Max in live action

displays awkward and staccato body movements as mechanicomorphic. In the

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13 For the way in which electricity was considered as a new modern source of life or soul
around the Enlightenment, see James Delbourgo (2006).

film, the human actor's imitation of a robot seems to be either realised by means of non-processed acting, or film shooting or editing. In the latter case, the result is likely to remind us of the pixilated movement of the human actors seen in *Neighbours* (Norman McLaren, 1952, CND), and interestingly, this technique is described as "animating humans as if puppets" (Purves 2014: Kindle 2978). For Max the on-screen character, and further for Max and Dave the two human agents of the film series, any figures are merely materials of image engineering, whether rendered graphically or photographically and whether shot frame by frame or in live action.

When the burlesque fight takes place going crazy on screen between the clown and the robot soldier, one crucial question surfaces in the viewer's perception: which looks less or more human? As the robot soldier is seemingly performed by Max, the question leads to problematising the demiurgic as well as human status of the on-screen creator Max who drew all the figures and invented all the machines in *Cartoon Factory*. Indeed, the issue of Frankenstein and his usurping creation is quite a common theme in other films from the *Out of the Inkwell* series. Now that I have made clear that Max on screen performs a demiurgic creator like God, the master of a genie, and a scientist like Frankenstein, I turns to the specific ways in which the clown is depicted as sub/nonhuman and the question of whether it/he threatens the ruling status of Max in interactions on screen.

Why Koko the Clown cannot be like Frankenstein's monster

Given Grodal's (1997) above-cited account of clowns as a typical nonhuman film figure, it does not suffice to acclaim that Koko looks alive. Rather, the clown figure is depicted and narrated as created, enslaved and engineered, loosely in response and contrast to the status of varying types which Max assumes on screen when interacting with it. In this sense, I call into question the evaluation of the Rotoscope, contesting Crafton who states, "Ko-Ko embodies Dave" (2013: 104). As showed above, Koko on screen displays schematic behaviours, which are close to the mode of figurative, rather than embodied, performance in Crafton's (2013) definition of the two terms. Max on screen (and further as the producer of the film series), is not simply engaged in creating the lifelike action of a figure, but also in the mechanical generation system of figures and their movements without relying on animators' imagination or their sense of body movement. This pragmatic evaluation of the technique suggests that the Koko figure highlights the process in which human bodies are subsumed under the system of image engineering.

In *Cartoon Factory*, the figure of the clown is explicitly depicted as wired to the image-engineering system. Being wired to a mechanical system works as a narrative device to signify the non/subhuman, or objectified, status of a human (and anthropomorphic) figure in conventional films, whether the figure is performed by a live human actor or hand-drawn; for instance, the mouse-queen robot in Disney's animated feature *The Great Mouse Detective* (Ron Clements, Burny Mattinson, Dave Michener and John Musker, 1986, US), the mechanised young emperor in the Japanese animated series *Nadia: The Secret of Blue Water*

(Hideaki Anno, 1990, JP) and Jason Stryker the mutant connected to metal tubes at the back of the neck in *X2* (Bryan Singer, 2003, US).

When Koko shouts, "WOW—Shut it off!!", at the stronger electric shock given by Max on screen, the human creator does not worry about how he might hurt his own creation. Although he soon separates the wire from Koko, it is not due to the clown's allusion to any pain, as he *knows* that it is impossible for any hand-drawn or engineered figure to feel pain or any other sensations. Rather, Max on screen does not need to keep his creation wired because he succeeded in making it walk as he wants, and then its walking movement becomes mechanically cycled in a faster pace with his strong electrification than it was.

Showing mechanicomorphic or theriomorphic movements in *Cartoon Factory* and many other episodes of this film series, Koko is dealt with as an object or an animal by Max on screen. In *Invisible Ink* (1921), Max plays with Koko using *his* clown hat as if playing with a cat using a feather toy, and in trying to catch it, the clown shows reflex reactions for a while (Figure 2.12). Despite the suppleness of body movement due to the Rotoscope, yet in terms of the behaviour, the human figure looks much like a helpless cat that is only made fool of by its master.
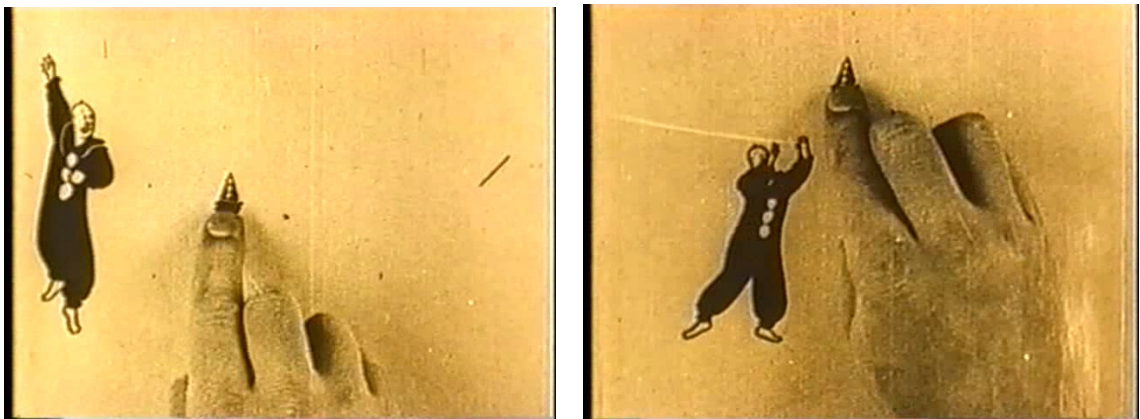
Figure 2.12 Koko in *Invisible Ink*

In *Jumping Bean* (Dave Fleischer, 1922, US), likewise, the clown walks or runs round distractedly in circles, with the top of his head tied and confined to the wire-like pen line that was drawn by Max on screen. In the middle of trying to free itself from being shackled, Koko's body becomes twisted to look like a screw's helical line or a thick spring. Soon followed by the contrasting depiction in which Koko becomes suddenly happy for obtaining a hat and a costume into which the pen line is transformed, the clown figure is characterised by the movements that even if supple, are involuntary, instinct-driven and goalless, as a narrative device suggesting that *it* is not or below human, in terms of Grodal's (1997: 116-117) definition of humanness. Such a mode of behaviour for Koko serves to remind the viewer of a dog or a monkey; when surprised at the unpredictable movements of the beans in *Jumping Beans*, he jumps up and down by reflex, and when confused by a mirror wall in *Puzzle* (Dave Fleischer, 1923, US), he does not show any cognitive ability to understand the reflected figure in the mirror as himself—he tries to attacks it only to break the mirror—unlike human beings.

What is more significant in *Jumping Beans* is that Max likens Koko to an object when he ridicules his non/subhuman creation: "Now You Look Like a Jumping Jack". This intertitled dialogue suggests that the behavioural loop of stimulus and response makes Koko look like the well-known mechanical puppet toy of a human appearance.[14] The clown figure's schematic movement of surprise

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[14] A jumping jack might refer to a physical exercise. Not as an object but an activity, however, the referent is not well compatible with Max's phrase, "look like a Jumping Jack". Further, the exercise was not well known to the public around the 1920s when the *Out of the Inkwell* series were produced. For the detail of the exercise, see Connor Heffernan (2015) The history of the jumping jack. Available at: https://physicalculturestudy.com/2015/02/23/the-history-of-the-jumping-jack/ (accessed 26 Aug 2018).

or shock is reduced to the mechanical toy's movement that is simplistically repetitive, flat and emotionless.

Koko's mechanically repetitive movement is highly visible in the early three creator-created interaction scenes of *False Alarm* (Dave Fleischer, 1923, US). In the first scene, we can see the clown try and fail a few times to catch a cane which on screen Max drew for him, every time it contracts and expands (or goes down below or comes up from the ground), seemingly for itself, yet resulting from the creator's invisible drawing scheme. Next, he is going to walk to the right side of the screen as he likes, and quickly interfered with by Max, he repeats the gesture and facial expression of anger to his creator to restart his favourite walking routine. We can see this set of movements two times; the second time is shorter than the first. Third, Koko bursts into a run, and then Max's hand quickly blocks his path as if it were a wall which he cannot jump over. Even his running in the opposite direction is interfered with by the blocking hand. Sandwiched between Max's two hands, and after rotating several times, the clown repeats four times the action of raising his hands up and down at the same time bending his legs up and down. In the three consecutive scenes, some of the clown's movements might suggest free will and emotions as the tokens of humanness. Repeated mechanically and often excessively, however, they work in the opposite way which illustrates that those anthropomorphic tokens are only pretensions.

This malfunction of the cues of free will and emotions can be viewed in terms of figurative performance. Observing early classical cartoon characters, regardless of whether they interact with live human actors as their creators on

screen, Crafton notes:

> Not that animated performances in the figurative mode were bereft of
> emotion; they simply expressed it using different devices. Performances
> arising from even the most rigidly conventionalized forms may still convey
> feeling by the way of vocabularies of *masklike* signs and gestures. (2013: 24;
> emphasis mine)

Despite his persistent argument that animated characters perform as effectively as live human actors on screen, Crafton as cited above admits that figurative performance can make the viewer perceive such characters as *fake* and eventually as sub/nonhuman. The scholar goes on to write of Betty Boop that "her movements, gestures, and expressions are formulaic; she is not introspective; we don't bond with her as a thoughtful being" (2013: 26). To be accurate, it is not that she is not introspective or thoughtful, but that the human agents of the *Betty Boop* series made the figure of the titular name move in the mode in which it does not appear so. No matter how supple or "lifelike" its movement looks, likewise, the Koko figure in the figurative, schematic and mechanicomorphic mode refers to its status as a puppet, thereby making its cues of free will and emotions ostensible, dubious and inauthentic.

In the Fleischer Brothers' motivation for using the theriomorphic and mechanicomorphic modes of behaviour, Koko is even depicted to foreground and self-exploit its own material conditions, drawn-ness and reproducibility, as a
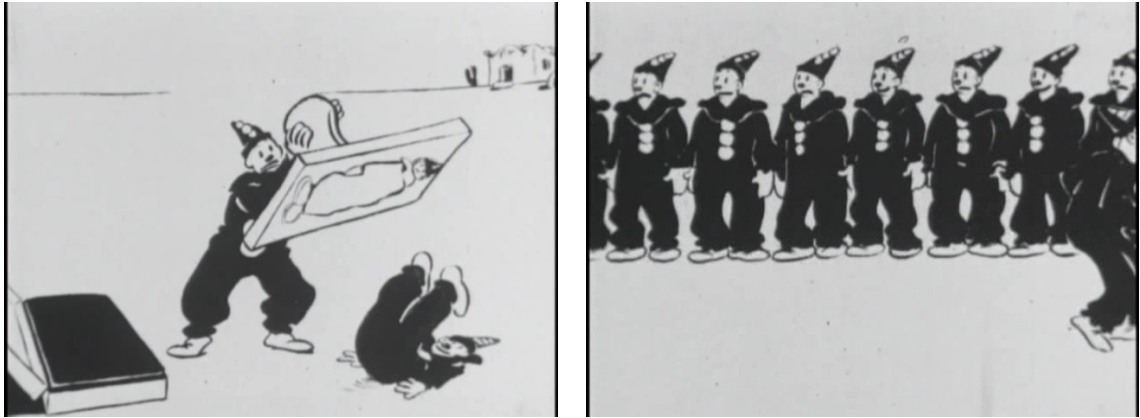
Figure 2.13 Koko reproduces it/himself mechanically in *Jumping Beans*

narrative device. In *Jumping Beans*, for instance, Koko reproduces itself

mechanically by means of a stamp (Figure 2.13). Countlessly multiplied in a flash,

the copies of the Koko figure move and run in entirely the same way to each other,

going so far as to march in rows as soldiers do. In this impersonalised and unified

mode of movement, the copied figures seem to be something mindless or soulless,

or humanoid robots.

The mechanical reproduction of one and the same cartoon figure echoes the

Fleischer Brothers' Taylorist vision of animation production in the film industry.

The vision has another aspect of replaceability, as relevant to reproducibility, in

which the Fleischers can create and supply new cartoon figures that as soon as

their hand-drawn precedent has lost popularity, are to work for the Tooniverse.

This is clearly claimed in *Koko in 1999* (Dave Fleischer, 1927, US), where Max on

screen says to Koko, "Now, you are not the only clown in town!" and then brings

some puzzle-like pieces of paper together into a puppet. Put by on-screen Max onto

the two-dimensional space of hand-drawn animation, the paper puppet is soon

transformed into a hand-drawn figure like Koko. In the film, mechanical is not only

the process of creating new equivalent figures as the materials of animation, but

also the futuristic world in which Koko and other characters live, eat and marry

under the order of automatised system, much the same world as we see in *Modern*

Times (Charlie Chaplin, 1936, US).

Indeed, the Brothers take advantage of the material reality of the clown

figure for a joke in *Koko Needles the Boss* (Dave Fleischer, 1927, US). Torn by the

hangnails of Max on screen with the paper on which Koko is drawn, this clown

figure asks Max on screen, "Don't hem and haw, I need surgery FAST!" However, it

is not surgery but rather possibly glue which the drawn figure lacking human

anatomy on paper needs—yet glue cannot work because the torn-ness of the paper

is not real but drawn. The joke continues while the surgical operation which its

human creator pretends to conduct is depicted using techniques of hand-drawn

animation. Sewing the torn area of paper, the drawn big and thick needle and

thread passes through the drawn figure's ostensible body without any treatment of

anesthetisation. Not hurt but upset about being sewed, Koko as a figure simply

moves aside out of the torn area on paper (Figure 2.14). This transmaterial and

transdimensional joke demonstrates that any performances of the clown on screen

are an illusory pretension based on the material condition of being drawn in ink
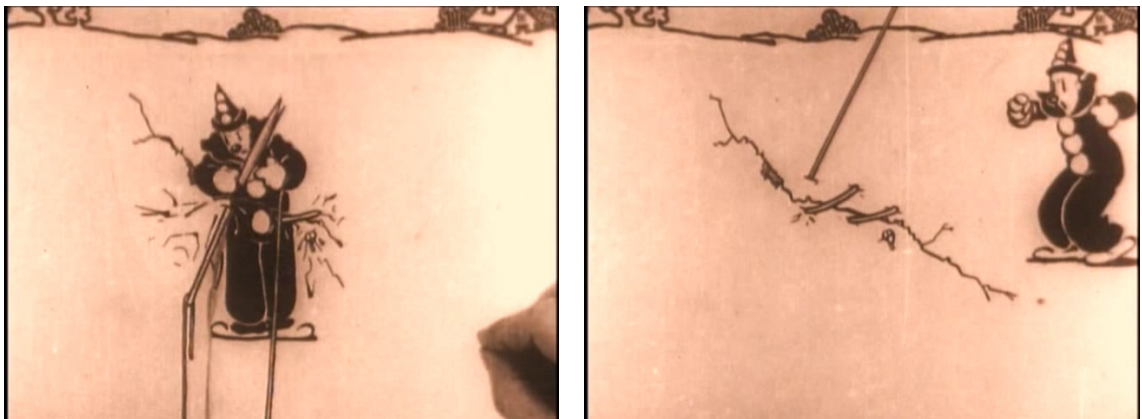
Figure 2.14 The hand-drawn needle and thread in *Koko Needles the Boss*

frame by frame.

The exploitation of drawn figures' material condition is also witnessed by Crafton, who comments on early animators including the Fleischer Brothers: "They relied on graphic conventions that put their toons' bodies through gyrations to show off their nonhuman anatomical rubbery quality, their imperviousness to physical attacks and dismemberment" (Crafton 2013: 28). The animation scholar is right in that he points out hand-drawn figures' graphic-ness and its conventions, but in animated film such figures do not have any (literally anatomical) bodies but are a constitution of lines and/or paints on the registered area of each paper or celluloid sheet.

Tied in with the schemata of humanness, this body issue helps reconsider the recurrent question of the uncanniness of rotoscoped figures in hand-drawn animation. Discussing mental models of humanness as relevant to social interaction, Grodal writes, "Furthermore, it is characteristic of the models of humanness that humanness is depicted as a 'felt totality'" (1997: 110). Here, the concept of "felt totality" suggests that fragmented or disembodied human bodies or their images can make it difficult for the viewers to perceive humanness or to experience the sensation of the quality in them. Putting forward the human being as composed of many different organs and functions, the film scholar continues, "Therefore, if we isolate the component parts and functions from the totality, the components are very often felt to have a non-human quality which is normally connected with lower life-forms, things, and mechanical devices" (p.110).

In this sense, rotoscoping is a process of isolating or "amputating" a human

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being's kinetic part in time from its original body and then transplanting it into a drawn figure of a body on screen. Lacking felt totality, even if transplanted into a human figure, the rotoscoped body movement can be perceived as something non/subhuman or non-living. It visualises the amputated-ness, disembodied-ness and constructed-ness of Koko on screen rather than helping the clown figure appear alive or human in totality.

In this section, I elucidated how Koko as a hand-drawn figure is dealt with as non/subhuman and further material in the *Out of the Inkwell* series. This does not entirely deny any possible impression of being alive and/or human when the viewer perceives the drawn figure of the clown Koko on screen, but rather sheds light on the impression of being non/subhuman and the material reality of drawn-ness which are explicitly shown with the figure in tension with the anthropomorphic illusion. Here stops working the impression of autonomy on the grounds of which Bukatman (2012) argues cartoon characters come to appear alive. He states:

> Ko-Ko might refuse to perform as directed, or he might show some reluctance to return to the inkwell at cartoon's end. As I have mentioned, these characters do not simply have life; they have a life of their own, and this rebelliousness can be read as a further sign of vitality. (2012: Kindle 337)

This argument touches on the Frankenstein-monster issue dealt with in the

previous section on Gertie. Cartoon characters' autonomy is also observed in the

Out of the Inkwell series and other animated cartoons by Crafton, who remarks,

"The toons are created by the animators, become independent beings, and then

rebel or threaten the creators, in these cases rationalized as digestive and

cannibalistic motifs" (2013: 284). However, it should be noted that Crafton's (2013:

80) emphasis is not on the toons' being or appearing alive but on their performing

liveness. By extension, it can be said that Koko is not really autonomous but

performs autonomy, or rebelliousness, in the diegetic world of the film series, as a

conventional stimulus for the viewer to laugh at.

Concerning animated characters—regardless of whether they are presented as

living or non-living, and human or sub/nonhuman—in his study of early animation

history, Crafton suspects, "the drawings seem to take on an independent life of

their own" (1993: 298). When this happens, he continues, "The 'hand of the artist'

disappears, its place now occupied by characters who become agents of his will

and ideas and through which his presence is known" (p.298). This observation

provides a hint of how a constructed figure in human (or animal) form can make an

appearance as a subject, at the same time creating its sub/nonhuman counterpart,

in the viewer's experience of animation film. Crafton (p.298) sums up as the term

of "retreat" the disappearance of the on-screen live-action animator behind the

screen, which reminds us of Descartes' view of the mode in which God's power

works toward the world He created.

As examined above, in many of the *Out of the Inkwell* series the on-screen

creator Max continues to intervene in how the clown figure Koko moves, how it works and how it ceases to be, after he gives rise to it. This mode of the creator's power reveals to the viewer that every time it moves, works and exists, the clown figure is not only drawn but also manipulated in time at his will. Crafton's (1993: 298) above-cited account suggests that the on-screen visibility of such a creator and his power interrupts the construction of a self-contained film narrative in the diegetic world where an animated figure can appear to the viewer as a subject independent, autonomous and alive. The scholar points out, "The animator opts for increasing invisibility while seeming to perform a service for the audience, entertaining them with these diverting adorable protagonists" (p.299)—what he means by adorable protagonists includes characters representing children and (possibly anthropomorphised) animals.

I connect this observation to the next Chapter Three which takes on the animation films in which the hand-drawn human figures usually operate as the leading narrative device, with no live human actors as their creator appearing, in the development of the film narratives. In the narratives, I analyse the puppet-as-puppet figures assuming non/subhumanness or simply referring to a thing, in contrast to those performing humanness or aliveness. Before entering the next Chapter, I examine Greaves' *Manipulation* as a critique of the animator's visible hand grappling with a figure of his own drawing on paper.

2.3. An Animator and His Resisting Creation in *Manipulation*

For the most part in *Manipulation*, a live-action human animator on screen tortures and fights the human figure which he has just created on paper, only to throw it into a trash basket. The antics are played out along with the animator's actions to control the human figure's every movement—I term such an action micro-intervention. As a figurative depiction of the animating process with hand drawings, all his micro-intervention is resisted and survived by the hand-drawn human figure.

In this sense, *Manipulation* is the film of an unfinished animation, and this theme of unfinished-ness makes the film noticeable in two aspects. First, the film

Figure 2.15 An animator in *Manipulation*

does not intend to show off any technical achievement of the hand-drawn human figure in terms of movement. More significantly, it features the figure's material condition of paper in the process of animating. With these aspects in mind, I proceed to analyse how the conventional status of the animator as a demiurgic creator is satirised in relation to the figure's materiality in the film. For this analysis, I connect the issue of the animator's status to the debate which Funkenstein (1989) observes was made between Newton and Leibniz about the intervention of the Creator-God with the world as a clockwork in terms of His (im)perfection. The question of (im)perfection will be also reviewed in terms of animation filmmaking from a non-anthropocentric, object-oriented perspective informed by minimalism. My intention with this is to evaluate *Manipulation* as a critical commentary on the animator's self-figuration as an omnipotent god.

At the beginning of the film, following the point-of-view shots in which the animator on screen works at a drawing desk, the viewer sees in a phenomenological sense what the animator sees happening on a sheet of paper. With the animator's face off screen, it is quite difficult to identify him except for gender (Figure 2.15). This anonymity functions as a cue in which any male animator employing the technique of hand-drawn animation can be the on-screen animator. He begins to draw a human face on paper, and soon tosses it out to disappear out of the screen whose frame matches the sheet of paper—the being-tossed-out is created using the technique of hand-drawn animation. The careless treatment indicates that the animator is not satisfied with his uncompleted creation. After tapping on the paper for another idea or approach, he begins to

draw legs, feet, a torso, arms and hands, with a head not drawn.

However, the resultant drawing seems to be still unsatisfactory to the serious animator. Tossing out the headless human figure again, further, he crumples the sheet of paper once used yet now empty. This course of artistic creation demonstrates that the animator is so powerful as to discard and dispose of at any time what he created and what he used for it. At this stage, the power is depicted to go beyond material reality by means of the technique of hand-drawn animation. The animator's three-dimensional action of tossing the figures out results directly in their two-dimensional sliding out of the paper in the film. In a realistic sense, this is impossible because once drawn with ink or graphite, the figures are physically fixed to the sheet of paper.

The film's narrative shifts when all the discarded figures come back onto a new sheet of paper to complete the figure of a human body. As if it survived without respect to its creator's artistic decision, the human figure makes a gesture of showing itself off with a smile on its face. Then begins a self-contained animation for a while without the animator; the figure is depicted as a performing character capable of moving for *himself* and aware of *himself*. Walking and running around voluntarily in a given, virtually three-dimensional, world of paper, he seems to notice that his own body is made of roughly drawn lines and lacks a three-dimensional volume. The character's autonomy is interrupted by the hands of the animator who without hesitation, needles into him with threads through the sheet of paper in order to manipulate him like a marionette (Figure 2.16). Impossible in a realistic sense, this interruption makes explicit a violent aspect of the animator
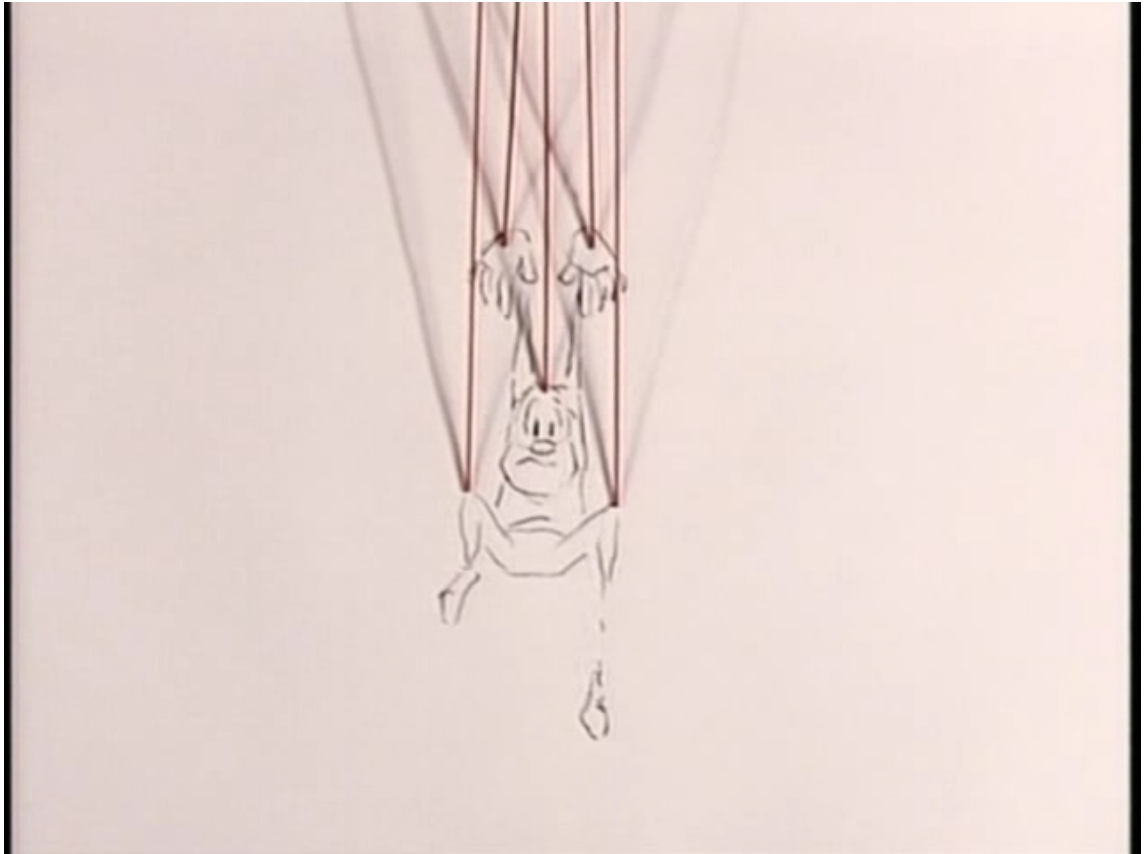
Figure 2.16 The figure becomes a marionette in *Manipulation*

exploiting the character for his own artistic motivation to the degree that one of the

character's feet is severed from the leg while being forced to be badly moved by the

hands of the animator (Figure 2.16).

This is also what I pointed out analysing McCay's way of treating Gertie as a

circus animal in *Gertie the Dinosaur*. In this film, Gertie is depicted to swallow a

thick hard tree and a lot of water under the order of the animator. Although the

Gertie figure is given as alive in the film narrative, the action of swallowing is not

perceived as fatal for the nonhuman creation but operates as a device for the

human audience's laughter. For this comedic effect, the viewer's belief system of

Gertie on screen shifts swiftly from brought-to-life-ness to drawn-ness.

Manipulation puts into question such an anthropocentric perceptual play by

Figure 2.17 The animator tears out the figure in *Manipulation*

showing that the on-screen human animator's creative execution can hurt, wound

and injure a human simulacrum which he intends to present as alive. Ignoring that

the character looks upset, uncomfortable and hurt, the artist does not stop

manipulating *it* in a violent way: pulling its arms to the extremes, and flicking it

with fingers. The human simulacrum finally resists, hits and bites its creator, and

then the latter tears the former out of the sheet of paper (Figure 2.17).

Separated from the rest of the sheet, the hand-drawn human figure turns

into a three-dimensional yet flat puppet and tries to run away from its creator.

Cruelty reaches the peak; when on the run it slips on spilled red ink, it seems to

bleed. Thrown into a trash basket, the human figure climbs up from inside it to

show a cue of survival at the end of the film (Figure 2.18). This is a crucial scene

Figure 2.18 The figure survives in *Manipulation*

where the conventional discourse of animation is problematised. The on-screen

animator eventually gives up bringing the human figure to *life*, and nonetheless the

figure appears to move for itself and suggests a cue of life, with the human

animator gone at the end. Here, the film presents an ironical situation for the

viewer who promotes animation's conventional discourse; when someone argues

that the figure looks and *is* alive in the animated world, he should agree that it was

not brought to life by the on-screen live-action human animator but it is already

alive as material per se. If this view of materials or artefacts is accepted, there is

nothing that the on-screen animator struggles for in his studio. Instead of such a

view, therefore, material resistance is what I bring into focus in this section.

In the film narrative, the resistant figure's final survival does not prove the

animator's artistic achievement, nor acclaims animation's capacity of bringing-anything-to-life. The on-screen animator's interaction with the human figure as a creation of his signifies almost literally that he fails to achieve his artistic goals. He erases what he has just drawn and even dumps the sheet of paper itself on which he drew figures, because the drawings are not fit for what he intends to create, or simply because he does not like them. For the artist in *Manipulation*, concepts are prior to materials. This is quite a usual event for animators in the real world. For instance, we can see an animator crumple and throw away the sheet of paper on which he drew a figure in the 1939 documentary entitled *How Walt Disney Cartoons Are Made.*[15] Even in the current digital environment of animation filmmaking, Stella Dearing[16] remarks on her 2017 animation project: "Artists like Lean and many of our contemporaries, we started animation with pen and paper, they didn't do anything, except to *draw, erase, throw the paper out, draw again* for eight to 12 hours" (Tomada 2017; emphasis mine).

Manipulation does not feature the on-screen live-action animator's successful execution but rather his failure to construct a good relationship with his creation as material. He struggles in controlling it, only to discard and leave it behind. In contrast to this film, *Gertie the Dinosaur* does not give any cue that some drawings of Gertie were erased or thrown away into a trash can, thereby

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[15] This documentary is available at: https://youtu.be/mhfp6Z8z1cI (accessed 19 Oct 2018). For the detail of the documentary, see Open Culture (2011) How Walt Disney cartoons are made: 1939 documentary gives an inside look. Available at: http://www.openculture.com/2011/04/how_walt_disney_cartoons_are_made_.html (accessed 19 Oct 2018).
[16] Dearing is senior vice executive president of the animation studio Top Draw Animation, Inc. involved in the production of the animation film *My Little Pony: The Movie* (Jayson Thiessen, 2017, US/CND).

suggesting that the on-screen animator McCay is a flawless creator. In *Manipulation*, on the contrary, the human animator is a self-contradictory creator ready at any time to throw away figures which he is alleged to "bring to life". This figuration of an artist as imperfect inflects what Batchelor calls as "the humanist ideal of the work of art . . . born from a struggle between a solitary individual and his resistant materials" (1997: 68). The film suggests that such a humanist ideal leads to anthropocentric violence, thereby belying the human subject's mastery over the sub/nonhuman object.

Particularly in terms of animation among arts, the imperfectness of the on-screen animator-creator takes us to where the question is raised of the mode of intervention in which God exerts His power on the world. For Newton who put forward theological accounts in terms of his laws of motion, God "was by no means a lazy gentleman who does not interfere in his creation" (Funkenstein 1989: 95). According to Funkenstein, the British natural philosopher "would not have been able to account for the instantaneous effect of gravitation" without "[taking] God's spatial omnipresence more and more literally" (1989: 94). As seen in *Manipulation* and also the films by McCay and the Fleischer Brothers I discussed in the preceding sections, analogously, the motion of hand-drawn animated human or animal figures is likely to be viewed as mirroring the filmmakers' power or creativity. What interests me is the reason for which the intervenient mode in which God exerts power was not entirely accepted by Newton's contemporaries. Funkenstein indicates, "Leibniz, who opposed many of Newton's theological positions, was particularly enraged by this image of God as an *imperfect* watchmaker, the

mechanism that he created being in constant need of repair" (1989: 95-96; emphasis mine). For Leibniz, God cannot be an imperfect artist.

Extending from Leibniz's view, in *Manipulation* the on-screen animator is an imperfect creator. His demiurgic performance of micro-intervention in the motion of the drawn human figure is but the token of its incompleteness as well as his imperfectness. In the vein of Crafton (1993), such a token was made invisible in animation history to make animated figures subjects in self-contained film narratives. Several decades after the *Out of the Inkwell* series, *Manipulation* is intended to make visible again and criticise the anthropocentric view in which the anonymous animator still insists on the intervenient, often violent, control of every movement of his creation. In this intention of Greaves', the recalcitrant human figure as a material thwarts the idealist animator on screen.

In an attempt to illuminate animators' privileged status over animated figures and materials in animation filmmaking, in this Chapter I have examined the hybrid films in which live-action human animators on screen perform as demiurgic creators or life-givers with hand-drawn human or animal figures as their creations. My analysis of the films reveals that the on-screen animators act as if they gave "life" to the figures, but that they still remain to regard and deal with their creations as materials or objects. Among the hybrid films under examination, further, I evaluate Greaves' *Manipulation* as a self-criticism of such a self-contradictory stance in animation filmmaking. In the following Chapters Three and Four, I will turn to puppet-as-puppet figures appearing on screen with and in

contrast to human or animal figures, in conventional self-contained narrative films made, respectively using the technique of cel-based hand-drawn animation and that of stop-motion animation.

Chapter Three

Puppet-as-puppet Figures and Their Modes of Movement in Cel-based Animation in Group CEL

The focus of this Chapter is a group of the hand-drawn figures of puppets presented as puppets in conventional, narrative-motivated, cel-based animation films, most of which are located in the Tooniverse defined by Crafton (2013). My analysis of these figures intends to articulate the ways in which they are discerned by the animators and the viewers, as inanimate, fake or non/subhuman, from the figures representing humans or (often anthropomorphic) animals as living beings in the narratives of the films of that kind. As there are a large number of the figures I classify and call as Group CEL, I have developed a typology which helps select and analyse the emblematic case(s) of each type. For Group CEL, I suggest eight types of puppet-as-puppet figures (See Table 3.1). As discussed in the Methodology, each type is defined in terms of the two key criteria: (1) animatic transition and (2) interaction with human and/or (anthropomorphic) animal characters.

Throughout the case studies with the typology in this Chapter, extending discussions of the power relationship between creator-animator and created-animated in Chapter Two, I analyse the ways in which human or animal characters as living deal and interact with their simulacra as non-living or fake in the film diegesis. In particular, drawing on the discourses of humans, animals and machines by Descartes and La Mettrie, this analysis clarifies and evaluates the system of belief and value, or the ideological background, in which animators and other

Type	Criteria	
	Animatic transition primary and secondary	Interaction with characters in the film narrative
1	a. No transition: Stationary state	No interaction
	b. Only primary transition: Passive mode of movement	
	c. Only primary transition: Automatic mode of movement	
2	Secondary transition's main principle: Shifting to a different world	No interaction except for supernatural characters
3		No interaction except for the human owner and his/her animal friends
4		No interaction allowed except for animal or marginalised characters
5	Secondary transition's main principle: Magic	Enchanted by the character of a higher being in the film's world
6		Cursed by a diabolic power in the film's world
7	Secondary transition's main principle: Technology	Equivocal in the film's world
8		Deceptive in the film's world

Table 3.1 Eight Types of the puppet-as-puppet figures in Group CEL

human agents depict the figures of two kinds, living and non-living, real and fake, with the cues for the viewers to perceive one from the other as distinct (or to misperceive one as the other in some cases). In clarifying those backgrounds, I place some cases on the one hand within the film-historical context focused on puppets across between animation and live action, and on the other, the socio-political context involving issues of adopted children and racism, television and the nation-state, and corporate power in animation industry. This expanded contextualisation will show how a figure and its mode of movement demonstrates what an animator or a viewer can see or imagine happening to him/herself or someone else in the real world.

Next, I outline the emblematic cases of the eight types, including three subtypes, in Group CEL before analysing them in detail.

Selection of the emblematic cases from Group CEL in the Tooniverse

The emblematic films I have selected for the eight Types come mostly from Hollywood studios and other conventional platforms of animation filmmaking like Japanese "anime".[1] They include: *Pinocchio*, *The Many Adventures of Winnie the Pooh* (John Lounsbery and Wolfgang Reitherman, 1977, US) and *The Great Mouse Detective*, all from Disney; *Suddenly It's Spring* (Seymour Kneitel, 1944, US) and *The Enchanted Square* (Seymour Kneitel, 1947, US), both featuring the Raggedy Ann

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[1] Anime is a conventional, yet controversial, term to signify the Japanese industrial platform of cel-based hand-drawn animation filmmaking and its stylistic successors. For my postcolonial critique of the term, see Kim (2013) The East Asian post-human Prometheus: animated mechanical 'others'. In: Buchan, Suzanne (ed.) *Pervasive Animation*. New York and London: Routledge.

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doll, in the *Noveltoons* series; *The Mouse and His Child* (Charles Swenson and Fred Wolf, 1977, US and JPN); *The Simpsons: Halloween Special III* (Carlos Baeza, 1992, US), one episode of the long-running animated sitcom; and the anime TV series, *Astro Boy* (Osamu Tezuka *et al.*, 1963-1966, JPN).

Central among the films is Disney's *Pinocchio* which not only features the titular boy character as a wooden puppet but also places the figure of *him* among a broad range of puppet-as-puppet figures, either in human or animal form. Bukatman observes:

> Geppetto's workshop is filled with clockwork automata that erupt in a riot of limited but cacophonous action. The automata, in their repetitive, mechanical actions, are reminiscent of the simple looping image sequences of an earlier era's optical toys, while Pinocchio himself, with his greater range of movement, motivation, and expressivity, is more properly cinematic, from the moment the Blue Fairy animates him. (2012: Kindle 3333)

The breadth of types of puppet-as-puppet and other non/subhuman figures found in *Pinocchio* helps me examine some of the eight Types in a cohesive manner. I classify and analyse those automata and other puppet-as-puppet figures in separate Types, which remain sub/nonhuman in contrast to the puppet boy character that is eventually transformed into a "real" boy when *Pinocchio* comes to an end. For much the same reason, *The Great Mouse Detective* is as good a case as *Pinocchio*, except that the performing characters in the former's narrative do not

include any figures of life-size human beings because it features anthropomorphic animal figures.

As antithetic to *Pinocchio* in terms of sub/nonhumanness, *Astro Boy* is a pivotal work, as Frederik L. Schodt writes of the techno-puppet figure of the title:

> In a 1986 article in the *Journal of the Robotics Society of Japan*, Tezuka explained that he created Atom [Astro Boy] to be a type of twenty-first-century reverse "Pinocchio," a nearly perfect robot who strove to become more human (i.e., emotive and illogical), and also to be an interface between two different cultures—that of man and that of machine. Although Tezuka had never read American novelist Isaac Asimov, who worked hard to overturn the "evil" image of metal men in the West, his creation—Atom—was a friend of man and lived according to strict rules of robot behavior remarkably similar to Asimov's Three Laws of Robotics. (2011: Kindle 1144)

This alternative aspect of Astro Boy to Pinocchio is at the heart of Kim's (2013) essay, which here I build on for analysis of the puppet-as-puppet figures' movements and their religio-philosophical backgrounds and implications by placing them among other types of sub/nonhuman equivalents as well as human and/or animal characters.

Focus on figures of puppets as toy objects also expands my scope to the locus where we can find the two Raggedy Ann films of *Noveltoons*, *The Many Adventures of Winnie the Pooh* and *The Mouse and His Child*. These are adaptations

of well-known children's books, respectively written by Johnny Gruelle,[2] A. A. Milne and Russell Hoban. Although each of the books might not be necessarily conventional, I put priority on the Hollywood context in which the toy narratives were made into animation films.

In the following sections, I examine puppet-as-puppet figures from the above-mentioned emblematic films in the order of Types.

3.1. Type One: Inanimate Human-like or Animal-like Objects in *Pinocchio*

Classified as Type One (T1), many puppet-as-puppet figures are kept as inanimate objects in animation films, and accordingly, are not employed as performing characters in the films' narratives. Drawn on paper and/or then celluloid in cel animation, not all the T1 figures undergo "animatic transition", either "primary" or "secondary". Generally marginalised in the film narrative, the T1 figures assume a substantially contesting role in my thesis because they do not involve any cues of life or soul, that is, cues working for secondary animatic transition, even when some of them go through primary animatic transition. Considering the difference of the modes of movement shown on screen, I develop three Subtypes in the T1 figures: (a) stationary state, (b) passive and (c) automatic modes of movement.

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[2] Tracing back the toy narratives along and across cultures, graphic arts, books and animation films, Kuznets comments, "Gruelle's colorful illustrations of a variety of dolls as well as of other creations—like the camel with the wrinkled knees and the paper dragon—have entered into the American consciousness, even when his less original narratives are forgotten" (1994: 21). What is remarkable in her comment is the popularity of the illustrated figures of Raggedy Ann and Andy, and indeed, these figures are easily found in animated shorts, animated television series and an animated feature, all produced in conventional show business industry, since around the 1940s.

Emphatically, these three modes of physical cues rely on the rendering ways in hand-drawn animation. In analysis of the ways in which those cues trigger the viewers to perceive human or animal simulacra on screen simply as objects, I clarify the perceptual strategy of the rendering ways, building on Grodal's (1997) discussion of schematic behaviours and the involvement of a "higher force" in term of sub/nonhumanness in film.

Subtype (a): Geppetto's figurine of a lady in the stationary state

In *Pinocchio*, a female figurine (Figure 3.1) is placed, as a lifeless object, on a shelf in the woodcarver Geppetto's workshop. The way in which the figurine is rendered

Figure 3.1 The figure of a lady figurine in *Pinocchio*

is visibly different from that in which Jiminy Cricket, an anthropomorphic insect, is rendered as an acting character when standing beside it. The outlines of Jiminy's body are drawn clearly black or dark on celluloid. This transparent thin glossy material with the Jiminy figure is laid over a sheet of paper on which the background is painted. By the time *Pinocchio* was produced, backgrounds for cel animation films in US animation industry were usually painted on heavy paper in washes (Klein 1998: 159).

Unlike Jiminy, the female figurine is rendered with a painterly style of brushstrokes, in particular, in terms of depicting the light and shade on the surface of its body. Around the painted surface is no clear outline, and this pictorial convention makes spectators expect that the figurine will not show any movements but remain part of the background, as outlines drawn on celluloid usually operate as a visible cue with which spectators can predict what will move and what will not on screen in a cel animation film.

What is peculiar about the figurine is that it shows as much a meaningful gaze, facial expression and posture as Jiminy Cricket does (Figure 3.1). In the scene in which Geppetto is drawing the face of Pinocchio, the figurine looks as if along with Jiminy, it is witnessing the old toymaker at work. However, the figurine remains static; it makes no blink of the eyes, nor shows any token of movements in time, while Jiminy's body is depicted to be always in motion. Given that the film genre of *Pinocchio* is a sort of fantasy, there is no reason why the figurine is prohibited from transforming, for instance, into a little fairy. If the length of the shot with the figurine becomes shorter without the anthropomorphised cricket character, it will become less easy to discern whether the figurine is simply meant

to be an inanimate object or a living fairy character like Tinker Bell in Disney's

Peter Pan (Clyde Geronimi, Wilfred Jackson and Hamilton Luske, 1953, US).

However, Disney animators apparently had no compositional motivation for such

transformation but rather used the lady-as-figurine figure for a sexist joke.

As Jiminy watches Geppetto drawing eyes onto Pinocchio's face, he

happens to touch the figurine's hips, unknowingly, to lean against something. In

embarrassment, the anthropomorphised insect character quickly apologises to it

as if the figurine were a living human lady. Jiminy's action raises a simple but

important question: Why should he apologise to *it*, although *it* appears to be an

inanimate object? Why does he blush at touching *it*? The anthropomorphic Jiminy

shows that he has a good knowledge of human or animal simulacra when he takes

a look around Geppetto's workshop on entering there. Looking at different types of

artefacts and noting how they are made, he refers to the words, clocks, music

boxes, toys, puppets and a marionette, before he encounters the figurine. It is,

therefore, impossible that Jiminy mistakes this artefact for a real woman who it

represents in human form. However, his apology to it makes the lower round part

of the figurine switch to a woman's hips as a sensitive and supposedly sensual body

part in Disney artists' motivation for a joke which intends to cause the audience's

laughter.[3]

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[3] My question of this sexist joke should address the issue of the relationship between viewing and viewed, subject and object, and male and female—Jiminy is a male character. The question can be rephrased: In what way is it that the joke works and what belief systems are shared in the Tooniverse of Group CEL? David Freedberg comments on the sensuality of human simulacra in sculptures and paintings: "In many cases the image came alive because the beholder wanted it to do so" (1989: 320). When he describes images as coming alive, he refers to the effect in which "we may want to touch them as if they were real" (p.49). In the effect driven by the beholder's desire or wish, the status of a human simulacrum shifts from an inanimate object to what it represents. I claim that Jiminy's touching the figurine's quite

The nonhuman insect character's gentle apology for his vulgar behaviour does not work to transform the figurine into a real lady, but as a joke due to his simply perceptual fallacy, loosely grounded on the look of a tramp like Charlie Chaplin. What is noteworthy about this joke is that perceptual ambiguity is involved in the figurine which is reminiscent of pottery figurines mass-produced for market in the real world. The joke is not only sexist but also functions to warn the viewers, who are ready to define themselves to be human beings superior to the insect character, that they should be able to discern real from fake in the diegetic world of *Pinocchio* filled with human (and animal) simulacra.

Subtype (b): Stromboli's marionettes in the passive mode of movement

In the scene where a puppet play is performed under the order of the show master Stromboli in *Pinocchio*, we can see the figures of marionettes as themselves, each with a different national (German, French and Russian) trope, not going through secondary, but only primary, animatic transition. This means that they are given cues of movement without those of life by their animators in production. The marionette figures are hand-drawn on cel like the Pinocchio figure—this figure undergoes both transitions, but their look and movement are rendered in a different way from those of the protagonist figure. On the Stromboli stage, for

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exaggerated hip part is driven by the same wish shared in the Tooniverse of Group CEL. Examining discourses of the myth of Pygmalion and his female simulacrum, Freedberg suggests that in such a wish surface two fears. One is the fear of the real body, which "forms the basis of the innumerable reservations that terminate in censorship" (Freedberg 1989: 344). This fear of sexuality lurks around Jiminy's physical contact with the figurine. It is at this moment that the viewers remind themselves again of the belief system that the figurine is not real but fake. The other fear is of the blasphemous imitation of God creating life, particularly in Western and Islamic cultures (Freedberg 1989:359).

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Figure 3.2 The figure of a marionette in *Pinocchio*

example, the figure of the German girl puppet (Figure 3.2) is depicted to move on

the stage, but to remain an inanimate object in contrast to the Pinocchio figure

which already underwent secondary transition. The former's status is

demonstrated through some specific visible cues designed by Disney animators in

accordance with the belief system of puppets as inanimate objects they shared, as

Frank Thomas and Ollie Johnston involved in the production of *Pinocchio* state:

> If the eyes remain constant throughout a scene, the character will be
>
> consistent and look like the model sheet, but he also will look like a doll
>
> with painted eyes. This quality was used purposely in *Pinocchio*, first when
>
> the puppet was lifeless, and later when he was dancing with the

marionettes in Stromboli's show. The eyes presented an interesting

problem since Pinocchio was still a wooden puppet even though he had

been brought to life, and part of the device that made him puppetlike was

to keep his eyes as constant as possible, giving him a wide, innocent stare.

Now he was working with *real puppets* whose eyes were only paint, and

there was *a fine line to be drawn between the lifeless and the living, while*

keeping both as puppets. (1981: 445; emphasis mine)

Besides the motionless and unfocused eyes, more visual cues are employed for the

same motivation. The German girl puppet's face lacks emotions without any change

in time. When the girl puppet's singing performance is featured in the scene,

further, the cue of its supposedly painted mouth also serves the Disney animators'

strategy for the effect of making something look inanimate, which in terms of lip

movement is not depicted to sync along with the lyrics, but remains closed and

stationary. The effect of all the cues is reinforced by parameters like shot size,

framing and camera angle. They are shown at a relatively high angle from a place

which is much closer to the stage than the seats where the audience look up from

in the Stromboli theatre.

Significantly when it comes to the definition of Subtype (b), the girl

puppet's body movements are rendered in a passive mode as subject to two

external forces; one is gravity and the other the manipulation of puppeteering

human characters who are supposedly out of sight over or behind the stage in the

show scene.[4] In particular, the puppet seems absolutely vulnerable and subordinate to the force of the strings when its entire body is suspended over the stage for a moment to the degree that its neck is arched backward (Figure 3.3). The passive mode of movements is intended to impose on the figure of the German girl puppet the kinaesthetic impression of lacking internal force which is likely to be

I'd bust my strings for you

Figure 3.3 The marionette suspended over the stage in *Pinocchio*

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[4] For a hand-drawn figure of an animal-like puppet as a puppet, see *Peter Pan*, in which Michael, the youngest of the three Darling children, always carries a teddy bear with him. In the film, the teddy-bear figure is marginalised to illustrate the infancy of its owner Michael. In the scene of the protagonists' final fight with pirates, the stuffed puppet is used by Michael as a sort of weapon tool. Entirely seized by two external forces, the human owner's physical action and gravity, it is so much squashed and stretched by a cannonball, which he has just put inside it, that its soft-looking body gets almost torn out around its neck. No cues are given to show the puppet's pain, disturbance and resistance. If the viewers are not familiarised with the cues of not implying a real living bear but a stuffed bear, they will be shocked at the way in which the boy character treats what looks like an innocent bear cub.

called will, intention or soul in a figurative sense.[5]

However, what is it that Thomas and Johnston refer to as "real puppets" above? In a technical aspect, real puppets for theatrical performance are not necessarily given motionless eyes and mouths but movable ones. Take a look at the scene of puppetry, "Lonely Goatherd", created by puppeteers Bill Baird and Cora Baird, in the live-action musical film, *The Sound of Music* (Robert Wise, 1965, US), and we can see the marionettes' eyes, eyelids, mouths and even cheeks moving in the scene. Such puppets with movable parts might not have been compatible with the reality of puppets which Disney animators sought. However, Thompson notes that in Hollywood classics, realism is "used as a secondary motivating force, a backup to the main compositional justification" (1988: 54). In other words, realistic motivation in conventional live-action films usually serves to make viewers immersed in the film narrative. By extension, I claim that puppets with movable parts did not suit the Disney animators' compositional justification to draw the line between both puppet-as-puppet figures; "lifeless" on the one hand and "alive" on the other.

Further, it is necessary to reconsider whether real marionettes *seem* to move passively in puppetry. In their study of puppet plays performed on a stage in which Elizabeth Ann Jochum and Todd Murphey acknowledge an intersubjective relationship between puppeteering and puppeteered, they cite Kenneth Gross,[6] who summarises:

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[5] The inanimacy of the German girl puppet on screen is amplified by the stage participation of more puppets looking the same as it and dancing in the same way together.
[6] Jochum and Murphey cites Gross (2011: 63). For the details of this reference, see the Bibliography.

The puppeteer knows he cannot control each limb separately, and thereby

imitate in perfect detail the natural movements of human bodies. Rather,

the manipulator learns to yield himself to the specific weight, the pendular

motion and momentum of that thing suspended from strings. That's where

the puppet's soul is found, in its merely physical center of gravity, which is

the line of its spirit. (cited in Jochum and Murphey 2014: Kindle 310)

In light of Gross, it can be said that the Disney animators ignored the specificity and the dynamics of the performance presented with "real puppets" on stage, for the purpose of making the Stromboli marionettes look inanimate.

Subtype (c): Geppetto's automata in the automatic mode of movement

A good example of Subtype (c) in Type One is automata, a variety of which is displayed in *Pinocchio*. Like the puppet-as-puppet figures of Subtype (b), they do not go through secondary animatic transition but primary animatic transition. A substantial difference is that in contrast to Subtype (b), Subtype (c) is not shown to be moved entirely subject to external forces, but to move by themselves with their "internal mechanism". Driven by this internal, yet preprogrammed, mechanism in the film diegesis, the figures of this Subtype are characterised with the automatic mode of movement that suggests the lack of autonomy.

There are two forms of automata, music boxes and clocks, in *Pinocchio*. First, we see Geppetto playing a music box with four orchestra puppets (Figure 3.4) when he is going to try out his Pinocchio marionette with strings. Following this,

Figure 3.4 The figure of an automaton in *Pinocchio*

clocks are shown to inform that it is nine o'clock when anthropomorphic and

theriomorphic puppets engaged with them start to move according to the clock

chime.

Unlike marionettes suspended and manipulated with visible strings, the

miniature puppets as part of automata show seemingly independent movements

on screen. This can be said to be a two-dimensional pictorial representation of a

real automaton. Yet the Disney animators seem to have attempted to discern

between hand-drawn human and subhuman figures on screen in terms of the mode

of movement. The orchestra puppets are rendered to show over-staccato

movements, which I call mechanicomorphic in this thesis. Furthermore, their

convulsionary movements are repeated over and over in a short time period. These

dynamic traits are also emphasised by the human-like and animal-like puppets set in clocks. As it is nine o'clock, each of all the clock puppets should perform a set of pre-determined movements nine times. Their moving performance does not function as a cue of being brought to life, but rather, as that of not being a real life.

Making clear the line between the two different cues, the Disney animators go so far as to go into and reveal the inside of the music box; the gears, rods, a spring and a bellow are shown to work for creating the music sounds as well as the orchestra puppets' body movements, when Jiminy hurries under the box to hide himself from Geppetto approaching to it. The endoscopic revelation of the inner mechanism makes the viewers notice that the orchestra puppets and their music-playing movements are not real but an illusion or fake, not autonomous but subject to a hidden larger mechanical system—later in this subsection I will connect this system to the higher power of Geppetto. This pedagogical approach towards the representation of visual objects is similar to that of the Renaissance artists who studied anatomy for painting or sculpting the human body (Gombrich 2011: 215). The duality of the automata represented on screen is shown by different depicting techniques. Their visible moving parts are drawn in dark outlines and solid colours on cel, but their unmoving cases rigged with the hidden parts inside painted as part of backgrounds on paper.

Supposing that those sophisticated automata were all made by Geppetto in the film narrative, their narrative function is to accentuate his knowledge, ingenuity and mastery of machinery. He is not so much a wood-carver as a toymaker or watchmaker. The old craftsman also seems to be the ruler of his mechanical miniature creations of human and animal simulacra. When playing the

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music box, he exclaims, "Music, professor!", as if he commands the conductor puppet set on the box; at the same time his real command is shown as the action of pushing the start button on the box. The "higher power" of the simulacra realm lives alone without any human beings except a cat and a goldfish before the Blue Fairy brings to life Pinocchio who he is to call son.

Alone without a family in his workshop, such a male figure who has great knowledge and skills with machines can be viewed from the perspective of a Romantic scientist, on whom Schelde remarks:

> [He] is also the practical cousin of the Great Artist invented by the Romantic movement. The science fiction scientist emerged as a literary figure in the nineteenth century at about the same time as the Romantic artist did. Both the artist and the scientific genius grew out of the Romantic obsession with the individual, the remarkable loner, the genius who single-handedly changes the world and creates mighty works. (1993: 31)

While Schelde (1993: 32) refers to Dr. Frankenstein as a Romantic scientist, Geppetto in *Pinocchio* does not explicitly pursue the same goal as him, but only wishes on a star that the wooden human-sized puppet should be a real boy as a son, without relying on his own technology. His status as a higher power remains confined to the miniature world of mechanical simulacra he has created. This issue of his status is also where the Pinocchio figure requires examination. I will come back to the issue in a later section.

3.2. Type Two: An Oneiric Doll in *Suddenly It's Spring*

In my definition, puppet-as-puppet figures of Type Two, Type Three and Type Four not only go through both primary and secondary animatic transitions, but also have in common the main principle for secondary animatic transition taking place in the film narrative: shifting from one world to another. Specifically, the T2 figures lack interaction with human (or animal) characters in the diegetic world of the film. What is of particular interest in this Type is that a puppet-as-puppet figure's secondary animatic transition can work as a catalyst to transform the experience of viewing an animated film world into something that is implied in Vivian Sobchack's (1992) concept of cinema as "window". In this section, I examine how the anthropocentric view of puppets as sub/nonhuman objects limits the epistemological effect of this concept.

The emblematic case which I examine for Type Two is the 1944 animated short, *Suddenly It's Spring*. This film was produced by Famous Studios whose artists had worked in the Fleischer Studios before the Fleischer Brothers leaving them. As a competitor of Disney, the Fleischer Studios obtained rights to the Raggedy Ann stories in 1940 to produce the animated short, *Raggedy Ann and Raggedy Andy* (Dave Fleischer, 1940, US) (Canemaker 1977: 71).

In *Suddenly It's Spring*, we see a human girl in a bed with a rag doll the figure of which was already known as Raggedy Ann to the audience of those days. The little girl is sick, as is suggested by the conversation between her mother and a doctor. When they go out of the room, the Ann doll cuts in to show a drop of water

Figure 3.5 The figure of Raggedy Ann in *Suddenly It's Spring*

falling down out of its left eye part in a close-up shot (Figure 3.5). The viewers of

the film should perceive the cue of a round bright figure moving and sparkling as a

drop of tear which the doll sheds, if they would like to immerse themselves in the

film narrative. This is the moment when the Ann doll undergoes secondary

animatic transition. The doll's primary animatic transition is not clearly presented

on screen, but the viewers would be enough initiated or familiarised to assume

that the doll figure will be depicted as being moved in a passive mode: Subtype (b)

of Type One.

What is remarkable in Raggedy Ann's secondary animatic transition is that

it takes place while the mother and the doctor are absent, with the girl left alone

sleeping or unconscious in bed. Weeping sadly in this scene are not only the Ann

Figure 3.6 The girl's mother and a doctor in *Suddenly It's Spring*

doll but also other toys and puppets in human or animal form in the room. Human

characters' absence or unawareness is a central cue which operates to suggest that

toys and puppets have their own secret world. For the cue to work, two additional

strategies are employed; one is framing and the other deploying cel and the

background.

First, the mother and the doctor in conversation are only seen up to

around the height of their chests without their faces being shown (Figure 3.6).

Excluding the human gaze off screen, this framing is quite familiarised in classical

cartoons usually featuring nonhuman animal characters to the extent that the

convention was parodied in the film, *Who Framed Roger Rabbit* (Robert Zemeckis,

1988, US), in which a lady character with her two legs alone shown on screen is

revealed to be literally a figure of two legs after shooting in a film studio. Second, the Ann doll is drawn on cel while the human girl painted in the same way as the background on paper (See Figure 3.5). The two figures are separated from each other by the way in which the materials in cel animation are deployed for different narrative functions; the doll should sooner or later turn out to be a performing character with anthropomorphic cues of body movement, and the sick human girl should be kept without noticing the secret world which the doll and its fellows inhabit.

In *Suddenly It's Spring*, those stylistic strategies trigger us to feel as if we can see what the two grownups cannot see. In other words, the film works as a window through which we can peek at a different world from the human characters' world representing ours.[7] Here I appropriate the term of the window which Sobchack (1992) conceptualises as one of three metaphors of cinema. Focusing on live-action film, she remarks that "the window as metaphor is emblematic of the *transcendental realism* that informs realist film theory and its belief in the film object as *perception-in-itself*—objectivity freed from entailment with the prejudicial investments of human being" (1992: 16), going on to refer to the belief as "[leading] to the realist celebration of what it describes as 'objective empiricism'" (p.16).

When it comes to animation, however, mentioning Bill Nichols,[8] Annabelle Honess Roe (2013: 22) claims that animation is free from the indexical bind of the live-action footage used for conventional documentary in a conventional manner.

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[7] A digital example of such window effect in the experience of film viewing is the 3-D CG animation film, *Toy Story* (1995).
[8] Roe cites Nichols (1991: 149) *Representing Reality: Issues and Concepts in Documentary*. Bloomington: Indiana University Press.

As a conventional hand-drawn animation, *Suddenly It's Spring* is obviously free from the logic of photo-indexicality. This means that what the viewers see happen on screen in the film has not necessarily happened in the real world. Discussing possibilities of the use of animation in documentary filmmaking, however, Roe (2013) stresses the role of iconicity (instead of photo-indexicality) and the iconic image's capacity of evocation. As regards evocation as a function of animation in animated documentaries, Roe explains, "By visualising these invisible aspects [ideas, feelings and sensibilities] of life, often in an abstract or symbolic style, animation that functions in this evocative way allows us to imagine the world from someone else's perspective" (2013: 25). Toys and dolls' secret world should be considered as part of such invisible aspects of life. The effect of evocation for viewers of animation film can be pertinent to the events which in reality they have not seen that on screen are happening to the toys and dolls left alone when no human beings or characters exist in one and the same place as them.

Yet, *Suddenly It's Spring* follows a convention of fantasy with puppets rather than developing the effect of evocation which Roe (2013) seeks to theorise in her study of animated documentary. After secondary animatic transition at the same time when it shifts from the world of the human characters to that of the toys, the Ann doll visits anthropomorphic deities of weather in the sky. The introduction of such mythological narrative devices goes beyond the degree to which the viewers keep interested in seeking to find what the toys' world is like. The toys' secret world itself is not a focus in the narrative of the film, where the Ann doll and other toys are depicted to feel sad about the human girl's bad physical condition; this motivates the Ann doll to travel up to the sky where it is to see the

anthropomorphic character of the sun. Their emotions and performances are mobilised under the anthropocentric value system of the human agents engaged in the production of the film. Obedient to the human owner are the Ann doll and its fellow toys unlike what Bukatman (2012) finds to be disobedient in comics and animation films.

Only the cue of obedience underlies through all the narrative of the film. During the journey in which the doll finds a way to help the sick girl, its anthropomorphic body movements are impossible to discern from those of the human characters, not to mention that it is depicted to talk and think as well as human beings do. These anthropomorphic cues are withdrawn as soon as the doll achieves her goal. At the end of the film, the little human owner awakes in her

Figure 3.7 The human figure and the doll figure in *Suddenly It's Spring*

sickbed to play with her lovely toys, while the motionless and expressionless face

and eyes of the Ann doll is shown as its initial condition again in a medium shot

(Figure 3.7). Emphasis is put on the difference, by means of drawing style, between

the figure of the Ann doll and that of the human girl, both depicted on cel in one

and the same shot. The doll's geometrical form of fixed eye pupils like chipped

"buttons" make it look more non/subhuman, in contrast to the girl's eyes with

slightly wandering pupils and irises drawn in a realistic style.

What will happen if when the human girl awakes to play with the Ann doll,

it does not quit the mode of movement in which it performs much like human

characters in a different world? This imagination has been exploited in the

Hollywood live-action horror film, *Child's Play* (Tom Holland, 1988, US) and its

sequels. In the 1988 film, a boy doll as a toy object suddenly begins to move and

talk independently in the real world inhabited by human beings, and its human-like

abilities are depicted as a result of being possessed by a serial killer's soul.

Observing the horror film, Nelson indicates, "Killer puppets like Chucky clearly

embody the long-standing Protestant dictum that what is not of this world is of the

Devil" (2001: 259), after relating this issue of human simulacra to the modern

psychological concept of projection: "[W]hat we now interpret as a person's

subjective psychological complex was formerly regarded as the objective intrusion

of a 'demon' or evil spirit" (p.207). In light of Nelson, such a religious attitude of

human simulacra as objects is not defunct in the West of the late twentieth century

up to the early twenty-first century. In such a convention of puppets, *Suddenly It's

Spring* ends without fear that the doll (and other toys) might usurp the audience's

real world as well as the diegetic world of the film, with the belief system

reaffirmed that such artefacts cannot move autonomously nor be alive.

3.3. Type Three: Empathetic Objects: Raggedy Ann and Winnie the Pooh

In this section, I analyse two cases for Type Three; one is another Raggedy Ann film, *The Enchanted Square*, and the other Disney's *The Many Adventures of Winnie the Pooh*. The former's narrative revolves for the most part around the interaction between a human girl and a rag doll which undergoes secondary animatic transition in an imaginary world of which only she seems to be aware, or a world created by her imagination. What is intriguing in this case is that the human girl's interaction with the doll is involved with "touching". I inquire into this physical act in term of the unchanging status of the doll as an object in the film diegesis.

As regards the latter case, I focus on the ways in which puppet-as-puppet figures in animal form are rendered to make a visible, if not so explicit, contrast to animal figures, both inhabiting an imaginary realm under the power of a human boy. In Type Three, this boy and other children as human characters can be said as a life-giver of their puppets. Drawing on Kuznets' (1994) discussion of this case, I seek to examine the power relationship between both—not the very concept of life.

***Desire and a girl doll in* The Enchanted Square**

Produced by Famous Studios, *The Enchanted Square* has no relationship with the preceding film, *Suddenly It's Spring*, in terms of narrative, and yet, similarly, the

Figure 3.8 Raggedy Ann and a human girl in *The Enchanted Square*

figure of the Ann doll undergoes secondary animatic transition during which the

shift takes place from human characters' world to an imaginary world. Primary

animatic transition happens to the doll figure in the passive mode of movement

when a policeman picks up the Ann doll from a trashcan and carries it in his hand.

In the passive mode, the doll seems to be flaccid and suspended by the policeman's

hand until it is given to a human girl.

Distinct from *Suddenly It's Spring*, *The Enchanted Square* involves the Ann

doll's interaction with the human girl named Billie (Figure 3.8). The doll even

speaks to Billie in the real world for a short while before it plays and dances with

her in the imaginary world. It is almost impossible to discern the difference in the

mode of movement between the doll figure and the human figure. Moving from the

human beings' real world to the imaginary world in the film, further, the doll's body becomes as large as Billie's. The shape of the pupils, the nose and the fingers is the only cue indicating that the Ann doll is not as human as Billie; its pupils look like chipped buttons, its nose a red triangular lump, and its fingers mittens, which are also seen in *Suddenly It's Spring*. Obviously, these visible traits are central elements for the viewers to identify the hand-drawn figure of a doll as the Raggedy Ann doll which was a popular icon at that time when *The Enchanted Square* was produced.

Appearing to be a celebration of the friendship between a doll and a human girl, the film includes a couple of complex narrative devices. First, the girl Billie is blind. She cannot see the doll in a realistic sense. As the doll suggests to her in the film, it is only imagination that makes her able to see something. Thus, psychologised are all the fantastic events that Billie sees, with the viewers seeing what is seen through her interaction with the doll; in the film's real world, she would fall down and be injured if she ran and jumped, as seen in the sequences where she runs and jumps with the doll in the imaginary world. The psychological device of imagination serves to enchant the situation of the slum in which Billie lives with mother.[9] Furthermore, the doll was not bought as a new toy in a shop, but picked up from a trashcan by the policeman. Blindness functions as a crucial device to prevent the girl from recognising how very dirty or damaged the doll is, as well as spurring her to imagine with it a fantastic world like an amusement park. Billie's imagination goes on to reveal her clandestine desire, being rich, when a wealthy-looking blonde lady is envisioned as her mother who she has not ever seen

[9] In addition, she does not seem to live with father because the kind-hearted policeman presents the doll to her, possibly for a chance to talk to her mother.
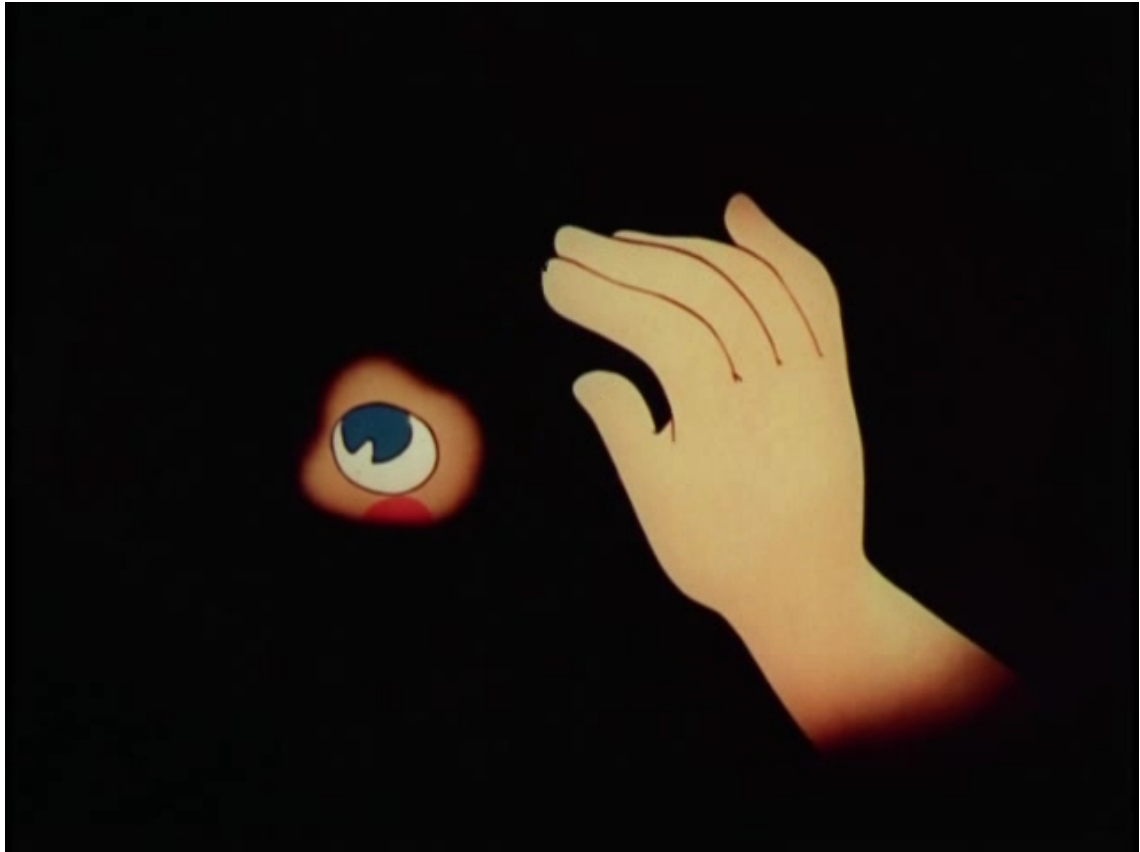
Figure 3.9 The human girl touches the girl doll in *The Enchanted Square*

in the real world.

Turning to the Ann doll, this anthropomorphic object interacts with Billie alone. The individual-specific interaction is also the device to psychologise the doll's on-screen anthropomorphic mode of movement into what happens in its human owner or partner's mind. What is particular about their interaction is that it accompanies the sensation of touch. When it encourages her to touch its body (Figure 3.9), the scene is given in the subjective point of view that is Billie's, with her right hand lighted, thereby consequently taking the viewers to the place of Billie. Although the scene tempts me to address the issue of touching as seeing, this is where I should focus more on how the film relies on and exploits the status of the Ann doll as a non/subhuman object, which is to say, the viewers' belief system of

its status is triggered to work in the scene. If it is not perceived as an object relying

on the pertinent cues, a fear of sensuality in the viewers is likely to loom on the cue

of the girl character touching the body of the doll figure, even if pictorially

represented, almost indiscernible from the hand-drawn figures of human

characters in the film—as discussed above about the scene with Jiminy touching

the hip of the lady figurine in the preceding subsection of Subtype (a). It would be

acceptable as long as the girl-like figure is believed not as a real girl but a doll. This

belief is confirmed in the film by the dialogue, between Ann and Billie, of how the

doll was made.

Puppets abandoned in **The Many Adventures of Winnie the Pooh**

In *The Many Adventures of Winnie the Pooh* as another case of Type Two, unlike *The*

Enchanted Square, there is no puppet-as-puppet figure in human form, but the

teddy bear named Pooh and the other stuffed animal puppets appear as puppets.

As in the Raggedy Ann film, these puppet-as-puppet figures interact with the only

human character named Christopher Robin (and also with non-puppet animal

characters).

Further, the Disney film has a complex structure of frame narrative in an

audio-visual manner. It begins with the live-action footage of a child's room where

the physical puppets of Pooh and *his* fellows are placed. As the camera pans to the

right, the *Winnie-the-Pooh* book appears on screen, with another physical puppet

of Pooh set by it (Figure 3.10). This footage is narrated by an acousmatic person

Figure 3.10 A physical model of Pooh in *The Many Adventures of Winnie the Pooh*

whose voice sounds male and elderly. According to him, the room is Christopher Robin's.

However, who is the narrator? There are two possible answers to the question. One is Christopher's father, who tells the viewers stories about his little son. The other is Christopher himself, who now old, recalls his childhood fantasy. As a grown-up, either is expected to distinguish the real world given in the live-action footage from the imaginary world given in hand-drawn animation. Indeed, the narrator says in the introductory live-action footage: "They all live together in a wonderful world of make-believe".

The framed narrative structure of the film becomes more complicated by the mode of movement in which the *Winnie-the-Pooh* book opens or is opened,

when the camera cuts from the shot seen in Figure 3.10 to the next shot. In this shot, the book is not opened by any visible human hand, but arguably, by the hand of the acousmatic narrator as invisible and omnipresent—using techniques of hand-drawn animation with the photorealistic background in which the Pooh puppet and other toys are included. Alluding to the acousmatic narrator's point of view, the camera movement makes the viewer's eyes move together with his to look over the book. Nestled within the enveloping live-action footage, the framing book cover and following pages on screen function as a liminal or transitional device in viewing experience, as Paula T. Connolly observes the self-opening pages of the book seen in Disney's animated feature films: "That these framing pages hold both verbal and illustrated texts provides a liminal area of book/film and directs an exchange of medium to move the reader to become a reader/viewer, negotiating both words and pictures for a short time before transitioning fully into the 'moving pictures' of film" (2015: 181). The acousmêtre's voice, sight and hand makes the viewer be immersed in the hand-drawn, animated world that comes to appear from behind the book cover. In addition to these audio-visual devices, the verbal phrases by the invisible narrator serve the same effect. For example, he tells in the introductory live-action sequence: "This could be the room of any small boy . . . Like most small boys, Christopher Robin has toy animals to play with",[10] as if the viewer might have been one such boy in *his* childhood.

In terms of the acousmatic narrator and the transition from live action to animation, *The Many Adventures of Winnie the Pooh* can be compared with *Gertie*

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[10] This way of narrating raises the issue of gender. In this thesis, I focus on the aspect of the child.

the Dinosaur. In both, the acousmatic narrator encourages the viewers to cross the line between photorealistic live action and hand-drawn animation. In Disney's Pooh film, however, the narrator is completely invisible and does not perform as a demiurgic creator. This function is what as discussed in Chapter Two, Crafton (1993: 288-299) observes in the retreat of the artist behind the screen. The scholar summarises:

> [H]is invisibility does not mean he no longer exists. It is just that his function has changed. His statements are no longer about his relation to his drawing, but about concerns shared with his audience. He is representing himself as a fabulist. (1993: 299)

In Disney's Pooh film, as a result, the animatic transition of hand-drawn figures is not ordered by any live-action animators on screen—they are hiding as storytellers behind screen. Rather, it is not only hand-drawn figures but also the *Winnie-the-Pooh* book itself to which animatic transition happens in the film. What is further significant is that in the animated world of/in the book, everything is given as hand-drawn; for a short while after the book cover is unfolded, even the Christopher figure playing on the swings appears to be suspended in the air which as hand-drawn on screen, is soon to show animatic transition with anthropomorphic cues of movements operating to make the viewers sure that it represents nothing but a human being. He communicates with animal characters or animal-like characters, all living in an isolated world, where he is the only human being.

Figure 3.11 The figure of an animal toy in *The Many Adventures of Winnie the Pooh*

When it comes to the other figures in animal form, including the Pooh figure, it is not so easy to determine whether each of them represents a living being or not as the figure of Christopher. When the first two pages of the book are animated, the viewers will see a donkey-like figure while this is being drawn without any visible artist's hand on screen, and yet this is not the figure of a donkey. Taking a closer look at it, we can find it to be the figure of a donkey-like puppet which has a thin line on the centre of its face and also on its legs looking like those of a rag doll (Figure 3.11). The lines seem to be representations of stitches, and are found in the figures of the other toy animals. In the case of the Pooh figure, the lines look conspicuous around the joints between its hindlegs and pelvis (Figure 3.12).

Figure 3.12 *The Many Adventures of Winnie the Pooh*

According to the Disney animators Thomas and Johnston, drawing eyes is one of the most influential ways which they used to make a difference of impression between the hand-drawn figures of living animals and those of toy animals. In particular, they suggest that bifurcating them can be achieved by how to deploy the devices of pupil, sclera and iris with respect to parameters like size, colour and movement (Thomas and Johnston 1981: 446-449). Recollecting how much effort they made to change the design of eyes in an attempt to give Mickey Mouse cues of life, both animators consider Pooh as the opposite:

On Winnie the Pooh, we had less of a problem than we had with Mickey, because he was a stuffed toy and was not expected to have eyes that

wandered on his face. It seemed appropriate for him to turn his head in the

direction of his "looks," and this actually gave him a less sophisticated

feeling that was in keeping with a "bear of very little brain." (Thomas and

Johnston 1981: 448)

This makes clear that in the film toy animals were not so dealt with as to look like

living animals, even when animated to move on screen. They are depicted to show

fewer cues of life than their living counterparts. Pooh's eyes lack irises and sclerae,

and his eye movements lack the cue of wandering. The objectifying device which

Thomas and Johnston call button eyes (p.448) is applied to the other stuffed toy

animals, too, except the donkey toy named Eeyore. Only Eeyore has the white

sclerae and black pupils like the figures of living animals: Rabbit, Owl and Gopher.

As its eyes cannot wander owing to the Disney animators' way of

rendering, the Pooh figure has to turn its head around from the neck to give a cue

of looking at something. The mode of this limited body movement seems to be

based on the physical reality of stuffed toy animals. In reality, such a toy is usually

given button eyes without any ability of sight, and its body is not given jointed body

parts; playing with it, therefore, a human child would twist its head part around

the neck part if he or she wants to make it appear to gaze at something. In addition,

Pooh's hands and feet are depicted to look like mittens without separate fingers

and toes except thumbs. This way of rendering is intended to add cues of Pooh and

the other toy animals being objects.

In the film, the most evident case of it is the figure of Tigger, as a toy animal

which looks like a tiger, which always bounces up and down. This

mechanicomorphic mode of movement does not seem to be under the control of Tigger itself. As the tiger-like toy figure on screen says, "Their tops are made out of rubber, their bottoms are made out of springs", its movement is depicted as subordinated both to the elastic property of the springs included in the body and to the gravitational field. This passive mode of movement pertains to Subtype (b) of Type One. In the diegetic world of the film, the Tigger figure is a slight revelation of the status of a toy animal as a mechanical object and further, as one of the products manufactured in factories.

Unlike Pooh and the other toy animals, Rabbit, Owl and Gopher presented as non-puppet, living animals in the film have as separate and long fingers as human beings. Although it represents a bird that has only wings and feathers, even
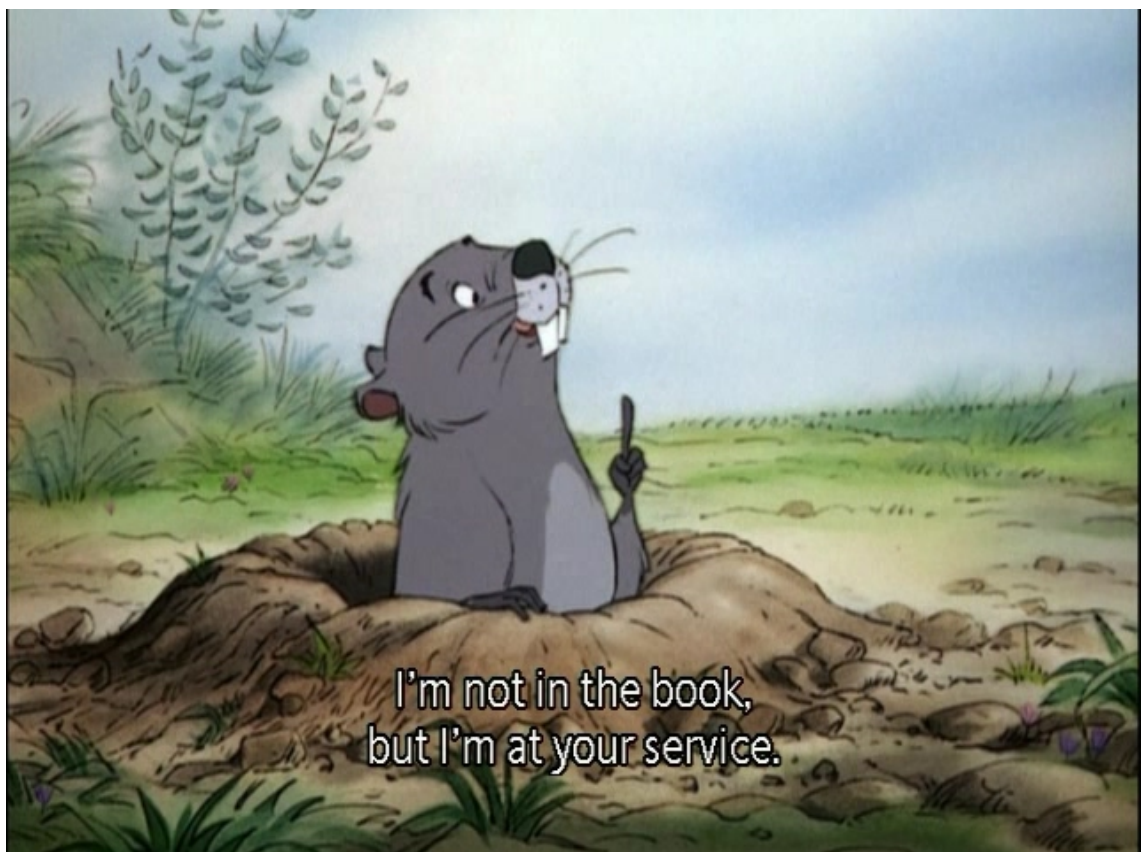
Figure 3.13 The figure of a living animal in *The Many Adventures of Winnie the Pooh*

the figure of Owl is so depicted that its hand-drawn wings might look like human fingers. Along with the wandering movement of the hand-drawn eyes with pupils and sclerae clearly separated, the variety of gestures composed of the subtle movements of those hand-drawn fingers serve to demonstrate that the figures of the living animals have non-verbal communication ability as well as emotion. In the film, the figure named Gopher shows the gesture of attention by raising up its index finger (Figure 3.13). Obviously, such body movements of the hand-drawn animal figures surpass those of the real animals they represent. When Disney animators depicted the bodies of those animal figures as alive, realistic motivation in the human agents stopped working in order to give them more cues of humanness rather than animalness.

Now I turn to the question of the sole human figure of Christopher who is in close communication with those toy animals—and in a loose contact with living animals—in the film narrative. The featured interaction between the young human figure and toy animal figures are depicted only in the animated book world which is enveloped by the live-action footage, and narrated by an acousmêtre in the past tense. The past tense of narration implies that no animatic transition happens to the physical Pooh puppet and the others seen in the live-action footage at the moment when the camera shifts from the live-action world to the animated book world. What seems to exist and happens in the book world is narrated as the childhood memories of Christopher, as suggested by Kuznets (1994: 47) who goes so far as to identify the fictional character with Milne, the author of the *Winnie-the-Pooh* books.

As for the status of the Christopher character in his world of childhood

memories, Kuznets notes, "[I]n the Pooh books he rules over . . . a society of small beings" (1994: 51), continuing, "[T]he child is a god amid the toys and animals" (p.51). By extension, the Christopher character in Disney's Pooh film plays a god-like role without whom the toy animals would not come into being in the animated book world. This is why the (only secondary) animatic transition of the boy figure is followed by that of the toy-animal figures (along with the living-animal figures). As the ruler of his self-immured world, Christopher is always relied on by the toy animals whenever they are in need, and further, he hosts and presides over the party celebrating Pooh as a hero. This interpretation of the film narrative leads to the conclusion that all the voices, body movements and often mischievous behaviours of the toy animals are the imaginative creations of their young human owner. On the other hand, the living animals do not play as central a role as the toy animals in his monarchical imagination, but assume the role of human grown-ups who discipline children (implied by the toy animals in the film) and are often annoyed by their unintended mischief.

The film narrative comes to the critical moment when Christopher should go to school in the last chapter of the animated book world. The human boy asks, "Pooh, promise you won't forget me ever?" Then Pooh answers to him, "Oh, I won't, Christopher, I promise". This implies that at a stage of growth, the boy has to leave Pooh and the other toys, as Kuznets indicates that "in Western culture, children are not allowed to identify with objects like toys" (1994: 43). Despite no more identification with toys, in the film the voice-over narrator tells: "Wherever they go and whatever happens to them on the way, in that enchanted place on top of the forest a little bear will always be waiting".

But how and why is it that once left behind by its human owner, the toy object waits always for him? I derive this question from the account by Kuznets who observes, "The story's denial of genuine conflict implies that childhood itself is Edenic" (1994: 52), going on to add that the Christopher character lacks "emotional anguish and psychic pain" (p.52). Unlike the scholar, I turn to focus on Pooh that is almost abandoned by Christopher in the film narrative.

Distinct from the perspective of the Western culture, a Japanese view of puppets helps reconsider the ending of Pooh in the film. In the view, human owners are not entirely qualified to discard those objects with which they have formed and kept a particular relationship; as introduced in the Literature Review (See footnote 32), the factor of relationship is one reason why the ritual of *ningyo kuyo* is promoted and conducted in Japan. According to Komatsu's (2003: 150-151) study of Japanese folklore, artefacts as well as puppets have been thought to become demons or get possessed by ghosts, named *tsukumogami*, in anger and hostility, when discarded by the human beings who have used them in every-day life for a long time.[11] In the film, Pooh and the other toy animals can be viewed from this belief of tsukumogami, and then it is tempting to assume that promising *never* to forget Christopher, in the film Pooh will finally turn angry at the human boy if he does not come back, betraying its trust.

No wonder Disney's Pooh film ends up showing the physical Pooh puppet which seems to manifest itself as an inanimate object, without any cue of speaking and moving independently, in the live-action footage of Christopher's childhood

[11] Traced back to the twelfth century in Japan, the belief of tsukumogami appeared in the age when human owners or users became able to dispose of artefacts driven by an advanced system of trading and manufacturing (Komatsu 2003: 157).

room. Or, what can stop us from imagining that as with Raggedy Ann, the doll in *The Enchanted Square*, in the film's world Pooh might be thrown away into a trashcan to find another young owner who is to form a new relationship with it?

3.4. Type Four: Perihuman Toys in *The Mouse and His Child*

In *The Mouse and His Child*, like Disney's Pooh film, the puppet-as-puppet figures in animal form are given secondary animatic transition at the shifting moment from the human-centric, real world to a different world where those figures can communicate with the figures of living animals. Unlike the Pooh film, however, this film does not involve any human character in the imaginary world which I term as "perihuman" in this thesis. In the perihuman world, too, puppets and toys as objects in animal form are depicted in a different way to animals as living, in particular, in terms of autonomy and the ability of self-feeding, or self-winding, for the wind-up puppets. As automata, this Type of puppet-as-puppet figures are well pertinent to Descartes' view of humanity, life and machine and that of his radical opponent, La Mettrie. In this sense, my analysis of the puppet-as-puppet figures in *The Mouse and His Child* aims to clarify the film's preoccupation with the anthropocentric Cartesian view, and further to problematise this by building on La Mettrie's "mechanist" materialism.

I mean by the term, perihuman, what exists and happens around human characters yet beyond their perception in the film narrative. Such a perihuman world is also seen in the girl's room in *Suddenly It's Spring* which I analysed above,

but in *The Mouse and His Child* there are no puppets and toys that serve their human owners; in this sense, the film has a possibility to demonstrate the non-anthropocentric in the puppet-as-puppet figure. Rather, they are depicted to be wasted by human beings, and further, be enslaved by living animals. The perihuman world is a metaphoric miniature of the real world which either human characters or the viewers inhabit.

As human, only an unnamed tramp character with a dog has a momentary interfacial contact with the puppets and toys to the extent that he remains an observer to mediate loosely between the viewers of the film and the perihuman world. It is not certain that what he sees in his gaze at the objects is the perihuman world which as the viewers, we see in the film. As this film is properly based on
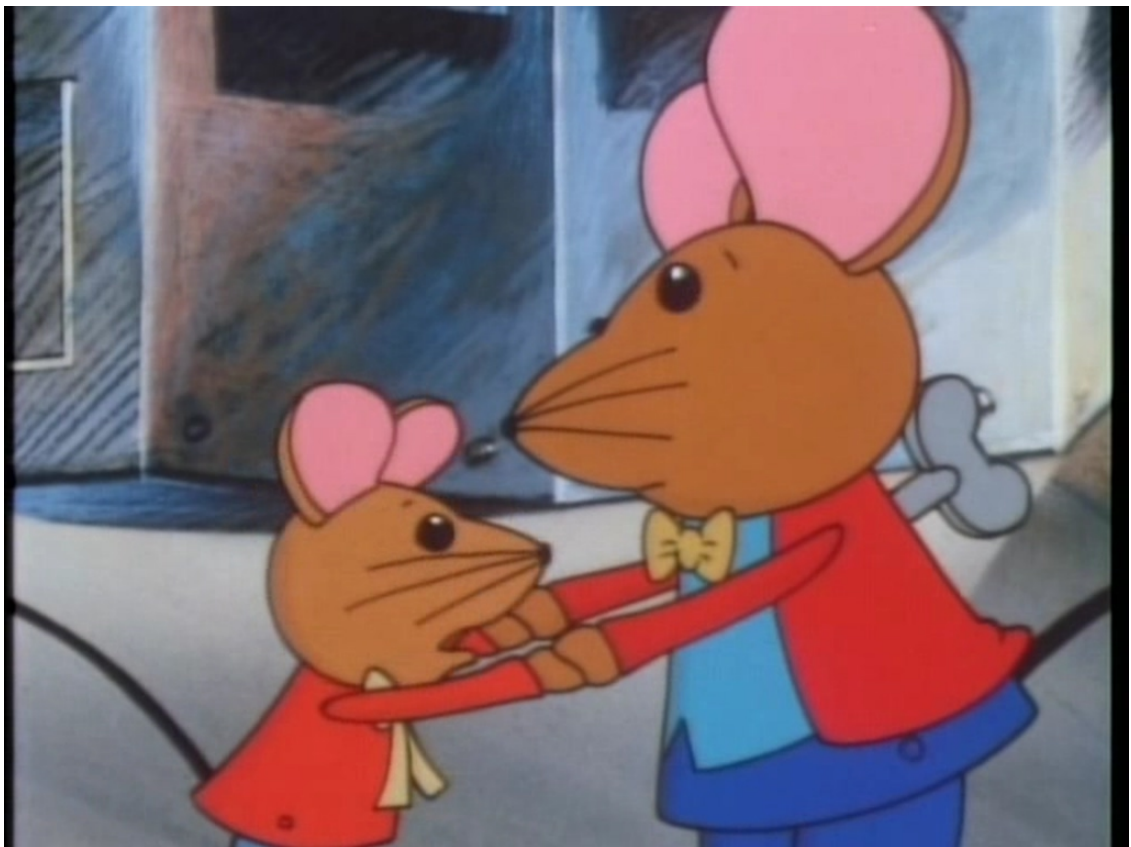
Figure 3.14 The wind-up toy mice in *The Mouse and His Child*

Hoban's story, of much relevance is Kuznets' account that in the children's book, the author Hoban "creates a world at the margins of the human one, reflecting human needs and desires but imagining a secret existence that humans neither control for the most part nor benefit from" (1994: 169).

In the film, the central puppet-as-puppet figure is a pair of clockwork mouse-like toys that have the relationship of father and son (Figure 3.14). In the scene in which the toy mice are taken out of a box, wound up and then put on a table by a human clerk in a toy shop, their primary animatic transition is at first depicted in the passive mode of movement: Subtype (b), Type One. Also included in the scene is the stationary state: Subtype (a), Type One. Before being wound up, in addition, they are seen to stand motionless on the table for five seconds. Once wound up, the toy mice start to move in repetition for themselves in the automatic mode of movement: Subtype (c) of Type One. All these modes function as the cue that they are simply inanimate objects. The impression of being inanimate is also consolidated by their expressionless button eyes and clear lines around joints, surrounded by the other toys and puppets that are rendered in the same way as the background painted on paper.

Secondary animatic transition is depicted to occur to those objects in a perihuman time and space. At midnight when human characters are absent from the shop, they start to move and then talk for themselves. What is interesting in the film is that secondary animatic transition does not entirely set them free from the material conditions prescribed by their human makers in toy factories. Even after secondary animatic transition, the hands of the father toy mouse and those of the son toy mouse remain connected and fixed to each other. They are depicted as able

to see, hear, talk and think like human beings, while their locomotion is subject to the spring-driven mechanism. If the father toy mouse on whose back the winder is set is not wound up, they cannot move or walk. However, they are still able to move their lips and make facial expressions. Even once wound up, they only move repetitively in a circle, with the father mouse swinging the son mouse up and down. This dual condition of those toys echoes the Cartesian view of soul and body (certainly for human beings). The father-and-son toy mice seem to have consciousness and the capability of self-awareness as an anthropocentric token of soul. As soon as secondary animatic transition takes place, the son toy mouse asks his father, "Where are we?" and then, "What are we?"

However, the toy mice learn soon that all the toys are destined to serve the human beings who buy them. When the son toy mouse says, "I think [sic] would rather stay here . . .", the clock character teaches him, "Thinking is not part of your job". The narrative of this film reveals that even in the perihuman world, puppets and toys remain to be seized by anthropocentric orders and beliefs. The perihuman world seems to be ruled by anthropomorphic animals capable of moving freely by their own will unlike the toys and puppets. With no rotating winder set on their bodies and given dark pupils and white sclerae, the figures of anthropomorphic animals as natural are to be clearly discerned from the figures of toy animals as artificial. The former is not depicted as confined to preprogrammed repetitive movements as is the latter; even if the toy mice appear to dance like human beings, the dancing-like movement is not theirs but is a toy function imposed on them by

their human makers in the film's diegetic world.[12]

In the perihuman world, Manny is a villainous rat character that rules his own realm. The tyrant gathers, enslaves, exploits and disposes of wind-up toys, including the father-and-son toy mice, as mechanical labour force in his realm (Figure 3.15). The rat and other animal characters have absolute power over the animal-like puppets because the former can wind up the latter; the puppets cannot wind themselves up. The power relationship between living animals and puppet

Figure 3.15 The enslaved toys in *The Mouse and His Child*

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[12] This impression of being a machine is reinforced by the way in which their costumes are animated in relation to their body movements. The toy mice's rigid-looking jackets and trousers are depicted as part of their tin-looking bodies, without any cues that separate arms and legs might be put into them. Unlike them, for instance, the scarf and the glove, respectively worn by the living animal characters, Manny Rat and Frog, are animated in the passive mode of movement, according to, yet quite free from the body movement which the two characters perform in an anthropomorphic mode. These dynamic cues also function to indicate that alive on screen are not the costumes as objects but the anthropomorphic animals wearing them.

animals seen in this film is an analogy of that between human and sub/nonhuman in the real world as well as fictional worlds. Kuznets postulates four motifs in toy narratives, one of which is:

> When manipulated by human beings—adults or children—toys embody all the temptations and responsibilities of power. As characters with whom humans identify, they also suggest the relatively powerless relationship of human beings to known or unseen forces: their dreadful vulnerability. (1994: 2)

In *The Mouse and His Child*, the wind-up puppets epitomise this motif in a double sense; on the one hand, they are manufactured and consumed under human power, and on the other, captured and enslaved under the anthropomorphic animal power.

The pivotal moment in the film is when the self-winding ability which the father toy mouse wants is realised in the later part of the film. Repaired and reconstructed separately by Muskrat, the living animal character that has as much philosophical and scientific knowledges as human beings, both the father and the son toy mice obtain not only autonomy but also bodily individuality. Their substantial transformation is likely to threaten the human world as well as the animal world in the film because the two toy mice do not have to wait for human or animal masters to wind them up. This is the sense in which Hoban's story adapted into this film is described by Kuznets as "veering from androcentricity" (1994: 169).

Nonetheless, the film does not go so far as to transgress the horizon of the

anthropocentric belief in which puppets in human or animal form are imagined to speak and talk only while human beings or their perception are absent. Collapsing the realm of the rat tyrant Manny, the self-winding puppets celebrate with living animals the finished construction of their own new home isolated from the human world, instead of going back to the human world to show off their mechanical movements in full autonomy. The small perihuman realm the puppets have built in a doll house is kept isolated from, and unknown to the human world.

Depicted within such a perihuman horizon is the "operation" through which the two toy mice acquire the self-winding ability. The operation must be a focal point for the viewer who looks forward to seeing how the toy gets autonomous in technological terms, because the film emphasises the reality of the toy's material condition in its diegetic world before reaching that point. For instance, a hawk snatches the toy mice as a prey, but it soon notices that they are not real mice because of the tin surface of their bodies. In another scene, the viewers can hear of the mechanical-ness and the material properties of the inside of the tin body. Exhausted from chopping a tree, the father toy mouse says, "I feel tainted and rusty in my motor". In the operation scene, however, the

Figure 3.16 The winding key disappears in *The Mouse and His Child*

transformation of the toy mice is not treated in a technologically serious way but rather in a Méliès-esque fashion with a cartoon symbol of sparkling (Figure 3.16); the colours of their body surface get repainted clearer and then the winding key on the back of the father toy mouse gets removed in only a few seconds on screen.

The operation scene also demonstrates a belief system into which the viewers should be initiated in enjoying the film in the Tooniverse. While reconstructed, the father toy mouse's disembodied head part utters, "Son", with a slight movement to show he has consciousness. "Papa", utters the son's awakened head part, too, once set on the body of the father (Figure 3.17). However, their dialogues are odd in that the father and his son are not anthropomorphic living animals but mechanical toys with mouse-like heads and human-like torso, arms

Figure 3.17 The son's head and the father's body in *The Mouse and His Child*

and legs; the family status of each toy mouse does not have to be defined by its head part. In those dialogues, intended to suggest the quality of consciousness, lies the Cartesian view that the human soul dwells in the head or brains (Maclean 2006: lix). Contesting this view which privileges human beings against anthropomorphic automata, La Mettrie's view is that human beings are machines: "The human body is a machine which winds itself up, a living picture of perpetual motion" (1747/1996: 7). Discussing La Mettrie's view of humanity, Aram Vartanian writes of his man-machine discourse: "The metaphysical and theological concept of a spiritual soul is made to designate simply ceartain [sic] effects of organic matter in motion" (1999: 46).

Here I do not attempt to enter the locus in which debates have been long made of the human being, but rather look into the figures of the toy mice from La Mettrie's materialist perspective in that they perform anthropomorphic automata with a partial appearance of a mouse in the film's world. Despite bringing into focus the self-winding mechanical puppets, the Cartesian concept of a spiritual soul is not abandoned in *The Mouse and His Child*. This is why in the film the toy mice heads are *not depicted* as broken, while their bodies, arms and legs are depicted as entirely broken into pieces to show all the internal mechanical parts; and why in repairing them, Muskrat does not peek into the inside (not drawn by animators in production) of the father toy mouse's head, while the inside (drawn by the animators) of the toy's mechanical belly is exposed to us through Muskrat's subjective point of view.

3.5. Type Five: An Enchanted and Enlightening Marionette in *Pinocchio*

In Disney's film, *Pinocchio*, the hand-drawn figure of the titular puppet starts from the status of an inanimate object to achieve the status of a human being at the end of the film narrative, in contrast to the cases selected for the other Types. In my typology of puppet-as-puppet figures for Group CEL, emphatically, the final achievement of "humanisation" or transformation into a "real" life in the film narrative is not a necessary condition. In this sense, however, Pinocchio can serve as a problematic case to make clear a distinct way in which animators and other human agents collaborate to envision subhumanness or non-living-ness in the Tooniverse built on hand-drawn cel animation.

At the centre of the narrative is the Cartesian view of life, humanity and reason (or rational soul), in terms of which after secondary animatic transition, the wooden puppet is told that it was given "life" and yet is not "real" in terms of reason. Intriguingly, however, the visual and narrative foci converge on the "body". Given La Mettrie's material-oriented opposition to Descartes, Pinocchio or his body drawn in human form can be considered as a perceptual, discursive battlefield between living and non-living, human and non/subhuman, real and fake. In this section, I seek to suggest an alternative viewing skill with Pinocchio to the conventional discourse that human simulacra should become "real", thereby addressing an issue of transracial adoption in terms of which I consider the puppet boy as being adopted by a human being.

In Type Five (and also Type Six), there is no shift from one world to another while secondary animatic transition happens to the figure of a puppet as a

Figure 3.18 *Pinocchio*

puppet in a film. Instead, magical power or a magical being's intervention is involved in secondary animatic transition as the main principle of the transitional happening, and then, in the film narrative the puppet is depicted as able to interact with any human (and anthropomorphic animal) characters.

As an emblematic case of Type Five, Pinocchio is initially given the status equivalent to the lady figurine which I examined above as the case of Subtype (a), Type One. Its eyes are aimless and motionless; and its upper body seems to lean on the wall, thereby suggesting that no self-controlling force exists in Pinocchio (Figure 3.18). In addition, its joints around the neck and the knee are drawn in dark lines as a cue of the mechanical-ness of a marionette body. Further, this puppet on screen does not show any response to Jiminy who gazes at and touches

it. Most of all, the cue of no mouth on its face suggests that the puppet-making is not finished in the film narrative.

Without (or despite) the transtextual motivation in which Carlo Collodi's original novel of great international popularity was adapted to Disney's animation film (Kaufman 2015:17-18), the hand-drawn figure of Pinocchio would still be likely to invoke fear—it might be a dead boy's corpse, in particular, for the vague stare of its eyes with pupils, irises and sclerae detailed—in a viewer because it represents a life-size human boy. The soother of such fear would be Jiminy, as a voyeuristic device, who kindly notes of Pinocchio's material status, "Good piece of wood", when he looks closely at the marionette before either primary or secondary animatic transition.

Shortly, Jiminy's observation of a human being's workshop is interrupted by Geppetto coming to finish making his new marionette which he is to name Pinocchio. The puppet's primary animatic transition takes place in the passive movement—Subtype (b), Type One, when the old watchmaker puppeteers it on screen, singing "Little Wooden Head". Emphasis is often put on the way which his puppeteering makes the marionette seem inanimate. For example, Geppetto manipulates it into walking with a stoop, which accentuates the limpness of the wooden body so that it might seem unable to resist gravitational force in the world of the film.[13] At this stage of primary animatic transition, no animation of the

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[13] Limpness is also a conventional token which is employed to indicate the status of automata when human dancers perform them on stage or in film. In *Coppélia*, the ballet by Léo Delibes, staged by the Royal Ballet in 2000, for example, Swanhilda (performed by Leanne Benjamin) tricks Dr. Coppelius into mistaking her for Coppélia by pretending to be the female automaton, when she frequently displays limp body movements. Discussing the live-action dance film, *The Sandman* (The Quay Brothers and William Tuckett, 2000, UK), partially based on the ballet *Coppélia*, Crow also points out, "Performed by Tamara Rojo, this Olympia moves with both mechanical rigidity and dollish limpness" (2006: 58).

Pinocchio figure works for the effect of looking like coming alive on screen. It is only the cat Figaro and the goldfish Cleo, as nonhuman animals, that mistake the marionette for a living being in the film.

Pinocchio's secondary animatic transition occurs when the Blue Fairy gives it something like life in the film narrative. Following the visual effect animation of sparkling light circles as a cue of a magical event, the marionette is depicted as if *he* woke from sleep with the behavioural cue of blinking and rubbing his sleepy eyes. Given the Western context within which the film was produced, this performance is likely to echo the concept of captured or taken souls that Patrick Harpur (2010: Kindle 2731) refers to as once pan-European before Europe was christened (Kindle 541). Harpur points out, "In Irish folklore, for instance, it is said that when a young man or woman is taken by the fairies they leave behind a 'log', or else 'the likeness of their body or a body in their likeness'" (2010: Kindle 270). Interpreted from the perspective of the pre-Christian folktale, the cue of Pinocchio's waking in the film suggests a possibility that after kidnapping a boy's soul in another place, the Blue Fairy returns it to a wrong body which Geppetto has just built out of logs in a wish to have his own son. If so, Pinocchio's secondary transition will arouse from the viewers troublesome questions like these: who and where is the human boy whose soul was taken by the Fairy? what will happen to him if the soul is not brought back to him?

Yet, the film narrative does not respond to such questions of the proper ownership of the soul. Instead, it takes a pivotal step at the moment when the Blue Fairy tells Pinocchio that she has given it "life"—not a soul—and notably that he/it is not a "real" boy. Her remark addresses an intriguing question: What is the

difference between the life and the realness of a boy such as Pinocchio that can and do move, walk and talk? Morality is the answer from the fairy (Bukatman 2012: Kindle 3352). The narrative motivation for this seems to be valid, as the protagonist Pinocchio will develop an overt interaction and relationship with not only Geppetto but also other characters, humans and anthropomorphic animals, co-inhabiting in the diegetic world of the film produced within the Hollywood context. What is peculiar about the fairy's view is that morality is not inherent to life itself and the latter is phony without the former.

Here works again the Cartesian view of life as a philosophical background or belief system. As discussed by Kim (2013: 177), the concept of morality is reduced to reason in Descartes. As regards how to judge something in question, according to Maclean, "He consistently recommended the 'light of reason' as the best guide" (2006: xxiv). For the French philosopher, life is considered as separated from the faculty of reason because living beings like nonhuman animals are machines, as Des Chene remarks, "Time and again he insists that machines can *simulate* all the functions of life" (2001: 10). In this sense, the Blue Fairy can be said to be a follower of Descartes. When giving only life and no faculty of reason to the puppet, the fairy does not perform a demiurgic role, as Descartes claims, "God has given each of us an inner light to distinguish the true from the false" (1637/2006: 24).

In this Cartesian view, the film narrative keeps Pinocchio to be a subhuman animal, after secondary animatic transition, that lacks morality or the faculty of reason. His on-screen ability of talking, as well as moving and walking, is regarded as nothing but a mechanical-animal simulation. This belief system squares with the

Figure 3.19 Children transformed into animals in *Pinocchio*

narrative development in which Pinocchio, along with other real human boys, is

transformed into a donkey, as a nonhuman animal, after all his delinquency and

debauchery on Pleasure Island, a place exempted from rules and morality.

Sold to circuses or salt mines as is shown in a later part of the film (Figure

3.19), the donkeys into which boys are transformed can read as a kind of slave

labour. While not focusing on enslavement but rather the working class, M. Keith

Booker (2010: 12) cites Nicholas Sammond, who points out:

[I]ndulgence in the pleasures of the working class, of vaudeville, or of pool

halls and amusement parks, led to a life as a beast of burden. Ultimately,

one was either a manager or managed, and the choices one made

determined the outcome. (cited in Booker 2010: 12)[14]

As with the vampire in *Nosferatu* (F. W. Murnau, 1922, GER), the frightening scene in which the human figures are shown to transform into nonhuman beasts can be a reflection of Disney films which, Booker writes, "tended to dismiss and denigrate working-class culture" (2010: 12).

Yet, it should be noted that *Pinocchio* is not a horror film but a children's film. In terms of film genres, Grodal observes Pinocchio and other Disney/Pixar characters:

> The business of attracting children's attention and allowing them to follow the action involves a further field of options. In the physical portrayal of agency, it seems that salience is important; differences in character and function are often enhanced by using different animals or other highly salient objects. It is easier to distinguish an aggressive character from a friendly one if the aggressor is a wolf or cat and the friendly one is a piglet or a mouse. The ability to display key emotions through the innate features of body language like posture and facial expressions is very important, and exaggerated body language is used to highlight the characters' emotions. (2009: Kindle 384)

The salience of Pinocchio, as the hero of the film, with whom children are expected

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[14] Booker cites Sammond (2005: 78) *Babes in Tomorrowland: Walt Disney and the Making of the American Child, 1930-1960*. Durham, NC: Duke UP.

to identify, seems to work successfully, as Bukatman comments in a personal tone:

> As soon as he can move and talk he becomes a figure of identification, so from an audience standpoint he doesn't need to become any realer, demonstrating that the combination of animateness and voice is a sufficient indicator of life. In fact, I'm always slightly disturbed when he does become a real boy at the film's end—I miss that little wooden boy. (2012: Kindle 3338).

This unhesitant evaluation of the animation of Pinocchio as a not-yet-real boy prompts the reconsideration of the way in which the Disney animators designed and animated the boy figure in terms of both life and not-yet-real-ness. Thomas and Johnston mention a directorial note of the design of Pinocchio, which indicates:

> When Pinocchio is a puppet, before he comes to life, we are going to have the black line where his neck joins because it looks *mechanical*, but when he comes to life, it spoils the cuteness to have those lines in black so we just ink this in the same color as his neck so you don't get any hard edge here. (1981: 277; emphasis mine)

What interests me in this note is that the Disney animators were concerned with how Pinocchio looks on screen. Therefore, the question should be raised of why they kept Pinocchio having the lines around the knee joints and wooden straight edges along the arms and legs after he comes to life in relation to the film narrative.

With the cues of woodenness, the Pinocchio figure nonetheless shows as much flexibility and elasticity on screen as human or animal figures in terms of body movement. The physical properties are virtually obtained using the techniques of two-dimensional hand-drawn animation, involving the medium of celluloid. In the case of stop-motion animation, as a matter of fact, it is impossible that a puppet model made of real wood walks and jumps in as flexible and elastic a way as Disney's celluloid figure representing a puppet. As indicated in Bukatman's (2012: Kindle 3338) above-cited passage, Pinocchio as a not-yet-real boy surpasses the real boy named the same as the puppet, who is to appear at the end of the film.
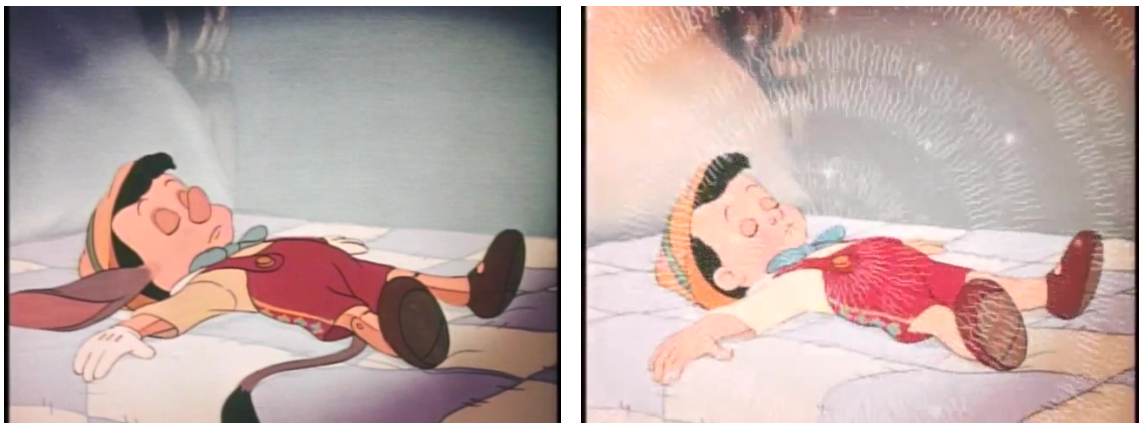
Figure 3.20 Transforming into a "real" boy in *Pinocchio*

The sensation of the hybridity of Pinocchio's body on screen is not the problem which I am going to tackle. Given the film's genre as fantasy, the wooden puppet jumping and dancing in such a supple way on screen is as much acceptable as the same puppet moving without manipulating strings. The very problem is the manner in which the Disney animators deal with such cues in the scene (Figure 3.20) where Pinocchio is transformed into a real boy from whose body disappear all the joint lines, wooden lines and the unusually long nose, as well as the donkey ears and tail. As resulting from his hedonistic behaviours on Pleasure Island, these

half-spellbound animal body sections deserve to vanish as a token of reward for his "brave, truthful and unselfish" behaviour, as with Pinocchio's nose made longer and longer by the Blue Fairy to punish his lies in the film. Unlike them, the mechanical/wooden marks on the figure of Pinocchio's body as not-yet-real should have nothing to do with what the boy was, is and will be, for the Cartesian perspective. As I discussed above, reason and morality are divorced from the very concept of life that is mechanical in the Cartesian view. However, the fairy links morality with the issue of body, machine, life, as she says to Pinocchio, "Remember a boy who won't be good might just as well be made of wood". Might it be that the fairy is not a Cartesian agent in the world of the film?

Such a question should be raised of the Disney animators, as human agents, along with the viewers in the Tooniverse. It is evident that the former agents were concerned with what Pinocchio's body should be and look like, going so far as to make the fairy consequently transmute its material of wood into flesh, by means of the animating process of changing lines and colours frame by frame on the transparent medium of celluloid. As Kim (2013: 178) suggests citing Michael Hardt and Antonio Negri,[15] this scene of transmutation is likely to involve racism which, drawing on human biology, has marginalised colonised non-Western people as other-than-human. In other words, the new look of Pinocchio can act as the lesson that the body is the ultimate condition for an adopted child such as him to be a real human being, however well he behaves himself in a given world. Soleil S. Groh reports the case of transracial adoptees in the United States: "Although Chinese adoptees can sometimes prefer to claim this 'white identity', which can

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[15] Hardt and Negri (2001: 258). *Jeguk* (Empire). Yoon, Soo-Jong (trans.) Seoul: Ehak

often be described as being a 'banana' or 'Twinkie', meaning the adoptee is 'yellow' on the outside and 'white' on the inside, Asians are still vulnerable to racism and discrimination" (2018: 19).[16]

When it comes to the body, La Mettrie's view of human beings and their faculty of reason provides a different insight into what Pinocchio was, is and will be. Suggesting that the materialist philosopher's stance converges on the body, Vartanian states:

> La Mettrie did not claim that animals, much less their human counterparts, were mechanical contrivances in the Cartesian sense, that is, automata lacking consciousness, feeling, and intelligence. On the contrary, the gist of his position was that those mental powers, real in man and beast alike, were products of their organization seen as a mechanical system. (1999: 58)

In addition, Vartanian (1999: 85) stresses that for La Mettrie, the machine means to be independent, autonomous and self-determining. Viewed from this perspective, and also as Bukatman claims that "it is precisely Pinocchio's misbehavior that makes him real, that makes him human" (2010: Kindle 3357), Pinocchio can be said to have already been a *real human* boy before the transmutation of his body; the Blue Fairy lied to him in the Lamettrian sense. At the end of the film, Pinocchio is no more disobedient to be subsumed under the

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16 Groh mentions J. P. Lee, R. M. Lee, A. W. Hu & O. M. Kim (2015). Ethnic identity as a moderator against discrimination for transracially and transnationally adopted Korean American adolescents. *Asian American Journal of Psychology* 6(2): 154-163.

anthropocentric order of the Tooniverse and beyond.

3.6. Type Six: A Cursed Toy in *The Simpsons: Halloween Special III*

In *Pinocchio*, no human and anthropomorphic animal characters are threatened by the subhuman wooden puppet, but rather the latter is threatened by some of the former. Unlike this case of Type Five, in the film narrative the cases of Type Six threaten human (and anthropomorphic animal) characters who seem unlikely to hope that puppets as inanimate objects move with their own will, not to mention coming to life. This is the ground on which I separate Type Six from Type Five as discrete in my typology of Group CEL. Despite its similarity to Type Five of the main principle, magic, in which occurs secondary animatic transition, Type Six is usually mobilised to arouse negative, horrible and aversive, response in the viewers of a given film, as well as in the human characters appearing in it.

In terms of genre, this Type is a preference in horror films, on which Grodal remarks that "the extreme fear is caused by the lack of normal means to control the monster" (1997: 249). In order for such fear to work well, as discussed by Grodal (p.246) using what he terms "cognitive dissonance", devices of horror films should be deployed to challenge the belief system of reality, scientifically verifiable, that both human protagonists and viewers have in common and take for granted in their everyday life. In analysis of the case of Type Six, I examine how such cognitive dissonance is aroused in the viewers with cues of a puppet-as-puppet figure's body movement out of "human control".

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As an emblematic case of this Type, I have selected *The Simpsons: Halloween Special III* (Carlos Baeza, 1992, US; a.k.a. *Treehouse of Horror III*), one episode of the animated situation comedy, *The Simpsons* (Created by Matt Groening, 1989-to date, US).[17] In the *Special* episode as part of the series whose genre is comedy, and whose narrative is focused on a middle-class US family and its neighbours, a puppet-as-puppet figure named Krusty the Clown is employed as a conventional device of horror films to serve the strategy of causing laughter from the viewers of the series. At the same time, the series' genre of comedy can be a facilitator to exploit a variety of the devices of horror films likely to be restricted for the mainstream television audiences.

The figure of Krusty representing a clown doll bears a good comparison to Koko the Clown that is made to undergo animatic transition by the on-screen live-action human artist Max Fleischer who assumes a demiurgic role, yet adopting modern scientific knowledge and technology, in the *Out of the Inkwell* series. In *Clown without Pity*, one segment of the *Special* episode, a Chinese-looking old shopkeeper (Figure 3.21) is involved in the unwished (secondary) animatic transition of Krusty, a doll which Homer, the father character of the Simpsons, buys for his son Bart in a shop actually not for toys or gifts. The shopkeeper says to his wrong customer: "We sell forbidden objects". The Chinese-ness of the sinister shopkeeper is reinforced by the use of a Chinese-sounding tune played when

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[17] This animated comedy show was at first broadcast through mainstream television networks in the United States (Norris 2014: 227-229), extending its international popularity up to South Korea and Japan.

Figure 3.21 The Chinese-looking shopkeeper in *Halloween Special III*

Homer enters the shop, named "House of Evil", to find a birthday present for his son. The combination of evil-ness and Chinese-ness addresses the issue of what Simon During (2002) calls black magic. Considered as dangerous and threatening to modern societies and communities, During writes, black magic "is familiar in both witchcraft and colonized territories" (2002: Kindle 571). Probably, realistic motivation for horror might have been an influential factor in preferring a Chinese man to a witch because there are Chinese towns and also traditional Chinese medicine shops found in the United States.

In the narrative, however, the Chinese-looking shopkeeper does not work as a "direct" agent who brings Krusty to secondary animatic transition. This transition is depicted after the scenes with Krusty in the stationary state (Subtype

(a), Type One) and then in the automatic mode of movement (Subtype (c), Type One). This automatic mode functions to indicate Krusty as a pull-string talking doll. The narrative device for Krusty's secondary animatic transition is given as a curse, or black magic, by the old shopkeeper, which as a modern middle-class man Homer is not willing to believe in. As a token of the curse, one day, Krusty changes all of sudden its preprogrammed dialogues, and further moves for itself to point at Homer with its index finger when he is holding it up. In this scene, the hand-drawn figures of the doll's eyes and pupils looking in extremely different directions are utilised to suggest the impression of craziness, as well as subhumanness and lifelessness, as indicated by Thomas and Johnston (1981: 446).

Figure 3.22 The doll's paraphysical movements in *Halloween Special III*

What is typical about the body movement of Krusty after its secondary animatic transition is that it shows greater abilities than the material condition of its body can allow. Resisting gravity, it can jump and fly to kill Homer and it looks even like it weighs much more than him when it knocks him down and pushes his head into a dog bowl (Figure 3.22). In the diegetic world of the episode, except for the concept of magic, it is not easy to explain where the doll's paraphysical power originates from, despite its small-sized body within which no overpowering

mechanical structure or parts is expected to be built. As Eric G. Wilson describes black magic as "sinister efforts to control the will of another" (2006: 130), the Krusty doll seems to be controlled or possessed by what it is not—the object as inanimate and lacking will would be much more vulnerable to such efforts. This irrational situation brings about cognitive dissonance in both the viewers and the protagonists who make effort to figure it out in the belief system of modern science, without admitting the premodern, non-scientific, notion of the curse.

What I am concerned with here is not the verification of the religious notion that goes beyond the scope of my thesis, but rather it is the way of animating the hand-drawn figure of Krusty. Coming to the perception of any human characters living everyday life in the film diegesis, and also to that of the viewers initiated to experience the diegetic world on television by identifying with them, the figure of a doll moving and talking with its own will can raise an epistemological issue—cognitive dissonance—of the inanimacy of an anthropomorphic object. Framed in the greater context of a sitcom, the exaggeration of the doll's power comes quite close to defamiliarising the conventional way of exploiting the two-dimensional condition of hand-drawn animation where there are no physical properties or laws, like gravity, as experienced in the three-dimensional world.

In the *Clown without Pity* segment, however, the cue of defamiliarisation or cognitive dissonance is not intended to tackle the viewers' everyday sense of human-like objects such as the talking doll Krusty, but rather helps to reproduce the modern Western-centric society's convention in which events or materials used as such a cue are imagined and marginalised as evil and non-Western. The ending

Figure 3.23 The doll under the human control in *Halloween Special III*

of the segment is a clear illustration of the society's dominant belief. Homer finally

ends up getting rid of any threat by learning how to control the doll with the slide

switch between "Good" and "Evil" set on its back (Figure 3.23). The human

character, Homer, is no longer terrified of the doll as long as he can control it. Yet,

he should consider any possible accident by which the switch on the doll's back

might slide to the mode of Evil and then get broken beyond recovery.

3.7. Type Seven: A Posthuman Android in *Astro Boy*

In Type Seven (and also Type Eight), science or technology is the main principle of

secondary animatic transition. This type of puppet-as-puppet figures in human form have an overt interaction and communication with any human characters in the diegetic world of the film: except the main principle, Type Seven has much in common with Type Five. Yet, the former Type builds on the discourse that technology can and will redefine the "humanity" itself of the real world in a post-Cartesian or postmodern sense (Haraway 1991).

When I analyse the case, *Astro Boy*, of Type Six in consideration of such a discourse, I focus on the way in which the boundary becomes thin between puppet-as-puppet figures in human form and human figures on screen, not only in terms of narrative but also in terms of the mode of body movement. For this dynamic aspect, one of the most influential factors is "limited animation", and both as a set of techniques and a style, this has been tied in with television as a nation-wide media platform in Japan and other countries (Lamarre 2018). My analysis of the puppet-as-puppet figure named Astro Boy embraces the socio-cultural implications of television to shed light on how its body movement was circulated in the involvement of a nation in the age of technology.

The emblematic case of Type Seven is *Astro Boy*, the Japanese animated television series, which Marc Steinberg evaluates: "The emergence of anime with *Tetsuwan Atomu* (*Astro Boy*; 1963-66), the first made-in-Japan, thirty-minute, weekly television animation show, which went on air on January 1, 1963, proved a tipping point in the development of transmedia relations in postwar Japanese visual culture" (2012: Kindle 68). In particular, this series has also been of great influence on what human simulacra of the future will be like in the real world—specifically in the field of engineering in Japan (Schodt 2011: Kindle 1287). Being

aware that it consists of around 193 episodes, in this thesis I focus on Episode One, entitled "Astro Boy Is Born", where an establishing depiction is made of the secondary, as well as primary, animatic transition of the titular puppet-as-puppet figure.

Set in the early twenty-first century Japan in the film diegesis, Astro Boy is an android boy invented by Tenma, the scientist and the minister of the National Science Agency, as a surrogate for his dead son. The male scientist has in common two motifs with Victor Frankenstein, the protagonist of Mary W. Shelly's novel, *Frankenstein; or, The Modern Prometheus* (1818). One is the death of the scientist's beloved family member, and the other his desire of creating life by means of science and technology. Unlike Frankenstein, however, Tenma enjoys his "official" power to order the experts of the Agency to develop his Frankensteinian project, mobilising the established technology of the future, without violating ethical norms, as the predecessor Frankenstein does, by building the humanoid out of inorganic materials.

While being built in a laboratory, Astro Boy makes a first appearance on screen in the stationery mode (Subtype (a), Type One). The technique of editing outlines the process of building the android. At the early stage, viewers can see its inside structure which is composed of artificial body parts resembling human counterparts, for instance, the arm bones, the empty thorax, the pelvis, the chin bone and the skull without eyeballs (Figure 3.24a). Such an anatomical depiction serves to make the viewers recognise the boy figure as a mechanical being. Following the scene in which artificial eyeballs are inserted into the eye sockets, the android boy is seen to lie on an operation bed, with the body almost finished
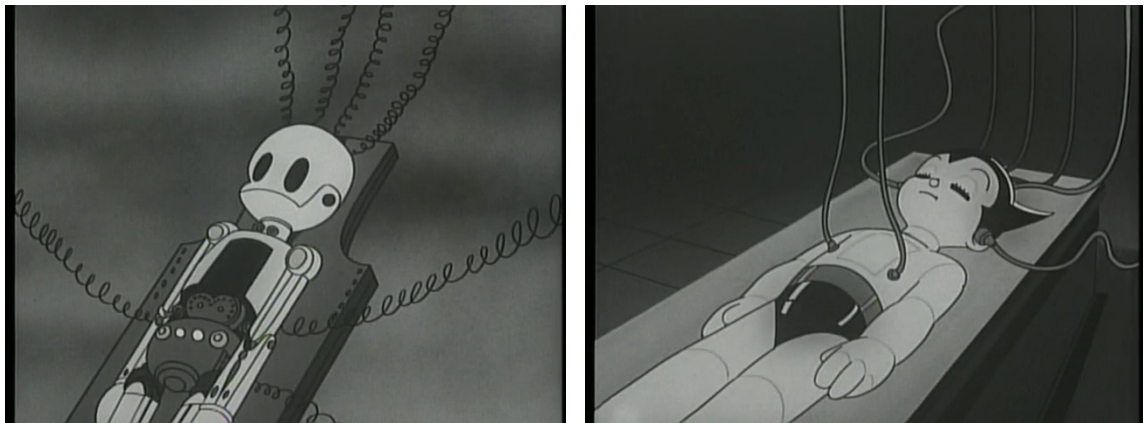
Figure 3.24 *Astro Boy*; left (a), right (b)

but still wired, and also with the eyes closed as if it were sleeping (Figure 3.24b).

Primary animatic transition is not depicted to occur to the boy in a separate way. Rather, there is no clear distinction seen between primary and secondary animatic transitions at the moment when the mechanical eyes open, the right arm is raised up and the upper body gets up. This series of movements can be read: on the one hand merely as the cue of an inanimate object moving in the automatic mode (Subtype (c), Type One); and on the other as the cue of secondary animatic transition during which the android figure will come to look more like its human counterparts appearing in the TV series. This ambiguity in the mode of movement suggests that in the science-fiction world of the animated television series, technology is so much developed as to make unclear the difference between both impressions of being inanimate and coming to life.

In either mode, however, the android is still depicted to seem less than human on screen at the moment of "birth". It does not support itself on the operation bed with either hand when raising the upper body, but the body rises up in a constant slow speed around the axis of the waist (Figure 3.25a). This movement makes it appear to lack the "totality" of an organic body, with the upper

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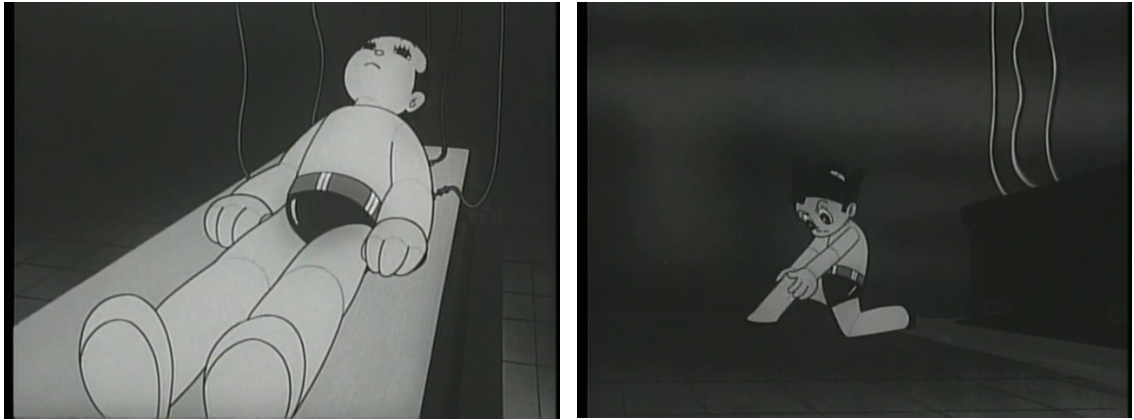
Figure 3.25 *Astro Boy*; left (a), right (b)

body separated from the lower one, as if individually driven by separate powerful built-in servomotors. Booted up, the android gets out the operation bed and then falling down over and over, seems to deal with the legs as if uncontrollable (Figure 3.25b). Succeeding in walking at last, it shows a slightly similar mode of locomotive movements to the monstrous figure that in the 1931 film, *Frankenstein*, impressed the audience with its way of stomping in an aimless and stiff manner. When hugged by its creator-father Tenma, it does not present any cue of reaction in terms of facial expression, eye blink and gesture.

Tenma is not a patient father, nor a self-aware scientist. After all his pleasure with his surrogate son, he eventually gets too anxious and angry to deny the nonhumanness of Astro Boy which lacks the development of the human body. It is impossible that any artificial abilities, intelligence, emotion and even morality, of the android satisfies the creator-father, for whom the focus is only the ungrowing inorganic body, in contrast to the Blue Fairy concerned with morality as the foremost issue in *Pinocchio*. In the diegetic world of *Astro Boy*, the android boy befalls another adversity; he has to accept the human-centric order under which regardless of their quasi-human or almost human abilities, androids are dealt with

as commodities or slaves. This means that Tenma must be already aware that his surrogate son is not allowed to go to school, nor to be employed, nor to open a bank account. Tenma's fantasy of the father-son relationship concludes when he hands over Astro Boy as a piece of stuff to the human master of a robot circus.

In the Astro Boy narrative, the ultimate issue for the android slaves is not the artificial body but rather the law. At the end of Episode One, all androids are liberated from slavery by being granted equal-to-human rights on a global scale; along with them, Astro Boy gains the status equal to human beings. This is where this anime series calls into question what is human. Despite the declaration of equal-to-human rights for androids, some of these ex-slaves keep protesting or seek to take revenge for violence, cruelty and discrimination by human beings, throughout the anime series.[18] In many of its episodes, the state-of-the-art android Astro Boy serves to mediate socio-political conflicts between humans and androids; no clear explanation is made of the reason that he remains to be a relatively docile friend of human beings.

The equivocality of Astro Boy in the narrative as the mediator between two opposing groups also triggers the re-examination of how to define humanity in epistemic, ontological, as well as socio-political, terms. In the future world of the anime series, electronic brains are depicted to emulate human brains. In Episode 139, further, the National Science Agency begins to take action for the physical development of android bodies, which is to transplant the electronic brain from one body into another body designed to match each of the human life stages.

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[18] As discussed by Kim (2013: 178), for Tezuka, the enslaved androids were an analogy of African-American people in US, and also of the Japanese under the US Occupation (1945-1952).

Technologies like artificial organs and transplantation are likely to undermine the conventional definition of humanity. Observing the crisis of human beings and their bodies in the sci-fi horror live-action film, *Parts: The Clonus Horror* (Robert F. Fiveson, 1979, US), Schelde notes, "Bodies are no longer self-contained organ complexes; they are loci of medical and scientific experimentation" (1993: 207). He continues:

> We are rapidly approaching a point where bodies are regarded and treated as machines that can be repaired and given spare parts. The problem, as sf [science fiction] sees it, has to do with the notion of self, of soul: the essence of individuality that makes Me distinctly different from You. If I have the kidney, lung, blood, or heart of another person, am I myself or that person? (1993: 207)

In *Astro Boy*, such an ontological crisis of humanity is transposed into the optimistic vision in which the future world sees androids more and more emulating, or even surpassing human beings. Astro Boy is repaired over and over every time his body is destroyed fighting enemies. In Episode 139, he remains simply what he was, even after his electronic brain is transplanted for testing into a mechanical adult body.[19]

The optimism of technology or the scepticism of humanity in *Astro Boy* is

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[19] In the same episode, it is human beings that pretend to be what they are not. It is revealed that one of them, a human detective wears a wig and in fact is bald. Yet, this is soon followed by his confession, with the gesture of revealing only to his television audience, that his bald head, too, is a disguise. When his hidden hair is shown in the end, this real-or-fake game is still open to a perceptual challenge; the hidden hair might be fake.

visually accentuated by the technique of limited animation and also was promoted

by the media platform of television. Pioneered by the artists of United Productions

of America in the 1940s (Maltin 1987: 332-333), limited animation was introduced

by Tezuka to the production of *Astro Boy*, in an attempt to meet the needs of a

television-oriented animation production system in the 1960s. Rejecting the

technique and the style of full animation supposedly using twenty-four discrete

sheets drawn per second, Tezuka pushed ahead with dropping the number of

drawings to three or four sheets per second (Ito *et al.* 2002: 44-45).

As a result, the use of limited animation does not enable viewers to easily

discern between human and android figures, in terms of the mode of movement,

for the most part throughout the animation television series. Both figures of

humans and androids present choppy and jerky movements, and even remain

stationary and fixed. Created by the reuse of many sets of cel drawings,[20]

furthermore, the figures of humans as well as androids show the same patterns of

facial expressions, postures and gestures in one and the same episode and from

one episode to another every week. These schematic body movements are likely to

pertain to those which Descartes (1637/2006) observes in the automata of his

days; the human simulacra show only the same responses, in repetition, to any

external stimuli in different situations.

The diegetic world of *Astro Boy* is not set in the seventeenth century but in

the early twenty-first century, the next age which is to build on the techno-

scientific achievements and potentials of the twentieth century. As regards the

human condition of the future world envisioned in sci-fi films, Schelde asks, "Can

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[20] The system for such reuse of cel drawings is called "bank" in Japanese animation industry.

humans remain human in a world where more and more of our time is spent interacting with machines and technology?" (1993: 118), going on to note, "Working with a machine means that the machine determines the tempo, the rhythm, and the duration of the work session" (p.126). In this vein, *Astro Boy*'s vision of such an industrialised and technologised world is implied by the human figures depicted to move on screen like their subhuman counterparts in terms of the tempo, the rhythm and the duration of the body movement.

At the time when *Astro Boy* was in production, postwar Japanese society was witnessing television as a new media, instead of cinema, to become the leading player of national narration (Kang and Yoshimi 2001: 128-129). Along with the refrigerator and the washing machine, television was called one of "Three Sacred Treasures", which traditionally signify three mythological items symbolic of Tennoh's prestige. Sang-jung Kang and Shunya Yoshimi (2001: 132) point out that in Japan, the modern and postwar version of Three Sacred Treasures functioned to nationalise technology, at the same time technologising Japan. Combined with the media technology of television, the Astro Boy figure can be said to work as an analogy of new Japanese nation, as well as new humans, to problematise the established orders and the definition of humanity.

3.8. Type Eight: A Deceptive Imitation in *The Great Mouse Detective*

As mentioned above, technology is the main principle of secondary animatic transition that Type Eight (T8) has in common with Type Seven (T7). The puppet-

as-puppet figures of the former Type are also similar to those of the latter Type in terms of their overt interaction with the figures of living beings as performing characters in the diegetic world of a given film. Unlike the T7 figures, however, the T8 figures are employed as a deceptive narrative device, which once believed as a living being by on-screen viewers, are revealed to be fake, without implying any vision in which technology might revise the definition of humanity.

In this section, the case under examination is the automaton Queen of Disney's 1986 animated film, *The Great Mouse Detective*. What is peculiar about this film is that Hiram Flaversham, the creator and *behind-the-stage animator* of the automaton, is not depicted as its master but a victim of Ratigan, the higher, political, power controlling and exploiting both of them in the narrative. Focusing on this peculiarity and in reference to the Disney animators' account, I connect the automaton figure's body movement to the discussion of hypnotism in Robert Wiene's *The Cabinet of Dr. Caligari* (1920, GER). The "somnambulist" figures found in both films help interpret a hierarchical change in the power relations between animator and animated, creator and created, controller and controlled.

In the film narrative, the automaton is created as a copy of the Queen of the Mice by the toy maker Hiram who was kidnapped by Ratigan, the villain scheming to seize control of the British mousedom. The mice inhabit the world of human beings and their kingdom is apparently similar to the perihuman world of the puppets and the anthropomorphic animals seen in *The Mouse and His Child* (as a case of Type Four in Section 3.4). In the Disney film drawing on the tradition of the Sherlock Holmes stories, however, the rodent world is depicted as thoroughly separated from and parallel to the human world in the film narrative. At the same

time, the mouse detective character named Basil assumes a perfect replacement of Holmes in miniature; this strategy of characterisation is applied to his mouse sidekick Dawson and the other anthropomorphised animal characters. Arguably, the animation film could have been created with life-size human characters; but it is not. What then is the effect of anthropomorphism in the film? With this question in mind, I proceed to analyse how the figure of the automaton Queen is dealt with in contrast to the figures of living beings in the film.

The automaton makes its initial appearance in the scene where it is being built by the captive Hiram (Figure 3.26). As is the android boy figure in Episode One of *Astro Boy*, it is shown with the internal condition of its body—including the head part—exposed in an anatomical manner to make certain the impression that it is an assembly of cogs and bolts—which are conventional visual tokens of machines, as different from the living characters in the film. In this scene, Hiram

Figure 3.26 The automaton Queen and the toymaker in *The Great Mouse Detective*

does not remain a toy maker, but shifts to become an engineer capable of creating a full-size android in terms of the rodent world.

As with Astro Boy, secondary animatic transition occurs to the engineer's creation, without primary animatic transition (Subtype (b) or (c), Type One) depicted clearly on screen, when it comes out of a present box that Ratigan's henchmen in disguise have brought to the Queen. At first, the automaton stands erect and stationary with its eyes closed for a while (Subtype (a), Type One), and then suddenly starts to show an intense convulsion at the same time opening the eyes wide. The suddenness of the body movement presents the impression that it is drastically driven by an external power rather than waking up on its own from sleep. However, it does not remain as an inanimate object, as do the miniature automata set on the music boxes and the clocks in *Pinocchio* (Subtype (c), Type One). Interestingly, it bursts into chasing the Queen, stretching out its arms and

Figure 3.27 The real Queen and the fake Queen in *The Great Mouse Detective*

showing its open palms, with its aimless eyes fixed (Figure 3.27)—at the early

stage of the chase, it is not yet clearly revealed that the automaton, like a stringed

puppet, is manipulated by Hiram through console and wire under the order of

Ratigan. The reaching or target-aiming gesture of the mechanical figure looking

aimless and blank in awkward movements adds another imagery of subhumanness

to the mouse-like yet anthropomorphic automaton.

What is noteworthy about adding cues of subhumanness is the way in

which the Disney animators conceptualised automata in terms of body

performance. In discussing the wooden puppet boy as an inanimate object in

Pinocchio, Thomas and Johnston states:

When an actor has to portray a robot or a sleepwalker, the first thing he

does is to fix his eyes in a stare, a lifeless gaze with no movement. (1981:

445)

Here, the animators introduce the figure of a sleepwalker to their account of

lifelessness and subhumaness in relation to body performance. Given that the

Tooniverse has long been related to the history of live-action film, the most striking

of such somnambulist figures can be said to be Cesare, the human character

performed by a human actor for the most part, in *The Cabinet of Dr. Caligari*.

Adding Cesare as a forth type, along with the mummy, the golem and the

automaton, to his android typology, Wilson indicates, "Under the hypnotic control

of Caligari, Cesare is a human transformed into a machine" (2006: 125). In his

essay on the German expressionist film, Stefan Andriopoulos traces such an

account back to the late nineteenth-century neurologist Georges Gilles de la Tourette, who described a hypnotised sleeper as "a true automaton . . . obeying all expressions of his magnetizer's will" (cited in Andriopoulos 2009: Kindle 448)[21]. Andriopoulos goes on to comment on Cesare: "The androgynous medium slowly steps forward, like a puppet that is held by invisible strings" (2009: Kindle 453).

The hypnotised sleeper Cesare is literally presented as the model of a puppet in *The Cabinet of Dr. Caligari*. A real effigy is used in the scene where in fright a few officers find a figure like Cesare when investigating Dr. Caligari's subject (Figure 3.28). The film achieves the desired effect of horror by undermining viewers' perception to the extent that they suspect that from the

Figure 3.28 The Cesare effigy in *The Cabinet of Dr. Caligari*

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[21] Andriopoulos cites Tourette (1887: 96). *L'hypnotisme et les états analogues au point de vue médicolégale.* Paris: E. Plon.

beginning Cesare may have been performed by the effigy rather than an actor who they have believed to be human. In the chasing scene of *The Great Mouse Detective*, the automaton Queen's aiming gesture in contrast to its aimless eyes evokes the viewing experience of hypnotists and hypnotised victims or criminals, many of whom, as Andriopoulos (2009: Kindle 373) indicates, were already enacted in many films between the late nineteenth century and the 1920s.

Despite the performance of Vincent Price cast for the voice of the villain Ratigan, however, horror is not the film's goal within the convention of the Tooniverse. Manipulated through an invisible, to be accurate, unnoticeable string as Ratigan commands, the automaton Queen is eventually reduced to a mechanical tool rather than a hypnotised victim. The chasing scene cuts to the full shot in which Ratigan is ordering Hiram to remote-control the mechanical mouse. At this stage, this mouse is perceived as only an inanimate object (close to Subtype (c), Type One) in terms of the diegetic status by us, the viewers of the film, as well as the Ratigan crew and the captive engineer.

In the film narrative, the mechanical object is staged later as the Queen for people gathering to celebrate her Jubilee. They believe that the automaton is the Queen, no matter how much convulsion its body makes in speech, no matter how poor its voice quality is. While the Queen is about to be murdered, it deceives people into accepting that Ratigan is the new leader of the mousedom. The automaton is not a hypnotised victim; in this Jubilee scene, instead, it works as a hypnotising tool. The hypnotised are the people (as mice) characters that are the audience of the Jubilee play enacted by Ratigan. Such a hypnotising effect on the audience is where Andriopoulos stretches his account of Cesare to the film

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medium. The scholar points out, "[E]arly theories of film described the new medium itself as exerting an irresistible, hypnotic influence on its spellbound audiences" (2009: Kindle 377). What is more relevant to the Tooniverse is his citation of the French physician Hippolyte Bernheim, who stated, "The hallucinations generated by suggestion can be as clear as reality; the hypnotised person, *even though he knows* that it is a hallucination, cannot escape it" (cited in Andriopoulos 2009: Kindle 605).[22] In this vein, arguably, the audience of the Queen's Jubilee ceremony are not simply the victims, but rather the participants, or co-animators in Crafton's definition of the term, of the political show.

This political film also presents a peculiar change in the relationship between the creator and his artistic creation. As examined in Chapter Two, McCay, the Fleischer Brothers and even Greaves play the self-motivated, as well as independent and autonomous, creators of their creations, which are simulacra of life, in their films. Unlike them, in *The Great Mouse Detective* Hiram is not a self-motivated but forced creator of the Queen simulacrum; through the microphone connected to the voice-making part built in the automaton, still less, he cannot tell his own story but is forced to deliver the voice of Ratigan, the true behind-the-scenes producer of the political show. Given that most of such on-screen animators disappeared out of screen to perform as storytellers by means of the narrative device of the character between the 1920s and the 1930s (Crafton 1993: 298-299), Hiram can be an allegory of the Disney animators who under managerial control struggled for their status as an artist or creator to animate figures and tell a story

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[22] Andriopoulos indicates the two sources of this citation: Bernheim (1888: 57) *De la suggestion et ses applications à la thérapeutique*. Deuxième édition. Paris: O. Doin. (Original work published 1886); ——. (1964: 40) *Hypnosis and Suggestion*. Herter, Christian A. (trans.) New York: University Books.

behind screen relying on them on screen.

Of course, the Disney film paves its conventional pathway which should not keep the mice audience on screen (and also possibly young children viewers of the film in theatres) in such a politically serious hallucination. The fake play is stopped by the heroes, and then, the fake Queen is abused for their counter-attack against the villains. With everything going to resolution, the harsh treatment by the detective hero Basil of the automaton brings about its entire destruction (Figure 3.29). The depiction of destruction is grotesque to the degree that the torso is completely shattered into pieces while the eyeballs and teeth are kept in their original places as are their human equivalent organ parts; it looks like an anatomical model lacking the felt totality. This is where the visual device of anthropomorphism begins to work in the convention of the Tooniverse; it serves to mitigate the viewers' fear or horror on the grounds that the hand-drawn figure is

Figure 3.29 The automaton Queen destroyed in *The Great Mouse Detective*

only the mechanical imitation of a *mouse* in the film's diegetic world. There should be no more hallucination of the fake Queen. In the vein of Andriopoulos, however, it should still be noted that the Disney film itself is also a hypnotising locus where the viewers co-animate as alive the hand-drawn figures of Basil, Ratigan and the other anthropomorphic animals. In this sense, the true victim is the automaton Queen.

Chapter Four

The Puppet-as-puppet figures and Their Modes of Movement in Group STM

In this Chapter, I focus on a selection of built or sculpted puppets presented as puppets in stop-motion *puppet* animation films.[1] I classify these as conventional in that they are motivated by narrative. My analysis is to elucidate how in the narrative of each film the *puppets* as puppets are distinguished from the *puppets* signifying humans or animals, in terms of movement as well as form. As defined in the Methodology, and as with Group CEL in Chapter Three, this is focused in particular on the two aspects which are the key criteria defining the typology of Group STM (Stop-motion). One is (1) the puppet-as-puppet figures' primary and secondary animatic transitions, and the other (2) their interaction with human and/or (anthropomorphic) animal characters in the film narrative. They are also influential factors in selecting the emblematic case(s) of each Type from Group STM which is located in the Puppetopos.

As I conceptualised in the Literature Review, the Puppetopos helps to make articulate the two points of Group STM in relation/contrast to the Tooniverse where Group CEL is located. One is the media specificity of each of the two different animation techniques. The other is, nonetheless, that the former has the convention of anthropomorphism in common with the latter. This enables me to

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[1] Puppet animation is often called model animation. In this thesis, too, I accept such use of two terms. Also, puppets are called models at the profilmic level when I stress the thee-dimensionality of a figure.

Type	Criteria	
	Animatic transition primary and secondary	Interaction with characters in the film narrative
1	a. No transition: Stationary state	No interaction
	b. Primary transition: Passive mode of movement	
	c. Primary transition: Automatic mode of movement	
2	Secondary transition's main principle: Shifting to a different world	No interaction except for supernatural characters
3		No interaction except for the owner (and his/her animal friends)
4		No interaction except for the animal or marginalised characters
5	Secondary transition's main principle: Magic	Disenchanted by the character of a higher being in the film's world
6		Cursed by a diabolic power in the film's world
7	Secondary transition's main principle: Technology	Equivocal in the film's world
8		Deceptive in the film's world

Table 4.1 Eight Types of the puppet-as-puppet figures in Group STM

appropriate the typology of Group CEL in this Chapter. Building on the eight types

of Group CEL, I redefine the counterpart of each Type for Group STM, in

consideration of its emblematic case (See Table 4.1). When I refer to the

counterpart here, it does not mean that one is the exact equivalent of the other.

Rather, I define some types of Group STM so that each of them might serve to

contest its counterpart in Group CEL.

Throughout the case studies I conduct with the typology of Group STM in

this Chapter, I will draw on two theoretical paradigms in addition to those which I

worked with in the previous Chapters. First comes from Romanticism which

Scullion (2009) studies focusing on the response of human beings, authors or their

protagonists, to human simulacra like automata and their body movements in

Romantic literary texts. As discussed by Scullion (2009), in particular, "Romantic

Irony" will be a key concept in understanding how such human simulacra threaten

the human beings' subjectivity and individuality both in the real world and fictional

worlds. In the Puppetopos, puppet-as-puppet figures can bring human animators

or creators to a similar kind of crisis, furthermore, in a multiple way, in that the

figures functioning as humans or animals cannot avoid presenting themselves as

much simulacra, simply puppets, as puppet-as-puppet figures on screen. As regards

a second paradigm for this Chapter, I build on phenomenological accounts of

bodies and touch because such an ontological crisis in a human being is observed

where they intersect in production of stop-motion animation. In terms of my

hypotheses, the critical moments should be analysed with respect to the parameter

of the mode of movement on screen. In stop-motion animation, figures' movements

are composed by the animators manipulating their three-dimensional bodies in the

real world where gravity works. In this physical and kinetic sense, I will also apply the method of film vector analysis to the cases selected. Next, I briefly explain how or why I select the cases as emblematic of the Group STM before analysing each of them.

Selection of the emblematic cases from Group STM

Here I outline the emblematic status of each selected case in the Puppetopos. First, three of them are feature films produced in the Hollywood film industry and distributed in the US and abroad: *Rudolph The Red-Nosed Reindeer* (Larry Roemer, 1964, US), *Santa Claus Is Comin' to Town* (Arthur Rankin Jr. and Jules Bass, 1970, US) and *The Nightmare before Christmas* (Henry Selick, 1993, US). These films are marked in common by the theme of Christmas, the day when Santa Claus is imagined to present toys or puppets to people. Further, *The Nightmare before Christmas* exemplifies the extensiveness with which *Rudolph The Red-Nosed Reindeer* was received and had influence in the zone I term the Puppetopos. As a producer of the Disney film, Tim Burton recollects:

> Like a lot of people, I grew up loving the animated specials like *Rudolph the Red-Nosed Reindeer* and *How the Grinch Stole Christmas* that appeared on TV every year. I wanted to create something with the same kind of feeling and warmth. (1993: 8)

This recollection is a remarkable hint that *Rudolph The Red-Nosed Reindeer* has

been of great influence and popularity in the Puppetopos.

The Rudolph film was animated by Tadahito Mochinaga, the Japanese pioneer of stop-motion animation, and by the crew of his MOM Productions in Japan.[2] Its loose sequel, *Santa Claus Is Comin' to Town*, was animated by their succeeding team based in Japan. Since Mochinaga's pioneering work in the 1950s, the Puppetopos has seen as a steady development in Japan as the rest of the world, with the Japanese stop-motion animators neighbouring the anime industry. I select Iwai's animated short film, *The Bachelor Machines,* as the case in which the Puppetopos and the Tooniverse intersect. More significantly, the film is deeply inspired in terms of narrative motivation by both La Mettrie's *man-machine* discourse and Villiers de l'Isle-Adam's 1886 science fiction novel entitled *Tomorrow's Eve* (L'Ève future). Invented by a Frankensteinian cyborg scientist in the film, both models of the android girl and her original as human challenge the viewer's perceptual attempt to discern between real and fake, human and nonhuman, in the development of the film narrative loosely based on the French novel.

Nick Park's stop-motion clay puppet animation, *A Close Shave* (1995, UK), is the third film in the *Wallace and Gromit* series that was created in Aardman Animations, the studio well known for the representation of hyper-realistic mouth movements as well as body movements. Interviewed by Kevin McDonald (1996) in 1995 when *A Close Shave* was in shooting, Park evinced his own close encounter with the Hollywood film industry, while significantly distinguishing himself from

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[2] Christmas has been celebrated, not necessarily in a religious but rather often in a secular sense, with the present-giving tradition accepted, in Japan since at least the mid-twentieth century, to the extent that it is regarded as a nation-wide event today.

Švankmajer and the Quay Brothers. As regards these animators, which I classify in Group PMT, the clay animator Park states that "they are working in a completely different field to us" (McDonald 1996: 71). What is relevant to my research subject regarding the third *Wallace and Gromit* film is that the clay model of a robot dog appears in contrast to the clay model of Gromit representing a "real" dog.

From among the films of Aardman Animations, I select another film, Purves' *Next* (1989, UK), featuring the hyper-realistic puppet representation of William Shakespeare and Peter Hall, the English theatre director who was alive when it was released. In this film, the model of the legendary playwright performs with the model of a "naked" dummy, with a sharp contrast drawn between both *puppets*.

The Mascot (Ladislaw Starewicz, 1933, FR) is a film by the stop-motion animation pioneer Starewicz, who Simon Pummell observes, "obsessively played with binary opposites: life/death . . . human/animal, fascination/repulsion, live-action/animation, fantasy/realism" (1996: 125). In the film which tells of a puppet-as-puppet dog seeking to save its maker's sick daughter, Starewicz combines the animation of a variety of physical puppets with the live action of human actors, both existing in the same three-dimensional space, yet separated from each other in the development of the film narrative. I will examine this conventional narrative, as an early case of Group STM, typical of the binary opposition between the human subject and the sub/nonhuman object in the hybridity of live action and stop-motion animation.

Roman Kachanov's *The Mitten* (1967, RUS) will be the case that I contrast to Disney's *The Many Adventures of Winnie the Pooh* analysed in the previous

Chapter. Internationally well known as the director of the puppet animation film series with an animal character named Cheburashka,[3] Kachanov did a long stint in Soyuzmultfilm, the studio noted as "the Soviet answer to Snow White and Mickey Mouse" (BBC 2003). Indeed, the then Soviet studio released the *Winnie-the-Pooh* trilogy of hand-drawn animation films directed by Fyodor Khitruk between 1969 and 1972, while Disney's three *Pooh* featurettes were between 1966 and 1974. Using stop-motion animation unlike both the *Pooh* series, Kachanov's *The Mitten* epitomises a different vision of the empathetic relationship between a child and an inanimate object.

Finally, Trnka's *The Hand* is the most challenging of the cases under analysis in the typology of Group STM, because the built model of a potter or sculptor who initially appears as human on screen is turned into a stringed puppet by the figure of a human hand performed, as if live-action, by a human actor. Purves remarks, "Trnka's multilayered film *The Hand* (1965) also features a wonderful reversal of the creator and created story, with the eponymous Hand telling the sculptor what to create: a huge monstrous image of the Hand" (2014: Kindle 2541). This film might seem to deviate from the two criteria in terms of which I allot *Pinocchio* to Type Five in Group CEL, because secondary animatic transition occurs to the puppet-as-puppet figure in the reverse direction. My intention in selecting *The Hand* is to accentuate the puppet-as-puppet model's relationship with the higher being that is able to not only make secondary animatic transition occur to, but also withdraw it from a sub/nonhuman object, thereby drawing a sharp

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[3] The film series directed by Kachanov consists of *Cheburashka: Gena the Crocodile* (1969), *Cheburashka* (1972), *Shapoklyak* (1974) and *Cheburashka Goes to School* (1983).

contrast to Pinocchio's relationship with the fairy.

4.1. Type One: Inanimate Objects

In Group STM, according to my methodological intention, Type One has much in common with that in Group CEL. This means that what I analyse with Type One in the first place is the way in which despite cues of movement, the puppet-as-puppet figures in human or animal form do not arouse any impression of life in contrast to the figures signifying "real" and "living" humans or animals. Importantly, viewers and animators are still aware that the latter figures are as "fake" and "non-living" as the former ones because both explicitly present themselves as built objects or three-dimensional artefacts on screen. As I show in this section, their common materiality is often managed and manipulated for the strategy of discernment through formal elements like the texture and size of a model, and the number of models looking alike. In other words, a critical moment is likely to surface in the viewers' perception when those elements do not seem to be clearly different between two kinds of models. In addition, I examine two Subtypes, (b) passive and (c) automatic, in Type One in terms of kinetic elements. These help to draw attention to the "stop-motion-animated-ness" of three-dimensional models and their film vectors, which I also seek to differentiate from the kinetic quality of such models in live action.

Subtype (a): Stationary state in Santa Claus Is Comin' to Town

Santa Claus Is Comin' to Town is a fiction film of how Santa Claus and Christmas customs came into being. The story focuses on toys which the fictional character Santa delivers to people. In the film, several elf brothers make toys, many of which are literally puppets like the models of elves. Unlike the latter, however, the puppet-as-puppet models we can see on the shelves in the elves' workshop (Figure 4.1) are presented as inanimate objects in the stationary state, which I classify in Subtype (a) of Type One: no animatic transition nor interaction. In the musical sequence, "The First Toymakers to the King" (Figure 4.1), the elf queen Tanta is seen along with the plush dolls, in the form of a blonde human girl, which are stored on a shelf. At the profilmic level, both Tanta and the girl dolls are three dimensional objects

オモチャ作りは大変

Figure 4.1 Puppets and toys as Christmas presents in *Santa Claus Is Comin' to Town*

and also puppets, only differing from each other in terms of movement, dialogue, size, materials and number.

First, in terms of movement and dialogue, I analyse and tackle the film's way of discerning the models of the dolls from those of humans (elves as such). The girl dolls do not present any movements on screen, in which sense I describe the state of Subtype (a) as stationary. Throughout the film, however, we can see such stationary models, which are not necessarily presented as inanimate puppets per se but as living human beings in the film narrative. In one scene (Figure 4.2), for instance, three soldiers are standing motionless and also speechless on the right and left sides of the screen, while the main protagonist Kris (to be Santa Claus) and the city ruler with a homburg hat on are moving and talking. It is not impossible

Figure 4.2 The models of three soldiers in *Santa Claus Is Comin' to Town*

that in the fictional world the soldier models seem to be portable sculptures, but they are located on the continuum of the soldier characters looking alike, the models of whom are stop-motion animated to move and talk in the convention of the cues of life. The models of the doll girls are not given such a continuum until the film comes to an end, even though their eyelids are animated for a moment to wink—as a joke in animation—at Tanta while she is passing by to behold them.

Second, the dolls' size can be considered as a cue of the status of inanimate objects. Yet, its effect is quite limited in differentiating between the elf queen as alive and the girl dolls as inanimate because in the film the elves themselves are presented as a type of human-like beings shorter or smaller than the characters of usual human beings, for instance, Santa Claus, Jessica and Special Delivery Kluger. In the fantasy film using miniature puppets and sets, either the smallness of size or the shortness of height is unlikely to have influence on the impression of the inanimacy of a puppet which appears on screen and existed before the camera.

Third, in the film the models of the girl dolls are made in a different fashion in terms of materials from the models of the elf queen and other performing characters. Seemingly, the models of the dolls are seemingly made of one and the same kind of textile or fabric, which is applied to all their hair, eyes, noses, skin and even costumes (Figure 4.3). Unlike them, the model of the elf queen presents clearly different cues of materials. Her smooth and slightly glossy face seems to be made of plastic; her hair is made of thin fibres; and her glimmering tiara and earrings are intended to suggest the quality of silver. The multiplicity and heterogeneity of the materials used for the queen puppet serve as a cue for the impression that it is alive.

Figure 4.3 The four girl dolls and the elf queen in *Santa Claus Is Comin' to Town*

In my view, the final and determinate factor is the number of the puppets which are designed in the same fashion. There are four girl dolls looking the same on screen, with respect to colour, hair style, facial expression, posture and other design elements; beside them, there are four kangaroo puppets looking the same on the shelf (Figure 4.1; Figure 4.3). The elves' toy-making workshop does not look large enough to be a factory, but such a series of puppets makes each of them lack individuality, thereby appearing as if mass-produced in a factory. As cited above, the stop-motion puppet/model animator Lord (2008:9) defines the specificity of his field in terms of the unlikeliness of mass-production or cloning. This suggests that a stop-motion animator forms or prefers an individual or personal—physical and tactile—relationship with each puppet/model whose copies are not made to

give a similar chance of relationship to other animators. The impression of cloned-ness is used to divest the girl dolls of the possibility that one of them might come to be a living and performing character on screen in the development of the film narrative as a fantasy. The concept of the mass-production of puppets is revised or twisted in *The Nightmare before Christmas*, and this will be discussed with the case of Type Six in Section 4.6.

Subtype (b): Passive Mode of Movement in Next

In *Next*, we see only three puppets on screen. Two of them are the hyper-realistic representations of Shakespeare and Peter Hall, which are intended to imitate

Figure 4.4 The Shakespeare model and the dummy model in *Next*

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human beings, particularly in terms of body movement. The rest is a dummy, equivalent in size to the two other models, with which the Shakespeare model performs on stage in the film's diegesis (Figure 4.4). This dummy model undergoes primary animatic transition in the passive mode of movement without any interaction with the two models of human beings.

With the whole body patched with rags, the dummy model is in human form but badly lacks details. Its hand parts are in the form of a mitten, its eye parts look like buttons of different colours, and there is no token of a nose on its face. Furthermore, it sometimes looks naked, as it is decorated with some costume props by the Shakespeare model. These are visible cues to encourage the viewers to discern the dummy model from the two others.

Figure 4.5 The dummy model performing with the Shakespeare model in *Next*

Performing many plays successively on stage, the Shakespeare model uses the dummy model as *his* co-performer. The dummy sometimes looks as if it were in interaction with its user, for instance, at the moment when clinging on to him (Figure 4.5). For the most part in the film, however, the human-like prop is manipulated as an inanimate object. In the section, "All's Well That Ends Well", the Shakespeare model swings the dummy's arm, pretending that it smacks his face (Figure 4.6a). Given this cue of being-manipulated-on-stage that is visible to the viewers, the dummy's performance or pose of clinging can be reduced to the Shakespeare character's performing artistry in the film's diegesis. While appearing subject to the performer's manipulating force, the dummy model is stop-motion animated to appear to be in the gravitational field. In the section, "Julius Caesar", it seems to lack the ability of supporting itself or keeping its given posture because it soon gets bent or falls down when not held by the Shakespeare model (Figure 4.6b).

Might it be that no armature is built in the dummy model? Such a possibility goes beyond imagination. The dummy's movement of getting bent or falling down cannot be shot in live action at the same time the Shakespeare model

Figure 4.6 The dummy shows passive movements in *Next*; left (a), right (b)

is stop-motion animated to move on screen. Therefore, it is reasonable to conclude that the dummy's passive body movements are the result of animating, frame by frame, with its body supported by a built-in armature whenever shot by the camera. Animated is not only the Shakespeare model's active movements but also the dummy's passive movements. This animated-ness is to bring back into question the dummy's passive movements afterwards in the film.

As the film narrative develops and in particular arriving at the final section, "Cymbeline" (Figure 4.7), the Shakespeare character gets surpassed by grandiose backgrounds and lighting, the electromechanical equipment of which seems to exceed the capacity of the performing character who manipulates the dummy on stage. The grandiosity of the stage implies that there are two "higher powers"
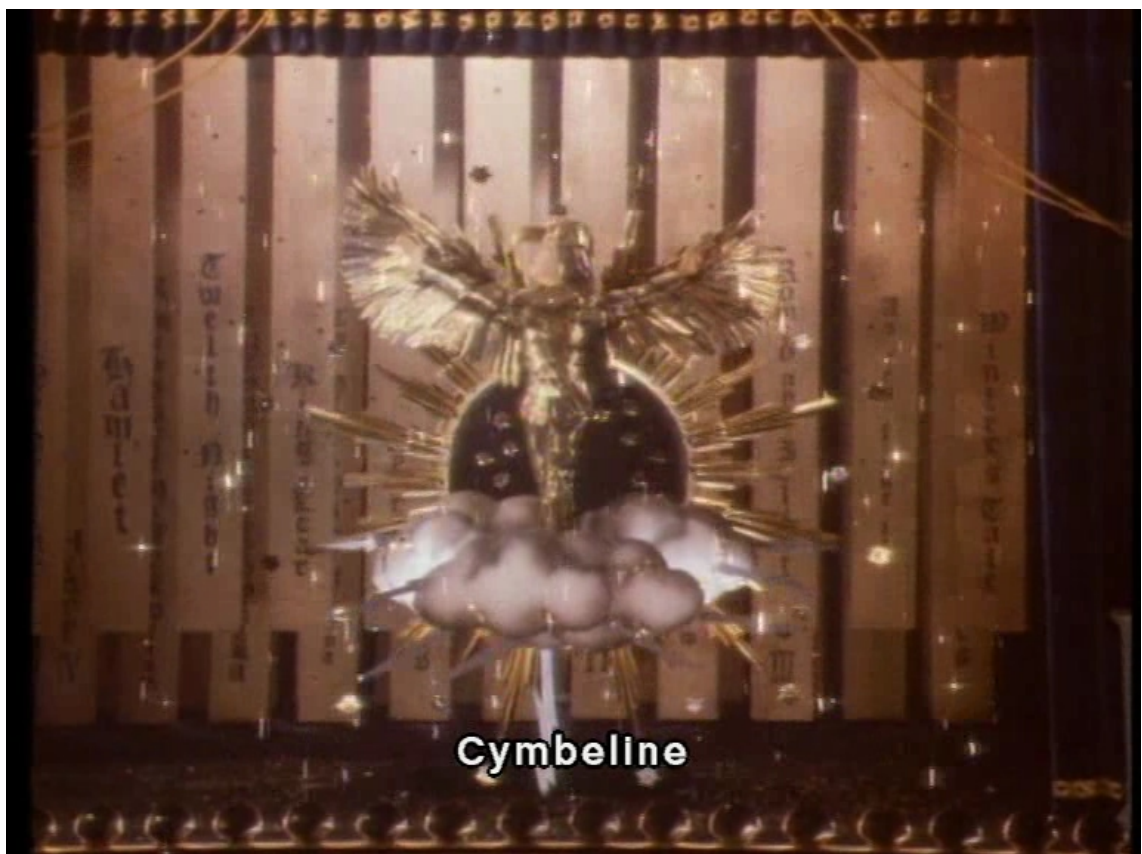
Figure 4.7 Higher powers implied behind the Shakespeare model in *Next*

invisible to the viewers. One power comes from the characters of stage crew in the film's diegesis, but there is no narrative motivation in which they help the Shakespeare character's audition in such a grandiose way.

The other is the invisible hand of the animator that as part of the diegetic world, manipulates all the elements including the acting Shakespeare model and the passive dummy model before the camera. Viewed from the animator's higher status as a manipulator, the Shakespeare character is a passive object, under his manipulation, which appears to assume the role of a living performer on screen; and it can be said in Crafton's (2013) definition of the live performer that the dummy on screen is as much a "performer" as the Shakespeare model, which assumes the role of a passive and non-living object. In this sense, one of the two models is the "double" of the other.

The ontological double-ness of either the manipulator or the manipulated applies to the relationship, supposedly unique, between the stop-motion animator and the physical puppet in the Puppetopos, as Purves comments, "The relationship between puppet and animator is quite unique, with both supplying equal parts of the performance" (2014: Kindle 2947). Observing the way in which the human creator is related to his/her subhuman creation in history and fiction, Wilson (2006: 4) suggests two categories of subhumanness; one is an unseemly double and the other an ideal double. I consider the latter as relevant to the Shakespeare model with which a perfection of body movement and performance is sought. Wilson notes:

In the latter case—the android as double of conscious ideals—the artificial

human externalizes its maker's spiritual yearnings: impossible notions of

perfection, visions of a paradisiacal condition never known on earth. But

this artifice, even though it might have been fashioned as a sort of idol to

be worshipped and imitated, often becomes a reminder of distance and

division—the gap between the actual and the ideal, the discord between

matter and spirit. (2006: 4-5)

Assuming the ideal double of its stop-motion animator, or its hypnotist in Pojar's

use of the term (See Moins 1997: 202), in the Puppetopos, the Shakespeare model

serves the animator to realise any difficult performances like a rotating jump, using

the technique of stop-motion animation, as shown in ballet or figure skating

(Figure 4.8). As indicated by Wilson, however, its seemingly perfect performance of

a pirouette is likely to evoke the gap between the material passiveness of the

Shakespeare model manipulated by an animator and the on-screen phenomenal

Figure 4.8 The dummy model performing the role of a dummy in *Next*

activeness of the Shakespeare character realised with the utmost precision by the animator. The dummy model plays an unseemly double that embodies the clandestine passiveness and non-living-ness of the Shakespeare model, as well as being used to accentuate its splendid activeness and living-ness.

Subtype (c): Automatic Mode of Movement in Santa Claus Is Comin' to Town

In the musical sequence "The First Toymakers to the King" in *Santa Claus Is Comin' to Town*, the models of two automata are shown as part of the products made by the elf toy makers (Figure 4.9). Set on the podium supposed to be a music box, one is the miniature puppet of a ballerina; and the other that of a clown, which makes its appearance, following the ballerina, in a dissolve. When they show a pirouette or a similar rotation in a fixed pose, without any change in facial expression, their primary transition takes place in the automatic mode of movement. In addition to their dry and flat automatic movement, the rotating handle set to the right side of the music box is shown.

The two puppets' status as an inanimate object is presented in the first

Figure 4.9 The models of automata in *Santa Claus Is Comin' to Town*

place by means of the stiffness of the pose which looks as if fossilised in the middle of motion. As is called by the elf queen singing in the musical sequence, the ballerina puppet's movement is not a pirouette in a precise sense; but it is only a simplistic rotation at a fixed moment while performing the ballet movement. The automata puppets' diegetic status is reinforced by another way in which the model of the ballerina is replaced with that of the clown on the same music box in the middle of the mechanical rotation in a dissolve. The implication of the replacement can be considered in terms of the uniqueness of the relationship between animator and puppet, as claimed by Purves (2014: Kindle 2947). The uniqueness of the ballerina model and the clown model is usurped by the dissolved replacement of the former with the latter on screen in two ways. On the one hand, both are dealt with as functional equivalents to each other by the animators of the film, on the grounds of their common status as toys for human beings in the diegetic world of the film. On the other, neither of the two models is allowed to keep a fixed relationship with the music box; they are but a replaceable part of the automaton-form toy. These two aspects serve to build up the impression that they are products manufactured in a toy factory. Indeed, toys and puppets are produced by a group of elf craftspeople, unlike Pinocchio that is made as a unique model by one and the same toy maker, Geppetto, to be his son in Disney's film of the same name.

What I am concerned with in this case is that no internal clockwork mechanism of the music box is shown, as it is with Subtype (c) in *Pinocchio*, the counterpart of Group CEL. My point is the inside-ness of the music box that viewers can expect to see in stop-motion animation because the models did or still do exist in the same world as they do. In the viewers' perception, they are structured in

three dimensions and therefore, there should be something behind and inside them in space. In an interview with Buchan, the Quay Brothers emphasise this unique trait of stop-motion animation as distinct from cel animation:

> Cel animation showing a screw coming out of the ground would only be a screw coming out of the ground in two-dimensionality. The point is that it can't be a clean screw, either. The important thing is that you felt that it was buried there for centuries, and it's sort of become unmoored, like migration. (Buchan 2011: 86)

Such a temporal-spatial capacity of stop-motion puppets, models and objects is hardly seen in *Santa Claus Is Comin' to Town*. This film is focused on tracing the surface of the objects, what they should look like on screen, rather than presenting them as they are. As I discussed above, the representational focus is clearly demonstrated in the models of the jewels, worn by the elf queen on screen, which are forged to achieve the impression of what they should seem to be rather than what they are.

In such an illusionistic strategy of production, arguably, the snow seen in many scenes of the film cannot be real but must be made of materials like tiny particles of polystyrene, to make the illusion of what looks like snow, because snow cannot withstand lighting in the shooting studio. For the effect of snow in her book aiming at providing conventional skills of stop-motion animation, Susannah Shaw indicates, "Make a first pass using polystyrene beads or shredded paper against a black background, this time lit from the front" (2004: 148). This can be said to be

one of the conventions of stop-motion animation, in which three-dimensional objects and their material and physical potentialities should be subsumed to serve the film narrative. Discussing how to make credible a fictional world crafted with the animation technique, Purves also remarks, "We have to be careful that ill-chosen fabrics or props or textures do not counteract the illusion" (2014: Kindle 327).

Stop-motion animation's convention of creating an illusion is applied to the movement of the automaton models that *looks* automatic on screen in *Santa Claus Is Comin' to Town*. Their mechanicomorphic cue of movement traces the motion of a pirouette, yet in quite a simple and flat way, to enhance the contrasting impression that only the puppets of the performing characters are alive in the film narrative. Furthermore, the quality of the automatic movement does not seem to stem from a real clockwork mechanism; if this is built in the music box, its movement has to be shot and shown in live action. The stuttering movement can be said to be a result of stop-motion animation.

As an alternative, might it be possible to insert the live action of a real automaton in the scene? the answer for such a conventional stop-motion animation film is negative, because a portion of live action is likely to damage the illusion of the animated movement of the characters to function as living in the film narrative, as Purves admits, "[E]ven the most sophisticated stop-motion is noticeable when placed alongside live action" (2014: Kindle 509).

What is even worse about the option is that the stop-motion models as live performing characters can be exposed to the effect of estrangement in which their manipulated-ness comes to surface on screen. Despite the illusionistic feats of stop-

motion animation which he has been engaged with, Purves concedes, "It still works for quirky creations and mechanical objects in a live-action setting, when the movement needs to be different, or with a suitable distancing or ironic devices such as dream characters, but it can no longer blend seamlessly with live-action footage" (2014: Kindle 525). This concession suggests that if it were inserted, the live-action automaton of a ballerina would make the elf queen and the other characters on screen shift from the status of a living performer to that of a mechanical object, which is also what they are.

4.2. Type Two: An Oneiric Doll in *The Mascot*

Starewicz's *The Mascot* is a film composed of stop-motion animation and live action. In the film, a live-action woman manufactures many puppets or toys representing humans and animals, which are all initially presented as objects in inanimacy. As is in the hybrid films of Group INT that I analysed in Chapter Two, the dimensional heterogeneity of profilmic materials is not involved in this film because live action and stop-motion animation share the physical property of three-dimensionality at the profilmic level. This sense in which I select *The Mascot* as a case of Group STM, instead of classifying it in a separate group, is also found in Purves' account: "Stop-motion has also pretended to be live action in stunts too dangerous for the actors to perform—or when the logistics were just too complicated and expensive to do it for real" (2014: Kindle 455). His account about the use of stop-motion animation for special effects in live-action film indicates

that stop-motion models have obtained the status of part of the same space and time as the elements of the live-action footage that are usually foregrounded in films.

In analysis of puppet-as-puppet figures in the film *The Mascot*, I foreground one enigmatic vestige which I find is pertinent to the limited-ness and finitude of the animator's agentic power. This is intended to highlight two aspects in his or her relationship with objects in Group STM and also Group PMT. One is that a stop-motion model's body movement is a series of the vestiges generated in time through the bodily, manual, tactile intervention of the animator who supposedly keeps staying near and working with it, and the other that he or she is part of a larger field in which gravity and other external—not only natural but also cultural—forces act beyond his control. I clarify these aspects with the method of film vector analysis.

In *The Mascot*, stop-motion miniature models of animals and humans are not employed to pretend to be live-action animal and human performers for special effects, but rather presented as puppets or toys in the human world which is seemingly set in 1930s Paris shot in live action. As first, the models as puppets shown on screen are being made in live action by a woman at her home the setting of which is reminiscent of a sweatshop. The film cuts to the model of a puppy puppet which she is sewing. In this shot, it is presented as an inanimate object in the stationary state (Subtype (a), Type One; Figure 4.10). This mode shifts soon to the puppet's secondary animatic transition when the woman in sorrow for her sick daughter sheds tears onto the puppy puppet's body which she is stitching. As soon as her tears are absorbed into the body, the puppet is stop-motion animated to

Figure 4.10 The puppet as a puppy puppet in *The Mascot*

blink and then this is followed by the animated movement of its neck and eyeballs

to imply it is staring at the woman. However, it presents itself again in the

stationary state, with the eyes unseeing and the body drooping as tokens of being

an object, when the woman's hand approaches it in order to finish stitching. This

switching between the different statuses functions as a device indicating that the

puppet undergoes secondary animatic transition outside the scope of human

awareness in the film narrative.

Its secondary animatic transition is not merely the event in which the dog-

like object becomes a moving imitation of a living dog. The behaviours of the puppy

puppet are more anthropomorphised than theriomorphised in a schematic sense.

For example, its forelegs and paws are stop-motion animated to move like human

arms and fingers when hung as a car pendant; it loosens the ribbon tied around the neck, with a variety of facial expressions that human beings are likely to show in need or in trouble; and when it becomes determined to jump down from the running car, it even covers its own face with its hand/paw, as a human being does when in trouble or feeling fear. It also shows infrequently theriomorphic behaviours, for instance, peeing on a policeman's shoes by raising up its hindleg, as male dogs do. In doing so, the puppy puppet seems to pretend to be a real dog so that human beings in the street might not notice the dog-like puppet capable of locomotion. This implies that the theriomorphic behaviour of the animal-like puppet is acceptable and not transgressive within the scope of human awareness in the diegetic world of the film.

In the film, the sporadic happenings/withdrawal of secondary animatic transition also accentuate the way in which it is treated as an inanimate object. When the first cue of the transition shifts quickly to Subtype (a) of Type One, the puppy puppet is not stop-motion animated to show any slight, for instance, painful, response while the abdominal area of its body is stitched with a needle by the woman. With the subsequent cues, anthropomorphic gestures and facial expressions, of secondary animatic transition intermittently given not to the on-screen human beings but to the viewers, the puppy puppet is shown hung around the neck in a car as a car pendant, which might seem to be quite a cruel treatment to a viewer who keeps perceiving it as something alive and not as an object, with the fear aroused in him or her that it might suffocate to *death*—even though this is an impossible event for such an object. This perceptual play is also the case of the clown puppet among the other anthropomorphic puppets in the film. Soon after

escaping from the vehicle delivering the puppets from the toy maker's place to a shop, the clown puppet is hit over the neck by car wheels, consequently with its head cut. The bold destruction of the human simulacrum can be allowed on the perceptual grounds that it is not performed by a live human actor but is an inanimate object at the profilmic level.

For this reason, secondary animatic transition has to operate so long as the models of animal and human simulacra do not make it impossible for the viewers to discern them from *real* humans and animals. In Type Two, the discerning device is the on-screen human beings' constant unawareness, whether they are awakened or not, of the anthropomorphic movements the puppets display as cues of life on screen. Moving to a different world unknown to human characters, these puppets do not interact with them but with the models implying a devil and other supernatural beings.

This interaction takes the puppets to a mysterious part of the non-anthropocentric world. Even when the puppy puppet serves to the sick girl the orange which it obtained to help her, the scene does not suggest any possibility of interaction in which with her eyes closed, the girl takes the orange pieces the puppet throws into her mouth. On the next day, she is shown on screen playing happily with the puppy puppet, which no longer presents any cues of anthropomorphic or theriomorphic movements to the viewer but is passively moved subject to her body movement of playing with it in her arms. This passive mode of movement functions to suggest that the faithful puppy puppet is but an inanimate object (Subtype (b), Type One) in the film narrative.

In *The Mascot*, there are enigmatic marks seen on screen in the movements

Figure 4.11 Blur-index vectors in *The Mascot*

which the puppets display after secondary animatic transition happening

sporadically. They are motion vectors appearing to be shot in live action, which I

call "live motion vectors" hereafter. When the puppy puppet jumps down from the

window ledge onto the sick girl lying in bed, for example, the motion of its jumping

down presents blur-index vectors (See the still frames in Figure 4.11), which can

be generated when it is shot in live action and not when it is stop-motion animated

with its position changed bit by bit. In *Next*, the Shakespeare model's rotating jump

as a motion vector is constructed using stop-motion animation techniques, which I

call an "animated motion vector" hereafter, and as a result, does not leave any blur-

index vectors (See the still frames in Figure 4.8). Although he does not refer to

motion vectors or index vectors, Purves, the director of *Next*, provides a relevant

account:

In live action, a moving object leaves a trailing blur on a frame of film,

which helps suggest the direction of movement. Whoosh lines on cartoons

have a similar effect, as do 'go faster' stripes on cars. In stop-motion, we

don't usually have the luxury to blur the image, but we can give characters

props or costume details, such as scarves that will trail behind, suggesting

the direction of the movement. The way the environment reacts will help—

leaves blowing in the wake of a moving object will also suggest not just the

direction of movement but also the speed. (2014: Kindle 237)

As indicated by Purves, it is almost impossible to leave blur-index vectors on still film frames, only by shooting an object changed from one position to another, because the photochemical marks derive from a quick change of quantity in the direction or speed of motion. Therefore, the reasonable inference is that the puppy puppet's trailing blurs, or its blur-index vectors, on screen were not generated in the process of stop-motion animation but rather in the process of live-action shooting.

What is enigmatic about the live motion vector and blur-index vectors of the puppet is that they inflect the canine object's anthropomorphic or theriomorphic autonomy on screen in terms of the mode of movement and the diegetic status. Those vectors make the puppet appear to be thrown in live action by an animator—possibly Starewicz himself—off screen, rather than jumping down with its own momentum and volition on screen. This mode of movement itself can be said to be passive, and yet does not involve primary animatic transition if it was shot in live action.

Whenever in *The Mascot* some puppets display sporadically live motion vectors, along with their corollary blur-index vectors, the invisible hand of the

human agent manifests itself in the form of those film vectors. Indicated by the filmed trajectory of an object released from the stop-motion animator's hand, the photochemical vestiges of human agency tell us that there are moments which do not allow him to keep full control of the motion of puppets in the process of stop-motion animation filmmaking. As suggested in Purves' above-cited comment, gravity is the most influential of environmental factors, which does not necessarily help stop-motion animators in production.

Such an unstable relationship between animator and animated at the profilmic level of stop-motion animation echoes that between the puppet-making woman and the puppets, as she cannot keep a stable relationship with the artefacts which should be sold and consumed in the toy market, in the diegetic world of the film set in the 1930s. How can we tell the stop-motion models of the puppets and toys from the puppets and toys sold as commodities in market? Despite the happy end of the film, the little daughter might not able to keep the lovely puppy puppet to herself because her mother has to sell it as a commodity in market. This realistic narrative setting with the puppets helps to broaden the meaning of the models of the devil and the other diabolical beings with which the puppy puppet and its toy fellows interact in an isolated infernal realm (Figure 4.12). The diabolical models are made of a variety of different materials sometimes looking natural and sometimes artificial. This formal condition tempts interpretation of these horrible models as an imagined demonisation of the puppets and other artefacts themselves that were all consumed and wasted by human beings, rather than as simply signifying demons, in the film diegesis.

As a vulnerable labourer, the toymaker, too, is as subordinated to the toy

Figure 4.12 A variety of diabolical models in *The Mascot*

market as are the puppets, and cannot help but continue to make puppets, without

being able to do anything for her sick daughter. It can be said that the mother's

oneiric proxy is the puppy puppet going under secondary animatic transition to

help her daughter without the awareness of human beings in the film narrative.

However, the film's romantic dream is often so vulnerable to the physical reality of

gravity that the puppy puppet turns out to be but an object of inanimacy and

passivity, whenever it shows live motion vectors and their entailing blur-index

vectors on screen.

4.3. Type Three: An Empathetic Object in *The Mitten*

In *The Mitten*, the main principle for secondary animatic transition is shifting from the real, anthropocentric, world, set in 1960s USSR,[4] to an isolated imaginary world where a little human girl plays with the dog that her mitten was transformed into. The narrative of this stop-motion animation film is largely parallel to its counterparts, *The Enchanted Square* and *The Many Adventures of Winnie the Pooh*, in Group CEL in terms of interaction with only the human owner. Yet, there are a few differences between them. It is not the models of puppets either in human or animal form, but the model of an object—a mitten—that is employed to interact with its human owner through two animatic transitions in *The Mitten*.

What is critical in this case is that the mitten turning into a dog as fake cannot avoid competing with a real dog in the film narrative. In this, the girl simply wants a dog, and at the end of the film, she will get a chance to choose between a *real* dog and the dog *living* only in her imagination. Intriguingly, the film ends without indicating her final decision. This is where I address the issue of "Romantic Irony". Another issue in my analysis of the film is the "double-ness" of the relationship between creator and created; at the diegetic level between the girl and her imaginary dog, and at the profilmic level between an animator(s) and the model of the girl's imaginary dog—actually mitten. I consider this issue of human agency at both levels in terms of the "path" which a stop-motion model follows

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[4] One clue for this 1967 film's historical setting is the representation of a refrigerator seen in the girl character's home. The appliance is reported to have begun to be diffuse throughout USSR in the 1960s. For detail, see Atlant (2014) https://atlant.by/bt.atlant.by/news/detail.php?ID=164942&SECTION_ID=14184# (accessed 15 March 2019).

moving on screen and in production.

As soon as appearing in the film, the mitten model is stop-motion animated to be dragged by the girl holding the braided tie attached to it, in the passive mode of movement (Subtype (b), Type One); this is the first moment when primary animatic transition happens to the object. And the mitten model goes under secondary animatic transition when transformed into a dog in the girl' wish to have a dog. At the beginning of the film, the girl's mother denies her a dog. Helpless, she imagines walking a dog in the street by dragging the mitten across the ground and then, the object is transformed into a dog in her imagination. Secondary animatic transition is depicted to happen to the mitten model at the same time as its transformation in a dissolve (Figure 4.13). First, the mitten model starts suddenly to wriggle and then run fast for itself in a random way. Next, it turns back to run toward the girl and then with the transforming dissolve, the dog model comes to appear on screen, stop-motion animated to wag its tail and prick its ears.

Figure 4.13 The fabric object transformed into a dog in *The Mitten*

Here, one question can be raised of whether the resultant status of its transformation is a real dog or a puppet dog, because in the film every dog model, either presented as real or fake, cannot be discerned from each other in terms of the materials which it is made of and the way in which it is stop-motion animated

to move. For instance, the model of the black puppy (Figure 4.14b) which the girl sees at her friend's is presented as real in the film narrative and yet displays formal, material and behavioural similarities to that of the transformed red dog (Figure 4.14a). Both have button eyes and fabric bodies and show schematic behaviours of caninity.
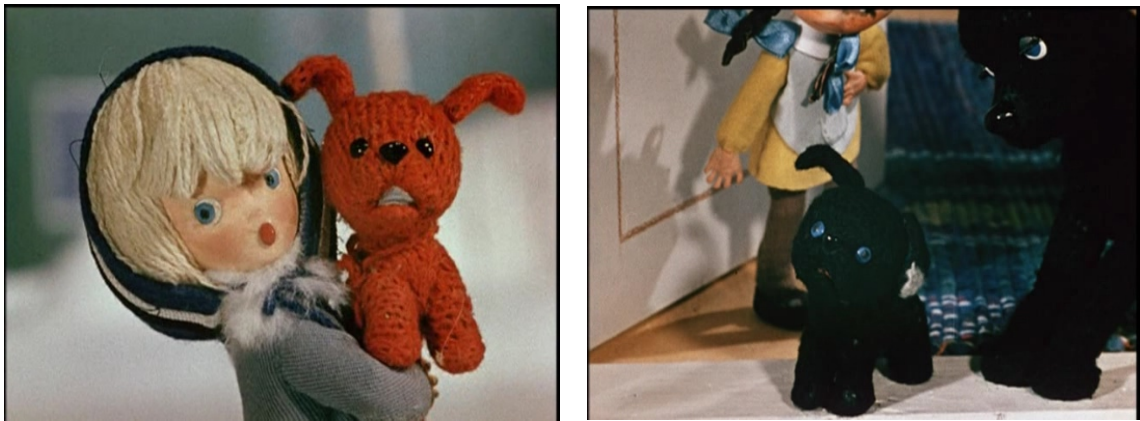
Figure 4.14 The girl's imaginary dog and a real dog in *The Mitten*; left (a), right (b)

After transformation, the other human characters as well as the girl are depicted to recognise and interact with her imaginary dog as usual or real, in particular, in a dog contest in which the girl takes part with it. However, this does not literally mean that the mitten was transformed into a real dog in the world of the film. Rather, my reading of the narrative is that all the contest and its participants are what the girl's imagination created in an attempt to spend time playing with her imaginary dog in a variety of ways.

The girl's imagination comes to a crisis when the tail of her imaginary dog is caught on something sharp, while running down from the slide in the contest. With its tail unravelled as one thread of wool (Figure 4.15), the accident reveals the material reality of the girl's imaginary dog being made of fabrics, both at the profilmic and diegetic levels. The revelation leads the imaginary dog, as a model, to

Figure 4.15 The imaginary dog reveals its material reality in *The Mitten*

stop moving for itself and then this canine model is brought to the stationary state

(Subtype (a), Type One), remaining limp for a moment which a viewer might

perceive as *dead* if he or she has enough identified with the girl character for the

effect of secondary animatic transition in the film narrative.

This is where I need to analyse the way in which the girl's imagination

works in the diegetic world of the film. Despite the revelation, the girl persists in

her own imagination which transforms the mitten into an imaginary dog. In the

course of the scenes in which the girl takes care of the imaginary dog at her home,

the film turns to focus on the girl's imagination-driven behaviours, there being no

longer the model of the puppy puppet but that of the mitten seen on screen. In one

of the scenes, the girl puts the mitten on the brim of the dish, imagining that it

drinks milk she provides (Figure 4.16). This is a clear clue of the way in which the girl plays with the mitten she imagines to be a dog in the film narrative. It is the girl's manipulation for mimicry which makes the mitten appear to herself as a dog. As observed above, the girl's mimicry is also seen in the scene where she performs walking a dog by dragging the mitten across the ground. While the dog runs for the contest and fetches the hidden stick in her imaginary realm, therefore, the girl must have raised, put down and moved the mitten from one position to another, in an attempt to make it hold poses so as to look as she imagines.

Yet, the film's narrative motivation does not present the scenes in which she imitatively manipulates with her hands the puppy puppet into which the mitten was transformed. It is intended to visualise and narrativise animation's

Figure 4.16 The girl manipulates the object as if a dog in *The Mitten*

conventional discourse that any object can be brought to life in the art/media form. Given that in *The Mitten* the stop-motion animators and their hands are not made visible on screen while manipulating all the models, the relationship, both imaginary and physically manipulative, between the girl and her mitten, provides an insight into that between the human agents and the models they are to perform and interact with in production. The models are vulnerable to stop-motion animators' physical manipulation and the unpredictable risks latent in the environment where they are put for animating. If an animator wants to keep his or her unique relationship with a model, he should not abuse it in production because if severely damaged, it has to be replaced with its clone.

Indeed, this case is seen between the girl and her mitten-dog in the later part of *the Mitten*. Damaged while running in the contest, the mitten-dog no longer functions to meet the girl's longing for a dog, with its secondary animatic transition reversed on screen; the imaginary dog is presented as transformed back into the mitten as an inanimate object when she comes back to it with a bowl of milk at her home. Seeing her daughter imagine the mitten to be a dog and feeling sorry for denying her a dog, the mother is going to bring back a *real* puppy from her neighbour, which looks much like the puppy, as a puppet, into which the mitten is transformed. Interestingly, there is no cue which makes it clear that the girl accepts the real dog at the end of the film. Such a cue is likely to disturb the relationship, supposedly unique and irreplaceable, between the stop-motion animator and the model of the mitten-dog at the profilmic level, as well as that between the girl and the mitten-dog at the diegetic level.

This doubled disturbance is revealed by the facial expressions (Figure

4.17a), like sadness or grimace, and the gesture of depression (Figure 4.17b), that the girl's imaginary dog shows on screen after being materially damaged during the dog contest. Furthermore, it walks around in circles, as if at a loss, while the girl is finding milk in the kitchen. In the film narrative, those body movements imply that the imaginary dog feels anxious that something might happen to its relationship with the girl because it failed to satisfy her expectations, and then that she might come to want a real dog rather than the imaginary one which is but an object in reality.
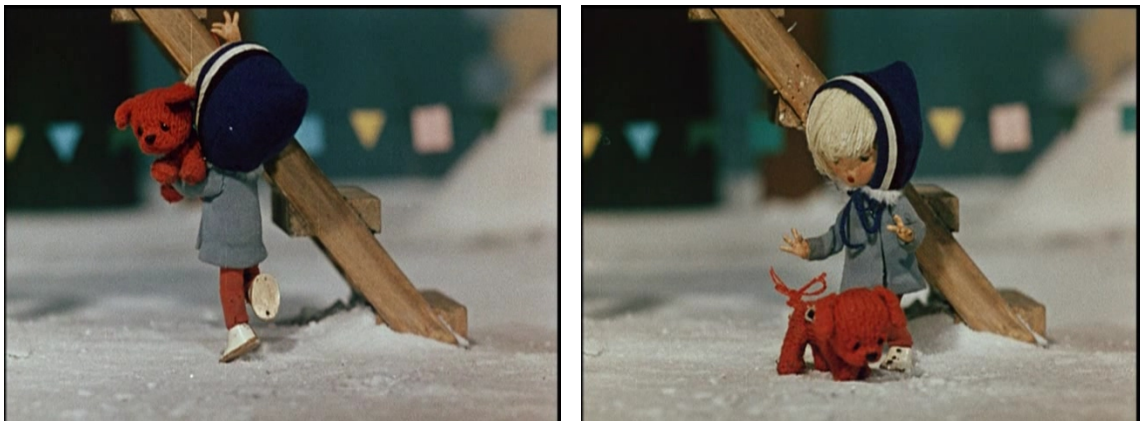
Figure 4.17 The imaginary dog's anxiety and depression in *The Mitten*; left (a), right (b)

Given that Purves notes, "[I]t is important to revel in the direct contact between puppet and puppeteer" (2014: Kindle 396), the canine model's body movements of depression and anxiety should also be considered to stem from the physically intersubjective experience of the stop-motion animators engaged in the production of the film. While in a slightly reluctant way Purves reiterates, "The contact between a human hand and the puppet gives the animation so much 'soul', to use a clichéd word" (2014: Kindle 397), this word can and should be replaced with "ghost", in terms of which Crow (2006) seeks to illuminate the out-of-control, compulsive and convulsive aspect of the "gestures" performed in repetition by, and

circulated through human bodies and the stop-motion models, too, which animators' bodies are supposedly connected with and extended to.

The replacement of soul with ghost helps to shed light on the stop-motion animators' artistic "irony" shaded by the conventional emphasis on their artistic mastery or control of stop-motion models and other materials. The artistic irony is involved in the binary opposition between real and imaginary, real or fake, soul or material, in terms of which in *The Mitten* the human agents feature the human girl character's imagination that brings to life the mitten as an object. The crucial moment in the narrative comes when the mother is going to bring the *real* dog for her daughter. At this moment, the stop-motion animators cannot help being located between the fantasy they imagine and seek in animation production and the materiality and artificiality on which it is based. They do know that in the film the model of even the dog presented as real is not of substantial difference at the profilmic level from that of the dog as imagined by the girl character.

Their ironical situation can be viewed from Scullion's (2009) discussion of Romantic Irony that she finds to be demonstrated by Hoffmann's kinaesthetic motifs. The author defines Romantic Irony as "involv[ing] continuous oscillation rather than finite synthesis" (Scullion 2009: 1), for an "artist to maintain a state of balance between the spiritual and the material" (p.15). Such artistic oscillation between binary opposites is found in ambiguity in which as analysed above, the model of the girl's imaginary dog is dealt with, in relation to that of the neighbour's real dog that looks much the same as the former, except for a few design elements in *The Mitten*. In the oscillation, not given is the clear cue in which the girl will accept the real dog that her mother has obtained at the end of the film. Observing

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the kinaesthetic and spastic motifs of the protagonist Nathaniel in Hoffmann's *The Sandman*, Scullion reads the character as the epitome of Romantic Irony: "He chooses to move along a continuum, instead of delimiting himself, in binary fashion, to the mundane on the one side or the infinite on the other" (2009: 17). By extension, such a state of Romantic Irony is demonstrated by the body movements that the model of the mitten-dog shows on screen in the mode of motoric jerkiness and repetition—making grimaces and walking around in circles. These movements lurk in the manipulating hands of the stop-motion animators of the film motivated by the narrative of bringing-any-object-to-life, as well as those of the girl transforming an object into a living being in her own imaginary and isolated realm.

4.4 Type Four: Perihuman Toys in *Rudolph The Red-Nosed Reindeer*

In this Christmas-themed film, the puppet-as-puppet models are employed to assume the role of the toys which Santa Claus delivers as the holiday presents to children on Christmas Eve; the legendary figure and other living beings are stop-motion animated using three-dimensional models. In particular, the puppet-as-puppet models of Type Four are presented as the toys which were discarded by human beings because of their malfunction, and now are living in a perihuman realm in the film diegesis. One of the most dramatic scenes occurs when the toys stop (or are stopped from) moving, talking and singing because Santa Claus is going to take them as Christmas presents to human children. Secondary animatic transition suddenly withdraws from them, and then, the peculiar film vectors of

their movements problematise the conventional discourse of animators' omnipotent or perfect God-like mastery over materials. With the crucial, "reverse-transitional", "life-taking", moment both for the models and the animators in mind, I analyse the shape and movement of the models signifying toys or puppets in terms of the aesthetic strategy of discerning between living and non-living, real and fake.

The film revolves around Santa, his fellow elves and reindeers living in Christmas Town located at the North Pole. This geographic specification is given by the stop-motion model of the snowman narrator that functions to establish a film world in which the viewers and their real world are connected with Christmas Town and its inhabitants. Another device for the same function is the introductory news-reel sequence, composed of black and white live-action footage, which reports at the beginning of the film that Christmas is in crisis because of bad weather.

The puppet-as-puppet models I will analyse in this section are given the status of the toys manufactured as Christmas gifts and considered as objects by the elves of Christmas Town. I focus on a group of puppets or toys among those objects, which are shown to stay in the perihuman realm where only the discarded toys are accepted eternally. Ruled by a griffin-like beast, the realm is where the inanimate puppets and toys go under secondary animatic transition and then temporarily interact with a limited number of animal and human characters (including elves) in the diegetic world of the film.

The two critical events are simultaneously presented when the three protagonists respectively named Rudolph (a reindeer), Hermey (an elf) and Yukon

(a human being) happen to reach the perihuman realm in the course of their incidental meeting up and wandering together. Each of the visitors regard himself as strange as do the other members of his own community; Rudolph for his red-glowing nose, Hermey for his wishing to be a dentist unlike the other elves devoted to toy making, and Yukon for his reckless wandering to find gold and silver. On arriving at the realm, they find a lot of gift boxes, from which the models of puppets and toys are stop-motion animated to come out on their own to talk to the visitors about what the place is and why they stay there.

With secondary animatic transition taking place, the models of the puppets and toys begin to show anthropomorphic body movements in a varying degree with respect to the difference of their forms, which are to be classified in three

Figure 4.18 Discarded puppets and toys in *Rudolph The Red-Nosed Reindeer*

kinds of forms: human, animal and mechanical (Figure 4.18). For example, the model of a girl puppet seen at the centre of Figure 4.18 is stop-motion animated to move its mouth, arms and torso so that it might look like it is talking, singing and expressing *herself*. Standing erect, the model of an elephant puppet, too, on the right side is stop-motion animated to move its mouth, neck, forelegs and torso for the same effect as the model of the girl puppet, yet showing a smaller range of motion than the model in human form. The models of a toy airplane and a toy train on the left side are stop-motion animated to show simple movements, respectively like turning around in circles and rolling from side to side. The mode of their mechanicomorphic movements are difficult to discern from the automatic mode of movements seen in Subtype (c) of Type One. However, the models of the mechanicomorphic toys are given eyes, along with mouths stop-motion animated to move delicately as if they sing on screen like the model of the girl puppet. This implies that the film relies on anthropomorphism to provide viewers with the impression that any kinds of models look alive on screen.

At the same time, it should be noted that the model of the girl puppet is not given so many tokens of humanness as are the models of human characters Hermey and Yukon. While the eyes of the Hermey model are composed of sclerae and pupils, displaying eye movements and eye blinks (Figure 4.19a), the girl-puppet model is given button eyes without any eye movement and eye blink. The hand is another token which makes the latter look less human than the former. In contrast to the hands of the Hermey model which are given entirely separate fingers to show hand and finger gestures in detail, those of the girl-as-puppet

**Figure 4.19 The living characters' eyes in *Rudolph The Red-Nosed Reindeer*;
left (a), right (b)**

model look like mittens.

As the viewers are preconditioned in the film narrative which indicates that the girl-as-puppet model is placed where discarded toys are gathered, its mitten-like hands would not lead them to perceive it to be a human being with syndactyly, but rather accentuate the impression that it is a puppet partially in human form. The Yukon model is given the same button eyes as is the girl-as-puppet model, but they do not damage Yukon's diegetic status as a human in any substantial degree (Figure 4.19b). In the film narrative, human mastery over animals and objects is demonstrated in the scenes where Yukon uses a whip to command his sled dogs without any hesitation—he also carries a pistol with him. Expected from these scenes, the mature male character's possible threat to animal characters can be rather mitigated by the button eyes which make him look less human on screen in contrast to Hermey as his functional equivalent.

The pivotal moment for the discarded puppets and toys comes when asked by Rudolph, Santa visits the perihuman realm to deliver them to children, who might not mind their formal and functional condition supposed to be abnormal, on Christmas Eve. What I am concerned with here is that Santa, the only human

Figure 4.20 An unidentified force exerted on the toys in *Rudolph The Red-Nosed Reindeer*

character in the delivering scenes, does not put the puppets and toys into his gift

bag. Rather, the models of them are stop-motion animated to apparently put

themselves into the gift bag (Figure 4.20). At this moment, however, an external yet

invisible force seems to be exerted on the models because there is no cue showing

that they move body parts like arms or legs for such an action; instead, the whole

body of each of the models is quickly lifted up in the air and then put into the bag.

For example, the model of a soldier puppet is seen to be suspended in the air

without any blur-index vector (as marked with a white circle by me in Figure 4.20).

This animated motion vector of the body indicates the kinetic passivity of the

soldier puppet as an inanimate object, as with the dummy model in *Next* in Subtype

(b) of Type One, but unlike the latter, in this film there is no clear clue indicating

the diegetic source of the force which lifts up and puts down their bodies. How can we explain what the passivity of the stop-motion models is due to?

One possibility motivated by the narrative is that Santa has magical power capable of moving things without physical contact, and in the opposite way to secondary animatic transition, his magical power turns the puppets and toys back to objects per se lacking locomotive ability at the moment of leaving the perihuman realm. At this reverse-transitional moment, the models of the puppets and toys are not stop-motion animated to fear or resist this reversal. This might be justified by the anthropocentric view in which they are depicted to aspire to be adopted and played with by human children, above all because they are factory products for the purpose, in the film narrative.

Besides this narrative-based explanation, it is also possible to consider the models' passive mode of movement as the performance of the stop-motion animators engaged in the film. The models' kinetic passivity seen on screen does not necessarily imply the artistic perfection but rather the imperfection of the animators, because the human agents could have stop-motion animated the models' arms or legs in detail so that they might show great joy at the realisation of their aspiration, going on their own into Santa's gift bag. However, such an attempt must have been thwarted by the condition of material and formal limit that the production crew imposed on the models for the impression of inanimacy or objecthood. As seen in Figure 4.20, for example, the model of the soldier puppet lacks enough movable arms and legs for stop-motion animation of detailed locomotive movements. Here my point is not that the animators should have stop-motion animated the models, with their secondary animatic transition kept valid.

Rather, it is that the resultant mode of movement the models show on screen is the literal appearance of force which the animators' invisible hands under physical and kinetic limitations exerted on the models in front of the camera in production. Significantly, it reveals that the animators themselves along with their manipulating force are part of a larger field of forces acting beyond their control.

4.5. Type Five: A Disenchanting and Revelatory Puppet in *The Hand*

As analysed above, the invisible stop-motion animator's physical and kinetic contact with a model can be found in its mode of movement on screen. Most models are puppets at the profilmic level in stop-motion animation. Type Five is focused on the way in which the puppet's secondary animatic transition and interaction with the characters of human or "higher" beings plays on and further inflects the profilmic aspect unique to stop-motion animation. The animated short, *The Hand*, is a case of this Type in Group STM, and this selection is particularly intended to make a sharp contrast to *Pinocchio*, the counterpart of Group CEL.

A central focus in *The Hand* is "Romantic Irony". In this concept, the human agency of stop-motion animation is supposed to manifest itself as unstable and anxious, oscillating between real and fake, subject and object. My analysis of the case centres on a model whose initial status implying a living human being switches later to an object, or the model itself. This disenchanting, demagicalising, shift is depicted to take place through the intervention of the figure of a human hand which seems to be that of a real human being. In my analysis, not only is the

anthropomorphic model considered as a powerless artist or animator who desperately resists the intervention and order of the hand figure as an external power, but also the latter as a stop-motion animator or puppeteer who in his or her self-figuration as the Creator-God, manipulates the former finally to take "life"—nullifying secondary animatic transition—from the resisting object in human form.

At the beginning of the film, we see a physical puppet, looking like a clown, put on the bed in a room. There is no cue which shows the puppet move while the camera moves around in the room; the puppet is presented in the stationary state (Subtype (a), Type One) for a while. Without any clear cue of primary animatic transition, secondary animatic transition takes place when the puppet is made to open its eyes. What is unusual in the convention of the Puppetopos is that the opening of the eyes is not presented by stop-motion animation but by editing; the film cuts from the shot of the closed eye to that of the opened eyes. This unusualness serves to discourage the viewers from defining the puppet to be a human character living in the film world.

This obscurity is reinforced by the setting of the diegetic world in which the puppet is placed. From the perspective of the conventional stop-motion animation, the physical puppet appears to live alone, making pots, in the room, without interaction with other physical puppets. While the camera shows only the inside of the room, the window and the door are kept closed for most of the time. Even when either of them is sometimes opened, nothing is seen through it; it looks completely dark outside (Figure 4.21). These devices of film setting serve to make it difficult for the viewers to find any clear reference for determining whether the puppet represents a human or presents itself as a puppet in the film world, while

Figure 4.21 The clown-like puppet and its/his room in *The Hand*

the film is located within the anthropomorphic and anthropocentric convention of

the Puppetopos. Without such referential cues, the viewers are triggered to

oscillate between two levels, diegetic and profilmic, of the perception of the

puppet. At the former level, the viewers can perceive a clown as waking up in the

bed and giving water to a flower in the film world of three dimension on screen, as

they take such actions in the real world of three dimension. The movements

signifying such human activities are constructed with smoothness and delicacy.

At the latter level, the viewers can perceive the puppet as an object

animated by an animator off screen in the same three-dimensional world as they

exist, and this impression is also reinforced by the way in which the puppet looks

and moves on screen. Not showing any facial expression, the puppet's face is

designed in a geometrical, rather than realistic, fashion, and its vacant and fixed

eyes do not show any blinks, any movements. The puppet often shows robot-like,

mechanicomorphic movements; it is stop-motion animated to exercise with

jumping jacks as a type of gymnastics and to perform pirouettes. These movements

are not necessarily motivated by narrative, but rather, interrelates with the

puppet's appearance of a clown which assumes sub/nonhumanness (Grodal 1997).

The puppet's robot-like movements are also observed when it is stop-

motion animated to make pots; the rotation of the potter's wheel and the repeated

wheel-kicking of its legs and feet appear to be incorporated into a larger pot-

making mechanism. Without any on-screen references, except for

anthropomorphic behaviours, to help identify its diegetic status as a human

character, and evoking its own profilmic status as a puppet per se, the clown-like

puppet can be said to have already undergone secondary animatic transition

before the beginning of the film. And the narrative develops in the opposite

direction to Disney's *Pinocchio*.

The pivotal event occurs with the realistic figure of a human hand in a

glove, which seems to be part of a living human being in a diegetic as well as

profilmic aspect, partially because it extends to the arm beyond the frame that the

camera provides, and not least because its movements show off great subtleties

which otherwise would not have been achieved when shot together with the stop-

motion model animated frame by frame; however, the hand's on-screen

movements seem to be pixilated rather than shot in live action because they

involve staccato cues as motion vectors. One day, the hand figure comes to order

the clown puppet to create a sculpture of a hand (Figure 4.22). Resisting the
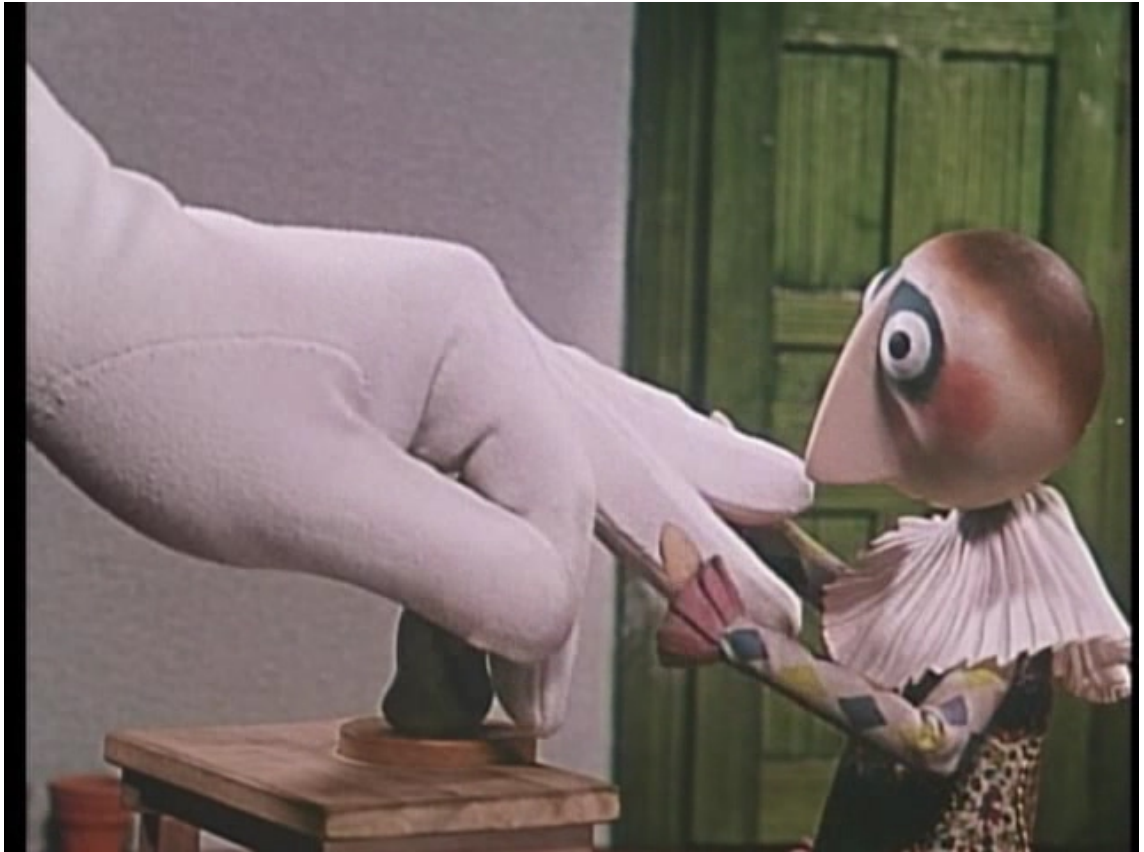
Figure 4.22 The hand figure and the clown-like puppet in *The Hand*

sudden order, however, it perseveres with making pots. While following the

narrative convention which introduces the antagonist to come into conflict—so to

speak, oppression of creative freedom—with the protagonist, the film does not

explain why the clown puppet is so obsessed with making pots as an activity

irrelevant to the appearance of a clown, but rather, the film narrative gains more

obscurity with the order of the hand figure that is as much irrelevant to the

puppet's appearance as making pots.

Further, the photo-indexicality of the hand figure on screen accentuates

the profilmic artificiality of the clown puppet as a miniature model in contrast to

the antagonist. These formal and narrative obscurities add fluidity to the status of

the only puppet seen on screen oscillating between the subhuman object and the

human subject in the diegetic world of the film.

In this oscillation, the film narrative shifts finally to focus on the clown puppet resisting the tyranny of the human hand. I read the hand's manual violence as a stop-motion animator's power controlling and manipulating puppets in production—later in this film, the hand figure comes to play a puppeteer of a marionette. The hand and its power are also read in the historico-political context by Fauzi Naeim and Nurul Lina, who note, "There is no doubt that the intrinsic allegory of the huge hand stands for the Czechoslovak communist government, and Trnka uses this film as a critique of the State's oppression of artistic expression" (2015: 106). Although the context of my reading is different from of that within which the two authors locate the antagonistic device, their interpretation echoes the sense of the power relationship in which I consider the hand figure to be a stop-motion animator even compared with God in the conventional discourse of the Puppetopos; Shaw describes stop-motion animation as "it's more like playing God" (2004: 1). The figure of the human hand embodies the tyranny of the power that animators are (self-)qualified to wield in animating objects.

In the film narrative of *The Hand*, the clown puppet does not perform as

Figure 4.23 Index and motion vectors shown by the puppet in *The Hand*

ordered by the hand figure. This makes the puppet seem to have its own free will. Forcing the persistently resistant puppet to create a sculpture of a hand, the hand figure finally grabs and drags it by the head to the potter's wheel (Figure 4.23), and this way of the hand figure exercising power brings the puppet to the status of an inanimate object in two aspects. In physico-aesthetic terms, the body movements displayed by the clown puppet look limp and powerless, with all its body parts, in particular, the arms (as marked with two red arrows by me in Figure 4.23), functioning as index and motion vectors to make visible the line of gravity, the force pulling them down to the floor.

In discursive terms, such a careless, indiscriminate way of dealing with the puppet the viewers want to believe to be *alive* on screen would be so inacceptable for them in the Puppetopos that they need to transpose the clown puppet from the state of being apparently alive to that of being originally inanimate. In this transposition, secondary animatic transition is clearly withdrawn from the puppet on screen at the same time when replaced with primary animatic transition in the passive mode of movement (Subtype (b), Type One). I term as disenchanting the reverse transition in which a stop-motion model shifts from its initial state of
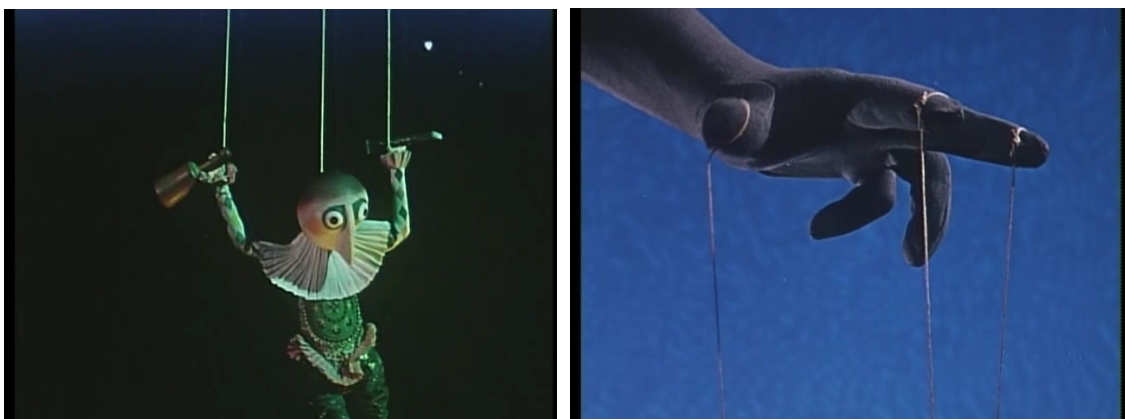
Figure 4.24 The clown-like puppet as a marionette in *The Hand*

completed secondary animatic transition, even if unstable and ambiguous, to one of three Subtypes of Type One.

In the later part of the film, the stop-motion puppet becomes disenchanted to the extent that the hand figure is shown to control it with strings as if a marionette on stage in a puppet play (Figure 4.24). When the hand figure on screen plays the puppeteer of it as a marionette in a literal way, its isolated room is also revealed to be part of a set, as if built for a puppet theatre (Figure 4.25). In the later course of its running away from the hand figure, the puppet shifts to the status of an object entirely subordinated to the physical movement of the puppeteering hand. According to every single movement of the hand figure, the clown puppet is stop-motion animated to sculpt a gigantic hand.

Figure 4.25 The puppet's room turns out to be a set in *The Hand*

Some of the puppetry scenes still include the moments when for the viewers familiarised with reading implicit meanings of a film, the puppet looks like a human being who is exploited by a higher power oppressing *his* creative freedom. They can say that he looks completely exhausted, when lying on the floor beside the hand sculpture, with no force of the hand figure exerting it through strings; they can say he weeps as traces of tears are represented by the running colours of the circles painted around the eyes. When we focus on the referential meaning of each of these scenes in which secondary animatic transition is almost withdrawn from the puppet, the puppet is not in exhaustion but rather is simply placed on the floor for a moment because the hand figure is taking a rest after an intensive manipulation of the clown-like object; the smudged colours of the face are not traces of tears, but rather are due to the hand figure touching it in manipulation.

Placing emphasis on referential meanings helps to shed light on the relationship between the film's stop-motion animator(s) and the clown puppet, which is usually supposed to be unique in the convention of the Puppetopos. What matters in this emphasis is that not only the clown puppet but also the puppeteering hand figure is a psychological self-projection and a phenomenological extension of the director Trnka and his animating crew identifying themselves as omnipotent, as Trnka himself states, "Puppet films are truly unlimited in their possibilities; they can express themselves with the greatest force precisely when the realistic expression of the cinematographic image often faces insurmountable obstacles" (Sadoul 1972: 255). Also given that in stop-motion animation filmmaking, Shaw stresses, "You have to get inside that puppet and first make it live, then make it perform" (2004: 1), the hand figure, too, must be part of what the human agents got inside in the production

of *The Hand*.

In the film, indeed, the clown puppet is depicted as able to express *himself* by creating its own favourite pots. Controlling and mastering *him* for the creation of a sculpture that the film's animators depict *him* resisting, the manual agent presented as a hand relegates the clown puppet to the status of an object on screen, at times in the stationary state, and at times in the passive mode of movement. This depiction implies that Trnka or the animators were aware of the possibility of the resistance of the puppets as materials in front of the camera. In other words, it might be the oppression of an expressive possibility proper to a specific puppet that a stop-motion animator seeks to make it live and perform on-screen only in the manners which he or she believes are perfect. If stop-motion animation films are really unlimited as is noted by Trnka, the obstacle is the finiteness of human agency. This is embodied by the resisting clown puppet under the hand's oppressive power in the film, onto which Trnka projected himself as an artist resisting the state (Fauzi Naeim and Nurul Lina 2015: 106). The crux is that in the Puppetopos the stop-motion animator cannot help but face the finiteness of his or her own creative agency as well as objectifying puppets which in production he or she claims to form a unique relationship with and further to get inside.

Finiteness and creativity bring death to the clown puppet that is stop-motion animated to play an artist in the diegetic world of the film, even though it recovers secondary animatic transition again when starting to run away from the hand figure after the forced completion of a hand sculpture. However, "death" is not a proper concept to the puppet almost dealt with as an object in the later part of the film; this cannot die nor be dead. Rather, it should be said that primary and

secondary animatic transitions are all withdrawn from the puppet. The puppet cannot foreground the impression of being dead but rather being simply stationary, when appearing on screen along with and in contrast to the figure of the human hand for the cue of aliveness or liveness provided by the organic body part of a living human actor. As an epitome of Romantic Irony (Scullion 2009), the clown puppet is a disenchanting revelation of human agency oscillating between materiality and creativity, supposed to be respectively finite and infinite, yet in the aspiration for or the anxiety about the reversal of the supposition, in stop-motion animation.

4.6. Type Six: Haunted Toys in *The Nightmare before Christmas*

This section is intended to show that when going through secondary animatic transition, not every puppet-as-puppet model either in human or animal form fascinates and is welcome to human beings in the film narrative as well as the real world. If not under the human control, the former is likely to terrify the latter, as demonstrated with the counterpart of Group CEL in the previous Chapter. What is particular about the case which I analyse here is that the protagonists are not human but supernatural, diabolic characters, who make usual toys and puppets horrible like themselves. This narrative addresses the issue of the relationship between possessing and possessed, haunting and haunted.

In the film narrative of *The Nightmare before Christmas*, two supernatural realms are depicted as separate from the human world. One is Christmas Town in which Santa Claus and elves live and work in perfect order for the annual Christian

holiday, and the other Halloween town whose population is composed of demons and monsters indulged in fun and raves. Weary of Halloween celebrated in the same fashion and pattern every year, Jack Skellington, the leader of Halloween town, decides to prepare with the population of the town his own edition of the year's Christmas celebration, after he comes back from Christmas Town which he happened to visit. The preparation revolves around the holiday presents, including puppets and other toys, which they are going to deliver to children. Once delivered in the human world, the models of those puppets and toys are stop-motion animated to move on screen in the way which human characters do not expect in the film. These puppet-as-puppet models are the cases which I take as Type Six in this section.

Preparing the Christmas celebration, yet lacking ideas of the holiday convention, Jack and his fellows begin with physically analysing the puppets and

Figure 4.26 The model of a girl doll in _The Nightmare before Christmas_

toys which they obtained from Christmas Town. In the experimenting scenes

involving primary animatic transition, the models of puppets and toys are

presented as inanimate objects on screen. For example, the model of a girl doll is

stop-motion animated to be moved when held in Jack's hand in the passive mode of

movement (Subtype (b), Type One; Figure 4.26). What is significant is that

examining the doll as an object, Jack calls into question what the object means and

where its meaning comes from, while singing: "These dolls and toys confuse me . . .

/ Simple objects nothing more / But something's hidden through a door. Though I

do not have the key / Something's here I cannot see / What does it mean".

In the film, the demons and monsters of Halloween town seem to lack

anthropocentric views of the anthropomorphic or theriomorphic puppets and toys

created either in the human world or Christmas Town. For example, the sound that

the baby doll makes is not understood as crying by the vampires (Figure 4.27), as

Figure 4.27 The model of a crying baby doll in *The Nightmare before Christmas*

they ask Jack: "What kind of noise is that for a baby to make?" In comic motivation, this question would work as a hilarious device to make the characters of Halloween town seem nonhuman and emotionless, as different from both the viewers in the real world and the human characters in the film's world.

Given that Jack is the protagonist in the film narrative, however, the viewers are tempted to identify with the demonic skeletal character challenging conventions and seeking something new. In this sense, the vampires' conversation with him about the sound of the baby doll can be said to defamiliarise the viewers' conventional way of perceiving the anthropomorphic artefact; indeed, the doll is not a real baby and it is impossible for it to cry. This material reality of the doll is also accentuated by the way in which it looks and moves. The model of the baby doll is clearly and visibly given marionette lines on its face part for emphasis on being a doll on screen, and swayed in the hand of one of the vampires, it shows the eye parts moving up and the mouth-and-chin part moving down, as an imitation of a real baby waking up and crying, in the automatic mode of movement (Subtype (c), Type One; Figure 4.27).

Defamiliarising the puppets presented as puppets in the film goes so far as

Figure 4.28 The puppets damaged in *The Nightmare before Christmas*;
left (a), right (b)

to physically damage them, thereby revealing that they are inanimate objects in an anatomical sense. Jack cuts with an X-Acto knife the belly of a teddy-bear puppet under examination as if dissecting the body of a real bear on a surgical bed (Figure 4.28a). While Jack and his Halloween fellows modify and remodel the puppets and toys they supposedly collected from somewhere outside their town, the one-eye bandaged monster cuts the neck of a girl doll on screen as if killing a human being with a guillotine (Figure 4.28b). Thoroughly dealt with as objects by the animators in production as well as the Halloween towers on screen, the teddy-bear puppet and the girl doll function to spur the viewers to remind and reconvince themselves that those puppets are only inanimate objects, as it would otherwise be too scary or too uncomfortable to see them damaged in the stop-motion animation's convention of perceiving puppets as living beings on screen. This defamiliarising strategy does not work for the models of the Halloween towers as nonhuman (and supernatural) in the film diegesis, for they need to function as live performers, in Crafton's (2013) sense of the term, to make the narrative develop.

In the development of the narrative, the instigation of secondary animatic transition to the puppet-as-puppet models is suggested by Jack who says of the baby doll: "Perhaps it can be improved". This verbal cue excites in the viewers expectations of how the puppets and toys will be remodelled and transformed by the Halloween towers who become enthusiastic about scaring and frightening human characters in the film's world. Once delivered by Jack to each home on Christmas Eve, the "improved" puppets and toys burst out moving by themselves, followed by the scenes in which the human characters run away from them in horror. Certainly, the puppets and toys are redesigned to look scary or awfully
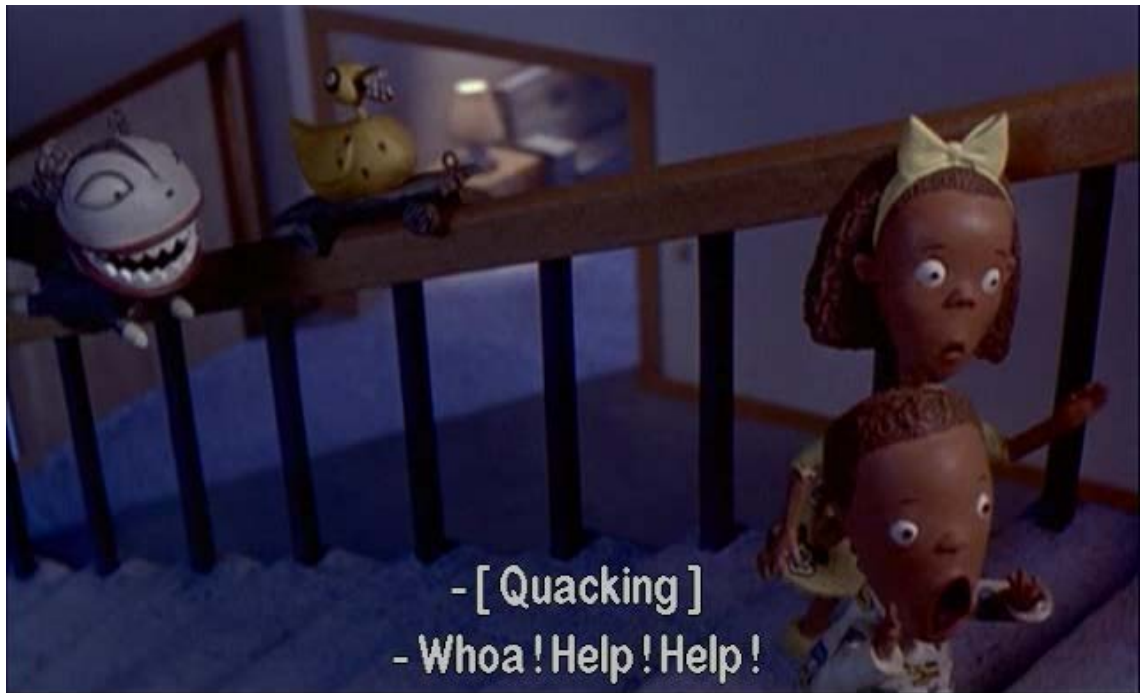
Figure 4.29 The models of haunted puppets and toys in *The Nightmare before Christmas*

different from what is expected of Christmas presents, as seen in the scenes of

Santa Claus and elves producing them in Christmas Town. A further point is their

unexpected and unpredictable movement. For instance, the model of the duck built

on the wheeled podium is stop-motion animated to run after a human children

characters on the handrail of a staircase (Figure 4.29). Along with it, the model of a

vampire-like puppet is stop-motion animated to fly chasing the children (Figure

4.29). The movement of those objects goes beyond both human control and/or

natural laws, the two realistic conditions that should be supposed to work in the

film's human world depicted to be clean, safe and in order on screen, a world

where human characters live equipped with modern technologies and institutions

like housing estates, electricity, telephones, broadcasting stations, anti-aircraft

artillery, radar systems, an army and the police. In the modern world, the children

run away from the puppets and toys bursting into motion in a manner which they

must have not expected.

How about the viewers? They must be aware that Jack and the other characters are models built like the puppets as puppets—the baby doll, the girl doll and the teddy bear—on screen. The question is asked: do the stop-motion animated models of the latter seem to the viewers to provide as much impression of life as the models of the former? To answer this question which is the central issue of my PhD thesis, it is necessary to take into account what kind of force is imagined to make those puppets and toys as objects move by themselves and in what mode it is depicted to move them in the film narrative. In my reading of the narrative, the on-screen supernatural movement of the puppets and toys as objects stem from the magical, demonic, power of the Halloween towners, in particular, including vampires, werewolves and zombies, all involved in remodelling and modifying those objects. The powers of these supernatural monsters have the trait of infectiousness in common and this is what I am tempted to focus on as the source of the demonic haunting power to make the puppets and toys move by themselves.

Among those monsters of infection and contagion, vampires have been imagined as able to pervade and possess human victims and objects with their power, as discussed by Thomas Elsaesser (2009: Kindle 1792) who in his chapter on the live-action horror film, *Nosferatu*, observes that a horror of epidemic and infection is both epitomised and instigated by the vampire's power and associations like rats and local soil in the German film. Nosferatu's horrible power is not only demonstrated by animals and materials but also by an object. Using the technique of stop-motion animation, the coffin lid (Figure 4.30) is moved on screen

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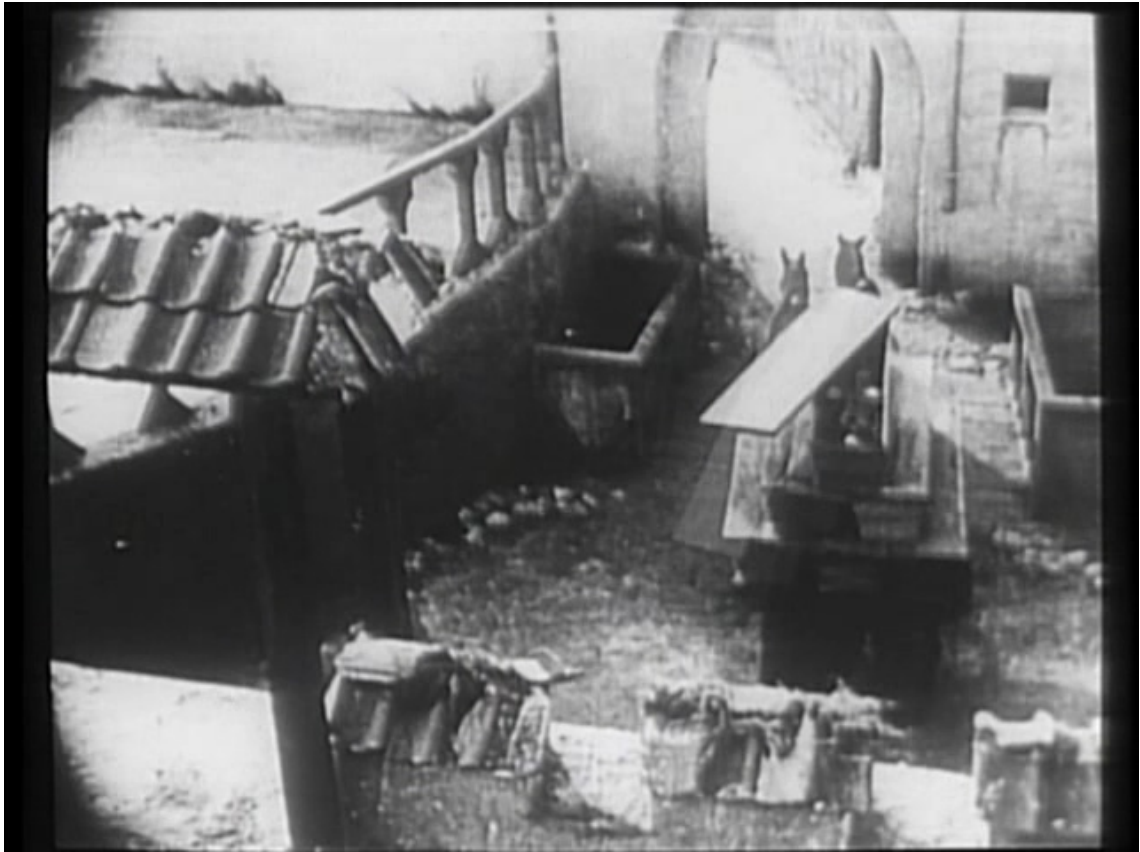
Figure 4.30 The coffin stop-motion animated in *Nosferatu*

by Nosferatu without any physical manipulation to cover the coffin in which he lies when leaving Transylvania for England (Pramaggiore and Wallis 2005: 108). In the film narrative of *The Nightmare before Christmas*, likewise, the on-screen human-terrifying movement of the puppets and toys as objects can be seen as manipulated at a distance by the paraphysical power of the vampires and other monsters of Halloween town.[5]

Turning to the issue of the mode in which the monsters exert such a power, the models of the puppets and toys are not stop-motion animated to provide the impression that they have their own will or consciousness; rather, they appear to lack them. The models of the flying little vampire and the wheeled duck are not

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[5] The transtextual background of jack-o'-lantern helps it be possible to infer that in the film Jack, too, has such a magical power if he made a deal with Satan.

given any change of facial expression or any movement of its eye parts (Figure 4.29). For this reason, their mode of movement seems to be close to automatic as seen in the case of Subtype (c), Type One. However, Type Six should still be discerned from Subtype (c) because the former is depicted as capable of aiming at the targets, that is, human characters in the diegetic world of the film. In the narrative, it would not be important to human characters, running away from the scary puppets and toys, whether these objects have moving eyeballs or changing facial expression; at any rate, they will be scary and horrible.

If they do, Jack and his Halloween fellows get troubled and threated because the objects themselves can become monsters that are not to be distinguished from the monsters of Halloween town, both as stop-motion models on screen. In other words, the Halloween monsters' power of animating, possessing, haunting objects can seriously threaten their own subjectivity and identity grounded in Halloween town, as well as the human beings in the film's world. Eventually, the models of the puppets and toys are not so stop-motion animated as to threaten the status of the Halloween monsters as performing characters.

4.7. Type Seven: A Posthuman Android in *The Bachelor Machines*

With the narrative loosely based on Villiers' novel, *Tomorrow's Eve*, and with the film title inspired by Marcel Duchamp's artwork, *The Bride Stripped Bare by Her Bachelors, Even*, or *The Large Glass* (1915–1923), Iwai's stop-motion animated

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short film, *The Bachelor Machines*, introduces two girl models that look much like each other. Given those transtextual motivations of the film, one of them can be considered to be the female android Hadaly and the other Sowana the human woman as its original. This means that one of the two girl models should function as a puppet per se, or a human simulacrum, while the other should function as a human being, in the diegetic world of the film. The former is the case which I classify in Type Seven of Group STM.

As indicated above, this case problematises the viewers' perception in terms of the binary opposition between real and fake, original and copy, in which the filmmaker minimises cues serving to discern the model of a human girl from the model of its/her simulacrum as an android. The former seems to be as much an object as the latter so that both look mechanical, non/subhuman and fake. Another problematic is the model signifying a (supposed-to-be) human creator-scientist with mechanical body parts in the film. I focus my analysis of these models on the technology of reproduction or mass-production which both blur the boundary between humans and their simulacra and further threaten human identity and individuality.

The film narrative revolves around the depiction of a mysterious, erotic process in which the cyborg doctor named Edison seeks to implant into Hadaly a substance extracted from Sowana, in order to make the female android much closer to humanity. Yet, it is obviously impossible to discern the Hadaly model and the Sowana model because both are designed to present the sameness of materials, colours, textures and shape on screen (Figure 4.31). This strategy of the model design intends to bring about perceptual ambiguity in the viewers who are

Figure 4.31 The models of Hadaly and Sowana in *The Bachelor Machines*

tempted to decide which is human and which is subhuman. In the beginning
sequence of the film, two models are shown only with their moving legs raised up
on screen, and although this implies that secondary animatic transition already
occurred to Hadaly as the puppet-as-puppet model, their synchronised movement
leads the viewers to fail to make clear which of the two models it is. Further,
neither model shows cues of facial expression, eye movement and lips movement
to help the viewers differentiate the Sowana model as human from the Hadaly
model as subhuman.

As the film narrative develops, three cues of differentiation are given to the
viewers. First, Hadaly shows the cue of supposedly menstrual blood, while Sowana
does not; and the former shows the cue of mechanical parts built in the belly
(Figure 4.32), while the latter is engaged in the disembodied type of bachelor
machine to extract an essential substance from female human beings. Despite these
cues, for the most part of the film the Sowana model is not dealt with to establish
its diegetic status as human. The surface texture of its body is not enough
elaborated to provide the illusion of human skin; the ball joints of the fingers and
other body parts like elbows and knees are exposed to the sight of the viewers.

Figure 4.32 The Hadaly model in *The Bachelor Machines*

The film's intentional rejection of the illusory representation of a human being goes so far as to present the cue of the genitals of Sowana when she is made naked by the humanoid type of bachelor machine before being engaged in the disembodied type of bachelor machine (Figure 4.33). The genitals are represented by a small roughly-made cut with a chisel on the pubis of the Sowana model. Arguably, this is where the cue of representation presents itself as a material cue and cannot be what it appears to be and in reality is not. When seen through the sight of the male character, Edison, who is easy for some viewers to identify with, the striking exhibition of genital nudity functions as a radical catalyst for them to abandon their persistent assumption that motivated by the narrative, the model *is* a human being or girl, and soon to shift to reminding themselves of the profilmic
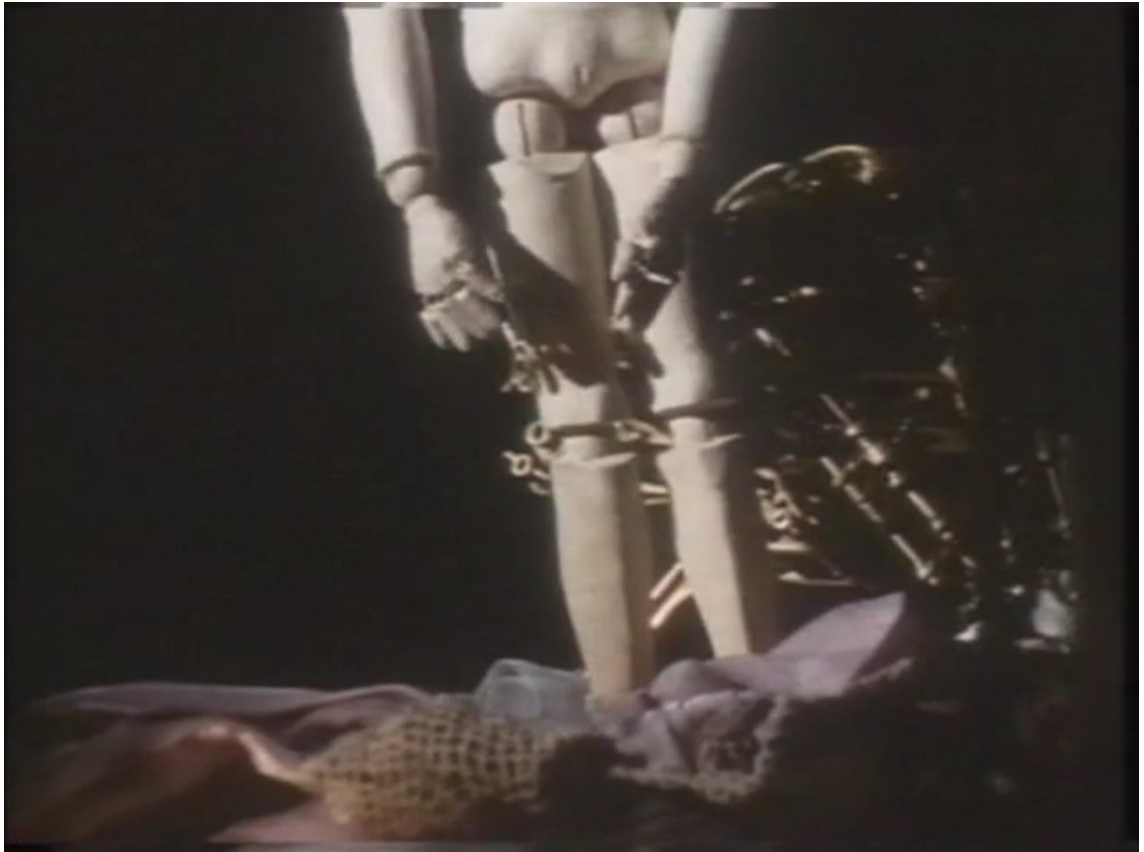
Figure 4.33 The Sowana model naked in *The Bachelor Machines*

reality that it is nothing but a built model.

Such materialistic cues suggest that in the film diegesis, the human character Sowana, too, might be in fact an android like Hadaly that has in common the profilmic condition of being a built model. If this assumption is true, it is not that Sowana is exploited to provide a human essence to Hadaly, but that the latter is a mechanical reproduction of the former which is also a mechanical reproduction of another human simulacrum in the film narrative. In this sense, Edison's bachelor machines can be said to be part of a factory for the mass-production of gynomorphic techno-puppets in the diegetic world of the film.

In the factory, Edison does not work as the Pygmalionesque creator of a female simulacrum but rather the manager of the system of mass-production.

There is no unique relationship between the human agent assumed by the Edison model and his products implied by the models of Hadaly and Sowana. As seen in many scenes where Sowana and Hadaly are engaged in the system of bachelor machines, further, the power which Edison exercises over the techno-puppets is mediated by mechanical devices. Suggesting that the techno-manager has a naked prosthetic hand, and not given any cues of facial expression, eye movement and lip movement (Figure 4.34), the Edison model looks by far more mechanical than, and as subhuman as, the model of Hadaly with cogs and gears hidden in the body. These cues jeopardise the diegetic status of Edison that should function as the human subject in the narrative, thereby spurring the viewers to suspect that even the supposed-to-be human scientist character might be an android.

Figure 4.34 The Edison model with a prosthetic hand in *The Bachelor Machines*

This Lamettrian suspicion was not unfamiliar to the viewers in 1998 when *The Bachelor Machines* was released, as seen in the films classified in the genre of cyberpunk; to name a few, *Blade Runner* (Ridley Scott, 1982, US) and *Ghost in the Shell* (Mamoru Oshii, 1995, JPN), respectively for the most part composed of live-action footage and of hand-drawn drawings. Paul Jackson defines the genre as "[c]yberpunk futures have commonly presented societies so intrinsically connected to technology that boundaries between man and machine become blurred" (2009: Kindles 4004). My concern in this section is that *The Bachelor Machines* is a film made using the technique of stop-motion animation, by which stop-motion animators are conventionally tempted to have a unique relationship with each model through tactile interaction with it. The anthropomorphic, gynomorphic models of the film portray a human agent suffering from difficulty in forming such a unique relationship with his or her creations, both subsumed into the structure of machine and technology, in the irony that in the film he or she envisions technology making human simulacra more human.

4.8. Type Eight: A Deceptive Imitation in *A Close Shave*

In *A Close Shave*, the third film of the *Wallace and Gromit* series, the dog named Preston is revealed to be a robot and not a real dog in the later part of the film (Figure 4.35). This deceptive robot is the case which I classify in Type Eight of Group STM. As I demonstrate, this case follows the convention of the "evil" machine (Schelde 1993) in which a puppet-as-puppet model is not qualified to be
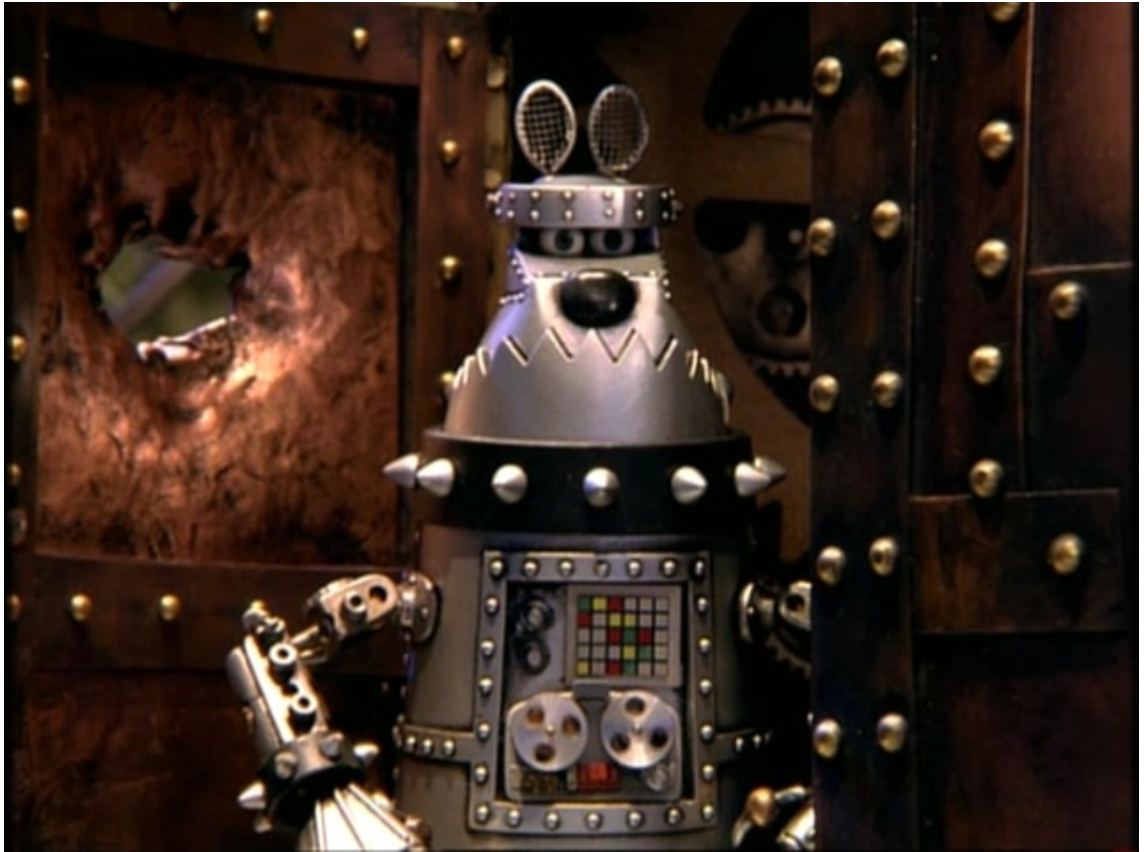
Figure 4.35 The robot dog Preston in *A Close Shave*

disobedient, autonomous and have free will, but rather is considered to be out of order, out of human or anthropocentric control. In analysis of the case, I challenge such a viewing skill, thereby call into question the status or identity of one of the two titular characters in the film diegesis: Gromit. The question is whether the dog is a robot or not in the sense that he is as much an intelligent anthropomorphic dog as the dog-like robot Preston seems to. Further, the former lives with the human "inventor" Wallace.

When it comes to theriomorphism, the *Wallace and Gromit* series features animal characters that do not simply represent animals but also move and behave like human characters on screen. Above all, Gromit, one of the film's protagonists, looks like a dog, but *he* is shown to knit a sweater, play puzzle games and read
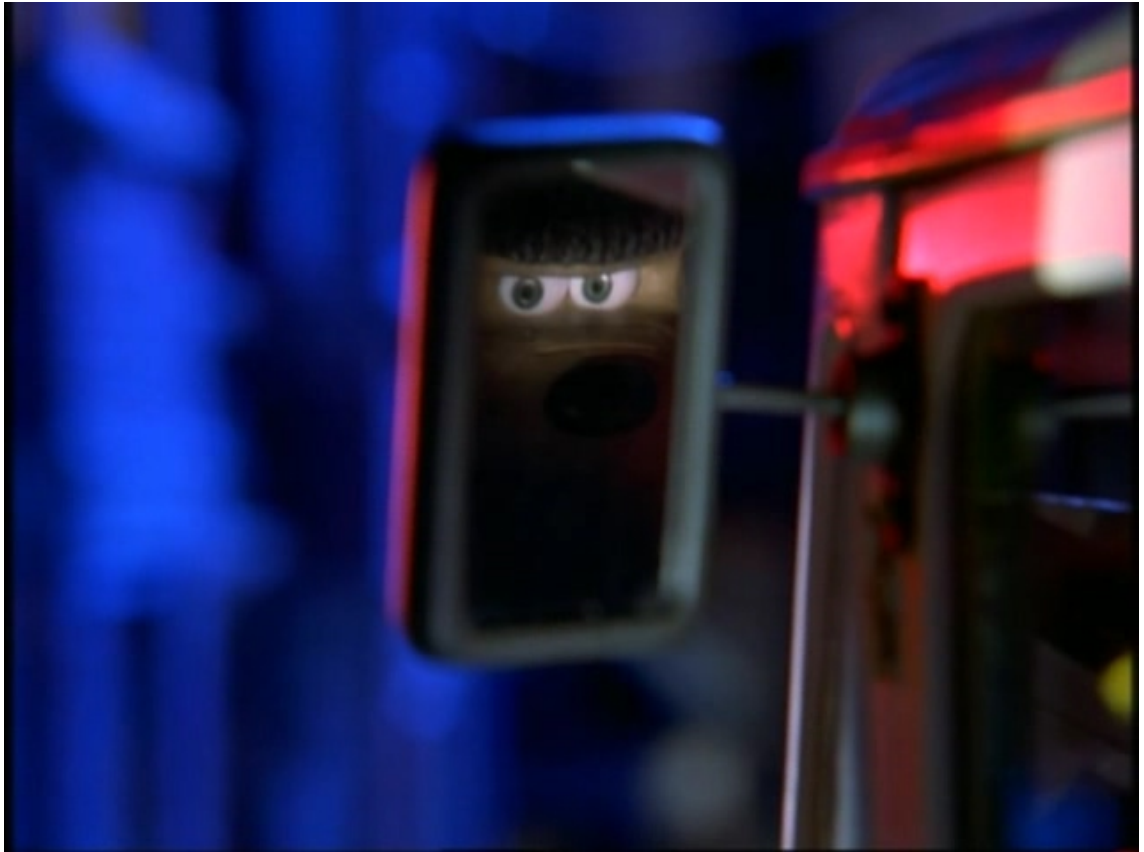
Figure 4.36 Preston's first appearance in *A Close Shave*

books; he is also depicted to be arrested and sent to jail in the same manner as are

human characters. This strategy of compounding anthropomorphism and

theriomorphism gives Gromit a status apparently equal to Wallace and the other

human characters in the film narrative.

Such a strategy is employed as a narrative device to play tricks on what

Preston is. When initially appearing in the film, the (not-yet-revealed) dog

character's face is shown overshadowed, except for the eyes, in the side-view

mirror (Figure 4.36). *He* still looks human because of his staring, determined eyes

which are composed of completely separate eyeball parts—white sclerae, green

irises and dark pupils—like those of Wallace and the other human characters in

this and preceding films in the series. When the film cuts to Preston's whole face,

still with its more-than-half part overshadowed, the dog-like face turns to serve as a clue for the viewers to perceive *him* as a character of a "living" and "real" dog like Gromit. Preston functions as such for a while to make the narrative develop against the two claimed protagonists, Gromit and Wallace, in the genre convention of crime films; the dog-like antagonist rustles sheep with his human accomplice, Wendolene, and further schemes to make a false charge of Gromit being a killer of a sheep.

Preston's real identity in the narrative is finally revealed in a verbal way when Wendolene changes her mind to stop his criminal activities in which she has participated in order to keep her shop. The verbal cues are presented by the shop owner who says to Preston: "Daddy didn't create you for this! You're supposed to protect me!" Given the preceding scene in which she tells Wallace that her dead father was an inventor like him, her dialogues imply that Preston is not a real dog but a robot with a canine appearance, whose preprogrammed role is close to a servant of the human creator-inventor and/or his beloved daughter. This servant robot has a transtextual reference in film history, which is Robby the Robot in the
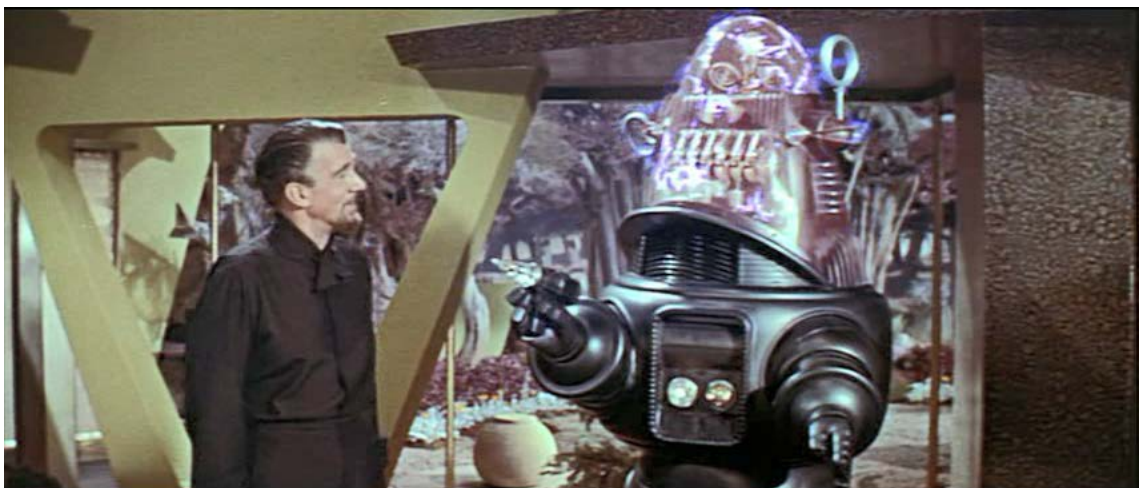
Figure 4.37 The scientist and Robby in *Forbidden Planet*

1956 live-action sci-fi film, *Forbidden Planet* (Fred M. Wilcox, US).[6] In this film, Robby is depicted as a completely obedient machine which Dr. Morbius created and programmed so as to be unable to attack or kill human beings. When as a test he orders Robby to fire a ray gun at human soldiers, mechanical troubles happens so that it might fail to follow the order (Figure 4.37).

Unlike Robby, Preston no longer obeys the order of Wendolene, the innocent human master who tries to stop him from rustling sheep; or even his disobedience can read as an action to protect her as the owner of the wool shop. In the later scenes in which Gromit and Wallace seek to save her and the rustled
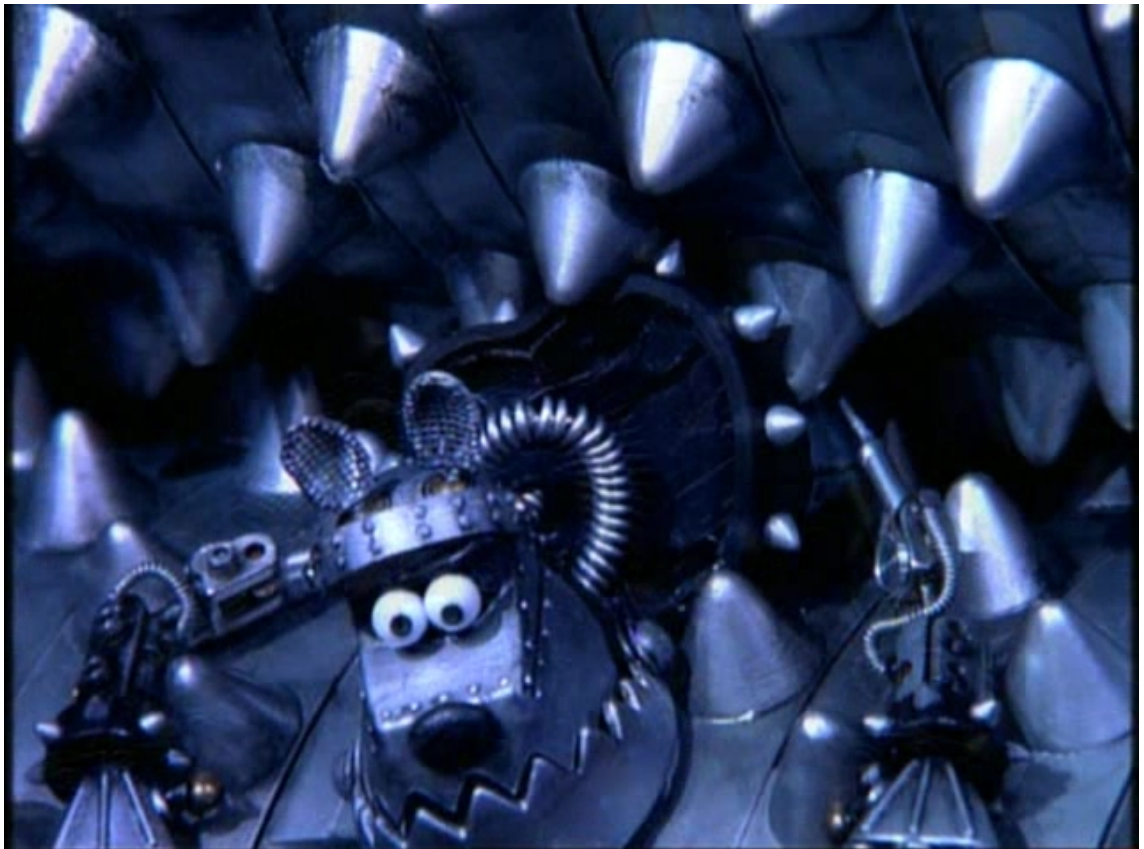
Figure 4.38 The robot dog Preston destroyed in *A Close Shave*

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[6] In the course of the production of *A Close Shave*, Park, the director of the film, referred to *Forbidden Planet* among the US and the UK sci-fi films of the 1950s that were involved in forming his film tastes (McDonald 1996: 62).

sheep from Preston, the robot goes so far as to kill the anthropomorphic dog character and even the human characters. In the course of hand-to-hand fights, the robot's fake flesh gets stripped off from the mechanical endoskeleton (Figure 4.35). After all these fights, the robot is destroyed into pieces being jammed by a protagonist into the machine for the mass-production of canned dog food (Figure 4.38). This is the moment when secondary animatic transition is withdrawn from the robot model.

This destruction is a clear indication of the way in which Park and the other stop-motion animators of *A Close Shave* consider and deal with Preston as an inanimate and fake object with the appearance of a dog. Jammed into the machine for dog food production, the Preston model as a robot is so crushed that the eyeballs jump out of the head, and later, all the decomposed metal parts of the body are put into empty cans, originally for dog food, one by one carried periodically by the roller conveyor belt. In these scenes, the robot model is not stop-motion animated to provide the impression that as an intelligent robot Preston is "aware" of what is happening to it and what as a result it will be, not to mention the impression that it feels pain in the destructive process.

In the film narrative, Preston's unawareness of the fatal events happening to itself is pretty contradictory to intelligence and other relevant abilities that the robot shows off reading a newspaper, devising schemes and modifying Wallace's invention. Given those intelligent abilities, the robot can be said to be one of the greatest inventions, in terms of Descartes' notion of automata, that have ever been created by human beings in the diegetic world of the film. Both in the film's world and the Puppetopos, however, its ability of disobeying the human master's order is

Figure 4.39 Preston remodelled in *A Close Shave*

not applauded as a free will, but rather, rejected as threatening and harmful. The

ending of the film shows that entirely shattered, Preston is rebuilt into an obedient,

harmless robot, with the previous arms and legs replaced with four wheels, under

Wendolene's full remote control (Figure 4.39).

What I am concerned with in this ending is Gromit, the counterpart of

Preston. Once an anthropomorphic dog, the latter was initially believed to be as

intelligent, alive and real as the former by all the characters (except for Wendolene

and her dead father) in the film's world and also by the viewers in the real world;

the truth is that Preston is not alive nor real. The secret and the revelation of what

Preston is can apply to Gromit himself; in other words, he might be a not-yet-

revealed robot. However, there is no cue suggesting Gromit's anxiety of the

possibility that he might be a preprogrammed robot as is Preston. It is certain that such cues are not necessary for Gromit, only if he keeps being or playing an obedient servant of Wallace in the film. No Romantic Irony is found in *A Close Shave* where the dog model as well as the robot model is employed to function for the anthropocentric order of the world demonstrated by Wallace and Wendolene.

Chapter Five

The Non-anthropomorphic Puppet-as-puppet Figures and Their Modes of Movement in Group PMT

In this Chapter, I focus on cases which I classify in Group PMT (Parametric) as alternative to Group STM in a direct sense and to Group INT in an indirect sense. While being technically based on stop-motion animation as in Group STM, in Group PMT the puppet-as-puppet models are presented on screen as objects per se and are not intended to represent and narrativise what they are not; for instance, the case of Type Seven in Group STM, the Hadaly puppet is presented as a "puppet" and yet the status and meaning of the puppet is subsumed under the convention of the "android" narrative.

To put it in neoformalist terms, the puppet-as-puppet models in Group PMT function as "bared devices", or as "quasi-agents" in terms of Bennett (2010: Kindle 65), without being motivated by narrative. Unlike Group STM, Group PMT consists of the puppet-as-puppet models that are stop-motion animated to go beyond the anthropocentric hierarchy of soul/life over matter, subject over object, human over sub/nonhuman, not to mention real over fake, which I will show in this Chapter.

As an indirect alternative to Group INT, Group PMT foregrounds the movements of objects with which stop-motion animators, invisible on screen, interact. In the latter Group, the objects are not employed to display the power relationship which the animators imagine forming with them in production, and

also that which the human live actors performing as animators show interacting with them on screen. Rather, as I will show later in this Chapter, they work as what Bennett (2010) calls "quasi-agents", to make visible external forces surrounding and acting on them in the first place. Further, the quasi-agents insinuate that there is something affective and effective in and around themselves on and across screen, something that I believe Bennett (2010: Kindle 219) conceptualises as "thing-power" in the philosophy of vital materialism.

The thing-power, according to Bennett, "gestures toward the strange ability of ordinary, man-made items to exceed their status as objects and to manifest traces of independence or aliveness, constituting the outside of our own experience" (2010: Kindle 219). Bennett's philosophical conceptualisation of thing-power is also an attempt to make it possible "to *experience* the relationship between persons and other materialities more horizontally . . . to take a step toward a more ecological sensibility" (Kindle 452). The more horizontal relationship between human beings and things is what in Group PMT the human agents as theurgic—as defined in the Literature Review—seek to envision and present manipulating and interacting with the puppet-as-puppet models, in other words, the puppet-as-thing models. Given that the political philosopher (Bennett 2010: Kindle 134) refers to films as one way to develop and promote such a sensibility, I claim that those models appearing in stop-motion animation films can produce a similar effect.

In this Group, the theurgic agents' pursuit of non-anthropocentric relationships with things leads to revising, modulating and defamiliarising the impression of aliveness demonstrated by the puppet-as-puppet figures or models

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that I analysed with Groups INT, CEL and STM. My analysis of Group PMT focuses on "trajectories", or paths, which each model as a quasi-agent draws in the form of index and motion vectors, interacting with an invisible animator(s) in the on-screen three-dimensional space. In the course of analysis, I will strive against the anthropomorphic reduction of the trajectory stop-motion animated to refer to itself as something unknown to the viewers, and this is why I developed the term, trajectory, which is similar yet alternative to the mode of movement likely to highlight the figurative qualities (such as life or soul) that a model is supposed to demonstrate by moving on screen like something that it looks like and yet is not.

Such trajectories and paths also function as unconventional kinds of kinaesthetic cues to insinuate what models on screen are and can be as themselves, when appearing to move, without being subsumed under the conventional concept of animation-can-bring-something (or even anything)-to-life. In this Chapter, I will show that those cues help the models to surface as things or quasi-agents in terms of Bennett's vital materialism, eluding the bifurcating definition of primary and secondary animatic transitions that works in the other Groups.

Selection of the emblematic cases from Group PMT

The cases which I consider as emblematic in Group PMT centre on Švankmajer, the Quay Brothers and Kawamoto. As cited in the Literature Review, these filmmakers have evinced unconventional, non-anthropocentric views of puppets, and further, for the first two, artefacts and objects are as significant as, and equivalent to puppets, even if they are not in human or animal form. Their unconventionality can

be contextualised in terms of the opposing stance which each of them took towards mainstream film production and narrative style.

According to Hames in the seminal volume on the Czech filmmaker, "Švankmajer tends to distance himself from the Czech animated school" (1995a: 27). In Hames' (pp.25-26) account of Czech animation history, the school refers to the major tradition of puppet animation developed and led by Trnka, Karel Zeman, Hermína Týrlová, and Pojar among many animation filmmakers in Czechoslovakia. Instead of becoming engaged in the school which contributed to the formation of the Puppetopos, Švankmajer has shown affinity with avant-garde art and experimental film movements. In his film-historical contextualisation of the unconventional filmmaker, Hames points out, "Švankmajer's early films were . . . produced in the same political and cultural context as those of the [Czechoslovak] New Wave" (p.36). It was in the late 1960s that the filmmaker made his directorial debut, a few years after the New Wave made an appearance in the country. As the author comments, importantly, "A uniform characteristic of most of the New Wave films was a rejection of classical narrative" (Hames 1995a: 27).

Based in the UK for decades since leaving the US in which they were born and raised, and also known for their artistic proximity to the Czech filmmaker, the Quay Brothers identify their way of filmmaking as different from Hollywood and other conventional filmmaking. Interviewing the Brothers, Buchan (2011) clarifies it in two aspects. First, she notes the disorienting effect of their films: "They easily justify giving this kind of uncertainty to their audiences, pointing out the difference between this and guided cinematic forms of suspense that follow Hollywood conventions" (2011: 146). Another aspect is that the Brothers do not prefer to

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employ dialogue in a conventional fashion easy to find in Hollywood or its contextual/industrial equivalent. Discussing the Quays' filmmaking in terms of the use of dialogues, Buchan notes that its unconventionality "not only makes their work distinct from live-action, dialogue-driven narrative, but it also sets them apart from many animators damned to what the Quays call the 'ghetto-ized, anodyne cliché-ridden dosage of children's television, an absolute swamp of banality, where all the characters are inevitably docile bogus flunkies wrapped around well-known actor's voices'" (2011: 168).[1] Certainly, it is quite easy to find puppets/models made to assume the role of such characters in Group STM as analysed in Chapter Four.

Compared to Švankmajer and the Quay Brothers, the Japanese puppet filmmaker Kawamoto might be found relatively close to the Puppetopos because many of his films seem to involve a kind of narrative. But this should not prevent us from experiencing the sensibility that he forms on screen interacting with puppets. Early in his career, Kawamoto learned much of the art of puppet animation from Mochinaga and Trnka, both referred to respectively in my analysis of *Rudolph The Red-Nosed Reindeer* and *The Hand* in Chapter Four. However, his frequent recollection of what Trnka talked to him about does not draw attention to how to construct film narratives but rather how to work with puppets. As I will scrutinise the latter issue in this Chapter, it is worthwhile here to look at how Kawamoto identified his art of puppet animation filmmaking in relation to film narration and other types of puppet animation which I classify in Group STM, as part of the

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[1] Buchan indicate the source of the Quays' comment: Quay Brothers (1986: 1) In Deciphering the Pharmacist's Prescription "On Lip-Reading Puppets". London. Unpublished manuscript.

Puppetopos. Renowned for the Trilogy of Absurdity (*Fujori Sanbusaku*), the Japanese animator noted:

> I am attracted to absurd narratives. Usually, a result is supposed to follow a suitable cause, and it is scary that only an unexpected horrible result comes out without any cause given. This often happens in the real world, even if you would not like to imagine it. I aim to depict such absurdity to make my audience horrified" (Okada 1998a: 148; English translation mine).

It was Eisenstein that Kawamoto (Okada 1998b: 158) referred to as influential on his way of film editing, and this implies that his film narration tends to go beyond conventional styles. Observing stop-motion animation films by Purves, Park and Lord, all involved in Aardman Animations, on the other hand, Kawamoto (Okada 1998b: 153-154) distinguished his stance from theirs in that they animated puppets as surrogates for human beings or actors in terms of on-screen performance.

Drawing on these evidences that help to position Švankmajer, the Quay Brothers and Kawamoto outside the Puppetopos, I choose and focus on one of the films by each of them in terms of high relevance to my central subject of puppet-as-puppet models and its mode of movement: Švankmajer's 1971 short film, *Jabberwocky*, the Quays' 1986 short film, *Street of Crocodiles* and Kawamoto's 1972 short film, *The Demon* (Oni).

5.1. Energised Eloquent Objects in *Jabberwocky*

In analysis of the film, *Jabberwocky*, I draw on the concept of "faktura", developed by the Russian avant-garde (Gough 1999; Meyer 2000) and associated with Minimalism (Meyer 2000), in terms of which a three-dimensional figure's movement on screen is foregrounded and bared as a vestige, or a "trajectory", left behind and accumulated on film in time through the physical, tactile interaction between the animator and the figure in production. This "bared" trajectory arouses in the viewers an unfamiliar, non-anthropomorphic and non-anthropocentric, sensation of objects seen in motion on screen and of human interaction and intervention with them. Describing the trajectory with the method of film vector analysis, I interpret such a sensation in terms of the vital-materialist concept of "thing-power" which Bennett (2010) puts forward to stress that materials and objects assume "agency" outside human awareness.

For the most part, this film shows many objects in human form moving, without any human character in a clear interaction with them, on screen: bisque

Figure 5.1 A human girl in *Jabberwocky*

dolls, paper dolls, toy soldiers, a jumping jack, a trapeze clown toy and a pocket knife decorated with a lady figure. Only in an early scene whose setting is a room full of objects, a real girl is shown for an instant to move around in flickering or stroboscopically (Figure 5.1). This optical effect makes her a series of photographic cut-out figures rather than an on-screen live performer. Even while appearing on screen, she keeps marginalised; leaning on a wall and being in a corner soon after her failing to catch a doll moving, as if it escapes from her, on the floor in the room. At the centre of the film are not living human beings but inanimate objects.

Many of the objects are stop-motion animated in a series of scenes to move by and for themselves, and this might be reduced to the conventional discourse that animators or human agents have the demiurgic power of giving life to inanimate objects in animation. For example, we see the white gloves move, as if being taken off, from the hands of a bisque doll (Figure 5.2). From the conventional perspective, it would be said that the doll *plays* a living baby girl and *takes off* her gloves on screen. Might it be that secondary animatic transition has occurred to the doll? However, a close look reveals that the doll's hands and fingers are not given any slight schematic cues of movement to imply their taking off gloves while this
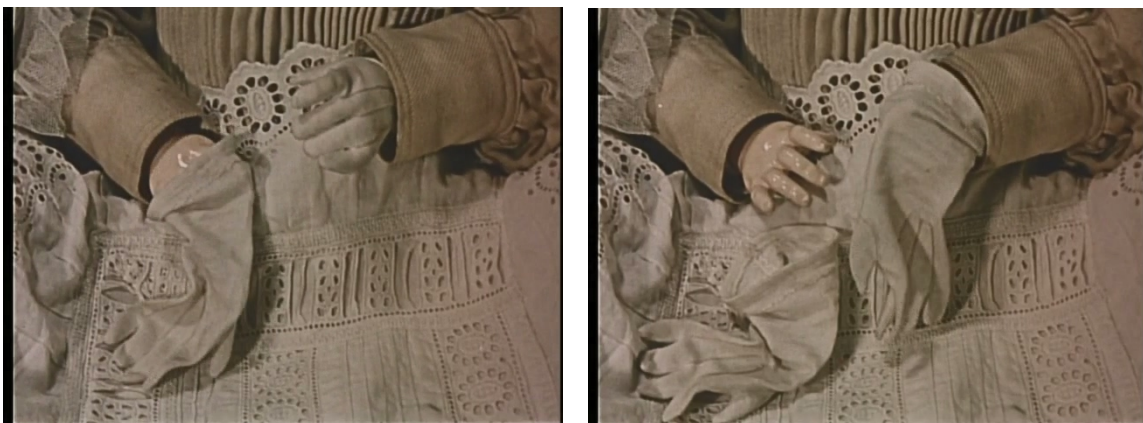
Figure 5.2 The doll's gloves moving in *Jabberwocky*

action takes place. In terms of motion vectors, the gloves seem to be stop-motion animated to be pulled off by a human hand invisible on screen.

A similar mode of movement suggesting the action of an external force on an object in the diegetic world of a film is usually shown in Subtype (b) of Type One, whose mode of movement is passive in Group STM. The passive mode serves to trigger primary animatic transition to indicate that the object is inanimate, whatever it might look like, as subject to either gravity or a human character's body movements. However, the gloves' movement of being-pulled-off is not easy to identify as passive because it does not involve any visible cues of a human character exerting a force on them.
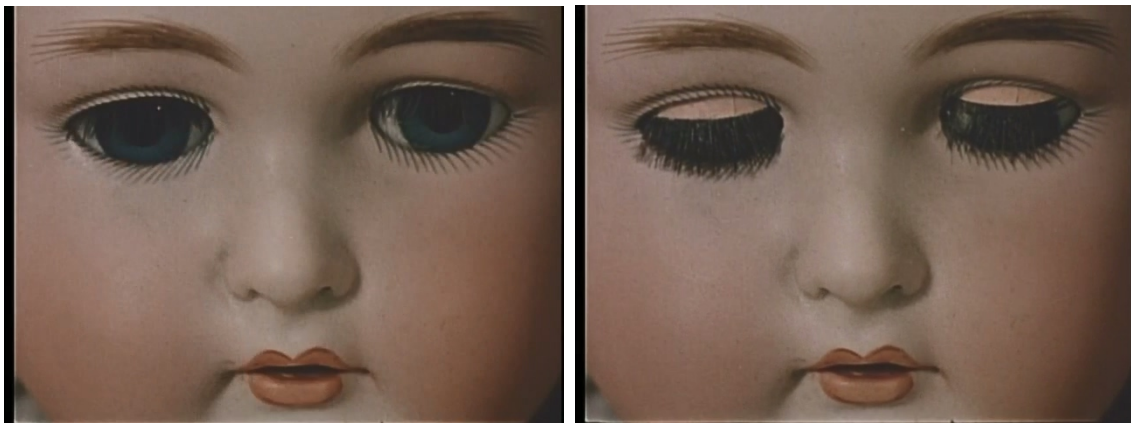
Figure 5.3 The doll's eyes moving in *Jabberwocky*

The kinaesthetic mystery of the gloves gets deeper and deeper by the close-up face of the doll whose eyes are opening (Figure 5.3). Not functioning as a narrative-motivated device but as a parametric one, the eyes' movement is a mystery which allows varied and incompatible ways of explaining its technical and semantic aspects. First, it is uncertain that the eyes were stop-motion animated to open on screen. The opening movement does not involve kinetic cues of enough clarity to judge that it was created using techniques of stop-motion animation.

Given that dolls of that type were first given moveable eyes to suggest sleepy-ness in the nineteenth century,[2] it might have been filmed in live action while the baby doll is moved to raise and lower the eyes by an off-screen human agent at the profilmic level. In the film, however, the moving eyes on screen do not serve for such an anthropomorphic and anthropocentric aim—sleepy-ness, but rather simply show their own mechanical-ness. At the diegetic level, the moving eyes are likely to work as a cue implying that the doll is played with by the girl who appeared once in the early scene, or an invisible girl whose acousmatic voice is heard to read Lewis Carroll's poem *Jabberwocky*.[3] When this effect of the cue is successful, the eyes' movement is identified to be passive as in Subtype (b) of Type One.

The duration of the moving eyes is soon interrupted by the cut to the movement of a stroller in the room where nobody is found. Further, the stroller in which the doll seems to be seated is stop-motion animated to move by itself. Its locomotive movement is not given any cue of secondary animatic transition but kept literal and aimless; at the same time being not given any cue of primary animatic transition because no human character is implied as exerting physical force on the stroller, nor any mechanical system as activating its automatic locomotion. The fact about the three consecutive movements—the gloves, the eyes and the stroller—is that each of the objects *are moving* itself on screen while it *was moved* by human agents in production using either the technique of stop-motion

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[2] Museum of American Heritage (2005) The mechanics of dolls. Available at: http://www.moah.org/dolls/dolls.html (accessed 3 May 2019).
[3] The information of the voice is given in DVD: Columbia Music Entertainment (2005) Shuvankumaieru 'Jabawokki' sono hoka no tanpen (Švankmajer's Jabberwocky and other short films). COBM-5311. Columbia Music Entertainment.

animation or live-action shooting; further, it might still exist somewhere in the real world. But where and what are the meanings of those and other movements seen in the film? What is Švankmajer's artistic motivation for them?

Figure 5.4 The pocket knife in *Jabberwocky*; top-left (a), top-right (b), middle-left (c), middle-right (d), bottom-left (e), bottom-right (f)

To answer this question, I proceed to analyse the most remarkable movement of a pocket knife, with a decoration of a female figure, that is presented in the later part of the film (Figure 5.4). At the centre of the screen frame, the camera initially focuses on the wooden figure of a human lady set on the round metal podium (Figure 5.4a), which does not necessarily manifest itself as a pocket knife, and this can prompt the viewers to expect it to display anthropomorphic movements on screen. However, the object is stop-motion animated to turn around on the same spot and then the blade comes out from the handle which forms part of the back of the lady figure. This is the moment when the object raises a question in the minds of the viewers: will it function and move as a lady or a knife on screen?

Shortly, the object is stop-motion animated to roll forward and then to jump up from the spot in which the spear point has been stuck in the tabletop (Figure 5.4b-c). On falling onto the top of the table, it is stop-motion animated to jump up, flying and spinning in the air, and fall again and again in different directions (Figure 5.4d-e). This series of movements are not anthropomorphically nuanced but aimless, lacking narrative motivation. The most puzzling moment comes at the moment when the lady pocket knife stops finally moving on falling onto the table. Blood flows out from the back of the lady, that is, the handle of the knife, as soon as the blade is stop-motion animated to go back into it (Figure 5.4f). For the viewers familiarised with the anthropomorphic convention of Group STM, the physiological event and element will be attributed to the lady figure as their source; they might say, "She is injured". However, it should be remembered that when the blade comes out of the figure part that is also the handle part, the lady

figure does not bleed. Further, no cue is given to imply that any emotional or physical responses to the crucial event might happen from within either the pocket knife or the lady figure. The bleeding event should be explained in a different way, which is also to find the answer to the questions of the aimless movements presented throughout the film.

Building on film vector analysis as the helpful method, the trajectories along which the lady pocket knife moves on and around the table in the film are not subject to gravity because in the first place it jumps up against gravity and then does not follow a parabolic path at every falling motion when gravity alone acts on the projectile. This observation leads me to assume that in the film's world an external force should grab, raise and lower the knife against gravity; yet the anthropomorphic source of the force is invisible on screen at the diegetic level. There are two possible answers. One of them is that Švankmajer or his co-working stop-motion animators *are* working as the source of the external force that *did* exist there, even if invisible on screen. From this perspective, the trajectories, or paths, which the object shows moving on screen are considered to be the material traces which they *left* on film, interacting with and exerting force on it frame by frame before the camera.

I call the filmed traces *faktura* in and of stop-motion animation, in James Meyer's (2000) definition of the term. Contextualising Minimalism and its aesthetic stances in relation to Russian Constructivism, Meyer indicates that as a key concept of the early twentieth-century art movement, faktura is "a revelation of an object's literal materiality, and *konstruktsiia* (construction), an organization dictated by function and the physical nature of the chosen materials" (2000: 19). According to

Maria Gough's (1999: 36) essay on faktura, this concept was developed to reveal and release the made-ness of artworks. By extension, many of the trajectories and paths seen in *Jabberwocky* can be said to be a revelation of the made-ness or constructed-ness, including animated-ness, of the movements.

Figure 5.5 Blur-index vectors and live-motion vectors in *Jabberwocky*

In the film, the made-ness of movements is also accentuated by the juxtaposition of live action and animation that Michael O'Pray (1995: 52) refers to as a trait of Švankmajer's manneristic film style. As one of the most significant examples, a trapeze clown toy moving on screen is presented in live action, which shows motion vectors and blur-index vectors unique to live-action shooting (Figure 5.5). The literal and aimless movement of the anthropomorphic doll not only makes a sharp contrast to the very animated-ness of the animated movements preceding and following the live-action shot, but also suggests that there should exist a live human being or a crewmember, if not visible on screen, moving or exerting force on it, off screen. In other words, force in production was exerted and in projection is shown being exerted on it by him or her.

Turning back to the scene with the lady pocket knife, the concept of faktura encourages me to infer that a human agent in production should be the source of

bleeding as an event taking place on the continuum of the trajectories and paths that his or her hands *did* follow together with the object which he or she *did* manipulate as itself in production. In brief, he or she really *did* bleed in production; it *is* human blood on screen. Considered in terms of faktura, the event might make some of the viewers feel too squeamish to accept as bared or raw, even if the blood is not specified as real in the film—it might be a little bit of red paint or a pig's blood. Observing the living bodies and organic materials used in the three-dimensional artworks of the twentieth century, by analogy, Tom Flynn (1998: 160) describes them as disturbingly radical; one of his cases is Mark Quinn's sculptural work entitled *Self*, which was modelled of the artist's own blood in the form of a human head.

However, this does not give a sufficient answer to the questions of Švankmajer and his crew's artistic motivation: why should the objects be dolls and toys, and why should they and their movements be set against a room and not a studio (re-)presented as such? These questions spur me to assume a diegetic figure as the anthropomorphic source that exerts force on the lady pocket knife in the film which even if not motivated by narrative, features a few thematic threads, in particular, the acousmatic voice of a supposedly little girl reading Carroll's poem, and the playful, mischievous and naughty force seen in the movements of the toys on screen. Following the threads, a child (or children) surfaces as the figure that once played with the old toys now left alone in the room. František Dryje describes *Jabberwocky* as "interpreted personal memories of the world of childhood" (1995: 135). Yet, the author does not afford to draw enough attention to the aspect of objecthood with which the child forms an interactive and intersubjective surface—

what Švankmajer (Hames 1995: 110) calls tactile memory[4]—that I seek to clarify in terms of force as well as movement in this thesis.

Given the concept of memory, instead of faktura, the invisible figure of a human child should be considered as no longer staying and playing with the toys in the diegetic world of the film. In the room, nonetheless, they are shown to keep moving on screen without any human physical intervention. Does this mean that the film is grounded in the "old-animistic" belief of objects as already ensouled or alive? Such an interpretation is to ignore the specifics of movements which the objects show on screen, the details of the trajectories and paths formed between them and the body of the human subject touching them in time.

With the concept of touching in mind, I argue that in the film, the energy transmitted from the human subject to the toys through physical contact is envisioned as the cause which makes them keep moving. The energised objects include not only the toys but also objects and materials such as a stroller, apples, clothes irons, coffee grinders, spoons, chalk and paper. Švankmajer stresses, "I have already spoken about the 'eloquence' of objects and their ability to carry latent meanings into which they 'invest' time, touch and the 'manipulation of human sensibility'" (1995: 111). For the filmmaker, objects speak and endure, while touching and affecting, as well as being touched and affected by, human beings. This is the sense that Roger Cardinal comments, "Švankmajer . . . prefers his curiosities to bear traces of usage" (1995: 85), going on to cite the filmmaker who

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[4] In an interview with Hames, the filmmaker states, "As the results of my study showed, there does exist something akin to 'tactile memory' which penetrates the remotest corners of our childhood; from there it is reflected in the form of an analogy with the slightest tactile stimulation or the provocation of tactile imagination, encouraging the 'tactile art' of communication" (Hames 1995b: 110).

notes, "The more an object has been touched, the richer its contents"[5] (p.85).

While in *Jabberwocky*, the objects either in human or nonhuman form are not stop-motion animated to imitate the localised[6] body movement of the human subject in an attempt to provide the impression of being alive—for the same reason, no movement of an object implies secondary animatic transition, it is movement itself, as a temporal event composed on film through objects touching and being touched, that functions to affect the viewers: the gloves of the bisque doll pull themselves off from the hands, with wiggling wrinkles shown on them, as if they are being taken off from the hands by a child, or *me*, looking at and touching them off screen; their eyes move as if they are being moved by him or *me* at play; the lady pocket knife jumps up, spins, flies and falls as if they are being made to do that by him or *me*. These physical events are presented as not separated from the "real" world which the viewers including *me* inhabit, in particular by editing the live-action shot (Figure 5.6b) of the paper airplanes flying out of the window of the room toward the street outside, before and after showing them taking off and

Figure 5.6 The paper airplanes in *Jabberwocky*; left (a), right (b)

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[5] Cardinal cites this from Vratislav Effenberger (1987) Švankmajer on *The Fall of the House of Usher*. Gaby Dowdell (trans.) *Afterimage* 13: 33.
[6] My use of the term, localised, is influenced by Lamarre (2013.)

flying out by themselves through the window in stop motion animation (Figure 5.6a). Shown in the live-action shot are buildings under the sky, which seem to be so raw and unprocessed as to suggest that the paper airplanes can be seen by anyone inhabiting or passing by the town and streets connected with the world where we live.

The affect that the *Jabberwocky* objects are intended by Švankmajer to have on human beings reminds me of what Bennett (2010: Kindles 151) calls "impersonal affect" or "material vibrancy" in her philosophy of vital materialism. For the philosopher, the concepts are "not a spiritual supplement or 'life force' added to the matter said to house it" (Bennett 2010: Kindle 151). She adds, "I equate affect with materiality, rather than posit a separate force that can enter and animate a physical body" (Kindle 151). In this and other accounts, Bennett uses the term, "body", to signify not only human bodies but also nonhuman ones. In particular, her definition of the nonhuman bodies goes so far as to embrace "the minerality of our bones, or the metal of our blood, or the electricity of our neurons" (Bennett 2010: Kindle 463). In my reading of the political philosopher, bodies are defined as something exerting force, something affecting or vibrating, not necessarily perceived in an anthropomorphic way. Bennett suggests, "[A]ll bodies are kin in the sense of inextricably enmeshed in a dense network of relations" (2010: Kindle 508).

Drawing on the affect or capacity of the nonhuman bodies she defines as quasi-agents, I observe that the toys and objects moving in *Jabberwocky* embody the way in which they work as quasi-agents, without being subsumed under anthropomorphic, anthropocentric and narrative-oriented orders. The stop-motion

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animated (and filmed) embodiments can be interpreted in the sense that Bennett revisits the old notion of "deodand", seeking to identify the quasi-agency of objects, or thing-power:

> Agentic capacity is now seen as differentially distributed across a wider range of ontological types. This idea is also expressed in the notion of "deodand," a figure of English law from about 1200 until it was abolished in 1846. In cases of accidental death or injury to a human, the nonhuman actant, for example, the carving knife that fell into human flesh or the carriage that trampled the leg of a pedestrian—became deodand (literally, "that which must be given to God"). (2010: Kindle 439).

Like the carving knife, in *Jabberwocky* the lady pocket knife sticks in the top of the table and injures human fingers (if invisible on screen) when the blade slips. This and other objects are stop-motion animated to display the movements and events that each of them *does* induce and allow human beings to get engaged in making happen: the bisque doll wears a pair of fabric gloves, whose material flexibility and structural separateness enable the stop-motion animators to touch and pull them off from the hands. Bennett acknowledges that such a thing-power is "less masterful than agency but more active than recalcitrance" (2010: Kindle 433), going on to problematise the very concept of mastery in an attempt to make the relationship between the human subject and the nonhuman object more horizontal, which will otherwise remain marginalised out of human sensibility in the hierarchy of the former over the latter (Kindle 452).

Jabberwocky problematises the viewers' sensibility familiarised in the conventional discourses: animation can bring something (or even anything) to life; and animators can perform the role of a demiurgic creator masterful of objects and materials. In the film, Švankmajer with his animation crew does not seek to show the puppets and other objects moving on screen in the anthropomorphic ways that make them look alive or ensouled from the anthropocentric perspective. Emphatically, his focus is to make bared and visible the trajectories and their subtleties, such as jumping, running, hovering, flying, grinding and wiggling, drawn in time by physical forces exerted and transmitted between two kinds of agents, human beings and things, surrounded by and resisting the gravitational field of the earth. Either as memories or traces of the agentic forces, those trajectories can inflect, twist and defamiliarise the ways in which the viewers sense the effect of the gravitational field that has been visualised in the first place to serve anthropocentric movements and narratives in the convention of Group STM.

Not completely retreating from the field of forces, if not visible, in *Jabberwocky*, the theurgic agents of the film manifest themselves as intervening in the movement of the puppet-as-puppet figures, as do the demiurgic agents of Group INT I analysed in Chapter Two. This is where I find Bennett's concept of the quasi-agent pertinent to my case study of *Jabberwocky*. Building on Bruno Latour,[7] Bennett (2010: Kindle 435) elaborates on her concept of a quasi-agent as an "intervener". Unlike the demiurgic counterparts in Group INT, the theurgic agents in the film do not consider the figures to be the sub/nonhuman slaves of a human

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[7] Bennet cites Latour (2004: 75) *Politics of Nature: How to Bring the Sciences into Democracy*. Porter, Catherine (trans.) Cambridge: Harvard University Press.

master. Rather, they intervene in the field of forces and the physico-aesthetic events taking place therein both at the profilmic and diegetic level.

5.2. Objects as Distributive Agents in *Street of Crocodiles*

Stretching much of the discussion made above, in this section I analyse the case of *Street of Crocodiles* as pertinent to another vital-materialist concept of "distributive agency" (Bennett 2010). As indicated by this term itself, it suggests an alternative perspective to the convention of attributing an animated figure's movement on screen to an animator as a human agent whether the result is, so to speak, perfect or not. In the case, such a concept is concretised in the movement, or kinetic trajectory, of models, puppets and objects which inhabit their own world, without any anthropomorphic centre or mastery—models which Buchan (2011) finds to be of insecticity. Here, I consider insecticity as a non-anthropocentric possibility of theriomorphism. Using techniques of camerawork and editing, the case also problematises our viewing experience of the "thing realm" which unknown forces seem to diffuse and circulate throughout, and therefore, I connect this effect to Buchan's (2013) conceptualisation of a "cinema of apprehension".

Loosely based on the Polish writer Bruno Schulz's story and as a "notably nonnarrative film" (Buchan 2011: 34), *Street of Crocodiles* starts with the live-action shot in which an elderly man enters a theatre, who seems to keep the place. Approaching a construction like a kinetoscope combined with an antique bellows camera among the dusty-looking objects left alone on the stage, he looks into it

Figure 5.7 The human keeper and the kinetoscopic construction in *Street of Crocodiles*

(Figure 5.7), and intercut with razor blades and pulleys, goes on to spit into it from the top. Cutting to the spit going down into the construction, the film takes the viewers to the realm of puppets separate in a degree from the human world shot in live action. The puppets are presented as puppets in contrast to the old keeper performed by a live human actor.

In a vague causality implied by editing, the spit is shown to set into motion razor blades, gears, pulleys and hydraulic cylinders in the kinetoscopic construction (or an old kinetoscope patched up) so that the machinery delivers a "force" to a puppet-as-puppet model through strings, one of which seems to be tied to the model's wrist. At first, the body of the Schulz model[8] is kept flabby, in

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[8] I borrow this name for the protagonist model from Buchan (2011).

particular with the head lowered so extremely that it appears to be literally a model or puppet. When the delivered force shakes its hand as a cue of primary animatic transition, the puppet is quickly stop-motion animated to raise the limp head and then to become concerned with the string tied to the wrist, as if it is given what is called consciousness (Figure 5.8), which is likely to function as cues of secondary animatic transition—I will analyse this in detail below. It is not only this intriguing nexus but also a pair of scissors that implies a thin, mysterious connection in a material way between the realm of the puppet and that of the human keeper, while it seems impossible for the kinetoscopic construction to hold the puppet realm in terms of the scale. Crosscutting of the human keeper holding scissors with the Schulz puppet in the construction suggests that the former is

Figure 5.8 The Schulz model in *Street of Crocodiles*

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cutting the string tied to the wrist of the latter across the boundary between both

realms. Once the string is cut, the puppet is stop-motion animated to begin to

wander in the miniature realm.

Figure 5.9 The string and the glass screen in *Street of Crocodiles*; left (a), right (b)

While Weihe observes the supposed secondary animatic transition of the

Schulz puppet as "awakening and emancipation from its strings" (2006: 45),

however, the puppet on screen does not move in the anthropomorphic mode of

movement in comparison to its anthropomorphic look. Above all, it is not stop-

motion animated to express any human-like response to strange events happening

around it. There is no cue of surprise, uneasiness, perplexity and bewilderment

seen in the face of the puppet, for example, when a randomly knotted string gets

detangled smoothly without any material recalcitrance (Figure 5.9a) and the dusty,

murky glass screen gets raised without any visible or identifiable source of force

for the ascending movement (Figure 5.9b). This less anthropomorphic impression

is also reinforced by the way in which the body of the puppet is built. The puppet's

head is not made of latex or other conventional materials but of plaster (Buchan

2011: 111). Except for the main limb joints like the elbows and the knees, the face

and most of the body parts seem to be quite stiff and rigid.

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Figure 5.10 The Schulz puppet in *Street of Crocodiles*

Despite such unpredictable, inexplicable events in succession, the protagonist does not even try to escape from them, but rather, simply keeps moving around, in a degree as if tracking the moving strings engaged in pulleys and other visual or auditory stimuli. In particular, coming out between the two walls (Figure 5.10), it moves forward with the upper body lowered, almost as if crawling or scurrying, and this mode of movements make it look like an animal, further an "insect", in taxes, for instance, phototaxis or phonotaxis. Finding such an insect-like trope with respect to puppet design in the Quay Brothers' films, Buchan indicates, "Besides the anthropomorphic puppets, automata, and simulacra, the Quays have consistently used what I call insecticity in their films, where insectlike figures feature prominently" (2011: 113). Focusing on the Brothers' puppets of an insect-like design, the scholar describes their body movement, on the one hand as "scurried, instinctually autistic actions", and on the other as "angular and darting movements and unexpected gestures [which] contribute to the unease of watching them" (Buchan 2011: 114). I believe that such modes of movement apply not only for the puppets of an insect-like design but also those of a human-like design in the work of the filmmakers, and in this sense, extending Buchan's account of insecticity

to the aspect of puppet movement, I will call "insectomorphic" the mode in which

the Schulz puppet is stop-motion animated to move.

When insectomorphism is a variation of theriomorphism, the latter mode

of movement is found in Group STM, particularly in the cases, *The Mascot* and *The*

Mitten, respectively of Types Two and Three. The dog-like models as puppets in

both films are stop-motion animated in the first place to serve their human masters

in the anthropocentric narratives, as I analysed in Chapter Four. The Quays'

predilection for insecticity has nothing to do with such anthropocentrism and

intends to defamiliarise the viewing experience and skills formed in the

Puppetopos. Citing Roberto Aita's interview with them,[9] Buchan remarks:

> Instead of using insectlike puppets to illustrate familiar aspects of human
>
> behavior, the Quays draw the viewer into a world that provides few
>
> comforting familiarities. The "autonomous and self-sufficient world" is
>
> isolated . . . (2011: 114)

Her account of the isolated world prompts me to compare *Street of Crocodiles* to

The Mascot, the case of Type Two, and *Rudolph The Red-Nosed Reindeer*, the case of

Type Four, both classified in Group STM. In Starewicz' *The Mascot*, the canomorphic

and other models as puppets go under and perform after secondary animatic

transition unknown to human characters. Although remaining in the human world

without having their own physically separate realm, the puppets as puppets are

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9 Aita (2001) Brothers Quay: In Absentia. Totaro, Donato (trans.) *Off-Screen*. Available at: http://www.horschamp.qc.ca/new_offscreen/quay.html.

depicted as inhabiting a realm isolated completely from the world where human awareness works. In *Rudolph The Red-Nosed Reindeer*, the discarded puppets as puppets after secondary animatic transition are shown to *live* in a physically isolated island, for toys alone, which I call perihuman. The island does not allow any living creatures to stay, and there is no exception for Yukon, Hermey and Rudolph, the human and animal characters marginalised in their own world, who happen to reach the perihuman realm. In both films, the puppets are depicted in the main to commit themselves to human interests: bringing an orange to the human toy maker's sick daughter in the former, and longing for being owned and played with by human children in the latter.

In *Street of Crocodiles*, the puppet realm is in the awareness of the human keeper who does not look particular or exceptional, and this implies that the world can be exposed to any human beings only if they visit the theatre. Further, he is not surprised at the realm when looking at it through the construction. It is the inhabitants of the puppet realm who seem to be unaware of the other realm. They do not notice that they are observed by someone outside their realm, or it might be that they simply do not care about the outside. The Quays provide a noticeable hint of how insecticity can be related to the isolated-ness of the puppet realm which they envision:

> A little like when we observe the world of insects, and we *wonder where the logic of their actions comes from*. They can not talk to us to explain what they are doing; it is a bizarre miracle. So, watching one of our films is like observing the insect world. The same type of logic is found in the ballet,

where there is no dialogue and everything is based on the language of

gestures, the music, the lighting, and the sound. (cited in Buchan 2011:

114; emphasis mine).[10]

In this comment, the filmmakers suggest that insecticity and the insectomorphic

mode of movement function respectively as a concept and a parameter to construct

a film world, using stop-motion animation, that is independent of and not

motivated by human viewers' interests, and further that exists outside human

cognition. With the outsideness of a film world in mind, and reconsidering

kinaesthetic insectomorphism, I proceed to clarify a non-anthropocentric logic of

the actions and gestures that are shown by puppets and also objects working as the

puppets' functional equivalents, like screws and gears, in *Street of Crocodiles*.

Besides the Schulz puppet, first, there are more puppet-as-puppet models

with a human-like or animal-like appearance in the film. Featured among them are

the models of tailor puppets,[11] whose ceramic heads look alike; yet unlike the

leading tailor puppet which has a torso and four limbs like a human being, each of

the rest of them has the lower body part composed of a drawer, a box and small

wheels. When the Schulz puppet comes to their place, the leading tailor puppet is

shown to wind strings or threads on its arm from a pulley and then to seemingly

make a gesture to tell the protagonist to enter there (Figure 5.11). In the place

where threads and cloth are stored, the tailor puppets take out the plaster head

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10 Aita (2001) Brothers Quay: In Absentia. Totaro, Donato (trans.) *Off-Screen*. Available at:
http://www.horschamp.qc.ca/new_offscreen/quay.html.
11 For this way of referring to the puppets, I draw on Buchan (2011), and yet my use of the
word, tailor, does not intend to signify any anthropomorphic role of the puppets in the film
which is not motivated by narrative.

Figure 5.11 A tailor puppet in *Street of Crocodiles*

from the Schulz puppet to replace it with a ceramic head similar to, yet larger than

their ceramic heads, while dressmaker pins stick themselves into the torso of the

Schulz puppet. Further, they put fluff in the cavity of the ceramic head and then pull

it out of it through the empty eye sockets, the mouth and the open top of the head.

     All the stop-motion animated actions of the tailor puppets and the

dressmaker pins look like a kind of ritual performance, whose meaning is quite

difficult for the viewers to grasp, because the narration of the film is parametric.

Nonetheless, an anthropocentric viewer familiarised in the Puppetopos would seek

to rank the tailor puppets at the top—as superior to the pins—in a supposed order

of the realm of puppets and objects, in part because they have an anthropomorphic

appearance. For example, when the Schulz puppet enters the tailors' place, the

Figure 5.12 Tailor puppets and dressmaker pins in *Street of Crocodiles*

leading tailor puppet opens a small box, from which several dressmaker pins come

out to run along the right arm, shoulder and left arm of the tailor puppet (Figure

5.12). In the convention of the Puppetopos, the viewer is quick to consider the

anthropomorphic puppet to conjure and manipulate the pins without touching

them, at the same time identifying the former as the master of the latter; the

movement of pins on screen is reduced to the mastery of the anthropomorphic

figure. However, the mastery of the tailor puppets over the pins and other

materials becomes questionable in a later scene.

After all the ritual performance with the Schulz puppet, each of the tailor

puppets is shown to suddenly stop performing in an autonomous way with a

variety of kinetic details and to begin repeating the rotation of an arm in a circular,

mechanical fashion on the shoulder joint, with the head tilted limp (Figure 5.13a).

The posture and the gesture make the puppets appear to be mechanical objects

lacking consciousness and will. Their mode of movement looks similar to what I

define to be the automatic mode (Subtype (c), Type One) in Group STM, which

causes them to shift from the status of the anthropomorphic master of non-

anthropomorphic objects to that of an automaton in Descartes' sense of the term.

Figure 5.13 The tailor puppets and the screws in *Street of Crocodiles*; left (a), right (b)

As I discussed in Chapter Four, a puppet-as-puppet model's automatic mode of movement suggests that it is engaged in a clockwork mechanism or other higher power systems, from which its movement stems.

However, no such mechanism or system is implied for the tailor puppets, as the entire emptiness of their heads is likely to thwart the viewers' expectation that there might be any mechanically refined power source built in their outdated puppet bodies. A similar impression is made by a tailor puppet whose lower body is the wheeled box composed of a drawer and a glass chamber. Like the head, the drawer and the chamber seem to be all empty; mysteriously, further, the box is depicted as a transformer of materials in which a metal screw turns into a thread. Even when the kinetoscopic construction is considered to be a larger mechanism or system which is kept by human beings as higher powers, the tailor puppets are not depicted as connected to the system, for instance, through a cable.

As a possible answer to the question of what is the power source for the tailor puppets' movement that was once autonomous and is now automatic, a clue in close-up is given while the circular motion of the arms is repeated (Figure 5.13b). It is a screw fixed in the shoulder joint of a tailor puppet whose arm rotates

in a circular way. In many scenes preceding the close-up of the screw, the metal

materials of that sort are stop-motion animated to pull themselves out of window

ledges, larger mechanical parts and wooden floors, to roll over and over as if

running, to fall from above and even to fix themselves in floors. As mentioned in the

Literature Review, Weihe describes the movement of the screws as an abstract

artwork:

> It is shown in its essential 'screwyness' and observed merely for the sake
> of its specific grammar of movement—a left hand turn means appearing as
> a shape, a right-hand turn means disappearing into the wood" (2006: 45).

This observation attempts to decontextualise the screws and their movements that

are located in the complexity, heterogeneity and uncertainty of objects and forces.

In my observation, the autonomy and directionality of locomotive movement

impart to the screws the impression of being insects, for example, ants.

Significantly, this impression of the screws is connected with a tailor puppet

repeating the rotation of an arm by the shot, with a rack focus (Figure 5.14a -> b),

Figure 5.14 The shot with a rack focus in *Street of Crocodiles*; left (a), right (b)

during which the focus of the lens shifts from a screw rotating by itself (in the foreground) to the screw fixed in the puppet's shoulder joint (in the background). This shot suggests that all the autonomous movements of the screws might be a power source which enables the tailor puppets to perform their ritual and other acts.

The tiny materials do not seem to be the sole power source. Given that they are transformed into strings/threads in the glass chambers of the tailor puppets, the latter can be said to have a power. In this sense, the strings moving through pulleys throughout the film move by themselves and further put the puppet realm into motion inside the construction, rather than being pulled by another power higher or larger than them. In the film, the screws and the strings function as a kind of agent, in other words, quasi-agents which have thing-powers in terms of Bennett (2010).

In *Jabberwocky*, too, the puppets and objects are stop-motion animated to perform as quasi-agents, which make visible and bared the forces that they are exerted by and exerting on the animators as human agents in production. Even though being kept in one and the same room, however, they are presented on screen in a discrete way, in particular in terms of editing, so that their agentic capacities are disconnected in the film. In contrast to this case, in *Street of Crocodiles* puppets and objects are depicted to move and function in a loosely implied connection as if they have their own logic of engagement. The tailor puppets cannot move without the screws, and some of these metal parts are transformed into the strings through the glass chambers of the tailor puppets. Moving throughout the inside of the kinetoscopic construction, the strings move

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the pulleys as well as being moved by them, which would stop moving without the screws. As a terminal of the chains of the movement, the leading tailor puppet winds strings on a spool by moving its arms; the winding force is delivered to something connected to the strings. In the chains where forces and energies are circulated from body to body, it is not easy for the viewers to identify what is the subject of the mysterious realm and whether one movement is the cause of the other.

The chains of the quasi-agents and their agentic capacities in the film can be considered in terms of "distributive agency", a central concept of vital materialism put forward by Bennett, who notes, "A theory of distributive agency, in contrast, does not posit a subject as the root cause of an effect" (2010: Kindle 883). The theory relates to another concept called "assemblage" by the philosopher, who states:

> [A]n idea I will put to work for a vital materialism, is this: bodies enhance their power in or as a heterogeneous assemblage. What this suggests for the concept of agency is that the efficacy or effectivity to which that term has traditionally referred becomes distributed across an ontologically heterogeneous field, rather than being a capacity localized in a human body or in a collective produced (only) by human efforts. (2010: Kindle 672)

This vital-materialist notion of agentic capacities distributed in heterogeneous, not only human but also non-human, bodies pertains to the sensibility in which the

Quay Brothers show the movements of things, ranging from a puppet to a tiny dandelion fluff in the film. Turning back to the detangling of the knotted string in the earlier scene (Figure 5.9) I discussed above, the string is not merely pulled by two forces of tension connected to its extremes—if so, it will become more tightly tangled, but also the fabric material detangles itself in its own capacity on the continuum of distributive agency in a heterogeneous field. Even such materials assume power inside the construction, and therefore the puppet realm should be renamed, for instance, the thing realm, where anthropomorphic puppets like the tailors lose privileges over non-anthropomorphic, non-puppet objects, both intervening in the way their realm operates.

As suggested in the Quay Brothers' above-mentioned comment about the insect world (cited in Buchan 2011: 114), the operating logic of the thing realm is unknown to the viewers. It is an embodiment of outsideness for and beyond them, even though visible on screen. In *Street of Crocodiles*, the sense of outsideness is also heightened by the events happening in a scientifically and experientially unusual direction. For example, an ice cube comes to appear from a puddle of water; and levitating in varying velocities and trajectories from the ground, dandelion fluffs gather around to form a dandelion clock. In terms of our everyday experience, these events are likely to take place in the opposite direction. Almost impossible is that a puddle of water turns into an ice cube without an ice cube tray even when the temperature suddenly reaches zero degrees Celsius, and that the fluffs soar up against gravity. These paraphysical events serve as cues implying that there is a twisted and contorted field of forces and energies in the thing realm.

The theme of outsideness, or otherness, underlying the film gives impetus

for me to revisit the Schulz puppet in relation to the other puppets and objects that as discussed above, elude the definition of primary and secondary animatic transitions. What I attempt here is to question Weihe's (2006: 45) description of the Schulz puppet's booting-up as awakening from slumber. When the puppet begins to raise up the head, with the hand cut from the string by scissors, in the early scene, this inception of the puppet as a mover should not be simply reduced to such an anthropomorphic convention. For this reason, I also stress that the puppet's mode of movement is more insectomorphic than anthropomorphic alone. In the film, the puppet seems to have constantly existed in the kinetoscopic construction even before the human keeper comes on stage, and therefore, it should be considered as a part of the thing realm in which puppets and objects

Figure 5.15 The two puppets' synchronised movement in *Street of Crocodiles*

move, function, act and intervene in assemblages.

Its status is also suggested by two cues; one is the synchronised way in which the Schulz puppet and the leading tailor puppet move at the moment when the former is about to enter the latter's place (Figure 5.15). The tailor puppet in the foreground moves in the same way, almost at the same time, as the Schulz puppet moves in the background, and in particular, their synchronisation of body movement is shown to happen side by side, while the one is not looking at the other. Both seem to be in a degree connected with each other. The other cue is that the Schulz puppet picks and keeps a screw in a striped box (Figure 5.16). The screw is taken from the puppet and later replaced with a "screw shoe" by the tailor puppets, which are to transform the metal part into strings/threads. This exchange

Figure 5.16 A screw into the box of the Schulz puppet in *Street of Crocodiles*

of objects implies that the former is as much engaged in an agentic function as are the tailor puppets. The Schulz puppet is part of the thing realm.

Here, it should be remembered that the Schulz puppet boots up when the human keeper is about to peep into the thing realm in the kinetoscopic construction, and the viewers are initially given cues, like an over-the-shoulder-shot and the keeper's point-of-view shot, to see the mysterious realm as what is seen through his eyes. In this sense, the realm itself can be said to be what a kinetoscope film portrays inside the viewing device. In an interview,[12] the Quay Brothers make clear that they intended the human keeper's saliva to be a replacement of a coin as the admission fee (cited in Buchan 2011: 180). In other words, what we and the keeper see is not the thing realm itself but rather, the filmic image of it.

The kinetoscope film—fictitious as created by the Quay Brothers for *Street of Crocodiles*—of the thing realm is full of incomprehensible events, while it is certain that the objects appearing in the film did and might still exist somewhere in the real world. This perceptual conflict between the events and the object pertains to the concept of a cinema of apprehension put forward by Buchan (2013) in her essay on *Street of Crocodiles*. Buchan notes that the concept brings spectatorship to focus in this way:

I develop a somatic, epistemological and aesthetic proposal for the viewer's reaction to these vitalist machines: what I call 'a cinema of

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apprehension', a performative and actively engaged paradigm of spectatorship for puppet animation distinct from live-action cinema, and animistic animation.[13] (2011: 14).

Importantly, the quality of a cinema of apprehension is doubled by the framing device of the film, which is the live-action human keeper peeping into the kinetoscope in the theatre. On the one hand, we are basically located as the viewers of the whole film, and on the other, triggered to identify with the human keeper's view point by the techniques of camerawork and editing, we come to perform the viewers of the kinetoscope film in the film diegesis. The concept should be applied to the kinetoscope film seen by him and also us, the viewers, as well as to the whole film of *Street of Crocodiles*.

With this doubled cinema of apprehension in mind, and in order to clarify how it affects the viewers in the real world, I draw on what Gunning (2007) calls the mode of apprehension in his essay about photographs of "ghosts". Here, it should be remembered that as indicated in the Literature Review, the concepts and discourses about ghosts have not only referred to human beings but also objects or artefacts. Gunning states:

Spirit Photography juxtaposes physical presence with its contrary, a phantom-like transformation of the human body that does not remove it from our vision but does render it somehow unreal. Instead of simply

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[13] In my reading, Buchan's term of animistic animation intends to distinguish the Quays' non-anthropomorphic puppet animation from two dimensional, cel-based, hand-drawn animation in which the discourse of something-coming-to-life prevails.

being present, the phantom occupies the ontologically ambiguous status of "haunting"—enduring and troubling in its uncanny claim on our awareness and sense of presence yet also unfamiliar and difficult to integrate into everyday space and time. (2007: 100)

Like Gunning's, my focus is on the juxtaposition of the materially extant bodies, as physical presence, of the puppets and other objects in *Street of Crocodiles*, with the immaterial, or quasi-material, movements which transform the bodies into something even unreal and paraphysical, ranging from the insectomorphic behaviours of the Schulz puppet with a human-like appearance to the reverse motion of the melting ice cube.

This ghost-like movement of the sub/nonhuman bodies can be viewed from Crow's (2006: 49-50) account that such gestures or body movements are ghosts possessing bodies in motion and moving from body to body in circulation. Citing film scholar Lesley Stern,[14] Crow suggests gestures as "wandering homeless ghosts [that] take up residence in alien bodies, there to play out the repetition is their destiny" (p.49). In this sense, both the puppet and the object in *Street of Crocodiles* are possessed by ghosts, which we see on screen in an irresistible attraction and in an irremovable suspicion, that is, in apprehension.

The sense of apprehension is heightened by the ambiguous cues likely to be taken by a viewer as live action. The cues allude to a live human being existing in the thing realm (despite his or her awareness that it is impossible in terms of

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[14] Crow indicates the source of this citation: Lesley Stern (2002) Putting on a show, or the ghostliness of gesture. *Sense of Cinema*, July-August. Available at: http://www.senseofcinema.com/contents/02/21/sd_stern.html.

Figure 5.17 The rubber band and the effigy in *Street of Crocodiles*; left (a), right (b)

scale) at the diegetic level, or to a human agent intervening therein, for manipulating in live action rather than for animating, at the profilmic level. For example, the rubber band is shown to be quickly released from the state of tension (Figure 5.17a), and the motion vector and the trajectory of the release arouses in a viewer the sensation that there *might* have existed a human agent to exert force on the object whose elasticity is too difficult a physical property for him or her to control for frame-by-frame photography. The effect of this kinetic cue does not remain at the profilmic level but goes so far as to evoke in the viewer a feeling that a "real" human being has just left there at the diegetic level.

Another example is the human (possibly female) hand caressing or stroking the breasts of a female effigy (Figure 5.17b). As no clear cue is given for identification of whether it was animated or shot in live action, the moving hand figure of subtle nuances stimulates a viewer to suspect that it might be a real human being's and accordingly, that in the thing realm there might be a human being (or actor) who is as large/small as the puppets and objects, thereby disturbing the normal sense of scale that they are familiarised with in the convention of the Puppetopos. It is because if the female effigy is as large as a

human being, the other puppets and objects as its functional equivalent might be by far larger than the viewers expect.

However, neither of the human beings presents him/herself on screen, but rather is seemingly marginalised in terms of the agentic role and capacity both at the profilmic and diegetic levels. In the former aspect, unlike the human agents playing demiurgic life-giving creators of their puppet-as-puppet figures in Group INT, the Quay Brothers do not intend to assume such a capacity. Instead, they seek to evoke the material, formal and functional capacities that are unique and inherent to the rubber band and other objects they touch and are touched by. This serves to make those objects on screen look as if they are not processed but are presented as they are, even when cognitive dissonance happens to the viewers seeing their incomprehensible movements and events in the thing realm as a kinetoscope film.

As discussed with the case of the rotoscoped hand-drawn figure, Koko the Clown, in Chapter Two, the ambiguous figure of the human hand (Figure 5.17b) carries uncanny implications in terms of humanness and its "felt totality" (Grodal 1997: 110). As the film does not clearly show the diegetic identity and the material property of the hand figure, the question of whose hand the figure can be brings me to two possible answers, each creating a resultant sensation of difference in a viewer to whom the fragmented figure of the body part seems to be in live action. First, it is the female effigy that stokes the breasts with the hand which seems to be a female one. The effigy is the hybrid of an inorganic body *alive* with an organic arm, and this is likely to arouse a sense of horror (as well as a sensual effect) in the viewer concerned that the rest of the original human body is lost in the thing

realm. The other possibility is that a human woman exists in the thing realm where

human beings are not given the status of a master or ruler; rather, they are the

subjects of the tailor puppets whose place is full of anatomical illustrations of

human bodies. In either case, humanness and its bodily totality are seriously

threatened by the tailor puppets or other nonhuman agents amputating and

suturing human body parts in the same way as the head of the Schulz puppet.

Figure 5.18 The keeper's saliva and a fly in *Street of Crocodiles*; left (a), right (b)

The film does not enable the viewers to find a place for anthropocentric

comfort even in the human realm where the keeper peeps into the thing realm.

Above all, the keeper does not assume the entirety of humanness when dropping

saliva, instead of inserting a coin, into the kinetoscope (Figure 5.18a). The saliva

associates him with a bug which vomits saliva, and this association leads to the

flies appearing in the thing realm; one is shown scurrying and flitting around a

bottle (Figure 5.18b), and the other is put by a tailor puppet on the mouth of the

Schulz puppet whose head has just been replaced with another. This association of

his saliva with those flies[15] locates even the human keeper somewhere, with the

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15 It is also reported that associated with magical effect, human saliva was employed for rituals

wall becoming diaphanous, between both realms. In this sense, the whole film of *Street of Crocodile* is a doubled cinema of apprehension.

5.3. Puppets and Puppeteers as Serving Agents in *The Demon*

Extending from the discussions and findings with the two previous cases, this section foregrounds the vital-materialist view of things as an "intervener". Viewed from this perspective, it is not only animators but also objects and materials that take part in the process of creating movements in animation film. In the case of *The Demon*, the animator Kawamoto borrows the sensibility and the kinetic vocabulary of intervening puppets from bunraku in which human puppeteers have developed a non-anthropocentric, object-oriented relationship with puppets for centuries. This relationship is influenced and concretised by the material constitution and mechanical structure of puppet bodies, the system of puppeteering them, and the structure of the stage on which both puppeteers and puppets perform. In terms of puppets themselves, I also consider it within religio-philosophical contexts like Shintoism in Japan.[16] With these traditions in mind, I analyse the case to illuminate theurgic agency which Kawamoto demonstrates in stop-motion animation.

Based on one of the Japanese collection of tales, *Konjaku Monogatari*, written in the twelfth century at the latest, *The Demon* involves three puppets, in

in China, Arabia, Greece and Ethiopia (Best 1976). My analysis of the human keeper's saliva focuses on the Quays' interest in insects and Buchan's account of insecticity.

[16] It should be noted that Shintoism is not a discrete religion but has been combined or mixed with Buddhism over centuries (Ama 1996). This combination is usually called *shibutsu-shugo* (syncretism of kami and buddhas).

human form, stop-motion animated to perform respectively as two brothers and their old mother. What I am much concerned with is that in the film the director and animator Kawamoto sought to employ the puppet design of bunraku, a form of traditional Japanese puppet theatre (Okada 1998a: 148; Anonymous 2007: 39). The employment of the design of bunraku puppets implicates a way which the director took in exploring the movements of puppet bodies in stop-motion animation. In terms of puppets' body movement, Kawamoto states:

> The point is not to make it [the movement of the puppet] look like human, but create it . . . This issue is similar to that of bunraku. In their early days, bunraku puppeteers tried to make the movements of puppets close to those of human beings, but it was impossible. Instead, they turned to seeking the essence of movement by excluding unnecessary movements. (2015: 113; English translation mine)

Here, Kawamoto emphasises that a puppet's performance should not be an imitation of a human being's, but rather be created or found in a proper way to the puppet itself. In this vein, the body movements of the three puppets in *The Demon* are, as I will show in this section, intended to build on those of the bunraku puppets, thereby not representing those of human beings while demonstrating a non-anthropocentric sensibility of objects in human form. This is why I classify them as puppet-as-puppet models in Group PMT.

In an early part of *The Demon*, one of the most distinct, unconventional body movements is seen when the two brothers walk heading to a forest for

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Figure 5.19 The two brothers walking in *The Demon*; clockwise from the top left

hunting deer (Figure 5.19). Each puppet's walking is presented with the arm and

leg joints functioning as the pivots of the locomotive movement. The right lower

arm is put horizontally across the belly while being bent at the elbow almost

perpendicular to the right upper arm. The left arm seems to be kept perpendicular

to the ground while being slightly bent at the left elbow as if some strain is applied

to the body parts. The two legs of each puppet are bent at the knees raised up in

varying degrees. With this stylised form of posture kept and also with the right and

left legs alternately moving up and down, the two puppets begin to walk forward

frame left, but do not show any change, any progress in location when viewed in

relation to the background elements on screen. Quite synchronised between both

puppets, the walking movement is intended to highlight their presence (on screen)

as performers rather than imitating the way in which a human being walks.

This kind of body movement is seen in what is called *roppo*, a pattern of body movement (kata) which while moving ahead, a puppet displays with the arms and legs in bunraku. When I asked if roppo signifies walking in the interview with me, the leader and puppeteer of the *ningyo-joruri* troupe named Saruhachi-za, Hachirobei Nishihashi[17] noted, "So to speak, when a puppet asserts itself as if saying, 'Here I am'" (2019). The roppo-style walking is employed to give a strong impression of "being-there-ness" to bunraku puppets on stage.

Tied in with the bunraku-style design and the roppo-style walking movement of the puppets, the background serves to evoke the presence of a different type of agency on screen. In particular, it lacks the ground on which the puppets should be made to step, and therefore, in the roppo-style movement, their bodies appear to be hovering or floating in mid-air. Given the theatricality of the bunraku puppetry, this impression of levitation stimulates the viewers to remind themselves of the bunraku puppets hoisted against gravity by puppeteers in the stage set which instead of the floor for puppets to step on, holds the pit (*funazoko*) that is hidden behind the waist-high partition (*tesuri*) between the stage and the audience.

In the pit, bunraku puppeteers normally manipulate puppets by pushing them upward manually or with rods. Further, a bunraku puppet for a leading role

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[17] After studying theatre studies in Waseda University, Nishihashi began bunraku puppetry training under Minosuke Yoshida in 1970 and worked as a bunraku puppeteer with the stage name of Minoshi Yoshida for nine years. In 1979 when he left the bunraku world, he moved to the island of Sado, where old forms of performing arts have remained for several centuries, and he has since then been engaged in *bunya ningyo*, an old form of Japanese puppetry. In 1995, he launched his own puppetry troupe, Saruhachi-za, to revive Buddhist storytelling art, while collaborating with old forms of Japanese music and Western music.

involves three puppeteers: the main puppeteer (*omozukai*) hoists the upper body of the puppet with his left hand inserted into the chest through the hole in the back of the torso while his right hand supports and controls the right hand (Adachi 1985: 34; Gross 2011: 70); using a control rod, the left puppeteer (*hidarizukai*) is responsible for the left hand (Adachi 1985: 34); the leg puppeteer (*ashizukai*) supports and manipulates the legs and feet with his hands (p.51). In addition, the bodies of the three puppeteers are clothed in black as if they are part of the background or the shadows of the puppets,[18] except that the main puppeteer exposes his face without the black hood on.

Figure 5.20 Kamiya walking in the bunraku play *Shinju Ten No Amijima*

For example, the puppet of the leading character Kamiya is manipulated to walk in mid-air (See the puppet with a white hood on in Figure 5.20), when he hangs around the Gay Quarter at the beginning of Scene Two in the bunraku play *Shinju Ten No Amijima* (The love suicides at Amijima).[19] As a result, the leading

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18 Shutaro Miyake (2005: 302) notes that the puppeteers clad from head to toe in black can be regarded as the shadows of the puppets operated by them on stage.
19 This bunraku play is included in NHK (2008) NHK Special: Ningen Kokuho Futari, Yoshida Tamao Takemoto Sumitayu (NHK Special: Two Living National Treasures, Yoshida Tamao and Takemoto Sumitayu) (DVD). NSDS-11876. NHK Enterprises.

Figure 5.21 A marionette on the ground in *The Nut Cracker*

puppet appears to drift or hover with all the main body parts constantly supported up by the vectors of forces working in the opposite direction to gravity. Not given any floor in a literal sense, the puppet bodies hoisted to move create the sensation of anti-gravitational levitation.

In the marionette theatre, forces surrounding and working on puppet bodies create a different sensation of force field. In *The Nut Cracker*,[20] for example, we can see the legs of a boy puppet limp when they touch the stage floor (Figure 5.21) in the introductory scene where several wooden puppets of boys and girls dance in front of the entrance of Clara's residence on Christmas Eve. Such limpness is due to the reaction force that the floor imparts on the puppet's feet which at the same time are imparting an action force on it from the falling motion of the wooden body parts. The strings set to the puppet body do not seem to be able to control all

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[20] This marionette play is included in Salzburg Marionette Theatre (2012) The Nutcracker/Casse-noisette (DVD). 10132. Bel Air Edition.

the body parts at the same time against the reaction force from the floor and the force of gravity.

The kinetic sensation of levitation experienced in the bunraku puppetry is simulated by the puppets of the brothers which in *The Demon* are shown moving, with the black blank background functioning to nullify the very concept of a ground; this kind of body movement is also shown in the subsequent scene in which they go up a hill. It is via this sensation that the background evokes the presence of heterogeneous agency. At the profilmic level of the film, the floating movement of the puppet bodies cannot happen without the intervention of human agents. Here, the focus is the very sensation of floating rather than the moving puppets, which evokes the presence of (simulated) bunraku or bunraku-style puppeteers, as well as stop-motion animators, as human agents invisible on screen.

Some readers might remind themselves that unlike the film, *The Demon*, the bunraku theatre allows puppeteers to appear and perform alongside puppets on stage. The very presence of the human agents in bunraku is a key to clarify the way in which the film activates the heterogeneous spectatorship to defamiliarise the convention of human agency easy to experience in the Puppetopos. Observing the bunraku puppeteers' onstage visibility in relation to spectatorship, Dassia N. Posner remarks:

> Particularly in performance modes where the puppeteer is fully visible,
> such as bunraku, most of the pleasure in watching lies in the mind's
> oscillations between remembering and forgetting that the puppeteer is
> there, between believing in and marveling at the fiction being created.

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(2014: Kindle 5746)

This account points out that the viewer's mind can shift at any time between the two opposite modes, remembering and forgetting, in terms of the onstage visibility of human agency. In other words, the bunraku machinery has capacity to activate a perceptual processor in the viewer's mind, which can marginalise something visible to disappear out of sight. Such a perceptual process is shown by the experiment which a psychologist Dobromir Rahnev and his research team conducted to find how the frontal cortex involved in thinking and making decisions operates with respect to visual perception (Georgia Institute of Technology 2016). In the report, "Out of mind, out of sight", about the result achieved from their experiment, the researchers indicate, "Sometimes the frontal cortex isn't expecting to see something, so although it's in plain sight, it blots it out of consciousness" (Georgia Institute of Technology 2016).

 In Kawamoto's film, *The Demon*, the cue of levitation triggers in the reverse direction the perceptual event which is supposed to happen in viewing a bunraku play. During the event, a viewer's mind alternates between apprehending that there might be a human agent somewhere behind the puppets in the dark and recognising that there is nothing but the human-like objects on screen. When the presence of a human agent comes into a viewer's perceptual scope, the supposed agency does not only involve stop-motion animating. It also implies puppeteering because such human agency is evoked by the puppets' bunraku-style body movements—these are of course constructed using the technique of stop-motion animation—throughout the film.

As I observed with the roppo walking above, the bunraku-style body movements are not imitative of human beings but rather in the filmmaker's puppet-oriented intention, are proper or inherent to each puppet body. Here, I analyse two examples of the puppet-specific body movement which demonstrates the animator Kawamoto's intention that is to evoke the sensation of puppeteering. In the scene where the younger brother is in danger with his head grabbed by a demon (Figure 5.22a), the elder brother tries to help him. Given that the former is spatially set left while the latter right in the scene, the viewers motivated by narrative are likely to expect for the elder brother's eyes to follow the direction to the upper right of the frame. However, his eyes are seemingly cast in different

Figure 5.22 The directions in which the elder brother is looking in *The Demon*; top left (a), top left (b), bottom left (c), bottom right (d)

directions: upper left (Figure 5.22b); upper right (Figure 5.22c); lower left; and almost straight toward the camera (Figure 5.22d). The puppet's aimless, vacant eyes are subject to the movement of the head turning around on the neck, which can perplex the viewers familiarised with the anthropomorphic movement of puppets' eyeballs or other relevant body parts to provide the impression of gazing. This disorienting movement of the puppet's gaze can be said to be a *kind* of figurative performance in Crafton's (2013) use of the term, which is for the most part due to the structure of the bunraku puppet body. Although some puppets for leading roles in bunraku are equipped with the movable eyes, mouth and eyebrows,[21] the neck is still a central joint part on which a puppeteer can swing, wobble and shake the head of a puppet, by means of a thick rod and elastic strings that are built in the head of most puppets.

In the same scene, Kawamoto employs another body movement unique to the bunraku puppeteering. Just before the demon appears stealthily, the elder brother puppet is stop-motion animated to show instructive gestures when telling the younger brother puppet to do something for deer hunting. In the course of the gestures, the puppet's right hand on screen is raised up higher than expected and then, as if pulled by an elastic rubber band, is slightly moved up and down the point where an instruction is shown with the index finger (Figure 5.23). Such a vibrating pause for quite a short period of time is seen between the two opposite vectors of momentum whenever the hand-and-arm movement is presented as a unit of gesture. This is an influence from the bunraku puppeteering usually

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[21] In addition, Adachi points out that in bunraku, "many heads do not have mobile faces" (1985: 34).

Figure 5.23 The elder brother's gestures (left) in _The Demon_; clockwise from the top left

involving three operators for one puppet. In the interview when I inquired how the

bunraku puppeteering is related to the pause, Nishihashi explained:

> In the case of bunraku, one puppet is manipulated by three puppeteers. It
>
> means that the main puppeteer needs to send the left or the leg puppeteer
>
> the signs that he will move on to the next action, and I think the signs
>
> result in the pause. For instance, he should first pull the puppet's head to
>
> the left slightly before he brings the puppet to the right. And he first pulls
>
> the head to the right a bit when he wants the left puppeteer to raise the
>
> puppet's left hand. This slight movement cues the left puppeteer to
>
> prepare himself to raise the left hand. (2019; English translation mine)

This bunraku-specific trajectory of body movement emulated in *The Demon* relates to Kawamoto's non-anthropocentric view of the relationship between animator and animated. In an interview with Emiko Okada, Kawamoto makes a religio-philosophical, Shintoist remark of what puppets are:

> They might be the most mysterious thing that human beings have ever made. We would be in trouble without them, even if there is no difference whether we have them or not. They might be something that fills the emptiness inexplicable in human mental life. Puppets would become necessary as a medium between the human world (*ningenkai*) and the spirit world (*reikai*). (Okada 1998b: 159; English translation mine)

Here, the stop-motion animator and puppet maker notes that puppets are more than simply objects, which go beyond human beings' comprehension. His indication of puppets' capacity to engage in the human world echoes the concept of thing-power that Bennett (2010) seeks to establish in her vital-materialist consideration of nonhuman—or quite-not-human in Bennett's (2010) sense of this term—things as quasi-agents and interveners between the human realm and beyond. Shintoism is not located so far from the scope of the philosopher, who defines vital materialism as "a doctrine has affinities with several nonmodern (and often discredited) modes of thought, including animism, the Romantic quest for Nature, and vitalism" (Bennett 2010: 243).

Kawamoto goes so far as to reverse the anthropocentric view of the role of

animators working with puppets. Probably in terms of the conventional discourse of animation as bringing something to life, Okada asks in the interview with Kawamoto what it means to impart life to them when they are like *yorishiro*. According to the Shinto priest Yamakage, the Shintoist term, yorishiro, signifies "a spiritual antenna for the spirit of kami to descend in order to manifest its presence" (2006: 66). He adds, "There are several types of *yorishiro*, including trees, stones, rocks, or in some cases animals" (p.66). Further, hitokata, albeit "inorganic" objects, are considered to function as yorishiro, which are the relatives of ningyo (human simulacra) in the Japanese language and religious tradition. The principal view of life and kami in Shintoism is outlined by Yamakage, who writes:

> Japanese spirituality has always recognized that Kami come in different forms, shapes and sizes and have different roles and functions. The spiritual dimension, the world of Kami, permeates all life forms, including humans, animals, and plants. All forms of life are interconnected and interdependent. (2006: 210)

Okada's use of the term, life, is likely to rely on this Shintoist view, in which yorishiro can be said to become a life form when kami dwells in the ritual object. What I am much concerned with here is not the problematic term, life, which Okada refers to, but the way in which Kawamoto redefines the role of animators within the context of filmmaking. Kawamoto answers her question:

> I think that life is inherent to each puppet when it is made. That is to say, it

already has life, and a puppet animation film finally comes into being when all the film crew, including animators and the lighting department, get engaged in helping the life radiate. (Okada 1998b: 159-160; English translation mine)

In his redefinition, animators are not expected to add to a puppet something crucial, often called "life" in the convention of both the Tooniverse and the Puppetopos, that would make it perform a diegetic role motivated by narrative. Rather, they should serve as co-agents, or co-intervenors, for each puppet to reveal something, inherent to itself, to the degree that the (human) viewers can notice something that would often trigger them to call it life or soul.

In consideration of the two more groups of human agents for music and verbal narration, as well as puppeteers, in bunraku, Keene finds in much the same tone as Kawamoto that the bunraku puppeteer:

does not use the puppet to express his own conceptions; he enables it to express its own emotions by imparting the strength of his body. We can forget his presence more easily than a chanter's or a samisen player's because he is hardly more than an extension of the puppet. He should be as impersonal as the electric current which indifferently makes a train run on its tracks . . . (1990: 159).

This is also the sense in which as the director and sole animator of *The Demon*, Kawamoto cites bunraku for the design and body movement of puppets. The

traditional Japanese puppet play is rich with such impersonal styles and patterns (kata), which entails the puppet-specific trajectories of bodies, that he believes should be central to the aesthetics of puppet animation. As the animator comments, "Therefore, performance proper to puppets should not be realistic but stylistic" (Okada 1998a: 148).

In the film, Kawamoto's stylistic strategy of stop-motion animation helps the puppets elude the definition of primary and secondary animatic transitions. It does not intend to provide the perfection of puppets imitating human body movements as a demonstration of the human mastery of inert objects. Walking and gesturing on screen in a human-like, yet bunraku-inspired, fashion, the puppets of the brothers under my analysis stimulate the sensation, or apprehension, that behind them might be human agents, staying invisible and impersonal, who in their capacity of theurgic agency, are supposed to help the objects present themselves in front of the viewers' eyes.

This kind of sensibility put forward and demonstrated by Kawamoto is what Bennett finds in human agents working with objects and materials in different professional fields: "Instead of a formative power detachable from matter, artisans (and mechanics, cooks, builders, cleaners, and anyone else intimate with things) encounter a creative materiality with incipient tendencies and propensities, which are variably enacted depending on the other forces, affects, or bodies with which they come into close contact"(2010: Kindle 1267). In this vital-materialist account, the scholar stresses that objects and materials have their own potential energy of creativity, which will come to take a form in interaction with human agents. In Okada's recollection, indeed, Kawamoto, who himself sculpts and makes

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puppets, said, "When I make the head of Komei [a puppet's role name], it sounds as if the puppet says to me, 'This is not my face'" (Okada 1998b: 160).

My focus is not to reduce the animator and puppet maker's artistry to a specific, known-as-Japanese, view of puppets and objects. Rather, I have sought to place his way of stop-motion animating within a larger philosophical locus of vital materialism which can extend to Shintoism or East Asian thinking. Kawamoto's film, *The Demon*, shows that puppets' body movements already lie in the bodies, the materials of which they are made and the way in which the materials are incorporated into a body, and it suggests that stop-motion animators should find the ways, or styles, in which the puppets can present themselves.

Conclusion

In this PhD thesis, I have examined and analysed the puppet-as-puppet figures, classified into four Groups, in terms of the mode of movement, while questioning and problematising two conventional notions: (1) animation can bring anything to life, and (2) in animation, movement is synonymous with life. In conducting this research, I have made explicit contributions to animation studies, which I summarise as follows.

First, through this research I developed demonstrably well-defined terminology and methodology both of which were applied to the analysis of the puppet-as-puppet figures and their movements on screen. As my analysis embraces the figures signifying not only puppets-as-puppets but also humans and animals, I have demonstrated that the terminology and methodology I have proposed is applicable to a wider range of figures in animation. In particular, primary and secondary animatic transitions function to clarify the different modes of movement (including the stationary state) displayed by the puppet-as-puppet figures in animation, as well as to distinguish them from live action, thereby shedding light on the specifics of movement which cannot be simply reduced to a unitary concept of movement. A further application of the two terms is that the element of transition included in them stresses the changeability of the mode of movement imparted to a figure in animation. As shown in my analysis, most of the puppet-as-puppet figures display the change between different modes of movement in time, and this has a significant effect on the impression of each figure

being perceived as animate or inanimate, and frequently oscillating between both.

In addition to the above, I furthered the development of the methodology which, expanding on extant theories, works in a specific and proper way for animation. Given that animation studies has suffered from the multifaceted-ness of animated figures and visuals, being created with a variety of techniques of animation, I demonstrated the effect and validity of my methods of classification and typology that I applied to the analysis of the puppet-as-puppet figures. Furthermore, I progressed the use of neoformalist film analysis and film vector analysis for animation studies, particularly in terms of describing, analysing and interpreting the not-narrative-motivated movement of three-dimensional figures as a parametric device, in relation to gravity and other forces. In doing so, I also made clear that the vector quantity described by both a magnitude and a direction is far more effective than the scalar quantity described by a magnitude alone in the analysis of animated movement. I am sure that the systematised terminology, taxonomy and methodology I have set out in the thesis will make a significant and influential contribution to future research in animation studies and other fields of the studies related to moving images as well.

Another aspect of my work is the application of this systematised terminology and methodology to my case studies. I have sought to emphasise that the impression referred to as life or coming-to-life in animation studies is not monosemic but polysemic, and therefore, that the specific movements of animated figures require scholarly investigation rather than reliance on clichéd and reductive general terms such as "life", "soul" or "anima". Indeed, my analysis proves that the meanings of figural movement in animation can be examined with respect to the

parameter of the mode which demonstrates the concepts implied by the figure itself and the context where it is located. For example, the puppet as one of my critical foci led to the examination of how the modes of movement displayed by some puppet-as-puppet figures in narrative-motivated films are deeply influenced by and reproduce the Cartesian view of humans, animals and machines.

By conducting the case studies in Chapter Two, I sought to supersede the neoformalist assumption of human agency by redefining the self-figuration of animators as a demiurgic creator. Importantly, Chapter Four demonstrates the difficulty of considering animators as the "sole origin" in the creation of animated figures' movement. In tactile manipulation and interaction, rather, the human agents' bodies are often possessed by the models which they seek to make re-perform as puppets per se on screen in sub/nonhuman modes of body movement. At the same time, some of the human agents inflect, contest, modify, revise and develop, on screen and in shooting, the sensibilities of movement by animating hand-drawn figures or built models. I also proved in Chapter Five that we need another concept of "theurgic" for animators who do not claim to be the sole demiurgic creator of a figure in animation.

These findings serve to clarify the problems with the two key notions I set out above: (1) animation can bring something and even anything to life, and (2) movement has a synonymous relationship with life in animation. In order to demonstrate the problematics of these, I developed and worked with three main hypotheses focused on the puppet-as-puppet figure: (1) the puppet-as-puppet figure is depicted as different from the figure representing a human or an

(anthropomorphic) animal in the diegetic world of the animation film and also the hybrid film of animation and live action, (2) this difference is visualised by the movement, as well as the form, of the figure, and (3) the mode of movement interrelates with how the animator or human agent envisages the figure both in production and in projection. An additional hypothesis is that such human involvement with the puppet-as-puppet figure in animation is grounded in the discourses and traditions about the definition of humanity and puppets as human simulacra. With these hypotheses in mind, I analysed the cases I selected as emblematic from each of the four Groups from Chapters Two to Five.

In Chapter Two, I analysed a selection of films from Group INT (Interaction), in which the live-action human animator creates and interacts with a hand-drawn human or animal simulacrum on screen. Both in *Gertie the Dinosaur* and the *Out of the Inkwell* series, each animator on screen is depicted in his demiurgic performance to achieve the perfection of life creation using the techniques of hand-drawn animation (and the Rotoscope also, in the latter case). My analysis proved that the animator does not consider the human/animal simulacra to be alive because of the way in which they are dealt with and exploited on the grounds of the material reality that they are hand-drawn. In particular, I clarified that in the *Out of the Inkwell* series, the hand-drawn figure Koko is depicted to look and move as if a fairy-tale slave, a robot, an animal and a mechanical toy. Also, it proved that such sub/nonhuman traits of the Koko figure are cued in a concoction of theriomorphic and mechanicomorphic, as well as anthropomorphic, modes of movement. Depicting his drawn figure in this way, the live-action human animator Max Fleischer envisions himself as a Taylorist engineer

who aims at the mechanical (re)production system of drawing and animating figures. Following these findings, I proceeded to analyse the hand-drawn human-like figure, appearing in *Manipulation* as a recent case, which is depicted to resist being its animator-creator's marionette and to survive his decision of discarding it for his artistic ambition. The analysis revealed that the film focuses in a self-reflexive way on the animator's unfulfilled mastery over his unfinished creation and on the hand-drawn human figure which without appearing in a completed film, is disposed of as materials useless to the human agent. From this analysis of Group INT, I succeeded in elucidating the conventional power relationship which the animator in production is likely to form with his or her human-like or animal-like figures as materials or puppets for animation filmmaking.

The focus in Chapter Three was on a selection of the conventional, narrative-motivated cel-based animation films which I classified in Group CEL, drawing on Crafton's concept of the Tooniverse. Considering the vastness of this Group, I developed a typology to help articulate the specificity of each case, in accordance with the key criteria, (1) primary and secondary animatic transitions and (2) interaction with other characters, both considered in relation to the mode of movement and narrative motivation. Particularly in the case of the first criterion, my experience of film viewing as well as the literature review led me to put forward three factors, (1) shifting to a different world, (2) magic and (3) technology, for the happening of secondary animatic transition which I define as being tied in with the film narrative. Interestingly, each of the three factors also relates to the convention in which animation itself is referred to as imagination, magic and technology in the Tooniverse, and these are narrativised in the

animation films motivated by the narrative of puppets and human/animal simulacra.

Examining the case(s) of each of the eight Types (with the three Subtypes included in Type One) in terms of the mode of movement, I showed that the two problematic notions ignore and marginalise the capacity of animation which can make human-like or animal-like figures appear to be inanimate objects on screen and the complexity of the relationship between the mode of movement and the impression of life.

First, although the cue, passive or automatic, of movement for primary animatic transition is given to the puppet-as-puppet figures in Group CEL, they do not provide any impression of "coming-to-life" but remain non-living objects. In two cases—the lady figurine in *Pinocchio* and Pooh in *The Many Adventures of Winnie the Pooh*, even primary animatic transition is not given, thereby making them remain in the stationary state; interestingly, the latter film begins with the live-action sequence where the physical three-dimensional models of Pooh are displayed on screen to provide the impression of an inanimate object in a photo-indexical manner.

Second, when the cue of movement for secondary animatic transition is given to the puppet-as-puppet figures from Types Two to Eight in the Group, they seem to gain the quality of life for a while, but in the development of the film narrative, are subsumed under the dominant discourses or traditions in which puppets, even if appearing as alive as human or animal characters on screen in motion, are defined to be not real but fake—furthermore, not in the waking but dreaming state (Raggedy Ann), not for maturity but for childhood (Pooh), not at

the centre but periphery of the human world (the wind-up puppets in *The Mouse and His Child*), not human but subhuman (Pinocchio and Astro Boy), not good but evil (Krusty), not the original but a deceptive copy (the automaton Queen).

Drawing in the main on the Cartesian view of humanity and La Mettrie's man-machine discourse as its radical materialist counterpart, I discussed and tackled the way in which the mechanicomorphic and/or paraphysical cues given to each puppet-as-puppet figure are used to reproduce such binary oppositions shackling it in the film narrative. The most remarkable cues of that kind include convulsive and repetitive body movement, the body's locomotion and/or levitation against gravity, and a limited range of the body movement. For the same effect, Raggedy Ann, Pinocchio and Pooh are given formal cues of differentiation as a priority, rather than kinetic cues, which centre on the direction of the gaze, the discreteness of the limb joint, and the shape of the eyeball and the hand/foreleg.

In this discussion, I also shed light on the diegetic role and status of the human or (anthropomorphic) animal characters much engaged in interaction with the puppet-as-puppet figures in the film narrative. They can be classified in two groups. First, Pinocchio, Astro Boy and the automaton Queen are of one group, created by toymakers or engineers in the film narrative. Notably, such diegetic roles are performed by the on-screen live-action animator Max Fleischer in the *Out of the Inkwell* series. To put it conversely, those human or anthropomorphic animal characters making toys and engineering machines can be said to function as the proxy of an animator or human agent who envisions him or herself under the conventional notion that animation can bring something inanimate to life. Second, Raggedy Ann, Pooh, the wind-up toy mice and Krusty are depicted or implied as

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products to be sold and bought in mass markets. In other words, it is in the capacity of a consumer or an owner that the human characters interact with them.

In Chapter Four, I analysed a selection of the conventional, narrative-motivated stop-motion puppet animation films which I classified in Group STM (Stop-motion). For this analysis, I defined the Puppetopos, as the stop-motion counterpart of the Tooniverse, in which the animation films created using physical puppets/models have been produced and received in such an extensive way as to form and familiarise conventions. Considering the extensiveness of the Puppetopos, and modifying the typology of Group CEL, I developed the typology of Group STM. At the same time, I also accounted for the media specificity of stop-motion animation, focusing on the way in which the animator interacts with the puppet/model in a physical and tactile way and on the resultant relationship of uniqueness and irreplaceability between animator and animated emphasised in the Puppetopos. In terms of these, I elaborated the spectatorship proper to stop-motion animation, as distinct from that of hand-drawn animation.

As with Group CEL in Chapter Two, my analysis demonstrated that the problematic notions do not generally apply to Group STM. Although primary animatic transition occurs to the puppet-as-puppet models in the Group, the kinetic event does not lead to the impression of being alive but rather being an inanimate object. In all the eight Types, as I showed, the animators involved *could* and *did* make models or objects—conventionally perceived as non-living by the viewers in the real world—appear to be non-living, by choosing either of the two modes, passive or automatic, of endowing them with movement or by leaving them stationary. Further, I made clear that such an impression is created by an

interwoven operation of the puppet body's movement, size relationship and material constitution, and the number of the puppet bodies of the same design or series, as conspicuously seen in *Santa Claus Is Comin' to Town*. A noteworthy point about the kinetic cues is not *what* the figure is in reality but rather what it *seems* to be on screen. As seen in *Santa Claus Is Comin' to Town*, the automata-like, non-automatic models are preferred to real automata in motion. It is because in production the models should be controlled frame by frame by animators, and in narrative motivation, demonstrate on screen what it should seem to be rather than what it is.

When secondary animatic transition happens to the puppet-as-puppet models from Types Two to Eight of Group STM, most cases show a similar tendency to those of Group CEL. In the film narrative, for a while, the effect of secondary animatic transition keeps them performing as much as the other models signifying living humans or (anthropomorphic) animals, but it is brought to a halt when being no longer required in the development of the narrative. Even while the effect functions in the narrative, the puppet-as-puppet models' diegetic status as fake and/or inanimate is implied by mechanicomorphic cues (the repetitiveness or limitedness of body movement) and paraphysical ones (the body's levitation against gravity). I also showed that as in Group CEL, some models' fake-ness and/or inanimacy in Group STM are reinforced by the cues of its reproducibility and replaceability under the order of the factory system and the mass market implied in the film narrative, which is obviously seen in *The Mascot*, *Rudolph The Red-Nosed Reindeer* and *The Nightmare before Christmas*.

These similar tendencies between Groups STM and CEL is what I aimed to

find developing the typology of each Group. The aim was to bring to light how extensive influence anthropocentric views, including the Cartesian stance, of puppets and objects have on the way in which they are not fully *animated* in the widest and densest sense of the term but are used to reproduce and reinforce the sensation of being not only fake and inanimate but also servile (the puppy puppet in *The Mascot*), imaginary (the fabric dog in *The Mitten*), peripheral (the discarded toys in *Santa Claus Is Comin' to Town*), and evil (Preston the robot dog).

Applying the typology in analysis, I intended to accentuate the specificity of Group STM as distinct from Group CEL based on the transparent material of cel. This intention influenced my selection of the cases to be examined. Analysing the puppet-as-puppet models' mode of movement in relation to the film narrative, and considering that most figures used in stop-motion animation are puppets and objects, I demonstrated the cases to be symptomatic of the animator or human agent's relationship with the model/puppet that is pertinent to phenomenological body extension and connection formed through touching and being touched. The most remarkable case is *The Hand* which I selected as Type Five. The film shows that the puppet-as-puppet model on screen can be an analogy of a human agent drifting between the status of a creative artist animating puppets and that of a puppet being animated or puppeteered by a higher power in production, as well as a presentation of the puppet itself shifting between the status of an autonomously performing character and that of an object enslaved and victimised by the manipulating power of the hand in the film diegesis. Building on the studies of the Romantic literature on puppets or human simulacra, I interpreted those symptomatic cases, in terms of Romantic irony, as addressing or problematising

the issue of the artist's mastery over materials on which his or her work is grounded and relies.

Chapters Three and Four reveal that the mode of movement in animation drifts on a continuum of the impression of living-ness and non-living-ness, tied in with the hierarchical impression of humanness and sub/nonhumanness. These animated impressions can make something deserve to be called human or less/not human, inasmuch as we persist in the notion that animation can bring something to "life". This brings me to the claim that animation can manipulate and control our sensibilities of humanness or sub/nonhumanness, as well as those of life or non-life. In this sense, the puppet-as-puppet figure in animation is obviously effective in defamiliarising and revising our sensibilities not only in terms of aesthetic experience but also ethical and political performances, as shown in the figures or models of Koko, Pinocchio, Preston, and other unnamed puppets and toys.

The fifth and final Chapter is focused on three cases, *Jabberwocky*, *Street of Crocodiles* and *The Demon*, from Group PMT (Parametric). My central aim with them was to describe each puppet-as-puppet model and its movement, both as bared, naked parameters in so proper a way that the description might not reduce the parameters to a narrative by which none of the films is motivated, as well as to the conventional notion of animation-bringing-something-to-life. Applying the method of film vector analysis and the Minimalist/Constructivist concept of faktura throughout all the three films, I succeeded in describing the way in which drawing trajectories in space, a puppet or an object on screen embodies not only movements but also multiple forces as vector quantities.

In doing so, I interpreted and evaluated the sensation created by the

trajectories and other bared parameters in terms of the political philosopher Bennett's vital materialism, in the first place, among other non-anthropocentric views. Applying to my subject the recent philosophical concepts about the human being's non-anthropocentric relationship with objects, materials and things, including puppets, I showed that the puppet-as-puppet models in three films function to evoke a peculiar sensation in the viewers, while defamiliarising the viewing skills formed in the Puppetopos. The sensation aroused by those models is that what we see happening on screen was not created by a human agent(s) alone, but might have been involved and still be involved in puppets or objects as quasi-agents. In the viewing field where a spectator is experiencing the sensation, animators or human agents are not envisioned being a demiurgic creator to determine the movement of puppets/objects and its concomitant effect of either animacy or inanimacy; instead, they are redefined to be another kind of agent I call theurgic.

Finally, I am aware that I do not focus on possible cases of non-anthropocentric puppet-as-puppet figures in two-dimensional cel animation, while discussing both of the anthropocentric and non-anthropocentric cases in three-dimensional stop-motion animation. As discussed with Group PMT in Chapter Five, the non-anthropocentric is not considered to stand alone but to involve the experience of a human agent's physical and tactile interaction with puppets and objects in three-dimensional space. I do not deny that there is a counterpart of Group PMT in cel-based and/or hand-drawn animation. However, they are outside the scope of this thesis which aims to specifically research the puppet-as-puppet figure and its

mode of movement, rather than attempting to find or define every one-to-one

correspondence between different groups of animation films. Moreover, I have

chosen not to deal with figures which have botanical appearances in this thesis,

partially because it was difficult to find a large number of cases of phytomorphic

figures signifying puppets in animation films. I hope that such counterparts and

figures not discussed in this thesis are discovered and discussed in future research

in animation studies or other relevant disciplines, drawing or expanding on

terminology, taxonomy and methodology developed in this thesis.

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Appendix

Filmography

Adventure of Prince Achmed, The: Lotte Reiniger, 1926, GER

Aladdin and the Magic Lamp: George Pal, 1936, NL

Aladdin and the Wonderful Lamp: Chester and Sidney Franklin, 1917, US

Aladdin and the Wonderful Lamp: Ub Iwerks, 1935, US

Astro Boy (Tetsuwan Atomu): Osamu Tezuka et al, 1963-1966, JPN

Bachelor Machines, The (Dokushinsha No Kikai): Tenshi Iwai, 1998, JPN

Blade Runner: Ridley Scott, 1982, US

Blue Rhythm: Burt Gillett, 1931, US

Cabinet of Dr. Caligari, The: Robert Wiene, 1920, GER

Cheburashka: Roman Kachanov, 1972, RUS

Cheburashka: Gena the Crocodile: Roman Kachanov, 1969, RUS

Cheburashka Goes to School: Roman Kachanov, 1983, RUS

Child's Play: Tom Holland, 1988, US

Close Shave, A: Nick Park, 1995, UK

Demon, The (Oni): Kichachiro Kawamoto, 1972, JPN

Enchanted Square, The: Seymour Kneitel, 1947, US

Forbidden Planet: Fred M. Wilcox, US

Frankenstein: James Whale, 1931, US

Gertie the Dinosaur: Winsor McCay, 1914, US

Great Mouse Detective, The: Ron Clements, Burny Mattinson, Dave Michener and
    John Musker, 1986, US

Ghost in the Shell: Mamoru Oshii, 1995, JPN

Hand, The: Jiří Trnka, 1965, CZ

Jabberwocky: Jan Švankmajer, 1971, CZ

Manipulation: Daniel Greaves, 1991, UK

Many Adventures of Winnie the Pooh, The: John Lounsbery and Wolfgang
    Reitherman, 1977, US

Mascot, The: Ladislaw Starewicz, 1933, FR

Merbabies: Rudolf Ising and Vernon Stallings, 1938, US

Metropolis: Fritz Lang, 1927, GER

Mitten, The: Roman Kachanov, 1967, RUS

Modern Times: Charlie Chaplin, 1936, US

Mouse and His Child, The: Charles Swenson and Fred Wolf, 1977, US and JPN

Nadia: The Secret of Blue Water: Hideaki Anno, 1990, JP

Neighbours: Norman McLaren, 1952, CND

Next: Barry J. C. Purves, 1989, UK

Nightmare before Christmas, The: Henry Selick, 1993, US

Night of the Living Dead: George A. Romero, 1968, US

Nosferatu: F. W. Murnau, 1922, GER

Out of the Inkwell series, The: The Fleischer Brothers, US (in order of release)

    The Tantalizing Fly (1919)

    The Chinaman (1920)

    The Ouija Board (1920)

    The Clown's Little Brother (1920)

    Perpetual Motion (1920)

The Automobile Ride (1921)

Modeling (1921)

Fishing (1921)

Invisible Ink (1921)

Flies (1922)

Jumping Beans (1922)

Bed Time (1923)

Puzzle (1923)

False Alarm (1923)

Mother Gooseland (1924)

Trip to Mars (1924)

Cartoon Factory (1924)

Ko-Ko Nuts (1925)

Big Chief Ko-Ko (1925)

Ko-Ko the Barber (1925)

Ko-Ko Trains'em (1925)

Ko-Ko the Convict (1926)

Vaudeville (1926)

It's the Cats (1926)

Ko-Ko Baffles the Bulls (1926)

Ko-Ko Hot After It (1926)

Ko-Ko Back Tracks (1926)

Ko-Ko in 1999 (1927)

Ko-Ko Needles the Boss (1927)

Parts: The Clonus Horror: Robert F. Fiveson, 1979, US

Peter Pan: Clyde Geronimi, Wilfred Jackson and Hamilton Luske, 1953, US

Pinocchio: Ben Sharpsteen and Hamilton Luske, 1940, US

Popeye the Sailor: Aladdin and His Wonderful Lamp: Dave Fleischer, 1939, US

Rudolph The Red-Nosed Reindeer: Larry Roemer, 1964, US

Sandman, The: The Quay Brothers and William Tuckett, 2000, UK

Santa Claus Is Comin' to Town: Arthur Rankin Jr. and Jules Bass, 1970, US

Shapoklyak: Roman Kachanov, 1974, RUS

Sound of Music, The: Robert Wise, 1965, US

Street of Crocodiles: The Quay Brothers, 1986, UK

Suddenly It's Spring: Seymour Kneitel, 1944, US

Simpsons: Halloween Special III, The: Carlos Baeza, 1992, US

This Island Earth: Joseph M. Newman, 1955, US

Toy Story: John Lasseter, 1995, US

Who Framed Roger Rabbit: Robert Zemeckis, 1988, US

X2: Bryan Singer, 2003, US