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A Mixed Picture

drawn animation/live action hybrids worldwide from the 1960s to the 1980s

In 1977, Bruno Edera suggested that full-length animated films had entered "a new 'Golden Age'" (Edera, 93), with directors working in "new modes of cinema", including what he called "films in mixed media" (ibid., 14), otherwise often described as "mixed" or "hybrid" animation.

Combining animation and live action is about as old as animation itself, or to be more precise, as the perception of animation as something distinctly separate from live action (Crafton, 9). It can be found, to give just two early examples, in *Sculpteur Moderne* (France, 1908) by Segundo de Chomón, where live action and clay animation are presented, or in Winsor McCay's *Little Nemo* (USA, 1911), which combined live action and drawn animation.

Yet, as a genre, hybrid animation has not been studied much from a historical point of view. In his recent book *Animating Space*, for example, J. P. Telotte is concerned with hybrid animation, but mostly from the United States. Moreover, the period between two of the acknowledged masterpieces and commercial successes of their kind–*Mary Poppins* (USA, 1964) and *Who Framed Roger Rabbit* (USA, 1988)–is covered in less than two lines (Telotte, 180).

This paper will, in contrast to Telotte, focus on feature films (60 minutes and longer) and TV series combining drawn animation and live action which were produced in various countries from the 1960s to the 1980s.[1] It will propose first a descriptive classification scheme using examples from the United States and Great Britain, assuming these are known best and are easiest to access internationally. In a second part I will introduce films and TV series from other countries, with comments by directors and information from the literature. This is meant to be a broad, but certainly not exhaustive, overview with the aim of encouraging more theoretical studies to look at a wider selection than just the usual American samples.[2] The paper will also show that, as far as target audiences, reasons for using hybrid animation, and results are concerned, the considerable output during these three decades presented quite a mixed picture, too.

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[1] This excludes short films such as John Weldon's *Log Driver's Waltz* (Canada, 1979; drawn animation and live action) and the numerous combinations of live action and stop-motion animation, for example, *Jason and the Argonauts* (UK/USA, 1963). TV series which only occasionally employed hybrid animation, such as *Tetsuwan Atomu* [鉄腕アトム](Japan, 1963-1966), which briefly combines drawn animation and a live action background at the beginning of episode 93 (*Kobaruto no maki* [コバルトの巻]; broadcast 7 November 1964, directed by HAYASHI Shigeyuki [林重行] a.k.a. Rintaro [りんたろう]), are also outside the scope of this paper.

[2] I have seen more titles than I mention in this paper, but I have not been able to view all of those that I identified during research. The pitfalls of using only secondary literature become evident in the case of Robert Lapoujade's *Le Socrate* (France/Germany, 1968): according to Edera (189), this is a mixture of animated cartoon and live action; moreover, "the animation sequences in it are significant and could not be replaced by live-action" (ibid., 95). Bendazzi (284) calls this film "partly animated". I was able to see a copy in the archives of the co-producer Bayerischer Rundfunk and it did not contain any drawn animation, but mostly live action with a few hardly significant sequences of object animation like stones moving in a pattern.

Classification

Several methods to classify hybrid animation already exist, e.g., the "continuum" between mimesis and abstraction introduced by Maureen Furniss (5-6), Erwin Feyersinger's (124-125) typology using the "metalepse", or the "intermediality" concept recently employed by Dominik Schrey for this purpose. These schemes tend to be informed by media theoretical considerations and they tend to address the relationship(s) between live action and animated film as a whole. (Schrey (16), for example, lists "remakes, spin-offs and adaptations" as a category.) Before presenting another, narrower, classification model, it is therefore necessary to define "hybrids" for the purposes of this study:

In general, a hybrid film or TV episode recognizably combines animation and live action, or different types of animation, such as puppet animation and drawn animation.[3]

On the other hand, it is difficult to lay down how much of each component should be present for the outcome to qualify as "hybrid". For this paper I will define any film or TV episode as hybrid if at least 10% of its length is drawn animation or live action (an objective, but arbitrary rule), or if the "other" part is shorter, but either in itself notable or necessary for the story as a whole (a subjective rule). Three examples should illuminate this approach (for "effects animation" see further below):

a) Blake Edward's *The Pink Panther* (USA, 1963) can comfortably be classified as live action. However, even though its animated[4] title sequence (by DePatie-Freleng) occupies only about 3% of the film and is of no relevance to the film itself, it is famous and influential enough to be considered important.[5]

b) George Dunning's *Yellow Submarine* (UK, 1968), on the other hand, is an animated film with a very brief cameo of the Beatles at the end. This sequence is not significant enough for the film to be included among the hybrids.

c) *The Charge of the Light Brigade* (UK, 1968) by Tony Richardson is again called live action. Yet the roughly 8 minutes of animation by Richard Williams–out of a running-time of about 125 minutes–are integral to this film about the Crimean War by providing, in the style of newspaper cartoons of 19th century Britain, historical background that would otherwise have been difficult to incorporate (Richardson, 239).

[3] Rotoscoping is here seen as a kind of special effect for drawn animation, not as an animation type itself. For this reason films such as Ralph Bakshi's *Lord of the Rings* (USA, 1978) will not be treated here even though they apply what might be called a hybrid technique.

[4] If not further specified, "animation" will in the following always refer to drawn animation.

[5] In addition, at the end of the film a brief sequence combines the animated Pink Panther with a live action background (type 2b).

Regarding the following classification it should be noted that this model is meant to apply to films as well as episodes of TV series as a whole, even though parts of it can be used to describe sequences or scenes.[6]

Type 1: animation and live action kept separate

Fat Albert and the Cosby Kids! (and slightly different titles; USA, 1972-1985).

This educational Saturday morning cartoon follows the adventures of a group of mostly black children in Philadelphia, based in part on Bill Cosby's childhood reminiscences. Both the title and the closing credits sequences combine live action shots of Cosby and animated scenes, separated by hard cuts. Cosby is also shown live several times during each episode, commenting on what happened in the animation and providing a bridge to the next animated sequence. However, live action and animation are not shown simultaneously.

This type of hybrid animation could be further subdivided according to structure (e.g., animated titles and credits as book-ends for live action content, or live action interspersed with animation) or technical features (hard cuts or dissolves[7] between live action and animation). However, in keeping with the distinction made for type 2 hybrids, it seems preferable to distinguish, if at all, between:

Type 1a: animation and live action kept separate, but with pretended interaction

In *Fat Albert and the Cosby Kids!*, for example, Cosby and Fat Albert several times "throw" objects, such as a board, to each other, which at the cut transform from real to drawn or vice versa. These tricks–as well as the set for Cosby–serve as confirmation that Cosby and the animated kids share the same "space".

Also, a film or TV series that uses animation as a direct and substantial continuation of live action, or the other way round, can be classified as type 1a.

Type 1b: animation and live action kept separate, no interaction

In the pornographic comedy *Once Upon A Girl* (USA, 1976) "Mother Goose" (played by Hal Smith) is on trial (live action) and tells erotic versions of well-known fairy tales, e.g. *Jack and the Beanstalk* (animation). Even though the live action in the courtroom also turns "erotic" at the end under the influence of both the tales and the heat, the animated and the live action worlds are thus distinctly separate.[8]

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[6] I am aware that this classification reflects, in part, different techniques of producing hybridity. Also, that it has further implications, for example on the question of the viewers' "space" being "entered" by drawn characters, or being "expanded" by human characters moving into drawn surroundings. However, the main consideration has been to present a method to briefly describe different types of hybridity even when no technical information is available.

[7] Dissolves, found for example in the type 1b hybrid *The Charge of the Light Brigade*, are here classified as a kind of special effects of animation, similar to rotoscoping.

[8] According to the commentary by executive producer William Silberkleit (found on the DVD) the film seems to have reached break-even – despite its subject matter, which limited distribution, and the quite primitive animation by moonlighting "young girls" from Disney.

Care should be taken, though, to distinguish between Type 1b hybrids and variety shows for children, such as *The Mickey Mouse Club* (USA, 1955-1959, and later), which often include animated segments. This kind of shows should not be counted as hybrids, in contrast to their filmic equivalents, which can be type 1b or type 4 (see below).

Type 2: drawn characters in "real" environment

Pete's Dragon (USA, 1977).

The boy Pete, accompanied by a green dragon called Elliott, escapes the rough family he has been sold to and becomes acquainted with lighthouse keeper Nora and her father in Passamaquoddy. Elliott, who can fly and make himself invisible, is drawn, whereas all people and backgrounds are real.

Type 2 hybrids often include pure live action and/or pure drawn scenes, also qualifying them as type 1. (For "package features" see type 4, however.) It is again mostly an arbitrary choice at which length type 2 hybridity makes a film or TV episode as a whole a type 2. For example, *Pink Floyd The Wall* (Great Britain, 1982), a film by Alan Parker about a rock star breaking out of his mental isolation, contains several animated scenes drawn by Gerald Scarfe, making it a type 1b hybrid. But one scene actually involves the live action protagonist Pink and a drawn monster evolving from the shadow of his wife. At less than 30 seconds the scene, memorable as it is like all of Scarfe's animations for this film, should not qualify *Pink Floyd The Wall* as a type 2 hybrid.[9]

Type 2 hybrids can be further classified by looking at the interaction between drawn and human characters:

Type 2a: drawn and human characters interacting in a real environment

In *Pete's Dragon* (live action) special effects allow Pete, for example, to climb up on Elliott. In fact, although Elliott is invisible or not even meant to be in the picture for long stretches of the film, the degree of interaction portrayed in *Pete's Dragon* is quite high.

A secondary consideration for type 2a hybrids would be whether the animation makes any "impact" on its real environment. When moving, Elliott leaves visible marks on his surroundings, sometimes even destruction. More common, however, are films like *The Incredible Mr. Limpet* (USA, 1964), with Don Knotts in the title role, which has several scenes of interaction between Limpet as a fish and human beings. Yet the impact of the drawn Limpet on the real environment is mostly reduced to a bit of water-splashing.

Type 2b: drawn characters not interacting with the real environment

Ralph Bakshi's *Heavy Traffic* (USA, 1973) tells the story of cartoonist Michael, son of constantly fighting Jewish-Italian parents, as he meets in his imagination the black barwoman Carole and gets into trouble. Throughout most of the film drawn characters act in front of still

[9] The film had been conceived from the beginning as a mixture of live action and animation by Scarfe. While initially intended to be an "extension of the [Pink Floyd] show" and the album *The Wall* (Schaffner, 244), the end product did not contain footage of Pink Floyd concerts and starred Bob Geldof instead of Roger Waters (ibid., ch. 20). The film was successful both at the box office and on the video market (ibid., 250).

photographs of New York's seedier sites or drawn backgrounds. Even when the background is live action, as in a street musicians' scene, it seems that it was filmed without much consideration of the animation to be superimposed.

Heavy Traffic also points to a further classification issue, i.e., when the background consists only of still photographs. In this case, calling an animated film "hybrid" would appear to be exaggerated.

Type 3: human characters acting within a drawn environment

Bedknobs and Broomsticks (USA, 1971).

This tale of an "apprentice witch" (Angela Lansbury), her bogus "professor" of witchcraft and three orphaned children in England during World War Two is mostly live action with special effects. However, when they travel on their magic bed to the "Isle of Naboombu" they enter an animated world, first under water, then on the island itself, where a soccer match is held. In these scenes only the five humans are filmed in live action, whereas all the animals they encounter, as well as the backgrounds, are drawn.

Technically, this "Isle of Naboombu" sequence is at least on a par with the "Jolly Holiday" sequence in *Mary Poppins*.[10] There is interaction in both directions, with the humans "influencing" the drawn characters, and vice versa.

As with type 2, type 3 hybrids can exhibit type 1 hybridity, too, which should be taken into account. Because type 3 hybrids are rather rare, it does not make much sense to subdivide them further, yet a distinction must be made between an animated background and a static drawn background: the latter is, of course, the often used matte painting and does not qualify a film as a hybrid.

Type 4: type 2 and type 3 combined; "package features" with more than type 1 hybridity

The War Between Men and Women (USA, 1972).

A cartoonist played by Jack Lemmon falls in love with a divorced woman (Barbara Harris) whose ex-husband somewhat interferes. Moreover, the cartoonist is going blind in this story "suggested by the writing and drawings of James Thurber".

The film contains all three types of hybridity: the title sequence is animated, followed by live action (type 1b); a battle scene has drawn characters fighting with the drunk men (type 2a); the "Last Flower" sequence is type 3. The length of the animations barely qualifies the film as a hybrid, but the importance, especially of the "Last Flower" sequence, certainly does.

So-called "package features", e.g. *Fun & Fancy Free* (USA, 1947), should be included in this type, too, if the segments do not have a common story line and type 2 or type 3 hybridity is shown.

[10] *Mary Poppins* is a type 3 hybrid; the drawn fireworks late in the film are effects animation, not type 2.

Type 0: combinations of more than two kinds of animation/live action

TRON (USA, 1982)

It might surprise some readers that this well-known pioneering live action/computer animation combination–which flopped at the box office (Solomon, 302)–is used as an example of type 0 hybrids. However, besides the pure live action at the beginning and end, and 15 minutes of computer-generated images (Patterson, 802), the film contains "backlit animation"[11] plus other "effects animation" of about 18 minutes length (ibid., 825). The "rez-up" of the light cycles, for example, had to be done with drawn animation because it was not possible at the time to combine live action with anything but simple computer-generated backgrounds (ibid., 814).

While effects animation such as the introductions to Disney's "True Life Adventures" in the 1950s (e.g., *Jungle Cat*, 1959) should not normally count towards hybridity, when it becomes as extensive as in *TRON* it should be included as a separate component.

Further Examples

Type 1b

Kikansha Yaemon – D51 no daibōken [きかんしゃ・やえもん D51 の大冒険] (Japan, 1974)
Anderusen Dōwa – Ningyo Hime [アンデルセン童話　にんぎょ姫] (Japan, 1975)
Shōnen Ninja Kaze no Fujimaru [少年忍者風のフジ丸] (Japan, 1964-65)

Based on a popular short story by AGAWA Hiroyuki [阿川弘之], *Kikansha Yaemon – D51 no daibōken* tells the story of the human boy Tadashi and a family of mice who help the old steam locomotive Yaemon to catch some thieves and thus save it from the scrapyard. Whereas all these characters are drawn and act in a drawn environment, the film is interspersed with, sometimes lengthy, shots of real steam locomotives driving through Hokkaido and mountainous regions of Honshu.

As explained by scriptwriter YAMAMOTO Hideaki [山本英明] (Tōei Dōga, 194), the original story was much too brief to be made into an hour-long feature, so it had to be added to (the mouse family) and expanded by using footage of real steam locomotives–not to drive on the narrative, but simply as filler. In the end, 27 minutes of the 62 minutes feature were live action, essentially unrelated to the story.

Director TAMIYA Takeshi [田宮武], who came from live action movies, confirmed that from the beginning it had been planned for budget and time-saving reasons to have one third of the film in live action and to produce the live action and animation mostly in parallel. The decision not to use dissolves, but only hard cuts, was his own and was later criticized (ibid., 194).[12]

The film, produced to profit from a steam locomotive boom in Japan (just as they had gone out of service in most parts of the country), did not do very well at the box office when compared to other feature films by Toei in the 1970s (ibid., 327), although it is difficult to blame

[11] Another kind of hybrid technique (Patterson, 798-800), although the result here is also visibly hybrid itself.

[12] A very brief type 2b shot can be found near the end.

this on hybridity alone. Toei's next long feature, *Anderusen Dōwa – Ningyo Hime*, also used live action, but this time only as book-ends to a quite faithful re-telling of H. C. Andersen's *Little Mermaid*: the beginning and the end of the film show footage of Copenhagen, while the story itself is drawn. This film had about 20% more viewers than *Kikansha Yaemon* (ibid., 327).

Toei had already used type 1b hybridity much earlier in the TV series *Shōnen Ninja Kaze no Fujimaru*, based on a manga about a ninja warrior boy by SHIRATO Sanpei [白土三平]. Although the story itself was animated, at the end of each episode martial arts expert HATSUMI Masaaki [初見良昭] spoke about ninja arts and showed live-action footage. Both for relevance and length of this "corner", the series just qualifies as a type 1b hybrid.

Type 2a

Dunderklumpen (Sweden, 1974)
Gokiburitachi no tasogare [ゴキブリたちの黄昏] (Japan, 1988)
Banpaiya [バンパイヤ] (Japan, 1968-1969)
Meister Eder und sein Pumuckl (Germany, 1982-1983, 1988-1989)

Dunderklumpen tells the story of the troll Dunderklumpen who on mid-summer night awakens some toys (puppets, a teddy and a small lion) to life and then takes them away from a couple of children. A boy follows him with a goat in tow, and is himself followed by his father (played by Beppe Wolgers). On their way Dunderklumpen and the toys encounter several strange creatures, among them a one-eyed man who wants the small box that Dunderklumpen had also stolen from the children. The boy and his father try to catch up with Dunderklumpen, but only finally reach him at his house in the north where a happy end for all ensues. On their way home the boy remarks wonderingly to his father that Dunderklumpen would be able to bring toys to life.

According to the director, Per Åhlin, "the tale about Dunderklumpen originally was a picture book with pictures from the mountain world of Jämtland (a province in Sweden). The characters in the pictures were primitive dolls placed in the landscape, and when we planned the animated film it became a matter of course to somehow transfer the original idea." (Personal communication, Per Åhlin, 24 August 2010.)[13]

The children, their parents and the goat are real, all other characters are drawn, except for the toys at the beginning of the film when they are shown for real. Most of the time the background is photographs or footage of Jämtland, but for some stretches it is drawn, too, in the style of a watercolour. Quite a number of scenes show humans and drawn characters interacting, for example when a drawn bumblebee guides the father, or the boy is "pulled up" a cliff by one of the drawn characters.

Although one might assume that the techniques in the film would be based on the "travelling matte" employed in *Pete's Dragon* three years earlier, this was not the case.[14] As Per Åhlin

[13] With thanks to Clas Cederholm for translating.

[14] Correction 20 June 2023: *Pete's Dragon* was released three years **after** *Dunderklumpen*. My fault, also for not noticing it earlier.

(personal communication, 24 August 2010) explains, this technique was "entirely unknown" to him and the production was thus quite complicated.[15]

Gokiburitachi no tasogare is quite a different example: a Japanese film about two species living in one world. The main protagonist of the film is Naomi, a female cockroach engaged to Ichirō, a honest but weak male cockroach. With their tribe they inhabit the house of Mr. Saitō, an untidy human who has come to a live-and-let-live truce with the cockroaches. One day, Hans, a warrior cockroach from another tribe across the yard arrives in Saitō's house and Naomi falls in love with him. Hans' tribe lives in constant warfare with the female owner of "their" flat, but when he returns to his duty there, Naomi follows him nonetheless. She thus becomes witness to the normal side of human-cockroach relations and flees back to Saitō's house. Meanwhile Saitō has become acquainted with the woman in the other flat and invites her over. Hardly surprisingly she is not enamoured with the cockroaches there, and Saitō reverts back to the tidy individual he had been before his wife and kid had left him. There follows an epic, if one-sided battle, between the two humans and both tribes of the cockroaches, with only Naomi surviving among the latter. Being pregnant, possibly by both Ichirō and Hans, she is also resistant to the poison used by the humans and can confer this to her off-spring.[16]

From the beginning, director YOSHIDA Hiroaki [吉田博昭] had planned his first film to be a mixture of live action and drawn animation.[17] One reason was that he had previously directed hybrid TV commercials. The other was rooted in the story itself: the cockroaches obviously could not be filmed live, but from their perspective even a table, to say nothing of a flat or house, would be gigantic, and humans would look like monsters (Tanaka, 112). By using human actors, filmed on set most of the time as if from a cockroach's perspective, Yoshida could highlight this difference.

Two years of production resulted in *Gokiburitachi no tasogare* being a well-made type 2a hybrid, with interaction between the drawn and the human characters, but not much notable direct impact by the cockroaches on their real surroundings. Even though the film was not a box-office hit in Japan (it does not even appear among the top ten Japanese films of the year in Kinema Junpō, 302-303), the story was taken up via a Japanese daily by CNN (Tanaka, 112), which was probably the reason that it was also released in 1989 in the US as *Twilight of the Cockroaches*, although after the technically more dazzling and accomplished *Who Framed Roger Rabbit*.

While it does not seem to have been widely remembered at the time, two decades before *Gokiburitachi no tasogare* there had already been a type 2a hybrid TV series in Japan: *Banpaiya*. Based on a manga by TEZUKA Osamu [手塚治虫], this 26 episode series covered the story of Toppei (played by MIZUTANI Yutaka [水谷豊]), a young man from the countryside coming to Tokyo, who turns into a white wolf at full moon. When he gets into an altercation he is rescued by journalist Morimura who arranges for him to get a job at Mushi Pro, the animation

[15] Information on the various techniques used to produce hybrids (optical printing, sodium screen, travelling matte, etc.) can sometimes be found in DVD extras, e.g., the *Brazzle Dazzle Effects* feature on the *Pete's Dragon* DVD.

[16] The film is, of course, ripe for interpretation. Suffice it to say here that director Yoshida did intend similarities between the cockroaches and the Japanese people, although he had developed the script some time before "Japan-bashing" became popular in the United States, so the massacre at the end should probably not be seen as a reflection of US-Japanese relations at the time of the film's release (Tanaka, 112-113).

[17] A brief scene of a "talking turd" is done in clay animation.

studio founded by Tezuka who appears as himself. However, a spy called Rock and professor Atami, a specialist for "vampires"–in his definition people who can turn into animals–want to use Toppei and other members of the "vampire" tribe for their own purposes.

Considering the date and the rather brief production time–the manga was published from 1966 to 1967, the series was produced mostly in 1967–the quality of *Banpaiya* is quite good. There are some well-handled transformation scenes and interaction is not only implied. The extensive use of an aerial composite camera[18] was probably a first for a TV series. However, it proved difficult to find a sponsor, the TV network also had problems with it, and the series started to be broadcast only in October 1968. The rather low ratings may have been due in part to the series having been filmed in black-and-white and being shown when colour anime had become more widespread (Itō and Haraguchi, 2). Moreover, the story was aimed at young adults rather than children, which, although not unheard of in anime at the time, was perhaps a bit premature.

The producer of *Banpaiya* was not Tezuka's well-known studio Mushi Pro, but a sister company, Mushi Pro Shōji, founded in 1966 to handle publishing rights and management of Tezuka's manga business. *Banpaiya*, their first audio-visual product (although only the second to be broadcast because of the delay) led them deeply into the red (Yamamoto, 251). The experiment–part of Tezuka's "dream towards opening up new land" (Tezuka, 265)–was a failure.

The situation would be quite different with another, later series also using an aerial image rostrum (Glück, 152) to combine live action and a drawn character: the German *Meister Eder und sein Pumuckl*. Based on highly popular radio programs and books by Ellis Kaut, the TV series tells harmless stories about the pranks of a red-haired small ship's kobold (Pumuckl) and the friendly elderly carpenter (Meister Eder, played by Gustl Bayrhammer) in whose workshop he has come to live. With the exception of Pumuckl, who is drawn, all people appearing are filmed in live action, as are the backgrounds in Munich or, occasionally, other Bavarian locations.[19] Pumuckl, who is only visible to Meister Eder and disappears from view when other people come near, interacts both with Meister Eder and with objects around him, such as shavings and his swing.

Interestingly, the reason for *Meister Eder und sein Pumuckl* being made as a type 2a hybrid was Walt Disney. Ellis Kaut did not want a purely drawn animation film, nor did she accede to proposals to use blue-screen technology and "shrink" a real person. Years before the television production started she had seen an ad for Disney films which showed Walt Disney behind his desk surrounded by some of his animated characters. "It was like magic", she writes. But only Manfred Korytowski, producer at Infafilm in Munich, was willing to realize Kaut's dream of a hybrid series with Pumuckl drawn and everything else in live action (Kaut, 200-201).

Producing *Meister Eder und sein Pumuckl* was quite time-consuming, much more so than *Banpaiya*. For the first 26 episodes (broadcast in 1982/83) work started in 1978, the filming took nine months, the animation done at the Hungaro/Pannonia studios in Budapest eighteen months, synchronisation another six months (König, 145).[20] This was one of the most costly

[18] An image of an aerial image rostrum can be found, e.g., in Taylor (67), and in Itō and Haraguchi (4-5).

[19] As in *Gokiburitachi no tasogare*, stills were also used as backgrounds.

[20] In contrast to Japanese practice, only one director, Ulrich König, was responsible for every episode of both seasons. A film, based on four episodes of the series, was produced at the same time.

productions undertaken for German television until then, making several co-producers necessary (Glück, 152).

When the first season had ended, the main funding organisation, Bayerischer Rundfunk, claimed to have no money for a sequel. Viewers protested, but it seems to have taken the intervention of Bavaria's then prime minister, Franz Josef Strauss, to get the Bayerischer Rundfunk to fund a second season, broadcast in 1988/89 (Korytowski, 154-155). In contrast to *Banpaiya*, which was even considered lost for some time, *Meister Eder und sein Pumuckl* has been rebroadcast numerous times.

Type 2b

Dot and the Kangaroo (Australia, 1977)

Based on a story by Ethel Pedley, *Dot and the Kangaroo* tells the adventures of a little girl called Dot who gets lost in the Australian bush and is taken on by a kangaroo who in turn has lost her child. The kangaroo gives Dot some roots to eat so she can understand the animals' language. They meet various animals on their quest to find Dot's "lost way"; when they finally reach her home, they have to part again. The film does not contain real human or animal characters; only at the end a real kangaroo is shown.

Yoram Gross, the director, writes:

> *Dot and the Kangaroo* was the first animated film about Australian life. The decision to use live-action backgrounds was purely from an artistic point of view. The awe-inspiring beauty of the Blue Mountains and Jenolan Caves of New South Wales inspired my imagination. To my mind no 2D drawing or background painting of this scenery can showcase or give justice to its magnificence. So I chose to put animated cartoon characters on live-action backgrounds, a technique which was not new to the film industry back in 1977, but was quite rare and special nonetheless. I had a state-of-the-art Crass aerial image projector especially ordered from Germany which became the most important tool in the production of the film. A small team of animators, tracers, painters and "in-betweeners", many of whom we had trained, worked for two years to complete the animation. The success of the film inspired a sequel of 8 more Dot films. (Personal communication, Yoram Gross, 23 August 2010.)

In fact, while there is a very small amount of interaction between the drawn characters and the live action background (water effects), there are also several instances when that interaction is missing; in addition, the running/jumping Dot and Kangaroo and the background sometimes do seem out of touch, probably because the live action camera was moved, which was not usually done in type 2 hybrids at the time.

Yet other aspects would seem to matter more than *Dot and the Kangaroo* being a type 2b hybrid: Michael Hill states that "repetition is a strategy used in the Gross films and this is present in musical, visual and narrative techniques" (Hill, 169); especially the re-use of shots and short scenes is noticeable in this film. On the other hand, the animation of aboriginal paintings in the Jenolan Cave segment is inspired, and the film was, after all, a success with its target audience: young children (ibid., 168). Type 2 hybrid animation afterwards became Gross's trademark.

Type 4

Allegro Non Troppo (Italy, 1976)
Le Table Tournant (France, 1988)

Allegro Non Troppo is a "package feature" similar to Disney's *Fantasia* (USA, 1940) because Bruno Bozzetto made this film as "certainly a riposte to Disney, but in an affectionate sense' (quoted in Boscarino, 101). Instead of the dignified Leopold Stokowski conducting a classical orchestra, Bozzetto fills the live-action segments with a tyrannical conductor leading an orchestra made up of old women. A slave cartoonist (Maurizio Nichetti[21]) is forced to "illustrate" the musical numbers, with the animations turning out sometimes melancholic, but more often bitingly satirical and funny. Whereas the film at first resembles a type 1b hybrid (like *Fantasia* overall), in the second half both the live action and the animated segments exhibit a variety of types, as well as brief clay animation.

Allegro Non Troppo was not a success at the box office,[22] but probably not because of its structure but rather because, as far as animation was concerned, the Italian public asked for Disney and children's fare, which *Allegro Non Troppo* certainly was not.

Le Table Tournante is another package feature, or rather a showcase for the work of director Paul Grimault. It presents short features by Grimault made between 1931 and 1980, all purely drawn animation, within a (rather feeble) live action structure of Grimault in a small studio being visited by various drawn characters from his films. It is thus both a type 1b and a type 2a hybrid, but without a common storyline of the several segments it falls under type 4.

Type 0

Majakovskij Smeëtsja [Маяковский смеётся] (Soviet Union, 1975)
Baron Prášil (Czechoslovakia, 1961)

The feature-length film *Majakovskij Smeëtsja*, based on the short novel *Klop* [Клоп] and an earlier, related film scenario by the Russian poet and painter Vladimir V. Majakovskij [Владимир В. Маяковский], can only be described as a veritable hodgepodge of live action and animation types. The title sequence is an animation by Anatolij Petrov [Анатолий Петров], drawn in the style of a Majakovskij poster of the 1920s.[23] Then the movie pretends to be a (live action) documentary of a rehearsal of Majakovskij's play, hosted by the then well-known Soviet film commentator and screen writer Aleksej Kapler [Алексей Каплер]. The first part of the play, set in the Soviet Union of the 1920s, is enacted by real people, marionettes (filmed "live") and cut-out and stop-motion animation, intercut with archival live action footage and garnered with special effects. At the end of this part, the protagonist, Ivan Prisypkin, is frozen in the cellar of his house which has burned down on the day of his marriage.

[21] Nichetti later directed and starred in his own type 2a drawn animation/live action hybrid with the erotic comedy *Volere Volare* (Italy, 1991).

[22] Comments to this effect can be found in the documentary video *I Mondi di Bruno Bozzetto* (Italy, 2001). While this film incorporates extracts from Bozzetto's animations, it should not be called a hybrid, not even a type 4 one.

[23] According to an obituary on Petrov, he managed to draw the scene of Majakovskij turning his head by 90 degrees after having memorized his bust at the eponymous metro station in Moscow from all angles (Borodin).

In the future (in the novel this would have been about the time the film was produced) he is revived in a Soviet Institute, but only after some discussion whether such a potentially contaminated specimen should actually be let loose on modern society. These scenes are live action, while what turns out to be the dreams of Prisypkin is rendered as drawn animation by Vladimir Tarasov [Владимир Тарасов]. It is only fitting that some of these scenes, interspersed with live action, are heavily reminiscent of the film *Yellow Submarine* and of the Woodstock festival, for Prisypkin is dreaming of being made a pop star, although his dream does not end well. Among numerous visual references one to Winsor McCay's hybrid *Gertie* (USA, 1914) can be found; in addition, there are some short type 3 hybrid scenes. The story ends in drawn animation (with Prisypkin and a bug that also survived the freezing), but the closing credits again show the empty set.

This "fairy-tale comedy", as the film calls itself, is therefore both a testament to intelligence–the styles of the drawn animation refer to the periods the play is set in, as does perhaps the use of cut-out animation, with collages of cut-outs quite popular for Soviet posters in the 1920s–and to overkill, because it never becomes coherent.

Even the films by Karel Zeman, the master of type 0 hybrids, while managing the integration of live action, cut-out, stop-motion and drawn animation better than *Majakovskij Smeëtsja*, tend to look too heterogeneous for wide mainstream appeal. Using hybridity, special effects, and Gustave Doré as a visual template for the retelling of Baron Munchausen stories in *Baron Prášil*, for example, is quite an appropriate idea; yet it is probably no accident that such type 0 hybrid feature films were usually made under non-commercial conditions in socialist countries, similar to art or experimental short animation in the West or in Japan.

Conclusions

Drawn animation features really enjoyed renewed international popularity from the early 1960s onwards (Maltin, 346). Drawn animation/live action hybrids also boomed, but this was a revival, too, hardly a new phenomenon.[24] The first wave of short features up to the end of the 1920s had already established all the basic types of drawn animation/live action hybridity: McCay's *Gertie* had been a type 1a, Emile Cohl's *Claire de Lune Espagnol* (France, 1909) a type 2a, and Walt Disney's "Alice Comedies", e.g., *Alice's Mysterious Mystery* (USA, 1926), type 3.[25]

The second wave during the 1940s, starting with the famous scene of Mickey Mouse shaking hands with Leopold Stokowski in *Fantasia* and including the type 4 hybrid *The Three Caballeros* (USA, 1944), was led by the Disney studios, but also saw a few efforts by other studios–e.g., the "Worry Song" scene with Gene Kelly and Jerry Mouse in MGM's *Anchors Aweigh* (USA, 1945)–, although these usually amounted only to brief hybrid scenes.

The third wave starting in the 1960s was different in that it broadened both the production base and the audiences for this kind of fare, in line with the animated feature film in general. As far as technical quality was concerned, Disney continued to be the leading company in producing hybrids, but this does not imply that everyone, or even the majority, followed a "Disney model": several filmmakers targeted an older audience, some with quite a different worldview. Even when children and families were the audience, filmmakers around the world seem to have

[24] See also the brief overview in Siebert (78-80).

[25] At the time Disney put what I call type 3 in sharp contrast to already existing type 2 hybrids (Crafton, 281).

been only marginally influenced by Disney films (or each other), and would likely not have been able to spend enough to imitate the Disney studio's technical prowess anyway.

The reasons for using hybridity were diverse, ranging from the wish to experiment and to break "the sterility of animation"[26] to the combination of drawn characters with land- or city-scapes that would have been extremely difficult to adequately reproduce otherwise. In other cases it was impossible to use live action throughout, but still made sense not to produce an all-drawn feature. Demarcating dreams from "reality" was another use of animation, as was the provision of background information not susceptible to live action treatment. And in certain cases of type 1 and possibly type 2b hybrids, financial reasons played some part, too.

As to the success or failure of these films and TV series, it is difficult to extricate the influence of hybridity from all the other internal and external factors responsible: the quality of story, visuals, soundtrack and actors; the advertising budget, distribution network, and competition, to list only some obvious ones. Yet it would seem that drawn animation/live action hybridity itself was not per se a disadvantage. Where hybridity made a difference it even seems to have had a positive effect, as in *Meister Eder und sein Pumuckl*, where Ellis Kaut probably proved correct in opposing both a fully drawn and a fully live action version. One might also argue that some films–*Pete's Dragon* is one–were noteworthy only because they employed hybridity.

Detailing the history of drawn animation/live action hybrids up to the present is not the aim of this article. It should be noted, however, that the mostly hand-drawn type 4 hybrid *Who Framed Roger Rabbit* pushed technical quality (and cost) to a new level by breaking the rule of keeping the live action camera fixed when filming type 2 sequences, and by increasing the number and quality of interactions between the drawn characters and their live action environment (Solomon, 282).

Yet the rapidly falling costs and expanding capabilities of computer animation would prove more important, severely eroding the appeal of drawn animation/live action hybrids since "realistic" computer-generated 3D content and special effects could now dislodge drawn animation from its role of providing scenes which could not be filmed live or with real characters. This affects most of all the type 2, 3 and 4 hybrids, but even extends to pure drawn animation, although "realism" is only one effect to strive for in animation.

The least demanding type 1 hybrid, however, has not become extinct: it can be found, for example, in several type 1b episodes of the TV series *SpongeBob SquarePants* (USA, 1999-), such as *The Sponge Who Could Fly* (broadcast 21 March 2003, directed by Mark Osborne), or in the type 1a TV documentary *La Voie du Chat* (France/Germany, 2008) on the relationships between humans and cats. For financial reasons, and when the intent is not to blur, but to accentuate (some) differences, such type 1 hybrids will perhaps continue to be used, even if another renaissance for drawn animation/live action hybrids in general is unlikely.

[26] Bakshi (quoted in Gibson/McDonnell, 109) is referring here to his type 2a hybrid *Coonskin* (USA, 1975), a very dark reply to Disney's type 3 hybrid *Song of the South* (USA, 1946). Technically more accomplished than *Heavy Traffic*, *Coonskin* failed at the box-office because of poor distribution in turn attributable to its controversial content (Grant, 21-22).

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