

From Print Cartoons to Animated Cartoons: How Caricature and Comic Strips Shaped Early Studio Animation

1. Introduction

In this paper, it is argued that studying the aesthetics set up at the turn of the 19th and early 20th century by caricature and print cartoon artists, is essential to understand the birth of animated cartoon aesthetics. In a limited context of study on the reception of animated cartoon aesthetics, this chapter argues that it is possible to forge a theoretical model of animated aesthetics based on the study of caricature and comics, a model that can then be re-injected into a more global understanding of graphic narration.

It was John Randolph Bray, a New York cartoonist best known in the 1910s for his newspaper comic strips (cf. Knudde no pag.), who was responsible for the first efforts to turn animation into an industry (Barrier 12). Bray saw animation as something new and original that could quickly become important. He also thought that there would probably be a way to “make money out of it” (Maltin 6). Bray therefore quickly devoted himself to the development (and above all the filing of patents) of a series of techniques that would not only allow his studio to flourish but also promote the commercial development of animation (Denis 138).

In 1913, with the studio's second film, *Colonel Heeza Liar in Africa*, a recurring character was created. This film was one of the first¹ to be commercially distributed, with a copy of it still available.² It is neither part of a vaudeville act, nor an isolated experiment. It is one of the first episodes of a series, and in this respect, it marks a turning point in the history of animation (Maltin 7).

1 According to Donald Crafton, the first episode of *The Newlyweds*, titled “When He Wants a Dog,” directed by Émile Cohl, was distributed almost nine months before *Colonel Heeza Liar in Africa*. Of *The Newlyweds*, only one episode survives: “He poses for his Portrait” (1913). For further information see Crafton, *Émile*, p. 163.

2 While the episode “Colonel Heeza Liar in Africa” is not available online, the second known episode (“Colonel Heeza Liar’s African Hunt”) from October 1st 1914 is available on *YouTube*. It is very similar, meaning, some scenes are identical and were probably reused. See: <https://www.youtube.com/watch?v=9FWzso2Qu2Q>.

The film opens with a title card indicating that it was drawn by the “noted cartoonist”, J. R. Bray. The term ‘cartoon’ here actually refers to a particular style of drawing encompassing both humorous press drawings and comic strips. From the outset, the film attempts to capitalise on Bray’s personality as a well-known cartoonist, although the Colonel appears to be an original creation.³ When the animation starts, one immediately notices a graphic style clearly reminiscent of the comic strip and press cartoons of the early 20th century: a fine black line and a relatively detailed but highly stylised figure.⁴ Indeed, when one compares the drawing in this film with some examples of Bray’s comic strip works (see Knudde), one immediately recognises the artist’s style, although for practical reasons,⁵ the images in the film are obviously less detailed than those in his comics.

As Michael Barrier points out in *Hollywood Cartoons* (1999), the surviving Bray studio films of the 1910s tend to be quite elaborately drawn in the manner of the 19th century magazine cartoons they evoke (Barrier 17-18). Thomas Stathes, curator of the Bray studio archives, adds that:

the graphic quality of the characters is more or less the same. Perhaps, the animated characters have slightly less details (literally, pen strokes) but the structure and overall look of the characters is pretty similar or the same comparing between the comics and cartoons. (Stathes)

This similarity between the aesthetics of the film and the aesthetics of Bray’s comic strips is emphasised, as pointed out at the beginning of this analysis, in the first title card of the film. The short animation is presented as the work of a famous ‘cartoonist,’ understood here in the sense of a print cartoonist. In fact, the film is conceived as a succession of press cartoons, with captions and drawings. For the modern spectator, it is surprising to note that these intertitles describe exactly the action seen a few moments later, as if the studio did not entirely trust the moving image in its capacity to convey the action alone. However, the formula

3 According to Thomas Stathes, Bray Studio’s archive manager, there is no known record of Colonel Heeza Liar’s previous existence in print (see Stathes).

4 Consulting comics and caricature archive sites such as <http://www.coconino-classics.com/> and <http://www.comicstriplibary.org/> (last consulted in September 2015), or <https://www.lambiek.net> (last consulted in February 2023), can provide an idea of the dominant graphic trends in cartoon and comic strip art at the time.

5 An animated film should contain at least twelve pictograms per second to offer a reasonably fluid animation. It would therefore be rather unproductive to try to maintain a high level of detail in each pictogram.

worked and, between 1913 and 1917, the dominant mode of animated film was the adaptation of comic strips (Wells 17).

2. The Print Cartoon: One of the Origins of Animation

The Newlyweds by George McManus and adapted by Émile Cohl from 1913, *Colonel Heeza Liar* by John Randolph Bray the same year, or *Mutt and Jeff* by Bud Fisher from 1916, all testify to the attachment of the animated cartoon as a cinematic category to the model of the illustrated press (Massuet 47). This section of the article is intended to demonstrate the strong historical ties between the “print cartoon” industry and the nascent animation industry, establishing one as a direct ancestor of the other. This connection will help to forge a further tie with the genre of caricature, identified as a key component of both the comic book and the early animation industry.

Dick Tomasovic says it all when he mentions “the relationship between the newspaper drawing industry and the animation industry,” specifying that: “In fact, in the 1910s, directors, animators and newspaper cartoonists adapted and adopted each other to the point of generating a phenomenon of circulation of images and artists” (Tomasovic 55; translation mine).⁶

Donald Crafton also mentions the influence of comic strips, admitting that they provided not only a fertile ground for stories and characters but also for artists (Crafton, *Émile*, pp. 48-57). Other researchers go further. In *The Art of Animation, An Anthology* (1987), Charles Solomon points out (quoting Crafton) that pre-existing forms of entertainment such as magic shows, magic lantern projections, the Lightning Sketch, political caricature, vaudeville monologue, popular scientific demonstrations, shadow puppets, spiritualism, advertising, journalism, pulp fictions, etc., constituted the “cultural bouillabaisse” of early cinema (Solomon 13).

The set of influences of animation cinema seems more complex here, but it nevertheless contains an essential element in the search for an aesthetic origin: caricature. Indeed, it serves as a binding agent for many of

6 Here is the original French version: “les relations entre l'industrie du dessin de presse et l'industrie du cinéma d'animation [...] En effet, dans les années dix, réalisateurs, animateurs et dessinateurs de journaux, s'adaptent et s'adoptent les uns les autres au point de générer un phénomène de circulation des images et des artistes” (Tomasovic 55).

the ingredients of this “bouillabaisse” described by Solomon and Crafton. It is undoubtedly a common ancestor of Lightning Sketches and comic strips and is used in advertising and in the press via political cartoons. It is even present in shadow puppet theatre, notably through the works of Caran d’Ache, a famous caricaturist from the end of the 19th century, such as *L’épopée* (1886), produced for the Chat Noir cabaret (Collectif n. pag.). In an article on political caricature published in 1967, Lawrence Streicher points in this direction when he states:

Caricature, cartoon (in the downgrading sense), the comic strip, and the animated cartoon are a connected series of para-artistic creations. They arose historically in the above order, but since the days of the animated cartoons, all have existed together. All use artistic means and mediums. Caricature, which is our central concern, underlies the others and is present in each (Streicher 431).

According to Streicher thus, caricature, or cartoon, is the starting point of a series of related artistic creations that also include comics and animation. In the *World Encyclopedia of Comics*, Maurice Horn points out that if we simply look at the etymology of the term ‘animated cartoon,’ the word used to designate animation derives directly from the term ‘cartoon’ (Horn 35); that is to say, according to the online Oxford English Dictionary: “a drawing executed in an exaggerated style for comic or satirical effect” (OED n.pag.), a caricature in short. And this is not an isolated argument. As early as 1920, E.G. Lutz in his book *Animated Cartoons, How They Are Made*, states that

When some of the comic graphic artists began to turn their attention to the making of drawings for animated screen pictures, nothing seemed more natural than that the word ‘animated’ should be prefixed to the term describing their products and so bringing into usage the expression ‘animated cartoons’. But the term did not long remain restricted to this application, as it soon was called in to service by the workers in the industry to describe any film made from drawings without regard to whether the subject was of a humorous or of an educational character (Lutz viii-x).

Twenty-eight years later, Lo Duca reaffirmed the theory by insisting that ‘cartoon’ is used metonymically for caricature (Duca 11). Thus, if we take up the reasoning of Horn, Lutz and Lo Duca, quite literally, an ‘animated cartoon’ is nothing less than an animated caricature. Of course, this could be seen as a simple etymological word play, but it is enlightening in many ways, especially when Lutz highlights the background of the founders of animated cinema as “comic graphic artists” (Lutz ix), or when

the very opening title card of a film such as *Colonel Heeza Liar in Africa* (1913), states that it was created by “The Noted Cartoonist” (Bray n. pag.).

In his book on the pioneers of animation, Crafton specifies that they had acquired some experience in the field of “popular graphic arts” before devoting themselves to animation (Crafton, *Before*, p. 44). Ralph Stephenson agrees with this when he explains that the majority of these animators were “newspaper cartoonists” trying their hand at a new medium (Stephenson 27-28). And he goes on to explain that while there were individual variations in style, generically the artists of this period were similar. They had a strong tradition of comic drawing, born of magazines like *Punch* and its French and American equivalents, waiting to be transposed, adapted and set in motion. These were usually line drawings, perfectly suited to black and white cartoons (Stephenson 34). Sébastien Denis adds that animators, especially in the early days, became interested in animation through press cartoons, and that press cartoons are a perfect exercise in exaggeration and precision of line (Denis, 2011, p. 50). Wells goes on to point out that in order to be able to produce a coherent collective work, animated film productions relied on the specific vocabulary of the comic strip which all animators readily understood (Wells 17). E.G. Lutz, indicates that in his days (1920), it was already clear that “patterns of emulation in the manner of depicting action and the representation of the character can be found in the drawings of Mr. A.B. Frost” (Lutz 248), a famous American cartoonist of the late 19th and early 20th centuries. Norman Klein also defends the hypothesis that animated cartoons are related to caricature. He states that animated cartoons “continued a tradition of graphic narrative which dates back to the eighteenth century, but particularly stems from nineteenth-century illustration. They were animated comic strips with a frantic life of their own” (Klein 3-4). According to him, the “memory” of the graphic narrative, as much for the animators as for the spectators, finds its origin primarily in the printed page, and this form of graphic storytelling, by 1928⁷, is at the core of animation (Klein 6). Moreover, he indicates that the literature of the 1930s on the subject, puts forward the fact that animation has its roots in a different substratum from live action cinema: comic strips (Klein 9). According to Klein, there is a real tradition of graphic narration which takes shape in the illustration

7 Klein uses the creation of the Mickey Mouse (1928), notably the first animated cartoon using synchronous sound, as a significant turning point for the industry and a shift from a more visual slapstick style of narration to melodrama and a more aural style.

of the end of the 19th century, continues in the comic strip and finally in the animated cartoon (see Klein 15).

Most of the animators of the early years of animated cinema were initially caricaturists, or are in any case indebted to this tradition. In fact, Stuart Blackton, to whom the first animated cartoon: *Humorous Phases of Funny Faces* (1906) is generally attributed, began his career as a caricaturist for the *New York Evening World* in 1896 (Crafton, *Before*, p. 44), Émile Cohl, another pioneer of animation, creator of the films based on the character 'Fantoche' from 1908, or the *Newlyweds* series from 1913, was a pupil of André Gill: one of the most important caricaturists of the late 19th century. Cohl himself was a well-known caricaturist when he took up the cause of animated film. Winsor McCay, the artist behind some of the most impressive animated films of the 1910s, including *Gertie the Dinosaur* (1914), is one of the most famous comic strip artists of the early 20th century, whose influences can be traced back to Tenniel or Grandville (Crafton, *Before*, p. 125). John Randolph Bray, founder of one of the first animation studios, as explained above, is one of the best-known illustrators and "graphic humorists" in New York at the time (Crafton, *Before*, p. 140). And the list goes on with Paul Terry, and the rest of the Bray studio team, but also Gregory La Cava, Walter Lantz, or even Max Fleicher who claims that it is to cartooning that he "owed his first bread", since he was an artist at the Brooklyn Daily Eagle for a salary of two dollars per week (Duca 104). These are all examples which, as Vrielynck claims, "illustrate and flesh out the theories and arguments of those who claim that animated cinema owes everything to the printed image" (Vrielynck 29-30; translation mine).⁸

As Crafton points out, the artists just named forged animation as a genre in its own right in the eyes of the general public, separate from the simple special effects of Méliès-style 'trick films.' He adds that it is with these artists that animation begins to be associated with dramatic situations, narrative structures, iconography and recurrent content expectations. Especially strong links are forged with the popular press (Crafton, *Before*, p. 9). In other words, it is in caricature that animated cartoons find the foundations of their aesthetic. And Marie Thérèse Poncet, one of the first

8 Here is the original French quotation: "illustrent et étoffent les théories et les arguments de ceux qui prétendent que le cinéma d'animation doit tout à l'image imprimée" (Vrielynck 29-30).

university researchers to have studied animated films, indicates that if we want to

understand an artistic form of expression, it seems essential to understand where it comes from, in which school the artists who use and define it were trained, to understand the relationship with what precedes it, what accompanies it and what follows it in the time of its evolution. (Poncet 32; translation mine)⁹

It is therefore essential, if we really want to understand the animated cartoon, to link it to what preceded it, to the ‘school’ in which the first animators were trained: caricature. This is why it is important to take the time to analyse the aesthetic program proposed by nineteenth-century caricatures in order to understand the graphic language spoken by the pioneers of animation when they started to animate. The next section, will offer an overview of the aesthetic characteristics of nineteenth-century caricature. This will in turn allow to summarize what could be said to be the ‘essence’ of caricatural drawing that will be passed on to animation through the comic strip.

3. Characteristics of Caricature

In an article on the conventions of caricature in the Georgian period (1714-1837), Robert Patten points out that the aesthetic program developed by caricaturists was partly the result of the fact that most of them had no academic education. They therefore depended, he argues, on innate talent, keen inventiveness and ‘tricks of the trade’ that minimised, if not exploited, their artistic weaknesses (Patten 335). The author argues that most of these ‘tricks’ will find their way into the practices of comic-strip artists and then, ultimately pass on to early studio animators.

Two of the main problems nineteenth-century caricaturists faced were perspective and anatomy. As far as perspective is concerned, the academic means of creating it (mastering contrasts and decreasing the size of the figures according to their distance), are inappropriate for the medium of caricature. Caricature being in essence an art of portraiture demands that

9 The original quotation in French reads as follows: “comprendre une forme d’expression artistique, il apparaît essentiel, de comprendre d’où elle vient, à quelle école ont été formés les artistes qui l’emploient et la définissent, de comprendre le rapport avec ce qui la précède, ce qui l’accompagne et ce qui la suit dans le temps de l’évolution” (Poncet 32).

the characters be recognisable. And the scale of their representation can be part of the recognition code. For example, Gillray regularly represented Napoleon as a character of Lilliputian proportions. Therefore, size would not be indicative of distance in a system of perspective, but a clear clue to whom the person depicted was (Patten 335).

Cruikshank, another famous nineteenth-century English cartoonist, solved the dilemma of perspective by avoiding outdoor scenes. Most of his drawings are set in what can be called a 'shallow box' scene. In this way he created a space with very little depth in which the figures were arranged in the manner of a frieze, thus avoiding the problem of having to draw groups one behind the other. If necessary, he tilted the scene so that the figures behind were higher, an effect achieved by choosing the angle of view slightly above the line of sight (Patten 335-336).

In the case of problems caused by anatomy, 'print cartoonists' also found ways to circumvent their possible artistic weaknesses. Clothing, for example, is such a mark of identification that it can, to some extent, compensate for the rendering of the body underneath, especially when that body is in motion (Patten 337-338). Loose-fitting clothing is particularly useful for this kind of exercise. Hands are also a rather difficult element to draw. Caricaturists therefore took care to partially hide them by giving them something to hold, by putting them in pockets, out of sight, or by making them wear gloves (Patten 338).

The 'print cartoonist' can also summarise the characteristics of a certain class of individuals. To do this, he synthesises its qualities and defects to give form to an archetypal character (Roberts-Jones 89). Another aspect of the accentuation of physiognomic characteristics lies in what could be called distortion for the sake of distortion, i.e. the search for the grimace and the grotesque as an end in itself (see Roberts-Jones 89-90). According to Roberts-Jones, as early as 1860, one can almost define a kind of 'academicism' of sorts of caricature which consists in representing subjects with a large head above a small body so that the disproportion between these two elements adds to the comic effect already obtained by the exaggeration of the features (see Roberts-Jones 94-95).

Of course, as Roberts-Jones points out, there are attempts at variation. Duradeau, for example, does not focus on the disproportion between the head and the body but seeks a comic effect through his work on the shadows of his subjects (Roberts-Jones 95). Another interesting invention is that of Carlo Grippa, who added around a photograph a series of small caricatural drawings representing in a satirical and critical way certain

aspects of the subject's life (Roberts-Jones 96). For his part, André Gill, the most famous caricaturist of the Second Empire until the 1880s, imposed his style on most of his contemporaries. Roberts-Jones presents Gill's work as a reduction of drawing to its essential core, shunning details to embrace the detail, the movement, the attitude that offers not only a physical synthesis but transposes the soul of the characters represented (see Roberts-Jones 104).

Finally, the anthropomorphisation of animals, plants and objects was always a fertile ground for caricature (Roberts-Jones, 1963, p. 97). Examples can be found in the work of Grandville, Busch or Alfred Lepetit. This non-exhaustive list gives a quick overview of these 'artists tricks' which were to serve as a basis for the new art form that animated film was to become in the early 20th century: simplification of the design, enlarged heads on a smaller bodies, exaggerations and distortions, shadows independent of the characters, states of consciousness that manifest themselves around the head of the figure, anthropomorphisation of non-human figures, etc., are all characteristic elements of 'print cartoon' drawing, as many 'tools of the trade' that Blackton, Cohl, McCay, and other pioneers of animated cinema learned to manipulate as 'print cartoon' artists and transferred into early 'animated cartoon' films. But these former 'print cartoonists' who became animators were not content with simply putting the 'print cartoon' into motion. Indeed, Klein notes that animated cartoons "are a record of consumer rituals over the past seventy years: of transitions away from print media towards cinema" (Klein 1). By the 1920s the formula that consisted of merely animating comic-strip characters without much thought to the specificities of the cinematic screen gradually lost breath. As Maltin points out, the graphic style of the original comic-strip works suffered at the hands of animators forced to simplify these still too complex drawings and to eliminate the backgrounds to increase productivity (Maltin 17). The aesthetics of animation had to evolve beyond the simple copy of 'print cartoons.' The next part explores this transformation and claims that while the art of animation evolved, the essence of caricature remained at its core.

4. Towards an Animated Aesthetic

As the first parts of this chapter have shown, there is an historical and aesthetic affiliation of animation with nineteenth-century caricature or,

to cover a wider sense including the press cartoon and the comic strip: the ‘print cartoon.’ However, a second element that becomes apparent when watching the first animated films produced in the 1910s is that one of their weaknesses is precisely this over-reliance on the codes of the ‘print cartoon,’ leading to a certain rigidity, a lack of fluidity in the animation itself. The problem quickly became apparent and artists such as Bill Nolan, Gregory La Cava or Charles Bowers tried to improve the situation in order to make animation an art in its own right, distinct from ‘print cartoons.’ As expressed earlier, this next part of this chapter will explore how animators transformed their practices mainly through the conquest of a greater fluidity of movement and steering away from the aesthetics of printed media. Animators first of all increased the number of images per second, but also gradually brought in a more rounded and simplified drawing style. This rounding and simplification of the drawing makes the characters easier to draw, which compensates for the increase in the number of drawings to improve the fluidity of movement. Now, movement, or “the moving”¹⁰ is precisely what makes the difference between a ‘print cartoon’ and an animated one (Rowley n. pag.).

According to Willoughby, the real invention of the animated cartoon happens around “graphic characters” along the lines of a graphic animated being who gradually became a kind of popular animated actor, a star, an industrial product of which Felix the Cat, created by Pat Sullivan’s studio,¹¹ was the prototype (Willoughby 194). In its first appearances, Felix’s figure is rather angular, differentiating itself from previous figures mainly by the simplicity of its black body (Barrier 31). A body that actually aims to save time by eliminating most of the contour lines. Moreover, a solid figure, all in black, moves more easily on the screen (Barrier 23), firstly because it is a solid mass, which eliminates any tremors that may appear when the lines vary from one drawing to another, and do not superimpose perfectly during projection, and secondly because the fact of animating a body in solid black means that, for any movement in profile, one cannot distinguish the limbs in the foreground from those in the

10 Dick Tomasovic defines the moving (*le mouvant*) as the illusion of life revealing its artificiality as opposed to the *movement*, characteristic of the living (Tomasovic 30).

11 The authorship of Felix is disputed. According to some, the animator, Otto Messmer, was responsible for its creation, while others claim that producer Pat Sullivan was the creator of the character. This paper will not engage in this debate. For further information see, for example, Willoughby, or Barrier.

background. This means that for a walking cycle, for example, only a half a cycle needs be animated.

Messmer, the lead animator at the studio, then had a stroke of luck in hiring Bill Nolan. Nolan brought in a style of drawing and animation that emphasised curves rather than straight lines, as briefly mentioned above. Felix's design quickly reflects Nolan's presence by becoming rounder and more immediately pleasing to the eye. Moreover, in its circular construction, as well as in the general simplicity of its design, the revised Felix facilitates animation in a way that most earlier characters did not (Barrier 31-32). This improved design, with its large white areas around the eyes and mouth, also enhances the figure's expressions (Maltin 25).

With his round body, entirely black except for the area around his eyes and mouth, Felix became one of the rare animated figures of the time not to be adapted from a comic strip and to be drawn with animation as a primary goal. According to Klein, from 1927 onwards, Felix's aesthetic type was imposed because it better corresponded to the kind of gags that were being set up as animation evolved away from the comic strip (Klein 37). For Dominique Willoughby, the artistic and aesthetic motif of the Felix-type figurines generated a new type of animation that relies on two methods. First, there is the development of the figure's 'acting.' An expressive acting pushed towards exaggeration and caricature by exploiting the properties of the animated line. Then there is the exploitation of the properties of line and animated graphics, of cartooning proper: schematisation, caricature, very advanced exaggeration. To Willoughby, these two modes combined constitute the new singularity of the animated cartoon figures that appeared at the time, and of their movement (Willoughby 195). But if we are to believe Willoughby, in order to establish this aesthetic specific to animation, better accommodating the realities of the industry, while allowing for the production of performances more capable of arousing emotions, animators did not in fact turn away from print cartoon, from caricature. On the contrary, they appropriated its essence (simplification and exaggeration) to adapt it to the possibilities of this medium, which was still relatively new at the beginning of the 20th twentieth century: cinema, and in particular animated cinema. These new animated figures are therefore, fundamentally, caricatural figures. Although on the surface, animated figures such as Felix, or Mickey Mouse ten years later, seem to be moving away from the comic book and printed cartoon aesthetics of the first studio productions. In reality, the very foundations of this aesthetic remain at the heart of the productions

that would bring about the golden age of Hollywood animated cartoons. But the story does not end here. When Tomasovic, quoted earlier, states that “directors, animators and newspaper cartoonists adapted and adopted each other to the point of generating a phenomenon of circulation of images and artists” (Tomasovic 55; translated from the French), this was not a one-way stream. Very quickly animated cartoon characters would find their way onto the print pages. This will be briefly explored in the final part of my chapter.

5. Return to Sender

In the opening of this chapter, it was explained that it was John Randolph Bray who was responsible for the first efforts to turn animation into an industry (Barrier 12). The author then explored how Bray transferred his comic-strip aesthetics onto the silver screen but also how this style showed limitations that had to be overcome for animation to truly flourish. But Bray also “realized the potential of promoting his own cartoons through newspaper comic adaptations” (Knudde n. pag.). Indeed, “Colonel Heeza Liar was also the first animated character to inspire a comic strip spin-off” (Knudde n. pag.). With the success of characters such as Felix in the 1920s, then Mickey Mouse and Donald Duck in the 1930s or Bugs Bunny in the 1940s, cross-media marketing strategies, from merchandising (toys, etc.) to comic strip adaptations were naturally quickly put in place. While in the 1910s it was essentially the comic strip that provided the animated cartoon with a pool of characters, from the 1920s onwards, it was the animated characters that began to take over the pages of comics. Felix was published by the King Feature Syndicate from 1923, Mickey Mouse from 1930 and Donald from 1934. Bugs Bunny was adapted in 1941 in a magazine entitled *Looney Tunes and Merry Melodies* by Dell Publishing (see Gaumer and Moliterni). The title directly alludes to Warner’s animated series and marked a ‘return to sender’ of sorts from the animated cartoon to the comic strip.

Bibliography

Barrier, Michael. *Hollywood Cartoons: American Animation in its Golden Age*. Oxford University Press, 1999.

- Bray, John Randolph. Colonel Heeza Liar in Africa. Released 6 Dec. 1913. https://commons.wikimedia.org/wiki/File:Colonel_Heeza_Liar_in_Africa,_1913.webm.
- Collectif. "Napoléon au Chat noir. L'épopée vue par Caran d'Ache." Adam Biro, 1999, http://www.old-coconino.com/sites_auteurs/carandache/index.html, last accessed September 2015.
- Crafton, Donald. Before Mickey: The Animated Film 1898 – 1928. 1982. The MIT Press, 1984.
- . Émile Cohl, Caricature, and Film. Princeton University Press, 1990.
- Denis, Sebastien. Le Cinéma d'animation. Armand Colin, 2011.
- Duca, Lo. Le Dessin animé – Historique, esthétique technique. 1948. Prisma, 1982.
- Gaumer, Patrick and Moliterni, Claude. Dictionnaire mondial de la bande dessinée, Larousse-Bordas, 1997.
- Horn, Maurice. World Encyclopedia of Comics. Chelsea House, 1999.
- Klein, Norman M. Seven Minutes, The Life and Death of the American Animated Cartoon. 2nd edition. Verso, 1998.
- Knudde, Kjell. "J.R. Bray." Lambiek.net, last updated March 2, 2020, last consulted Feb. 6, 2023. https://www.lambiek.net/artists/b/bray_jr.htm.
- Lutz, Edwin George. Animated Cartoons: How They are Made, Their Origin and Development. 1920. Applewood Books, 1998.
- Maltin, Leonard. Of Mice and Magic: A History of American Animated Cartoons, Plume Book, 1980.
- Massuet, Jean-Baptiste. "Rotoscopie et performance capture: pour une réévaluation de l'histoire technologique de la capture de mouvement." La capture de mouvement ou le modelage de l'invisible, edited by Marco Grosoli, and Jean-Baptiste Massuet, Presses Universitaires de Rennes, 2014, pp. 35-50.
- Oxford English Dictionary. OED. online: http://www.askoxford.com/concise_oed/cartoon?view=uk.
- Patten, Robert L. "Conventions of Georgian Caricature." Art Journal, vol. 43, no. 4, The Issue of Caricature, Winter 1983, pp. 331-338.
- Poncet, Marie-Thérèse. Étude comparative des illustrations du Moyen Âge et des dessins animés. A.-G. Nizet, 1952.
- Roberts-Jones, Philippe. La caricature du Second Empire à la Belle Époque 1850-1900. Le Club français du Livre, 1963.
- Rowley, Stephen. "Life Reproduced in Drawings." Animation Journal, vol. 13, 2005, n. pag. Last accessed 2014, <http://www.sterow.com/?p=797>.
- Solomon, Charles, editor. The Art of Animation, An Anthology. American Film Institute, 1987.
- Stathes, Thomas. personal email correspondence, May 17, 2012.
- Stephenson, Ralph. The Animated Film, Tantivity Press / A.S. Banes and co., 1973.
- Streicher Lawrence H. "On a Theory of Political Caricature." Comparative Studies in Society and History, vol, 9, no. 4, July 1967, pp. 427-445.

- Tomasovic, Dick. "Images dessinées / Images animées: stratégies et convergences de la firme Marvel." *Cinéma & Cie, International Film Studies Journal*, vol. 10, no. 14-15, Spring/Fall 2010, pp. 55-61.
- Tomasovic, Dick. *Le corps en abîme: Sur la figurine et le cinéma d'animation*. Rouge Profond, 2006.
- Vrielynck, Robert. *Le Cinéma d'animation avant et après Walt Disney – Un panorama Historique et Artistique*, Les Ateliers d'arts graphiques Meddens, 1981.
- Wells, Allan. *Understanding Animation*. Routledge, 1998.
- Willoughby, Dominique. *Le Cinéma graphique. Une histoire des dessins animés: des jouets optiques au cinéma numérique*. Éditions Textuel, 2009.