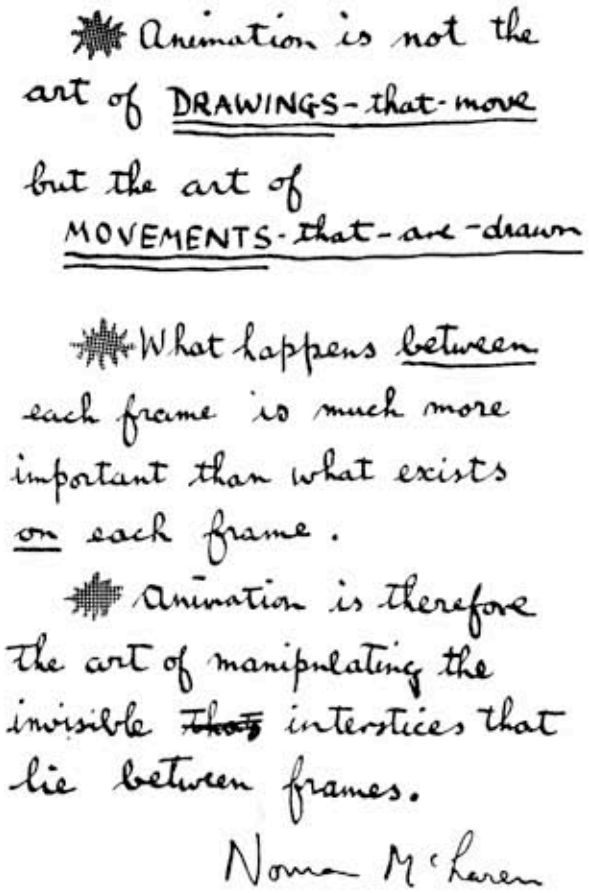
THE DEFINITION OF ANIMATION: A LETTER FROM NORMAN MCLAREN

with an introduction by Georges Sifianos

In 1986, as I was writing my doctoral thesis on the subject of "The Language and Aesthetics of Animated Film," I spent a great deal of time trying to discern the true essense of "animation." Definitions existed, but they were not always satisfactory. The main problem was that in most cases they tried to define animation through production techniques. In my opinion, the *quality* of animation is not inherent in an object but rather attributed to it. Our sense of "animation" depends more on age, culture and historic period than on technique.

One of the best known definitions of animation is that of Norman McLaren, who has made these statements:[1]



I had noted several times that the desire to valorize animation often lead to the adoption of impressive but somewhat questionable ideas. For example, I had seen attempts to recognize an "intention to create the illusion of movement" on prehistoric cave drawings of animals with many legs. This idea tries to attribute "ancestor titles of nobility" to the animated film, to counteract its association as merely an "art for children."[2]

I wondered if Norman McLaren's enigmatic definition was not also creating a mythology about animation (the phrase, "art of manipulating the invisible" suggests the idea of a magic power). Different interpretations of McLaren's definition further developed the metaphysical dimension, which caused me to question just exactly what he had intended.[3]

To the question, how can someone "draw" a movement, several answers have already been given: Géricaults, for example, in his painting, "Derby of Epsom," combines two different moments of a horse's gallop to create the feeling of movement. The Futurists' solution was to multiply the number of legs on a given painting. But what was McLaren's understanding? Was the phrase "movements that are drawn" literal or metaphoric? Literally, movements cannot be drawn, but a metaphoric meaning was unclear.

On the other hand, I wondered why "what happens between each frame" was so important. If it is important from a scientific point of view, how does this issue concern the artist, whose work appears *on* each frame. Why are images on the frame less significant?

Naturally, I understood that McLaren, as an animator, preferred movement over static images. Still, I had questions about his definition of animation, so I wrote to him and asked for clarification. In the following, which is an edited copy of the letter I received in response to my questions, McLaren modifies his former statements. This is the first time this letter has been published in English.[4]

4 August 1986

Dear Mr. Sifianos:

. . . briefly, I will say my first statement was meant metaphorically, or rhetorically, not literally. The critical decision which the animator has to make has to be made between the first drawing and the second drawing—just exactly how much *movement* he has to make. (Incidentally, I said "drawings" for a simple and rhetorical effect; static objects, puppets and human beings call all be animated without *drawings*, but I failed to include them).

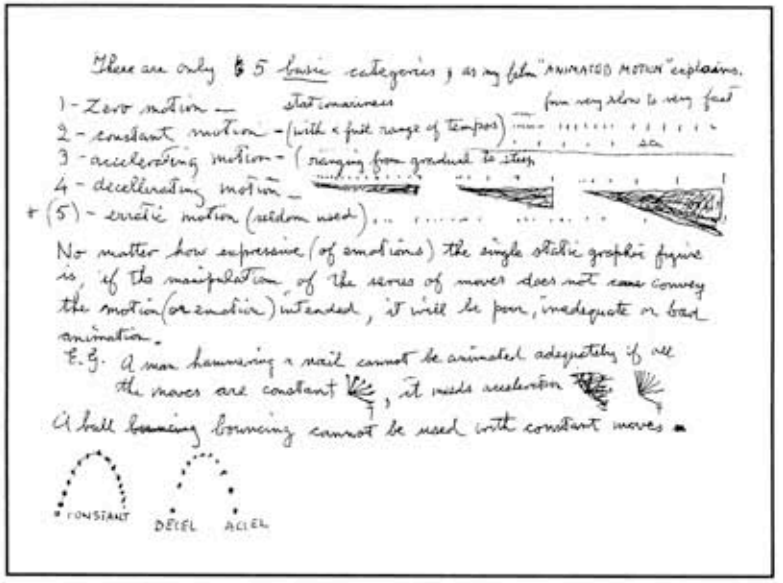


Illustration of movements from McLaren's letter to Georges Sifianos.

But, for the animator, whether he be moving a cut-out geometric form, a familiar three-dimensional object, a puppet or a human figure (as a match-stick man, a fully clothed and rendered chiaroscuro man, or a live figure), the most important aspect is that he thinks in terms of *just how much* he will move that figure *between* every frame photographed; moreover, he has to think of it as a continuous series of moves in advance.

There are only five *basic* categories, as my film *Animated Motion* explains:

1. zero motion - (stationariness)
2. constant motion - (with a full range of tempos, from very slow to very fast)
3. accelerating motion - (ranging from gradual to steep)
4. decelerating motion
5. erratic motion (seldom used)

No matter how expressive (of emotions) the single static graphic figure is, if the manipulation of the series of moves does not convey the motion (or emotion) intended, it will be poor, inadequate or bad animation.

E.g., a man hammering a nail cannot be animated adequately if all the moves are constant; it needs acceleration. A ball bouncing cannot be used with constant moves. These examples will seem very obvious to you. You are perfectly and exactly correct in saying "ce qui est donc important, . . . c'est le degré

de la differenciation de la deucieme image par rapport à la première."

The good animator knows the correct amount of differenciation by *instinct*, by observation, by experience. He *feels* it, if moving a cut-out or object, or a series of drawings.

As the Renaissance artist and all other painters in the realist tradition studied the *anatomy* of people, faces, forms and things around him, so the good animator studies the *anatomy* of the *motions* he sees around him (professionally, we call them "calibrations"). If he sees an angry man standing at a table and pounding the table with his fist, he sees the acceleration of the arm and fist as it descends on the table, and he will see that the more angry the man becomes the steeper (and faster) that acceleration becomes.



- Illustration of the acceleration of movement: the arm and fist of an angry man pounding on a table. From McLaren's letter to Georges Sifianos.

I seem to have strayed from answering your questions—I'm sorry. My main point is that the animator has to do his thinking or feeling *between* making one move and the next move, which usually means *between* one drawing and the next, or if he is working with cut-outs, things and objects, he has to make the *critical* decision of how much to move *between* shooting one frame and the next. *And that decision is at the heart of animation.* In a finished film, no amount of spectacular or beautiful decor and characters, etc., will be a substitute for good animation. In my three statements, I downplay and seem to ignore the importance of graphic elements.

These statements were made a long time ago when UPA [United Productions of America] and other animators were starting to use "simplified" animation, such as double-framing all actions and introducing many holds, which I considered despicable to the art of pure animation.

Of course, the graphism of whatever is being animated does play or can play a very important rôle. With only a match-stick man, one can make him be happy or sad by his path-of-motion and its calibrations. With a much more fully graphically drawn man-with-a-face, we would normally make the happy smiling

There are only 4 5 basic categories, as my fellow "ANIMATED MOTION" explains.

1 - Zero motion — stationnement

2 - constant motion - (with a fast range of tempos) from very slow to very fast

3 - accelerating motion - (ranging from gradual to sharp

4 - decelerating motion -

+ (5) - erratic motion (seldom used)



No matter how expressive (of emotions) the single static graphic figure is, if the manipulation of the series of moves does not somehow convey the motion (or emotion) intended, it will be poor, inadequate or bad animation.

E.g. A man hammering a nail cannot be animated adequately if all the moves are constant , it needs acceleration

A ball bouncing bouncing cannot be used with constant moves.



Illustration of movements from McLaren's letter to Georges Sifianos.

man *move* with vivacity in a joyful way, and the man with the sad face would move in a slow sad way, with drooping shoulders.

With full graphism, we have two more possibilities: the happy looking man many behave in the way our first sad man moved (following the same path with the same characteristics of the sad one) and vice-versa, the sad-faced man may move with joy.

The graphism and animation are made to contradict each other!!—rather than reinforce each other.

6 August 1986

Sorry, but the above explanations are rather confused, disorderly and perhaps obvious. If I were rewriting the three statements today, I would eliminate the first and second, and I would say something like this:

For the animator, the *difference* between each successive frame is more important than the image on each single frame. It is the heart and soul of animation. The graphism, though very important too, is of secondary importance. Animation therefore is the art of manipulating the *differences* between successive frames, or the image on each frame* (and should not be confused with the excellence of the graphism itself).

Yours sincerely, Norman McLaren

*a decision made by the animator in his mind, and at his leisure, which is what I rather obtusely meant by "the invisible interstices that lie between each frame."

[1] Norman McLaren, in André Martin, *Les cinéastes d'animation face au movement* (Poitiers: Imprimerie Daynac, n.d.). This definition also appears in other publications, including Giannalberto Bendazzi, *Cartoons* (London: John Libbey, 1994); Robi Engler, *Les ateliers de cinéma d'animation: film et video* (Lausanne: PM Favre, 1982); and in *Cinema 57* 14 (1957).

[2] For sources on animation and cave drawings, see Louise Beaudet, *L'art du cinéma d'animation* (Montreal: Musée des Beaux Arts, 1982), 13; R. Da Silva, *The World of Animation* (New York: Kodak, 1973), 4; Lo Duca, *La dessin animé* (Paris: ed. D'aujourd'hui, 1982), 10; John Halas and Roger Manvel, *The Technique of Film Animation* (Londres: Focal, 1976), 23; Roy Madsen, *Animated Film: Concepts, Methods, Uses* (New York: Interland, 1969), 3; Marie-Thérèse Poncet, *L'esthétique du dessin animé* (Paris: A.G. Nizet, 1952), 12; and Frank Thomas and Ollie Johnston, *Disney Animation: The Illusion of Life* (New York: Abbeville, 1981), 23.

[3] For example, André Martin translates "what happens between each frame" as "what is" (ce qu'il y a entre les images), which is far from McLaren's idea. A similarly wrong translation appears in *Cinema 57* 14 (1957).

[4] This information is published in French in the doctoral thesis, Georges Sigianos, "Langage et Esthétique du cinéma d'animation," University of Sorbonne, 1988.