“God is in the details,” according to Mies van der Rohe, and this maxim is a large part of what could be called animators’ core belief system, or at least aspects of our temperament which attract us to the craft.

And, because we are symbiotically entwined with the infernal machinery of illusion we are also to a large degree technicians. Even the lowly flipbook is not merely a book, but a manually-controlled viewing apparatus, prototype for the Mutoscope, precursor of the intermittent movement of cinema.

So, when we are asked how we made an animated film there is a common understanding that the configuration of processes and techniques, often called a “methodology,” is at the heart of the matter. All the rest—the design, story or philosophy—is manifestly evident. Yes, even the trickfilming pioneers included self-referential conceits (kegs of ink, bails of paper, hand of creator, and the like), but still there remains a gnawing mystery surrounding animation practice.

Throughout the 1970s I made cartoons using a number of techniques including the traditional, layered cel approach. But most of my work was what I called “anti-cartoons,” using live action, photography, stop-motion and xerography to reference the processes of illusion. By setting up contrasting temporal environments to document simultaneously
methods of time drawing, I hoped to enrich (by undermining) the essentially comic experience with paradox and irony. At heart, I am a gloomy guy with a veneer of cheer: after I laugh at Daffy Duck’s manic strutting I actually worry about what it might mean about race, gender and aggression.

*Flying Fur* was conceived as a cartoon redux, pure and simple, using the most basic conventions of drawing sequenced with a stolen moment of animation sound history to create a screwball stream-of-consciousness sketch.

What follows is both how I made *Flying Fur* in January of 1981 and how I came to make it: not really probing the deep, existential sources and motivations; rather, glancing at thoughts on animation process and history, and my role as a contrarian formalist within it. But, with nearly a quarter century of transformation to digital animation to sharpen and confuse my mind, it is also a rumination on drawing.

**SOUND**

Which comes first: the picture or the sound? There is a rich history of animated synchronisation including “Mickey Mouse” as a verb, Fischinger and McLaren, and the codified phases of character mouth actions. But there has also been a deep antagonism toward sound from some formal experimenters like Breer and Engel who are more concerned with creating purely visual rhythms.

I didn’t want merely to use a piece of prerecorded sound; I wanted to seize it, “appropriate” it, and use it to play with cartoon conventions and stereotypes. It was to be a kind of prodigal return to popular, comic roots; an urgent effort to find common ground with the Oedipal fathers (Disney, Avery, Jones, *et al.*) whom I had been trying to subvert.

Well before embarking on this project I spent an afternoon aimlessly (and blindly) gathering cartoon sounds from one of the TV channels in NYC which played old cartoons. At the time (the late 1970s) one channel programmed classic MGM and Warner’s stuff rather indiscriminately as a kind of video baby-sitting device. I turned on my reel-to-reel deck and recorded the audio for a four-hour period without watching the show. When I played back the tape, one soundtrack jumped out of the batch and stole my heart.
It was a mélange of typical cartoon effects (boings, whistles, squealing tires), stitched seamlessly together with orchestrated music that swooped from jazzy routines to dissonance: Basie meets Bartok, with a bit of Varèse on the side; no language, aside from doggie woofs.

**RULES**

I decided to approach this material with a fairly arbitrary set of rules to be true to the experience of the sound as such, not compete with or comment on the original cartoon characters or narrative.

1. Do not research the sound source until after completion of the animation, if then.

2. Do not add or subtract sound elements, nor alter the original track in any way; quote verbatim, including the announcer who says, “...now back to our show...” This rule has since led me to shun friendly advice that I commission a soundtrack for *Flying Fur* even after it became clear that MGM would never give me permission to use the original track.

3. Do not make a storyboard. Just draw whatever comes into my head. Yes, this sounds something akin to a Surrealist exquisite corpse, or psychotherapy. I wanted to retain a kind of unrehearsed mayhem underlying the orderly progression of sequence drawing, exposure sheets and scene folders.

4. Draw the animation in one month. I thought this would stimulate a kind of spontaneity, in keeping with the exuberance of the sound. All drawing was to be started and completed at the MacDowell Colony, a refuge in New Hampshire which catered mostly to writers, composers, and painters. This forced deadline was further abetted by the isolation, snow, and community of people who saw each other mainly at dinner. It made the project more like a “job.”

5. The title is *Flying Fur*, suggested by the abundance of aggressive, animal noises and breakneck tempo of the music. Choosing the title first, as a kind of carrot to allay distractions, is a rule I have followed for virtually all of my independent films.

These overt, codified rules imposed limits and structure which felt necessary, at least on a subconscious level, particularly with independent film, which is made chiefly to amuse yourself.
PRODUCTION

OK. Now the hard part. How does one make grass growing seem dramatic, even when compressed into a four-week period?

Sequence drawing on paper worked for Emile Cohl and it still serves the cartoon world quite well. By making a series of drawings, each slightly different from the one before, then displaying the drawings momentarily (about .1 second each drawing) an illusion of movement is achieved. The cartoon industry that developed from the Cohl experiment during the first half of the twentieth century applied a variety of methods to Taylorise the process into a highly sophisticated hierarchy but I (and many others in my generation) returned to the direct simplicity of drawing on paper and allowing the final design to look like a drawing on paper.

My background as an apprentice in cartoon studios also led me to value the scratchy, provisional, yet robust look of animators’ rough drawings. They contained a spirit often lost when traced onto a cel. By giving up the separation of figure and ground, fundamental to the classic cel design, and regressing to Cohl’s primitivism, I was forgoing graphic complexity (the illusion of 3D space) while affirming the act of marking on paper.

However, I did follow certain conventional studio practices:

Track Analysis. When transferred to sprocketed magnetic track the sounds (every effect, rhythm shift or percussive) were broken down to frame counts, scored on exposure sheets with little ideograms illustrating “hits” and decays. Broad divisions in musical and sound themes were used to further divide the track into “scenes.”

Layout/Scene. I drew the characters roughly on one sheet to indicate the framing, development, placement, lines of action and other scribbled marginalia which sometimes led to more development later when actually drawing the sequence. Because there was no storyboard each scene’s new layout, often coinciding with a new morning, was a kind of table raise, particularly since the soundtrack often had dramatic stylistic discontinuities. Sometimes the layout sketch is momentarily part of the sequence offering the alert viewer
Even without the storyboard, dividing the action into scenes, each with its own folder, sequence drawings and exposure sheets, was a default method of organisation and visual editing practised by studios at the time.

**Extreme/In-between.** This system of drawing, as opposed to “straight ahead,” simply describes the process of discontinuous choreography comprised of key poses which are held or emphasised and the intermediate poses which link them in time. Even a cycle (e.g. of a running figure, a repeated loop with no emphatic extreme) will need a key drawing to suggest an attitude.

Two fundamental aspects of sequence drawing are the union of time and space, often just called “timing,” and the symmetry of time: an action can be constructed from the beginning or from the end. Timing includes not only tempo, rhythm and accent, but also acceleration strategies which can be “natural” but more often are physically impossible, like a character’s rapid exit depicted by a slowly dissipating cloud of dust.

When producing a sequence, traditional studio animators typically made the extreme drawings with spatial notations and filled-in the exposure sheet as a script for assistants to make the in-betweens. Stylisation was then done by “clean-up artists,” inkers and painters.

The lowly “in-between” (even the word suggests an unimportant, indirect substitute status) is to my mind the most profound concept in animation. While the key drawings could be made by any illustrator and have a kind of limitless narrative potential, the in-between is actually a cusp on an arc of movement, the essence of animation. If the movement is cyclical it becomes the fulcrum to the wheel of time, manually constructed with strokes, smudges, dots.

Light from above intervenes with light from below to illuminate a registered stack of paper (at least three sheets, often more) containing the sequential phases of movement. The animator clamps the corners of the sheets with the fingers of one hand while drawing with the other. The lighting and paper grain provide subtle variations in translucency and stroke density to suggest a palimpsest of the action. Strokes can be seen migrating through space as if in a Marey chronograph. And of course to see it is to draw it.
The top light is important to interrupt the limpidity of the stack. Without it the effect is too much like a stack of tracing paper where line placement is visible, but line character is not. How does the mark look on paper at the time of reproduction? Some animators like to view and even draw their sequence without any bottom light while constantly flipping the pages to simulate intermittency.

When drawing the in-between the animator must have one foot in the past and one in the future in order to determine the proper position for the present stroke. This rather exciting prospect has nearly always been diminished by the traditional codes of character cartooning: consistency of form and motion. The motion must be smooth and the figure must retain its mass (except for emphasis); even the line must retain the same weight—all to deceive the viewer into that age-old suspension of disbelief (as if). Fortunately the example of artists like Breer and Engel continues to enable maverick cartoonists like Hinton.

The most conventional “improvement” to this process has been to view it as any other tedious assembly-line action and automate the in-betweens, first by in-camera dissolves, and now through “tweening” or “morphing” software. But the complexity of cartooning the figure, involving a multitude of graphic conceits to illustrate space, joints, limb functionality, attitude, has limited these labour-saving devices. Ultimately, for an animator, it’s no more about labour than strokes to a painter, or muddy hands to a potter.

Artwork. This word traditionally refers to painted cels and backgrounds, not animators’ drawings which were sometimes saved as a curiosity, yet more often unceremoniously trashed. There is an apocryphal story of Frank Lloyd Wright telling an astonished Walt Disney that he should use rough sketches, pinned up for a story session, as his final design. Wright’s view was later validated by a seminal exhibition of Disney work at the Whitney Museum in 1981 which featured animators’ rough drawings as well as the films.

Some scenes of Flying Fur use a cel layer to hold an element or are “slashed” to reveal a lower layer, but most are drawn on a single layer, with “trace back” elements as needed. This combines with the obvious colour pencil or marker strokes and the incidental smudges, erasures and reworked lines to give the overall design a roughhewn feeling. When traditionally-minded critics call it “unfinished,” I spin that into a compliment.

After I returned to New York I hired two assistants who coloured the drawings according to my models. Of course, this meant that I actually broke one of my rules by not completing the “artwork” in one month. Thus, the opening title says “written and drawn” but not “colored” in January.

Shooting on 35mm strictly following the exposure sheets. Unlike all of my experimental work, which often used self-referential and other disruptive devices, the cinematography for Flying Fur was conventional, mostly on 3s, on an animation stand. I cannot recall if I or an assistant shot it; probably a little of both.
NARRATIVE
What is *Flying Fur* all about? What was I thinking while drawing in that snowbound cabin? It would be tempting to compare the experience to the space-station inhabitants of “Solaris,” locked up in their rooms with their imaginary friends. In my case there was a suite of stock cartoon characters to play with: a square man which I had used on other occasions as a kind of surrogate, a wolf in running shorts and shoes (another surrogate!), a bird, a crudely drawn parody of Mickey Mouse, and an assortment of lesser beings: a cat, a house, various dogs.

The music suggested a series of archetypal cartoon episodes and attitudes, including the chase, the sneak, shock reaction, mocking laughter, impending doom, as well as numerous accents and expletives which pop up out of nowhere. This finely-tuned collage was my template for an introspective inventory of cartoon tropes. On the most basic, literal level *Flying Fur* is an archeological homage to the rich improbabilities of classic 1940s animation.

But, true to my return to roots, a deeper theme is how cartoons have used racial stereotypes both in design and characterisation. It is no accident that J. Stuart Blackton’s 1907 *Lightning Sketches* showed a quick-sketch routine with caricatures of “Cohen” and “Coon” or that Pat Sullivan’s business card “pickaninny” bears a strong graphic equivalence to his Felix, the first cartoon hero. Movies at that time were extensions of the vaudeville circuit which was heavily flavoured with minstrelsy; comedians used blackface on stage and in movies well into the 1940s. Although I have not done any systematic research, it seems likely that pioneering cartoonists, all of them white and influenced by prevailing racial attitudes, were drawn to these popular models and created characters which combined animal and human (African-American) characteristics. Sometimes these were overt caricatures: often the tubular body was joined to a spherical head which was blackened with a partial mask of white (originally just lips and eyes), sometimes enlarged to contain more facial elements.

If we accept that humour is often a reaction to, even a celebration of the pain or discomfort of others, then it seems likely that the comic effect of much early animation was related to the daily humiliation of African-Americans; inflicted violence was funny in part because these were representations of simple, fun-loving creatures, black creatures, often in animal form, yet always anthropomorphic. I am not arguing that cartoonists and their audiences were virulent racists but that they recognised immediately
who the victim was and could draw some satisfaction that it was not their sort. Explosions which blacken characters’ faces are but one of many gags that serve the same purpose.

At the same time there was and is a real desire for animators to act through their character, to assume a rowdy or disreputable identity, and what could be better than interracial or inter-species mimesis. Norman Mailer’s “White Negro” could easily apply to the anarchic animators of MGM and Warner’s in the 1940s as it did to the Beats in the 1950s. Of course, these wild assertions were part of a speculative matrix, not the elements of a theoretical argument.

A related theme focuses on ambivalence. Characters undergo startling reversals: hunters become hunted, chasers become chased, a “bad” cat becomes a pussy cat, black masked faces are passed off to white masked figures, even the Caucasian square-man has a kind of wish-fulfillment fantasy doing a jazz dance in brown face. These transformations are abrupt, discontinuous, angular and illogical, somewhat like the music.

Classic cartoons often contain signs, labels or captions as throwaway gag lines (including Jones’ long-running Acme Co.), often held on view for what seems now an eternity. Throughout Flying Fur I insert text as running commentary, often just below the threshold of comprehension. The most obviously legible example is a newspaper (Daily Snare) read by a villainous cat, accompanied by typewriter effects. Its headlines parody Variety while suggesting racial overtones to conflicts in cartoon studios.
BARRELHOUSE BOP
During the 1970s I often produced related flipbooks or pamphlets with my films. Just after *Flying Fur* I organised a publishing project called Flip-Pack for which I drew a flipbook called *Barrelhouse Bop*, a cartoon history of jazz. My thesis was that cartoons had evolved, like jazz, from primitive, vulgar sources into a classic era of orchestral popularity (Ellington, Disney), then to a modernist phase of experimentation by individualists (Charlie Parker, Norman McLaren), concluding with what I called a “new wave,” illustrated by a drum-smashing climax. The design of the cartoon musician evolves from racial stereotype to a more humanistic design before exploding into edgy abstraction.

The flipbook suggests a clue to another core theme of *Flying Fur*: jazz and dance. The characters seem more intent on performing certain primitive movements than re-enacting the traditional scenarios of chase and slapstick mischief. Cut loose from narrative anchors they push the action into the kind of purity found in nonsense. But just as jazz, even the “free” jazz I loved in the 1960s, relies on codified riffs and phrases within its apparent improvisation, so my characters, appropriated and procreated, find themselves repeating familiar, conventional steps and rhythms.

EDITING
There was no effort made to edit the material by rearranging scenes or varying their duration because the soundtrack was inviolate and because, given the helter-skelter nature of the flow of imagery any sort of narrative “improvement” would be either illusory or too obvious.

During the layout stage there were few false starts. Reorganisation was intuitive and had something to do with discovering, often after a lot of sketching, that something was not working. After ten years as a professional animator, working to fulfill contracts and satisfying clients’ desires, I had internalised various filters to insure that the mood or movement was “appropriate” or “understandable.” My fear, of course, was that this self-conscious awareness would infiltrate *Flying Fur*, burden it with linearity, and grind it down to a logical thread. After shooting and synching (on an upright Moviola), I finished with minimal negative cutting and contact printing.

CONCLUSION
At the point of completion I sought out the identity of the original film. John Canemaker suggested I call up Mike Barrier, an expert in animation history with whom I had previously corresponded, when he edited the magazine *Funnyworld*. By hearing the taped soundtrack on the phone Barrier immediately said *Puttin’ On The Dog*, a 1944 Tom and Jerry directed by Bill Hanna and Joe Barbera. The music was by Scott Bradley, who, along with Carl Stalling, was one of the composers who gave cartoons from this period their distinctively heterodox, collagist style. Bradley has been quoted as saying that he was firmly encouraged by the studio bosses to cut licensing costs by incorporating songs already owned by MGM in his mix (like “Runnin’ Wild” at the film’s opening).

Although it wasn’t my initial plan (it would have made a splendid Rule 6), I want to
install the film in a gallery with two projectors. A two-sided screen would be positioned in the middle of the space. On one side would be projected the original Tom and Jerry, on the other side, *Flying Fur*. The viewer would hear the soundtrack and choose between viewing the original or the parody.