# Technical Notes on *A Chairy Tale* (1957)

Visuals

Our method for making the chair move was that of traditional string-puppet technique, except that instead of having the strings run vertically upwards, we had them attached to the chair and run <u>horizontally</u> to off-screen right and off-screen left, where they were manipulated by two animators. For only a very few scenes did we use vertical threads. The strings were fine black nylon fishing tackle, which was invisible to the camera.

While rehearsing, we discovered that it was very important just <u>where</u> the strings were attached to the chair. Tying them low on the legs, or high on the legs, or low or high on the chair's back, or to combinations of these parts, made possible very different types of chair motion. If we wished the chair to rotate, at least two threads were wound around the chair's four legs <u>in advance</u> of shooting; during the shot these threads were pulled (off-screen) in opposite directions. For the most complicated motions, such as the chair leaping off the floor and flying through the air, we had to have four manipulators and add threads running vertically to pulleys on the ceiling, then horizontally to left and right off-screen.

Use of Sub-normal Camera Speeds

We had a variable speed motor attached to the camera, which could give us 16-, 12-, 8-, 4-, 2- and 1- frames per second (fps).

It was much easier to control the chair's behaviour if we moved it slower than normal. This led us often to shoot at half-speed (12 fps). If we wished both the chair's and the man's action to appear as if they were behaving at normal speed, the chair was manipulated at half-speed, and the man performed at 1/2-speed. Or, if the chair's action was really tricky to manoeuvre, we would run the camera at 6 fps, and have the chair and man move at 1/4 –speed. As long as the action and camera speeds were slowed down by the same amount, the final projection looked normal.
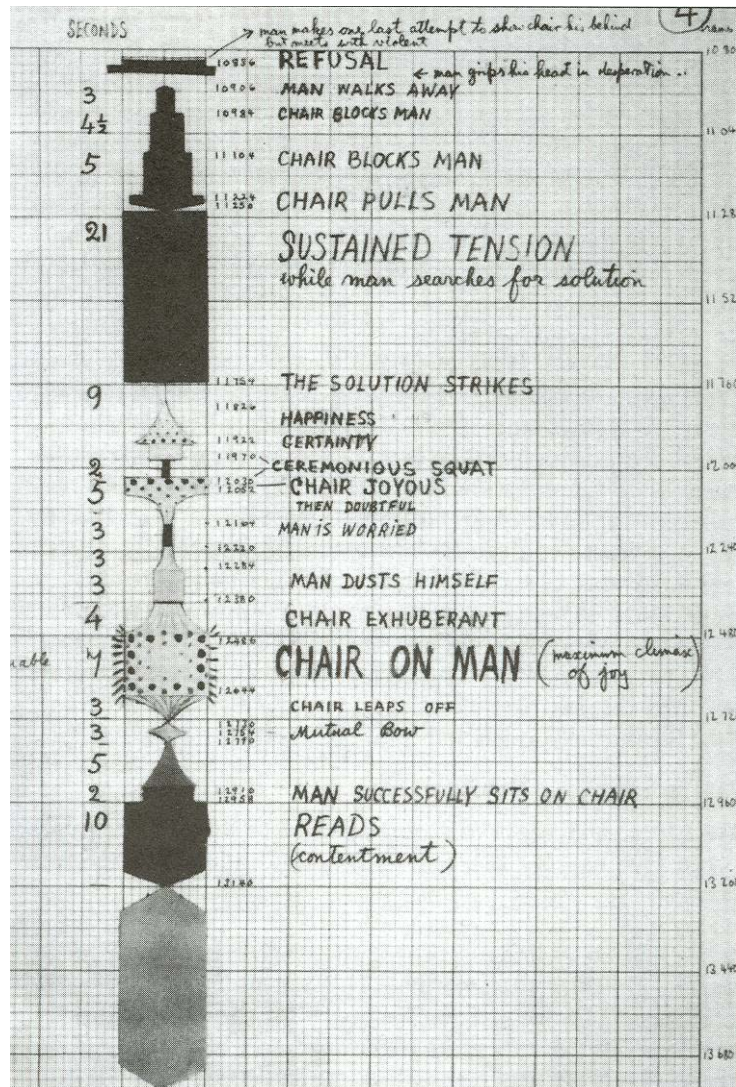
Part of visual outline of *A Chairy Tale,* prepared by McLaren for Ravi Shankar.

In cases where the chair moved with supernatural speed and the man with normal speed, our formula might be: camera 8-fps, chair normal speed, and man 1/3-normal speed. (The idea of variable ratios between camera speed and performance speed is dealt with in more detail in the technical notes on *Neighbours*).

When the man was dashing back and forth across the screen in search of the chair, he was running as fast as he could and the camera was turning at 2 fps, producing a blurred effect.

During the shooting there was considerable improvisation, for instance, when the man was chasing the chair in circles, we tied threads from his knees to the chair-legs, and had him run backward, pulling the chair after him, while making gestures as if to catch the chair. This, when the action was reversed in the optical printer, gave a convincing effect of him racing after the chair.

Soundtrack

The picture was completely edited before we considered what to do about the sound.

At this moment, by great good fortune, the distinguished composer-performer sitarist Ravi Shanker, who was then living in New-York, had come to Montreal for a TV recital. I invited him and his tabla-player, Chatur Lal, to view the silent film. He expressed a keen interest in composing the music.

We went about it in this way. In advance, I prepared a chart of the whole film on square-off graph-paper, where each square represented one second of time. The duration of sequences, episodes, actions and gestures was indicated precisely on this chart, by the use of colours, diagrammatic marks, names and numbers.

I then spent an afternoon screening the film many times for Shankar and his percussionist. Between every screening we would identify each sequence on the chart. After about a dozen screenings, they were both thoroughly acquainted with the film and the chart as it related to the film. They required three weeks to evolve the music based on the chart.

For the recording session the film was split into about ten loops, and the music performed as each loop was projected. About 20 seconds of silence was included in the loop, just enough for decisions to be made for improving the substance and manner of the performance.

When the music was felt to be right, we did not stop the projector, but continued running, and made several takes immediately; for Shankar it was important that they be recorded while at the peak of their "warming-up" rehearsals.

We also recorded 'wild' a few special effects on the sitar, and many percussive and semi-musical sounds on the table. These were later selected from an edited into the re-recording tracks for the final sound mix.

Norman McLaren (1957, revised in 1984)