A film director's conversion

Editing on VHS

by Hrafn Gunnlaugsson

The Icelandic film When the Raven Flies, shown at the Berlin Festival last February, and at the recent Atlantic Film and Video Festival in Halifax, was edited on a VHS cassette. No work print was made; instead, all the negative film was played from a scanner straight onto VHS cassettes, to which a time-code was added. The material on the cassettes was then edited together on ordinary VHS machines, and the negative film cut to fit the cassettes according to the time-code. Naturally, this sounds a bit hard to believe, and a lot of questions were asked while this method was being used. In the following, the director Hrafn Gunnlaugsson briefly explains why this method was used, how the work progressed, what sort of problems arose, and what the outcome was from both a technical and financial point of view.

Why video instead of a cutting table?

I have often found myself sitting over a difficult scene on the cutting table, lengthening, shortening, changing, adding, until the work print had become scratched and sticky, jumping about on the screen every time we made a cut. When you have to deal with very precise action and you have finished splicing the clips together, it can be difficult to know whether the editing has really worked. It doesn't make it any easier when some of the frames get lost or destroyed and you have to substitute from the leader.

My curiosity was aroused when Sven Skans, the head of the video department at AB-Film Teknik in Stockholm, informed me that they had got a system which could play the negative straight onto VHS cassettes with the time-code. They had edited some commercials with this method straight onto VHS, and it went quite well. That meant, though, that didn't matter - the time code was still legible.

The editing itself

To make sure it was safe, the laboratory ran all the negative through an analyser as soon as the developing was finished to check whether there were any scratches or lighting errors before it was played onto the cassette. No visible errors appeared, and I had all the material - some 17 hours - sent on 10 VHS cassettes to Iceland. The laboratory was in Stockholm, but I did the editing here in Iceland. Unfortunately, Iceland is so small that it does not have a laboratory.

When I got hold of the cassettes, the videomaster always remained unchanged however many copies were made of it. It was also possible to preview all the clips before they were processed and add or subtract one or more frames after each preview if you needed a very tight clip.

The editing systems that I considered using were the Panasonic 8500 video cassette recorder, and the editing controller NV-A500. When I had experimented with some other material, I decided to use this method for When the Raven Flies. In other words, no work print - just the negative put onto cassette and edited through the video.

Various technical problems

Up to then, everything had gone fine. The soundman used the cassettes that I had edited to post-synchronize the dialogue, and we went back to Stockholm to finish off the work.

The next stage was to film a telecopy of the video cassette. The idea here was to use the telecopy to cut down the amount of time for the sound-tracking, if that should be necessary. When the sound work was over, the next plan was to cut the negative according to the telecopy. When I got hold of the telecopy, it turned out that the time code was doubled up in some of the shots, as if the film and the video were not synchronized. Naturally, we were really surprised because for the first time it looked as if the EFC system had gone wrong. After a thorough investigation as to how this failure had occurred, we found the answer. The video machine had occasionally edited at half-frame - that is to say, that a 50th of a second had been cut out so that some of the frames...
were placed in the middle of the ones that preceded them. This of course meant that some shots were variously half-a-frame too long or too short. We decided to solve this problem by taking the negative, selecting one frame either to the right or the left so that each scene as a whole would be equally as long as its counterpart on the telecopy. The only risk was the possible variation of a single frame in two or three of the shots. By doing that, we hoped to retain the synchronization. This method worked, but entailed a good deal more trouble. If this had been foreseen, we could have avoided the problem by setting a frame-lock on the playing of the negative onto the cassette so well that we only had to get the actors to repeat very few lines, and that only took one afternoon. The film was then mixed in Dolby stereo and completed like any other film.

Technical outcome
After going through this experience – editing a full-length feature film onto VHS – I can only say: why take the long way round? It is so much more convenient and more stimulating to be able to edit the same scenes in a multitude of variations than it is to sit in a dark editing room, with bits of film covering all the walls, and not be able to see new possibilities without destroying everything that you have already made.

Moreover, this working method allowed us to be able to send the composer of the screen-music copies of the scenes as soon as they had been edited. In this way, he was able to get his work underway before the final editing began. All the problems that came up could be easily avoided or completely solved.

The financial side
The costs of a work-print, editor, and a cutting table were dispensed with, and in their stead came the cost of scanning all the material, the hire of the video machinery (it is that cheap – about $4,500 – that it’s worthwhile buying it), the telecopy for the negative editing, the light-rush print copy for the mixing, and the lighting quality control.

If a third of the material is printed onto a work-print and 10 weeks taken on the cutting table, the costs of the old cutting-room method and the video-editing method are nearly the same. The new method has the advantage that all the material and not just selected scenes are played onto the video cassettes. That gives one a lot of freedom with the editing because so often one overlooks the whole and gets wrapped up in the fine details when having to decide which individual takes to print. When it is possible to see all the material together, these kinds of errors can be reduced to a minimum. It also means that the scene and clapperboard markings become unnecessary when using post-synchronization because all the material is in the cassette. We didn’t use a script-girl to mark the scenes and trusted our own memories for the sound-track guide, where we read in all the information. That presented no problems – thus it was possible to save all the film that would have been used up by the markings, as well as the salary for the script-girl.

If I do another full-length feature, I have no doubts about the method – video. It has everything in its favour, and if you don’t believe me, go and see When the Raven Flies.