



THIRD IN A SERIES:

HDTV: Call It 'High Definition Imaging'

by Bentley Miller

Since HDTV is an entirely new medium — and in light of the information passed on to you in the last offering of this column — I would prefer now to call it the high definition imaging system. This is, I think, a more accurate description.

Although its roots are in the television photographic process, the HD imaging system is a medium unto itself. It has broadcasting applications, but that accounts for perhaps as little as 10 per cent of the market manufacturers of HD imaging systems would be looking at for their equipment. More likely users are publishers, medical schools and any user who requires a high degree of color detail and resolution. HD has greater utility than the creation of entertainment or information programming.

In light of these facts, one has to put some perspective on the entire field of HD imaging.

One of the principal reasons for convening the November HDTV conference in Ottawa was to facilitate development of some preliminary ground rules for the television/broadcasting end of high definition imaging, and to disseminate knowledge of HD imaging to a broad spectrum of people. Towards that end several workshops were conducted, some hands-on and some to discuss what had been done in the hands-on sessions.

An important element in the conference was a satellite link-up with the Banff Centre, where pictures sent in high definition were viewed on a Sony projection screen. Comments from the Banff audience, moderated by Milton Fruchtman, served as a useful foil to our first-hand experience. Unfortunately, they couldn't get the full benefit of what we were sending due to low screen brightness, which gave rise to a number of comments you will read later in this column. The discussions often took the form of evaluating the pluses and drawbacks of the medium.

In the hands-on sessions the gear was put through its paces to see where it excelled and where it was lacking. The first comparative test was lighting of scenes from a the play *Cold Comfort*.

The premise of the demonstration was to illustrate the difference between how a theatre lighting designer uses light in comparison to a television lighting director, and the resultant differences of the pictures when imaged using the HD system. John Munro designed the theatre lighting rig set-up; Tom Swartz was the television lighting director for the test. A discussion and question-and-answer session ensued after the test, which proved valuable for those in attendance.

What follows is a synopsis of the discussion of many of the issues that surround HDTV imaging as a production process.

David Langer: "From my eye, just looking at the monitor, I really like the wide shot. When it's on the wide shot, with lots of floor space, I think that the action that's going on is very interesting. But because I feel that I've got a wider perspective I just like watching the dances. I feel that I don't even need to cut away from it."

"...I think one of the major issues surrounding HD is ...the confusion of the medium as a mastering format with the various distribution alternatives that are offered."

Munro: "I think that's true! But, again, the conundrum that we're faced with is are we using high definition as a production medium ... and then we're going to convert it to something else? Or is it going to be used in its own right? In the beginning — certainly any production that I've been involved in, except for demonstration purposes — the material has been converted to other formats. And so you always engender a certain amount of compromise ... I think that you can really use high definition for what it was intended to be. But it is something that you as a producer or director have to always consider. Because once it is downconverted to 525 or 625 it's going to be seen as conventional lower definition television. It's an issue that we will not resolve until we have high definition in our homes and we can deal with

the theatrical experience — both live theatre and cinematic — as it was originally intended."

Langer: "One of the issues that I'm grappling with is that as a producer, in terms of co-productions, there are just so few markets in the world for a wide-screen application, whether it's a future closed-circuit market on an ad hoc basis here in Canada, which will certainly become the application not only here at the NAC but in other areas as well. So we are constantly faced with this distribution quandary. As we said, it's going to impact exactly on how you direct it and on how you frame shots. Do we not have to really think of high definition now in two ways — one as a mastering technique and one as a distribution technique? We need to split those apart; in conventional television you don't."

Munro: "I think that's true. In fact, I think one of the major issues surrounding HD is exactly that — the confusion of the medium as a mastering format with the various distribution alternatives that are offered. That has in fact become very politicized in the last couple of years. That the HD format should conform to what is conventional television distribution because, obviously, the television broadcasters don't want to be frozen out of this market. But the reality is a little bit like saying when FM radio came along that we had to make it fit into the AM band."

"So I think what we are dealing with here is that ... the only time we are going to see HD come into its own is when we present it as a large wide-screen format. In the meantime what we are going to see is a little like what the studios did in the early days of television — they shot color film despite the fact that there was no color TV available because they wanted to protect their masters for future distribution. And I think the film community is becoming very, very conscious of the fact, at least in terms of the lifetime of syndicated programming, that they have to start thinking about HD distribution or origination."

"So 525 post production, extremely popular in the last few years, is getting