to get a composited matte shot. With HDTV, blue screen mattes are instantaneous.

During his tenure at CJOH-TV Ottawa, Galt and his colleagues did extensive work with the NTSC 525 Ultimatte. The Ultimatte uses the blue screen color difference process to produce mattes, not keys as in the case with chroma key process. The ultimatte is capable of resolving fine detail such as strands of hair or smoke, elements that would be transparent to a Color Separation Overlay or chroma key. Galt believed that Petro Vlahos, the inventor of the blue screen color difference process, could build an ultimatte for HDTV. It was this HD Ultimatte that made it possible to shoot 13 half hours for a production budget of roughly \$11 million - or about \$750,000 per episode.

The costs may sound high, but recall that the bulk of the story took place in the Montreal of the 1920's, but it was actually shot in Toronto and the surrounding locale. The HD Ultimatte make possible many previously impossible shots that were instrumental to telling the story.

One of the matte shots we scrutinized at the seminar was a perspective shot facing southwest along Toronto street, which features buildings representative of the period with a few important exceptions the ground floors have been renovated and feature modern store fronts and, at the foot of the street on the west side, there was a two storey parking garage. These elements obviously didn't fit the times. To rectify this situation large blue screen matte boards were erected to block out the unwanted modern architecture. The scene was shot, with the matte boards in place, as if it were a live action sequence. Later an artist's rendering was substituted for all of the inappropriate areas of the scene.

The composite picture, with all of the live action, looks as if it were shot altogether on location. The matte is not flawless, but to all but the most careful and studied observer it is superlative. The important thing about this matte, like any special effect, is that it facilitates the telling of the story without drawing attention to itself. It was an effective creative use of a technical apparatus.

If there is anything to keep in mind when using HDTV is that it is just a tool, and not the saviour of mankind. Tools are meant to be used well to achieve a desired result.

Film Still Only Accepted Medium

Barry Rebo has made use of the HDTV medium as well. In some respects his companies usage parallels that of Northernlight and Picture Corporation, Rebo and his partners were the first American company to make a feature-length production on HDTV. The project, directed by Robbie Benson, was Do It Up, a film on the avails of the use of crack cocaine, a problem that has become epidemic in scope since the picture's release. In this instance HDTV was the medium of choice because that is the medium that the producers were used to. Joseph Bieber, one of the partners in Rebo, was quoted in an interview with Film and Video Productions as saying "We are involved in the electronic imaging business, especially through the medium of high definition." (1)

There were sound business reasons for shooting in HD too. Typically the cost savings over shooting the project on film were in the range of 18 per cent, even though they knew that for the movie to gain wide commercial release it would have to be transferred to film. Bieber was also quoted in the same interview "The only way we can deliver the image to the public in theatres is through the celluloid projector system, and until the projectors become electronic, we have to get over to celluloid. This means we shoot electronically, post produce electronically, and then transfer from tape to film so we can get the film in to the theatre circuits." (2)

At present film is still the only internationally accepted release medium.

Coincidentally another HDTV feature film, Julia and Julia produced by Italy's RAI and starring Kathleen Turner and Sting, was a box office failure. Why? It wasn't because it was shot on HD, because the HD pictures were well received as being the future imaging system. It was because the story was poorly crafted!

Rebo High Definition Studios has a host of firsts as far as High Definition is concerned. Rebo pioneered the use of HDTV for commercials with their production for REEBOK. And, in concert with Zbigniew Rybczynski, Rebo were the first to produce a music video on high definition — Imagine, which featured visuals cut to the song of the same name by the late John Lennon. It was a visual as well as special effects delight and was officially entered into competition at the

Cannes Film Festival. Many of the sequences left you wondering how it had been done.

That is the genius of Rybczynski, who some have likened to Orson Welles insofar as cinematic genius is concerned. Rybczynski worked as a director on a number of projects with Rebo until he started his own production company ZBIGVISION. During the seminar his name came up on more than one occasion as a maverick and an innovator.

John Galt spoke of the studio that Zbig has in upstate New York. The studio was described as being like any other sound stage that one shoots in with a hard wall cyc and such, with one important difference. You won't find any Ik's or 2k's in the grid, only banks and banks of fluorescents. On hearing this I wondered how could he be held in such high regard and how can he get the results that I had seen in Imagine, which featured skylines and strong sun shadows.

Well it just so happens that Zbig creates his strong visual imagery by doing multiple Ultimatte passes layering one image on top of another, blending, mixing, cutting. To do this he needs a flat light source. The fluorescent is ideally suited for this task. Zbig gets the strong contrasts and sharply textured shadows by painting them in during the post production process using a Paintbox.

There's more than one way to skin a cat! It is this type of unconventional thinking that will make HDTV everything that it can be. Zbig is primarily a video artist who is utilizing the available technology to create new and interesting images. He is pushing the horizons of electronic imaging out to new boundaries.

David Niles is extending the boundaries too in his own unique fashion. Niles, a hard working creative person. has been involved in high quality video production for over 20 years. His organization, 1125 Productions, is active on several fronts, including making Let's Work, a music video for The Rolling Stones that was directed by Zbigniew Rybczynski.

In addition to the regular gamut of production tools such as the camera and VTR systems, Niles has invested a great deal of money in HD production tools such as a Paintbox, a DVE, Ultimatte, switchers and a number of pieces of hardware which are in development. He is confident HD is going to catch fire because it represents a totally new, and vastly improved, system for delivering high quality pictures.