

nological advances in live creature effects can we expect? CINEFEX: Assuming it does stay around for a while, what tech-

of a live actor and then send it right to the skin technologies, and movement. One of the things we're developing formance to a digital character — to optically capture the performance is a performance capture system — the same kind you use to send a per-STAN WINSTON: There are amazing advances in hair and

an actor and translate that motion to your need for a bunch of guys working joysticks. animatronic character. So there would be no CINEFEX: You would motion capture

telemetry thing?

animatronic controllers? Kind of like a super

subtleties that happen in a single performer's one on the brows, another one on the eyes. but it still feels like a puppet, partly because especially important for facial performance. With this performance capture system, all the you have one performer on the lips, another and eye movement, and can even lip-sync — Right now, we can do puppets that have brow by the performance of one actor. It will be face would go to the puppet, all in sync. formance of the animatronic would be driven STAN WINSTON: Exactly, The per-

the artificial intelligence arena? CINEFEX: Any advances coming from

eyes. But we'll get there, and it will give us characters. more organic performances in our artificial they are using very big cameras in very big and get it into small eyes - because right now with a professor from MIT for three years, It will be years before I can actually use this he'll keep his eyes on you — and it's freaky. hear. He will look at you; and, as you move, technology that allows Leonardo to see and through its interrelationships with humans. developing a robot, Leonardo, that can learn Through that collaboration, I have access to STAN WINSTON: I've been working

of real-world versus digital effects. A few years CINEFEX: Let's move on to another area

the pendulum swinging back? being used in films. Do you see that happening? Is that more proof of about the future of miniatures; and yet, there seems to have been a ago, there was a lot of doom-and-gloom talk renaissance of miniature work, with more miniature effects than ever

done a matte painting, that's the shot. A miniature gives you more you have a wide range of things you can do with it; whereas, once you've a miniature than to do, say, a matte painting. Once you build a model photography. Among other things, it can be more cost effective to do ALEX FUNKE: There is a new fascination with using miniature

options, It's not the way to do everything, but I think III

of miniatures — and that totally surprises mel It could only photography is going to be with us for a long time. STEVE BEGG: Directors are actually starting to fee

in a big way, In a few recent productions, I've been sturned rary, but the pendulum seems to be swinging back toward

got to be tactile. It's got to be well and tricks, you continue to loot enhanced, but give me sometime walk around and touch. I know it is people say: 'We've got to use mine Because if you mix and match the return to miniatures is really lice

a miniature is the way to go. namic interaction between the thing is going to be destroyed, limit still a really good option, especially it. Anything where you are going a like water falling on it or fire wing has to interact with some natural GRAY MARSHALL MILL

and artificial atmosphere, and all the anticipate the need to put in artiful effects. In digital backgrounds you real light, get real reflections, and manipulating it to make it fit infin it to that point. And only them a see with. When you're dealing with part of the gate with something that a that a photographed object is 100 things that are built into a minial fill it with real smoke, we get real involved are built-in. We can light rip it apart or set it on fire, all of the you have to put a lot of effort in the photographed object. So you're in fairly large-scale model and you physical model is already real! IAN HUNTER: The simple

model, and there you go. The immediate on the stage, you can put your life detail to make it look realistic. It is computer graphics render, tweat JOHN KNOLL: You've flor

ing for us instead of against us. Real-time radiosity. back is physically correct, a realistic image. We have the [iii

restricted. To get around that, people build glant minialing going to be shot as separate elements, or they're going to I will always have to shoot over-cranked, and the effects on it, but I will always be strapped with the constraints of its in of detail. If I build a miniature, I'm going to get this, this area just a cost relationship between one kind of detail and an KEVIN HAUG: But a miniature is no more real than



