



Jim Blinn Corners Andrew Glassner's Notebook

Hey, Buddy, How Do I Get Into the Siggraph Electronic Theater?

James F. Blinn
and Andrew
Glassner

Microsoft

Jim: Practice.

Andrew: Buy a ticket.

Jim: Hire John Lasseter.

Both: Ha ha ha... ah... yes, yes.

But seriously folks, the Siggraph Electronic Theater is one of the most exciting events at the yearly Siggraph conference. It's where you can see a sampling of the best computer animation of the year. To be included in this show is a great honor and only the most skilled animators and wittiest of storytellers have even a chance of being accepted. Of course, the fact that both of us have had pieces in the theater has nothing to do with our holding this opinion. But the fact that we have both also been on the jury to select pieces for the show does mean that we feel qualified to advise you on how to get a piece accepted. For this reason, we are merging our columns this month into one.

Disclaimer

Andrew: Before we start, though, we need to give a couple of disclaimers. First, because the film show jury changes every year, there's no guarantee that our opinions will have any relationship to the way future juries decide pieces. Second, these are our opinions only. We don't speak for Siggraph or anyone else. Heck, we may not even speak for ourselves all the time—people are nothing if not self-contradictory (no they're not!). The opinions given here are for you to consider and embrace or ignore at your pleasure.

Jim: Actually, I'd say ignore at your own risk. After all, we're *professionals* here. Our advice isn't inherently idiosyncratic. What we have to say does have applicability independent of the tastes of a particular jury. There *are* some basic principles of getting accepted that hold from year to year.

History

Jim: The Electronic Theater started from humble beginnings. At the first Siggraph conference in 1974 it merely consisted of a bunch of us crammed into Dan

Sandin's dorm room, showing each other videotapes. (The conference was held at a college, and we stayed in the college dorm rather than a luxury hotel.) Starting the next year, we had an actual evening show in the auditorium. So little animation was produced in those days that just about everything got shown. For the next several years the film show was basically open projector night. (Early work was almost always on 16mm film, so I still think of it as the film show. Nowadays, most pieces are on video, and the only film is 35mm or 70mm.) Anybody with anything to show simply brought it to the conference on the night of the show and added it to the pile of films by the projector. When their piece came up, the producer would typically hop on stage and narrate it live. Also, in the early days the needs of the AV system weren't completely understood; in 1977 the power went out in the middle of the show, and we all had to give up and go to bed.

The jury process

Jim: Nowadays, hundreds of people have stuff to show and there simply isn't enough time for all of it. A jury must decide which pieces to allocate time to, and the show has become, unfortunately, very competitive. The selection process itself is fairly grueling for the jury.

Andrew: This year, the jury received around 500 entries. A standard VHS tape is about one-inch thick, so if we were to stack all of the tapes it would make a pile just over 41 feet high—that's almost a four-story building. If each piece is about three minutes long, that's 25 hours of video. Over a three-day weekend, the jury watches each and every tape to create a show that's between 90 and 120 minutes long.

Jim: And with the widespread availability of inexpensive animation software, it will only get worse, er, better. But simply buying the latest software and clicking a few buttons won't make an interesting animation.

Andrew: The jurists try hard, but until the AI crowd finishes the synthetic juror (which they say is only ten years away), we're stuck with humans. A tape viewed near the start of the meeting will be viewed with fresher eyes than a tape seen after 20 hours. In my experience, the jury bent over backwards to be as fair as possible to every piece, regardless of when we saw it.

Jim: Things that don't grab the jury's interest pretty quickly will probably lose out. They look for stuff that

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Submitting your entry

Jim: Our first bit of advice is, send your entry in on time. Electronic Theater deadlines, like all Siggraph deadlines, are strictly enforced. The jury simply won't look at anything that arrives late. This means that most of the entries show up exactly on the due date. If you're paranoid about missing the deadline due to the vagaries of the universe interfering with the postal service, send it early.

Andrew: Many of the pieces we saw weren't complete at the time the jury met, and that's okay. Sometimes the soundtrack wasn't final or bits of animation were missing.

Jim: If what you send in is not the final version (and what ever is?), on your entry form explain what will change. Is it because of tape format (submittal on VHS but final on Betacam)? Is the sound unfinished (you need to add final narration or music)? Is it because of editing (crash edits versus clean cuts and flashy transitions)? Is it because more rendering is required (you sent in a wireframe and the final will be fully rendered)?

Andrew: As long as the contributors wrote down on the form just what was missing and what would change, we were generally pretty generous. The questions always came down to whether or not we had seen enough of the piece to get a good feel for just how it would appear when finished, and whether or not we were confident that the remaining work could be reasonably completed in the time remaining.

Jim: Also, if your incomplete piece gets accepted, you are honor bound that the final tape you send in is the same piece that was juried. There is a famous story of an incomplete piece that was accepted only to have the final tape be of a considerably more sexually suggestive nature than the jury had seen.

When you submit your entry, you can include comments to the jury on how the animation was made. Don't leave this blank. Quite often the jury simply cannot figure out what is going on in a piece and what its relevance is to computer graphics. A few sentences can remedy this. Tell what parts are computer graphics versus live action. (In fact, one year a piece slipped in that did not use computer graphics at all. The producers fooled the jury by citing use of "unconventional techniques for antialiasing"). Computer graphics that are too good are sometimes ignored because the jury cannot tell it is computer graphics. (I almost can't believe I'm saying this. Stuff that fooled the jury would, at one time, be automatic grounds for admission. Now it's pretty common.) On the other hand, don't write a book on your motivation and rendering technique. More than half a page and the jury gets bored reading it.

Andrew: But the piece has to work on its own, because these text explanations won't be available to the audience. The piece itself has to be clear, interesting, and relevant, all by itself. The notes are generally a description of what you're going to improve for the final version.

I have two general pieces of advice: know your audience and keep it short.

Jim: Aside from that, I have two general pieces of advice: know your audience and keep it short.

Keep it short

Jim: And by short I mean two to three minutes. It's extremely rare for a piece in the final show to run for more than five minutes. It's always amazing to me, what with how hard it is to produce animation frames, that so many animations are too long and slow moving.

Andrew: Absolutely—a piece must never be boring. Showing it to friends as you work is one way to find out if you're moving too fast or too slow. Tell them to ignore the technical issues and just focus on whether they're understanding and enjoying the content of the film. Then you can fix any problems early, which is always easier than waiting.

Jim: Most submitted animation was originally made for some purpose other than Siggraph. If you have a longer piece you are, unfortunately, going to have to show only excerpts. If you send in something longer, and the jury is really jazzed by it, they might accept it on the condition that you excerpt two or three minutes of it. Or you can do the excerpting yourself beforehand, showing only the parts you are proudest of, and increase your chances of getting in.

Know your audience

Jim: In order for your piece to realistically get into the show, you must have a reasonable answer to the question, "Why is this interesting to the Siggraph audience?" Remember, the Siggraph crowd is pretty savvy about computer graphics. And what they are impressed by gets more advanced every year. They are no longer impressed by blurry spirals. They are no longer impressed by flying logos. They are no longer impressed by shiny glass balls. They are even no longer very impressed by photorealistic dinosaurs. They might be impressed, on a purely technical level, by some effect that has never been done before.

Andrew: Be very clear what your piece is trying to say. This is absolutely the most important issue, and you should think it through before you begin. Creating a piece of animation is hard work and takes a long time; you probably won't put in the effort unless you care passionately about your message. It can be educational, a joke, a story, a demonstration of technology, or whatever else is driving you, but keep your purpose in clear sight from the start. Make sure you care enough about the message that it's worth your effort to make the piece and the time of your viewers to see it.

Secrets of Siggraph success

Jim: Work for a big company on a project with lots of media attention. Have an enormous budget and massive production facilities.

Andrew: Or be born to a rich family.

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crowd wants more than
anything else.

Jim: Things get accepted for one of two reasons: they are either technically interesting or they are artistically interesting. In the technical area, just showing off the final results of some effect is not enough. There is a trend now to encourage (or even require) that the pieces contain exposition on how the effect was made. This is entirely appropriate for a technical conference and distinguishes the Siggraph show from just a general animation film festival.

Andrew: To increase your chances of success, plan early. Write your script first. Show it to friends, get feedback, and work it again and again before you even start to produce the piece. Make sure it's solid, the timing is right, and the pieces fit. And don't be shy—show the piece to colleagues and friends as you go. If something isn't working, you can learn about it early and fix it before you have too much invested to go back and recover.

Content

Jim: Each year the jury tries to include representative samples from a range of genres within the computer graphics field, especially research, educational, and student films.

Andrew: For convenience, we're going to discuss pieces as though they belonged to different categories. This is not something the jury generally thinks about while watching a piece; either it works or it doesn't, regardless of the category.

Each genre has its own conventions. Some are impossible to generalize—for example, there's not much one can say about how to make a good art piece. But some categories do seem to have some rules, which we'll cover here.

Jim: And the categories are...

- *Research/education* includes videos from the technical side of the conference (papers and panels), scientific visualizations, algorithm animations, and so forth.
- *Commercial* includes movie special effects, commercial sample reels, and ride films.
- *Art/storytelling* includes narrative stories, jokes and gags, and abstract smeary things.

Of course, a lot of pieces straddle a couple of these categories.

Research/education

Jim: One major source of research videos for the Electronic Theater is the technical papers from the conference itself. Some of these may not have the polish of the more commercial ventures, but a good, brief summary of your paper's results will be looked upon kindly by the jury. I have found, though, that some technical videos try to get

a bit too arty and mask their technical contribution.

Andrew: The star of the show here is the actual work. The opening titles should be simple, clear, and short.

Often science visualizations have voice-over narration. This needs to be seamlessly incorporated into the piece. A good plan is to write the script, record the narration, and then edit the video to fit the timing of the words. It is often easier for amateurs to edit video than to try to narrate something to match existing cuts.

A big block of text is almost always a mistake; have the narrator read it while showing relevant visuals. If you must show text, never have the narrator speaking while the text is visible. If the narrator is reading the text verbatim, it's boring, and if the narrator is saying something else, it's confusing. If you're the narrator, speak slowly and clearly. If you have to rush the words, you're saying too much. Hone and focus your message—keep it direct and clear. If there's background music, make sure it doesn't clash with or overwhelm the narration and visuals.

Jim: I should insert a comment here about rushed narration, since that has been a feature of some of my videos. In that case, it was intended as sort of a joke. But actually, I would err on the side of too fast rather than too slow. I've seen many visualization videos that had very fast narration that I thought worked fine. And since you need to keep these short, a lively narration will be able to say more than a languid one.

Andrew: I've always felt that part of the charm of your pieces is that they flaunt some of the rules!

The Siggraph audience is intelligent and interested, but for a non-computer graphics piece they're probably not experts in the subject matter that your piece illustrates. So the piece should begin with a crystal-clear, short introduction to the subject matter and the purpose of the work being illustrated. Then show the results. Don't expose the audience to all the details—zero in on the most important contribution made by the graphics.

State the big picture; show why your work is valuable by telling us how it can be used in its best applications. If you have figured out how to make realistic lip-sync, tell the audience that this can be useful for creating crowds of singing characters, which would otherwise be a real hassle.

Keep in mind that shallow clarity is better than deep confusion. Most people would rather understand a little bit of your work, and understand it clearly, than to walk away with a fuzzy idea of some larger issue.

With all of these principles in mind, write a detailed script before you begin assembling your animation.

Think of your film as a summary of a research paper: state the problem, state why it's an important problem, and show your results as clearly as you can.

Jim: And remember, if your Siggraph paper video doesn't get submitted with *your* narration, you might find it in a compilation video with *my* narration (and nobody wants that).

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people have a natural knack
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Commercial

Andrew: The sophistication of computer graphics work is incredible. In the past, one saw effects work and marveled at it. Now, the best effects work is invisible. And that's how it should be. But for Siggraph, the audience wants to know exactly what you did and why you used computer graphics to do it. They are technically sophisticated and technically interested.

Jim: Most of us will have seen the movie. What we really want to see is *how* you did the effects.

Andrew: Show the process! That's what the Siggraph crowd wants more than anything else. Show the most interesting steps in the production. Show the live action plates and the mattes, show the timing reel and the bloopers. Before-and-after comparisons are always interesting. Basically, the goal is to show the audience how you were a hero through your use of graphics. Show the problem that had to be solved and mention why other effects techniques were inappropriate, too expensive, or otherwise undesirable. Then show how you attacked the problem with computer graphics, what steps you took, and how the piece came together. Think "behind the scenes." Think "the making of." Emphasize the computer graphics; only include as much additional material (like live action and noncomputer animation) as is essential to carry the point of the graphics.

Art/storytelling

Andrew: Everyone loves a good story, well told. As with any skill, some people have a natural knack for storytelling, but most of us need to study, practice, and work at it.

The audience needs to care about the characters and understand the plot. This is particularly hard in the preferred Siggraph format of the short-short. A short-short is typically two to three minutes long. That's not much time to tell a story, but it is enough time to tell a joke; that's why most of the Siggraph stories are humorous. Often they're not much more than a setup and a punchline. Generally, Siggraph juries will accept one or two longer pieces, but they are the exception. Creating a story that's longer than about three minutes makes it much less likely to be accepted.

A great story can compensate for technical imperfections, but it doesn't work the other way around. The finest modeling and rendering in the world cannot make a bad script entertaining, but a really good story can survive even crude technique.

Share the soul fast. The key to a successful short-short is to bring the viewer into the heart of the piece right away. Find the central driving theme to your story, and hook the viewer immediately. You can spend a little bit of time on setup if you must, but make sure the setup is essential and entertaining. If you lose the jury—or indeed, any audience—during the first 30 seconds, you'll never get them back again. A story that has a dull two-minute buildup for a great punchline probably won't make it.

Except for very deliberately chosen and carefully executed reasons, don't deliberately mislead an audience's emotions.

Establish the mood right away. Let the audience know immediately what the emotional tone is—funny, sad, reflective. Never deceive the audience. Don't telegraph a sad story and then turn it into a joke—emotional deception is risky business for a storyteller. Certainly keep the piece surprising and intriguing, but except for very deliberately chosen and carefully executed reasons, don't deliberately mislead an audi-

ence's emotions. They rarely appreciate it.

Along those lines, be aware of your character's emotions. One way that a film works is by getting the audience to empathize with the characters. If the lead character is bored, then the audience will be bored—which is not good! The same goes for other emotions like annoyance and frustration.

Characters rarely realize that they are in a film. When a character becomes self-aware it breaks the implicit relationship between viewers and characters which the audience has come to expect. This is a great trick when handled with precision, but approach with caution.

An even more sensitive situation is when a self-aware character starts to reflect on the film itself. Rolling these risks together, a character can become self-aware and start to criticize the film. In other words, the actor openly denigrates the film. Surprisingly, several such films seem to be submitted to Siggraph every year. To make this work requires the most delicate of touches; otherwise, the audience asks the inevitable question, "Hey, if the characters in the film don't even like it, why should I?" Usually, they simply agree with the character, and the film has written its own epitaph.

For storytelling, there's nothing that beats the standard structure: a sympathetic character who takes risks to overcome obstacles and accomplishes a worthy goal. A good short story is always welcomed by the jury and the audience alike.

In closing

Both: Keep it short.

Make effects demos show the production process.

Make art pieces say something (anything).

Tell stories well.

Make jokes funny.

Make it interesting to the (possibly jaded) Siggraph audience.

And remember, the jury process still is inexact. If your piece doesn't get in, don't consider it a career terminating event. Try again next year. ■

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