Imagine a hybrid medium combining telepathy, television and apiary. A medium of the occult dithering in an interstitial space somewhere between vaporware, fiction and the Internet. It can transmit pictures of the dead and transport the living into the past, into a pre-lapsarian Eden, where the dead write themselves as poems in an ancient, dead language. To us they appear as letters of the alphabet and the photons that give us television images. But also as the noise made by bees. And not just any bees, but specialty bees from Mesopotamia. Such is the medium discovered by Jacob Maker, beekeeper and designer of flight simulators, narrator and protagonist of David Blair’s *Wax or the Discovery of Television Among the Bees* (1991).

David Blair’s *Wax* has been described as “one of the landmarks of media culture”¹; an assessment made in 1994 that is even more relevant today. At a time when terms such as hypermedia were still gaining currency and artists were struggling to find ways to utilize the creative potential of the Internet, *Wax* made its prophetic appearance on the scene. To the cognoscente of the cultural avant-garde, such as William Gibson and David Byrne, *Wax* was an unprecedented media text. The problem of categorizing it was an index of its distinctive contribution to an emerging art form based around the convergence of traditional art practices and the recombinant technology of the computer. Gibson and Byrne probably didn’t realize it, but what they were looking at, listening to and thinking about was the first film made for the electronic age.

*Wax* is a film that takes the electronic age as its subject matter. But it interprets the electronic age in terms of a strange and engaging poetic that fuses beekeeping, television and artificial language. *Wax*’s narrator, Jacob Maker, belongs to the nineteenth century tradition of the poet as seer, or visionary; though his affinities are more with Rimbaud and Baudelaire than Wordsworth and Coleridge. *Wax* is a picaresque exploration of the origins of media; a journey that takes Jacob Maker back and forward through the history of writing, the diaspora associated with the Tower of Babel and the myriad technologies that form conduits between presence and absence. Jacob’s wanderings represent a televisual *danse macabre* that finds in the strange otherworld of the dead a parallel non-space caught between here and there, an antipodal nowhere through which forces, things, information can flow. For Jacob’s grandfather, the spiritualist photographer James “Hive” Maker, this was an occult medium, an optoplasmic void. We prefer to use the more prosaic term Internet to describe this “other” space.
Eight years down the track David Blair has completed his hypermedia version of Wax, *Waxweb* (1991-1999). *Waxweb*, too, can be said to be a watershed in the short history of the intermedia arts. *Waxweb* is an embodiment of the experimental practices that come together under the umbrella-term hypermedia. The term hypermedia, though, has acquired an unfortunate technological gloss that has more to do with a fetishized co-existence of sound, text and vision than an aesthetics of engagement, storytelling and invention. *Waxweb* is the realization of Blair’s intimation of a type of movie that combines the pausing and spacing associated with digital interactivity and the temporality and flow of film. Hence the term hypermovie, which Blair likens to playing a game of three-dimensional chess. While you have the option to let the film run its duration of 85 minutes, it is possible to enter into any scene and explore it to discover background information or find out something about the characters and their relationships with the narrative as it is unfolding in the film. Moreover, the pause in flow becomes a kind of portal into parallel worlds and alternative narratives. It is this creative tension between flow and interval that marks a significant moment in the development of hypermedia as a poetic device of estrangement that interrupts our normative modes of reception and engagement. Hybrid forms of cultural practice may emerge out of the force of this interruption. *Waxweb* is without question an instance of this potential.

When indigenous bees conjoin with exotic species, their issue may well be unrecognizable. Now, more than ever, we need beekeepers.

David Blair was in Melbourne recently as a guest of the Melbourne International Film Festival. I caught up with him and talked about *Waxweb* on the evening of an unbelievably full moon.

**Wax has developed into an ongoing work in progress. Did you envisage this in 1991?**

No I didn’t. But at the moment of finishing, I also didn't quite realize that it would take so much energy and time to do the work of distributing it. That in itself was almost two and a half years, full- time.

At that time, I was already working on the second movie (still working on it, called *The Telepathic Motion Picture of The Lost Tribes*), and thinking about a thread that I hadn't been able to follow through in *Wax*, which was hypermedia, though that wasn't the word used in the early 1990s. Thinking that I might write the new project (*LostTribes*) as a hypertext first, I took a
sideways step and instead started to adapt Wax into one, imagining that it might be a good idea to do a Wax CD, as a sort of trainer for the next project. That was in 1993. Not long after I had the chance to do the first streaming of the movie that had a fair amount of press attention, and partly as a result of that, by various means, the CD and internet side of the project merged and became Waxweb. And again I didn't quite realize how long it would take. Endless design iterations interrupted by technology and my need to train. I learned what I needed, and did eventually what I wanted aesthetically, but it took until the summer of 1999.

I didn't realize at the very start that I would have to treat it as a fully-fledged, full time project with unique aesthetic goals and difficulties. But that became clear, and it ended well, as far as I was concerned. Though I often wished, during the long endgame, that it had finished years ago.

While Wax received significant critical acclaim on its release, the response to Waxweb early on was very mixed. How is it regarded now, especially in the light of the explosive popularity of hypermedia?

Well, the growth in hypermedia is both an increase in what you can do, and in the number of people who can actually see it without being dragged to some specific computer someplace. One of the reasons to I had to keep working on Waxweb was the feeling that the early versions didn't really deliver to the audience in the ways that I wanted (meaning early versions of the hypermedia version; the film itself was fine, complete and I was happy with it). It wasn't really until about 1995 that I figured out I wanted it to be a hypervideo, if possible in the best of worlds, and then it took about another 3 years before I could actually do that myself with (now common) off the shelf technology.

As for real delivery, well, as above, it was clearly on my mind while finishing that most people with computers could now easily see it on CD or online; and there are so many more people with computers now. Which means that a project so relatively (absolutely?) marginal can have a chance of finding an audience, out of that whole. And as a hedge, I have several different language versions. But to tell the truth, I'm not really sure where the audience is going to be, this time; that's to be found out. And so it's too early to report on reaction!

What are you doing with Waxweb now and where do you see it going?
Well, the project is finished, and now I'm distributing it, and of course again underestimating the effort that will take. But I take a fairly straightforward artisan approach to this. It isn't a commercial project, except at the level of artisan-economics. Between the various languages and the various computer platforms, I have 12 different CD versions I make available right now, so obviously I'm not doing mass duplication. But I don't mind doing the sales one at a time. I have to sell ten times fewer copies than a distributor would in order to make the same amount of money, plus I do the publicity better. And even if ten times more physical copies aren't in people's hands, the public can still see it on the web site anytime they want. I've got it up at a good site, the Institute for Advanced Technology in the Humanities, which doesn't begrudge me the gigs, and won't mind if it stays "in print" there for years and years.

If I had a couple extra months, yes, I might change and add some things, but I've got to get my Lost Tribes project composed now. I do have to admit to being attracted to DVD, but honestly don't know how much hypervideo functionality you can fit in the standard format, or how much automation the authoring tools offer. If I could re-author at home and afford to press, I would do that in a couple years.

Using VRML to create an “optoplasmic void” adds an interesting, otherworldly dimension to Waxweb. What challenges did you face creating this space?

I spent an inordinate amount of time with VRML for this project. In fact, one of my self-definitions of how Waxweb really does work as an "expanded" movie has to do with the antipodal relation between the movie, and the 3D (VRML), which is a sort of void surrounding the movie (there are hours and hours of VRML animations on the CD). But one of the reasons I spent so much time with it was that it was really painful to author. And now, at the end of it, I'm not yet sure how people are going to be able to look at it until the middle of next decade or earlier; it might be almost impossible to look at current VRML files in five years’ time. I hope not though, but I’m prepared to do some sort of re-authoring if I have to.

I thought that by this time, into my next project, I would be able to efficiently cross-author, creating nice 3D section for the movie that I could reuse in a VRML environment. And that anticipated the sort of relationship that was to be paradigmatic of the general ways in which I would be able to make a movie and a multimedia/web fiction at the same time. I'm a lot more cautious now.
What is your sense of the new media arts scene at the moment.

Less money to individual artists, but cheap machines; institutions on the march, as before; lots of odd audiences emerging out of the quantum froth and disappearing again, as always, some available to the artist, some only to institutions, as before.

Peter Greenaway has argued that cinema needs to hybridize to survive. *Waxweb* is perhaps an example of a hybrid approach to filmmaking in the way it incorporates hypermedia. From your point of view as a filmmaker, how do you see the future of film, especially in the light of emergent hypermedia practices?

Well, obviously this takes cinema-going as a defining element. Not that it shouldn't be, since the movie experience, and the suspension and emotion it produces, are great benchmarks. And indeed, a couple weeks in hypermedia make a video/film person often wish he/she was back with focused time, montage and effects, since that is an easier way these days to compose a wave for the audience to ride. Hypermedia haven't matured yet. People walk out of a web site at the first title, and I haven't figured out how to sell a $7 version of the CD. It is hard to compose going out of the movie into other media, and back again, without people going bump the first couple of times. The available options are to treat the problem metaphorically or metafictionally (put the glitch up front, but rename it as something that is part of the story) or work with it as you would dough, folding it back over and over until the harsh seam is smoothed away.

I know that I finally did succeed in creating a composition that can send the users of *Waxweb* out to that wave, into the suspended, collapsing (or expanding), or rhetorically infinite time of hypermedia/hypervideo. But it is hard to convince people that it is there, and to get them there. Tool-user difficulties, audience difficulties, all warn that you should either make a movie or make a hypermedia piece, but not try to do them both at once. But I do think, and many other practitioners would also, that it is probably already impossible to avoid doing both at once. That probably is the right way to go.
ENDNOTES


2. [http://www.waxweb.org](http://www.waxweb.org). The CD is for sale at the Web site and is available in PC and MAC formats. The Waxweb CD is available in English, French and Japanese. A broadband version is also available.