

Life in an articulated digital universe

For those of you whose Latin may be a little rusty, *articulus* means a “small joint”. In anatomy, “articulated” refers to joints uniting parts of the body; in architecture it is “to give visible or concrete expression to the composition of structural elements”. In general language terms, it conveys the concept of “forming or fitting into a systematic whole”.

Of course, we also articulate our thoughts (some more eloquently than others), but in speech as well, it is the articulate speaker who commands attention by skillfully joining thoughts and ideas together.

Remember, not so very long ago, when systems automatically didn't work together? Those were halcyon days for vendors and providers of “prepress” and “post-production”, a time when technologies were hoarded like collectibles. It was the golden age of non-articulated thinking.

But now the world has adopted a more positive collaborative attitude with regard to establishing common standards, leaving proprietary technologies behind. And this story is one worth following. Don't forget that a whole new generation has now grown up and is entering the workforce. And these people have never known any other kind of product development than that which is based on a foundation of open standards, a significant fact in itself.

This issue touches on two more important new standards in digital content evolution—MPEG-4 and OpenType.

Implementations of standard ISO-approved MPEG-4 through products such as Apple's new QuickTime 6 will have a gargantuan effect on both Web-based video



and pay-per-view video. Bob Connolly provides a synopsis of where MPEG-4 has been and where it's headed in his article on page 10 (*.mp4—Bring on Internet video and VideoOnDemand*).

In the world of the printed word, OpenType will have an equally significant impact. Through the combined weight of Microsoft and Adobe (which just released

its first OpenType library of over 650 converted Type 1 fonts), OpenType fonts will gradually replace Type 1 and TrueType fonts with one standard font format based on Unicode. This, in turn, will expedite a single inte-

grated system of fonts for virtually every language in the world, including Kanji. On page 14, Nick Shinn gives us a fuller explanation of OpenType's potential in his report entitled *Real Big Thing*.

The ongoing convergence of technologies is no more obvious than in website tool development. Macromedia Flash began as a simple vector toolset for creating small lightweight animations for the Internet. With the release of Flash MX (along with Flash Player 6), it has now emerged as a heavy-duty application that can accept a wide range of digital assets—including video. We welcome new contributor and expert Flash developer Robert Wong in this issue, who explores Flash MX's list of enhancements in his warm review on page 40 (*Video and Components make it so much better*).

The merger of technologies crosses through every form of creative content, whether for print, video or the web. This articulated technology tree promises to grow organically in conjunction with new

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P U B L I S H E R ' S N O T E S

standards and faster, more powerful computing environments. For Apple users in the printing and publishing market, Mac OS X's ability to facilitate improved speed and efficiencies has barely been tapped. But with the release of Jaguar (OS X 10.2) and the encouraging rumour that Quark may finally be ready to unveil QuarkXPress 6 (didn't it used to be 5.5?) for OS X in a few months, this may be about to change. Already we see software developers introducing more powerful image manipulation applications which take advantage of the OS X ColorSync environment. PhotoRetouch Pro from Monaco-based binuscan, which uses transparency support in OS X to full advantage, is dramatically illustrated and enthusiastically reviewed by digital artist/photographer Ron Giddings (see *Coloring inside the lines* on page 44).

By our next issue, we should be ready with a full report on Jaguar, but for now we offer softcore hacker Ben Brill's capsule tips on tweaking OS X to boost speed, conserve hard drive space and repair crashes (Special Report: *Mac OS Xpanded*, page 32).

A key part of "expanding the base of the pyramid" begins with the education of that new generation of users to which I referred earlier. We cannot underestimate the importance of supporting the schools and educational institutions which are preparing young men and women to enter the world of digital graphics.

To this end, we include on page 37 of this issue our annual *Directory of Canadian Graphics Schools*.

But for those who don't have time or inclination to sit in a classroom and who have an interest in creating motion graphics and visual effects—especially in Windows—it will be a worthwhile exercise to go through designer Kirby Ferguson's primer tutorial on Adobe After Effects, which can be found on page 20 (*Getting over the hump with Adobe After Effects*).

While technology draws the world closer to us every day, the digital universe continues to expand. New tools and devices bring images to us from even billions of miles away and make them as easily accessible as typing an Internet address into a web browser. *A view of space—from cyberspace* (page 48) provides a brief introduction to this virtually infinite source of imagery and delves into the mysteries of the non-visible spectrum.

The more we examine our universe, the more we discover that everything in it is united by cosmic influences that join all the parts together. The four fundamental forces which bind the universe—strong nuclear, electromagnetic, weak nuclear and gravitational—invisibly connect every galaxy, star, planet and asteroid, and each connection and influence works bidirectionally.

If we adapt this model for our own digital environments, it means that all of us must be aware of how we influence others, and how we are influenced by the system of technologies which we use. It started from a "small joint", and it has exploded into a global network of communication and information exchange. But will this articulated digital universe continue to grow at its current exponential pace—or end suddenly in a Big Bang?

All we can do is watch the skies—and our monitors. 🌍