

Notes from the Underground

Submedia's Atlanta Transit installation is taking advertising where it has never gone before— down a dark subway tunnel.

Commuters relying on public transportation in a metropolitan area will soon become intimately familiar with a new type of signage.

Just goes to show— if you come, they will build it.

Brightly hued, animated and magnificently proportioned, the debut installation measures a staggering 400 by 3 feet. But what makes the sign a real groundbreaker is the fact that it stretches along an interior wall of an Atlanta subway tunnel, lighting where there once was only darkness.

The sign heralds an innovative advertising technology whose central concept is adapted from the old-fashioned flip book. The technology, the brainchild of a Manhattan based company called Submedia, combines a series of stationary images with rapidly passing viewers. It reverses the traditional flipbook mechanism consisting of the viewer quickly thumbing through a series of still images on pages which, when seen in rapid succession, create the illusion of a moving image.

Although Submedia's signs have generated the interest of several rapid transit systems domestically and abroad the Metropolitan Atlanta Rapid Transit Authority (MARTA), serving an average of 580,000 passengers per day, was the first to sign on. Then, hometown giant Coca-Cola purchased the advertising space in the first installation for its new Dasani water product. Located between the Dunwoody and Sandy Springs stations, the Dasani ad is scheduled for a six-month run.

The technology is bringing advertiser



closer to their target audience while giving bored commuters a novel incentive to ride the rails. You can gaze upon this subterranean dweller from the inside of a MARTA train for the price of a subway fare (\$1.75). For the rest of us outside Atlanta, the same thing, in essence, goes: we will never be in the dark about subway tunnels again.

If you ask Josh Spodek, CEO and co-founder of the three-year-old company, about the patent-pending technology that has been generating interest world wide he will tell you straight out that it is "mechanically and electronically very, very simple." His SoHo headquarters, which consist of an ascetic loft embodying form following function, are similarly unpretentious.

As with many inventions, the technology is built on the familiar. The moving image of the small and silver screens, after all, are themselves adaptations of the flipbook gimmick. As Spodek told *Media Life*, in a movie theater you are actually watching a series of still images on the screen as they move past the projector. Why not then turn this principle on its head and have stationary images paired with a moving audience? Thus the first application of this idea: a subway car speeding past a series of panels designed to vice commuters the visual effect of a twenty second motion picture.

Tony Griffin, the marketing business manager of MARTA. Remembers the day he was cold called by the unknown Spodek, then just a very young man with a very big idea. The company had no track record and its technology had never been applied: still, "I thought it was a great idea with a substantial revenue potential. We hate

increasing subway fares, and I thought it would be a way to keep costs down for our customers."

Griffin was instrumental in moving the project forward, introducing Submedia to the transit authority's engineering department and coordinating solutions that would pave the way for the necessary approvals when the time came.

The biggest obstacle Griffin faced was convincing everyone to believe in the technology. "It's tough to get a new concept approved," he confessed, "especially with other transit authorities watching to see if MARTA's big experiment will pay off."

It did not take Spodek's Ph.D. in Physics to come up with the idea. Realizing the idea, however, did. MARTA's installation is comprised of approximately 250 individual units. Each about four feet long, installed side by side along a subway wall at a height corresponding to the car windows. The lighted panels display printed art from the advertiser, who provides a video of the ad for conversion into a series of printed stills using Submedia software. The panels are special light boxes that have been jointly manufactured by five New York City based companies, each with its own specialization. Each unit contains a patent pending optical piece that Spodek is particularly cagey about discussing.

When it comes to choosing a contractor for the first installation, Submedia selected Beatty Construction, an Atlanta based company with seven years of experience working with MARTA.

Thus far, the installation has been free of unexpected challenges. Doug Beatty, president of Beatty Construction, attributes this felicity to a simplicity both of design- the panels themselves only require

standard construction materials- and installation material involved. The pre-engineered, nationally manufactured structural framing system used to erect the panels is available off the shelf from the Unistrut Corporation, a manufacturer of construction products in Itasca, Illinois.

Once the installation is completed, the units will stay up for as long as they endure or are required; only the advertisements come and go. Periodic maintenance is conducted each time a new advertisement goes in. Spodek anticipates maintenance to be about the same as that of a light box in a subway station. "Access is a little more difficult, because it is best if you go into the tunnel during non-working hours" he said. "Although it is easier if the advertisement stays up longer, we have found that advertisers generally want to change ad copy once a month."

The general, bare boned quality of the technology has engendered a startlingly wide scope of possible applications. "Because the medium is simple, its robust," Spodek explained. "It can go in a lot of different places. All you need is a large number of people moving in a recognizable, predictable path."

And so Submedia targeted the subways. That is partly how the company name was selected- that, in addition to Submedia being a media company first, which means that its core business is selling advertising media to advertisers, as opposed to selling technology. "But although subways were our first market, they are by no means our only market," said Spodek. Possible venues on the horizon include moving walkways in airport, malls, department stores, and sports stadiums.

While the number of frames

the viewer sees per second the “frame rate” for television and film is usually 24, for the Dasani ad it is about 200. Although it is safe to assume that the frame rate employed by this technology will always be much higher than in television or film, the frame rate will vary between applications, between subway systems, and even between stations within the same system, depending on variables such as train speed and the amount of space available.

Despite the newness of the MARTA system (est. 1979) when compared to the ancient pedigree of New York City’s Metropolitan Transit Authority (est. 1904, only Boston predates it), average subway cars speeds in both systems are roughly the same. Their speeds, and speeds in general, fall between twenty-five and forty miles per hour, though in some areas like the transway on San Francisco’s Bay Area Rapid Transit (BART), trains run approximately eighty miles per hour.

The technology, of course, is still in its infancy, and its inventors—Spodek and co-founder Matthew Gross, who met at Columbia University undergraduates continue to discover the quirks of their medium. “When you see some things on a television screen, they look really flat,” remarked Spodek. “When mounted on one of our displays, however, they look really awesome. Somehow, when you look at something flat as you are moving toward it, it really

jumps out at you.”

The images certainly have to pop, as the Dasani sign is a purely visual experience. As yet, no sound will accompany this or any other subway installations. “We have thought a lot about sound because, when you have something animated, you naturally want sound with it too. On the other hand, we were concerned with the intrusiveness factor, especially since its already loud in the subway. If you make the ad sound louder than the ambient noise, you will have to make it very loud. We didnt want to bother riders; if people want to read, we want to let them.”

New York City, where Spodek and Gross have resided since the late 1980s, is one of the several cities with whom Submedia has been in negotiations. Bit after working with a much newer transit system like MARTA, this teething company will have something new to cut its molars on with the Metropolitan Transit Authority (MTA).

In addition to mentioning that the MTA has much dirtier walls than MARTA, Spodek said that the more ancient systems like the MTA are more challenging due to their older infrastructures. This may translate to inaccurate records, aged equipment and, Spodek said, after a seconds pause, “more entrenched bureaucracies.” It is harder to penetrate a system with a large number of departments, an obstacle that arises not only in the older systems, but in the bigger systems as well.

The larger systems, he continued, are “a greater part of the community, and therefore more responsible.” New York City, Submedia’s home base, has a system fitting both categories. “In New York, the subway is the lifeblood of the city. You cant do something that would disrupt the city. Any decisions that are made must be good for the system, and therefore good for the community.”

Due to these factors, Spodek believes that bringing his companys technology to its local subway “will take a little extra time.”

Meanwhile, Submedia is concentrating on its Atlanta installation. At this writing, all are still anticipating the unveiling of the Dasani ad, the contents of which Coca-Cola has kept tightly under wraps. The ad will premiere right before Labor Day.

When the advertisement is revealed di bit expect Atlanta to come to a halt. “MARTA will not close down just for this,” Spodek said. “We wouldnt want it to . After the unveiling, everyone will be going by it every day.”

Griffin is equally optimistic about the future of this technology, which is still considered MARTA’s “experiment”: come what may, “we have done something people will always remember as having originated with MARTA.”

For more information about Submedia, call 212/219-0033