

Hearing the Hype: A Conversation with Anthony Volodkin

by Daniel Alex Finkelstein

The history of music on the Internet is like driving along a road with no signs, many potholes, and so many twists and turns that only the bravest—and luckiest—make it through the fog to survival. Over the past seven years netizens have witnessed the appearance, disappearance, and reappearance of Napster, the arrival of podcasts, various attempts at services provided by Microsoft (the latest incarnation being Urge, a cooperative effort with MTV), Real's Rhapsody, Pressplay, and a massive black market of peer-to-peer file sharing protocols and programs through which the vast catalog of recorded music, among other things, is a click away. And we haven't even addressed the elephant in the room: iTunes, the phenomenally successful store and portal from Apple.

Between the peer-to-peer black market and the RIAA-blessed pay services lies a third avenue, the brainchild of Anthony Volodkin. His creation is **Hype Machine**, and it may change the way you listen to music. I sat down recently with Volodkin, a freshly-minted computer science major from CUNY Hunter Honors College, to talk about his latest project and its relevance in a post-Napster world of music and the bloggers who write about it. Only 21 years old, Volodkin was recently featured in Wired, Business 2.0, and The Guardian, and his fame grows larger by the minute—all this from someone who, by his own admission, produces no content of his own.

In April 2005, Volodkin found himself frustrated with so-called 'unstructured' online music services like Rhapsody, feeling isolated from new music. Meanwhile, the blogosphere was burgeoning with eager and enthusiastic music writers, each of whom

was a fount of commentary on the zeitgeist of various genres of music, from hip-hop to jazz. Volodkin found a few of these blogs and soon compiled a large list of favorites. "I really felt like I had to share this experience with people that probably weren't aware of what was happening," he said, "and probably would love it just as much." Serendipitously, Volodkin also found a site called WebJay that enabled users to create and share music playlists, which was later acquired by Yahoo! and then shut down. Inspired by his personal discovery of music blogs and the features of WebJay, Volodkin began working on what would become Hype Machine.

His vision encompasses more than a literal service: it's also about community. "The vision is that when people are moved by music ... they bothered to set up a Blogspot or whatever account, ... they've figured out how to upload a song, ... they took the effort. They found some music they liked and they wrote about it. That's really it. They just wrote about something because it moved them and they want to share that experience with others. So that's sort of the ultimate motive. There are a couple of sites that really exemplify this very well. One is called **Said the Gramophone**. It's a pretty old one, and it really captures that sense maybe to an extreme, but it's what I look up to as a model. Or something like **Fluxblog**, which is another kind of older site that is a good example of the vision."

Hype Machine itself is a site that indexes and scans music discussions on blogs all over the world. When a blogger posts an article about a song or an artist, if the blog is in the 'approved' list in the Hype Machine then the contents of the article are indexed, a link to the song is posted (if available), and its relative rank in popularity compared with the other blog posts that Hype Machine monitors is calculated. Visitors to the site are presented with an hourly-updated list of the results of the scans. Visitors who click on a particular music track also impact the ranking of a song simply by clicking on it. Volodkin considers Hype Machine part of the Semantic Web, yet his site has no sophisticated document classification technology or search features. He asks the question forthright: is natural language processing or document classification necessary to be part of the Semantic Web?

Volodkin's description of the technological beginning of his site is disarmingly unwitting. "Then I just started hacking at it. I wrote a very, very simple bit of code in PERL to maintain a list or database of the blogs I check, and crawl and access them." The differences between programming for schoolwork and programming in the wilds of the Internet soon became apparent. "In the process I learned that RSS and Atom

aren't really standards; people do whatever they want. I found a person who was editing [his] feed in Notepad, which made the dates fail very, very, very oddly. People generate XML manually sometimes," Volodkin lamented. "Then I put together a very simple front end in PHP to display the data from the database." What's running under the covers today? Not much has changed, Volodkin says. "It's still crawling with PERL, it's just gotten a little bit more robust."

With nearly 50,000 visits to the web site daily, 40,000 of them unique, and an hourly background scan of the 1200 blogs Hype Machine indexes, the servers are beginning to strain under the load. Volodkin plans to rewrite the core software shortly to scale with the growing popularity of his site. I asked him if he planned to use some trendy tools in the new version of Hype Machine, such as Ruby on Rails and Drupal. He winced, saying it was easier and simpler to write a small, specific piece of code for a small, specific application than manage a large infrastructure or cherry-pick from a bundle. "I'm not sure if Drupal [is the answer] for anything ... as some people would have you believe," he says. Volodkin advises programmers to look at user discussion forums to get a sense of the maturity and usability of a technology. When reading users' questions and the answers he suggests, "imagine trying to build with it."

During our conversation, Volodkin frequently returns to the topic of selecting blogs for indexing; it clearly has great importance for him. "I don't really look for the content, like I don't look at what it is people are writing about, I look at if they understand a certain structure to how this works. Are they in it for the right reasons? Are they passionate about music? Are they doing this to share things they like or are they up to something else? Are they really creating value? I look at sort of the elements of what they're doing, I don't really look at the content itself, like I don't really care which bands they write about. So in a sense, if their vision aligns with mine then I include them in the selection process."

The selection of which blogs to index and scan still relies on human eyes. "I'm always looking at ways to automate ... I haven't been able to automate [blog selection] at all, so I kinda gave up and I have people looking at the submissions," Volodkin said. "There's a submission process so what people do is ... submit blogs [that] get put into [a] moderation queue where a friend of mine or I will look [it] over [to determine] whether the blog really fits the vision or criteria we're going for. Because one thing I've found is that it's very difficult to use software to detect a music blog. You can sort of find blogs with MP3 posts or MP3 files but that doesn't actually mean that it's a site

that I want indexed. Because that really could range from a podcast to a guy in Turkey who posts cool CDs, to all kinds of things that I don't want anything to do with." With RIAA staring down the tubes of Sen. Ted Stevens's Internet, Volodkin has much to be concerned about.

Hype Machine provides several ways to listen to the music indexed by the engine, including a custom Flash-based player, a WinAmp playlist, and an iTunes playlist. None of the tracks are hosted on Hype Machine directly, but the fact that they're streaming from somewhere—most likely directly from a post on a blog—and are not a participant in SoundExchange, the consortium that collects royalty payments on Internet broadcasting and digital audio distribution, potentially puts Hype Machine in murky legal waters. Hype Machine encourages listeners to buy the tracks they enjoy through links to Amazon.com and iTunes (and if they do, Hype Machine collects a portion of the sale). If the Hype Machine model survives, at least a part of Volodkin's business strategy will be validated. Another part of the business model relies on advertising, although Volodkin didn't elaborate much on that strategy other than suggest that ads might appear on the Hype Machine Web site. He's already pursuing ventures with other developers, including Nick Denton (of Gawker Media) and Last.fm, and has recently added programmers in Seattle and Florida.

The notion of success for a music blog index and ranking engine may be hard to define and it may differ among individual users, but one early claim to fame was the identification of Crazy by Gnarls Barkley, high in the ranks months before it hit the Billboard charts. How well Hype Machine's rankings correlate with commercial success of music as defined by Billboard remains to be seen, but the question may be moot: Hype Machine was designed to introduce music selected by music aficionados, not predict best-sellers. How altruistic is this vision? It's certainly unique, but Volodkin also isn't shy about wanting to make Hype Machine a sustainable business. Only time will tell whether indexing and ranking songs from music blogs, or some variation thereof, can provide sufficient profit to keep Hype Machine afloat. There are limits to profit opportunities, Volodkin says, "I still want to focus on the consumer side of things and not get dragged into B2B and 'let's resell blog-tracking data on people.' I mean, there's revenue there, but that's not quite what I want to do."

His excitement over the fruition of Hype Machine is palpable. "The real goal is to create this environment [that] is sustainable financially for content creators, for me as the operator of this business, to let people discuss music in the way they like, and then connect those people to people that don't necessarily want to participate and write and

create, but want to experience and see what's happening. So connect the guys that are creating to the people that want to read and discover something new. And make sure everyone is compensated for the music. That's the goal."

Hype Machine recently won first place at the MIT Mashup Camp, an unconference where software mashups meet and compete. The competition is friendly; among his partners in Hype Machine is last year's winner. "He won a Sun Solaris server. It was so big, he didn't know how to take it home," Volodkin said. Perhaps the organizers learned their lesson: Volodkin won a laptop.

Biography

Daniel Alex Finkelstein is a PhD candidate in computer science specializing in computer architecture at Polytechnic University in New York. He holds a BS degree in materials science from Columbia University and an MS degree in computer science from Polytechnic University.