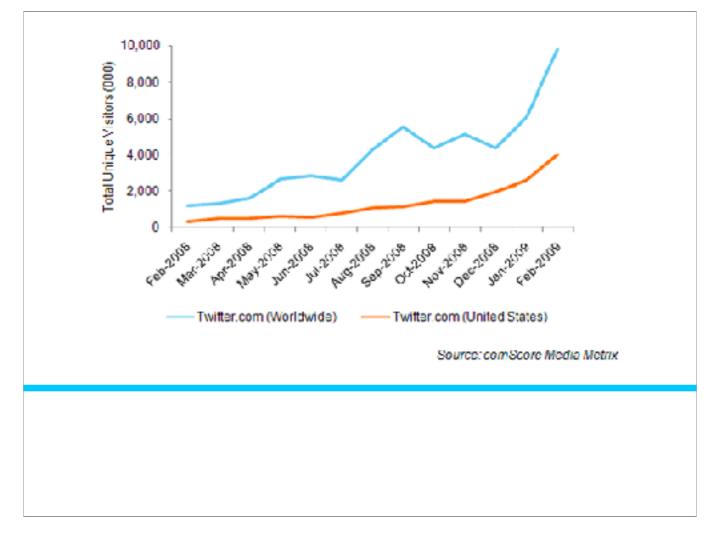
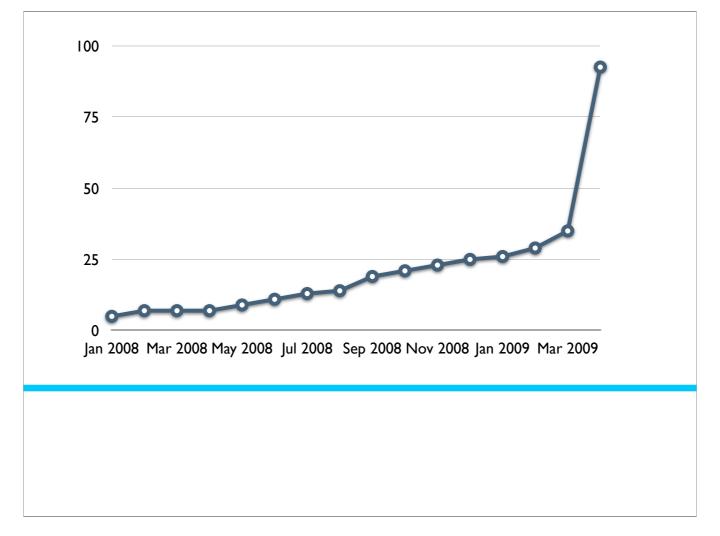


This is how I've started my talk in the past, where I've assumed that people attending have no idea of what twitter is and how people use it. This is the basic atom of twitter, the tweet. But I'm guessing that many of you already know that by now. Is there anybody here who's managed to avoid twitter's sudden catapult into global consciousness in the last 2 months? Raise you hand?



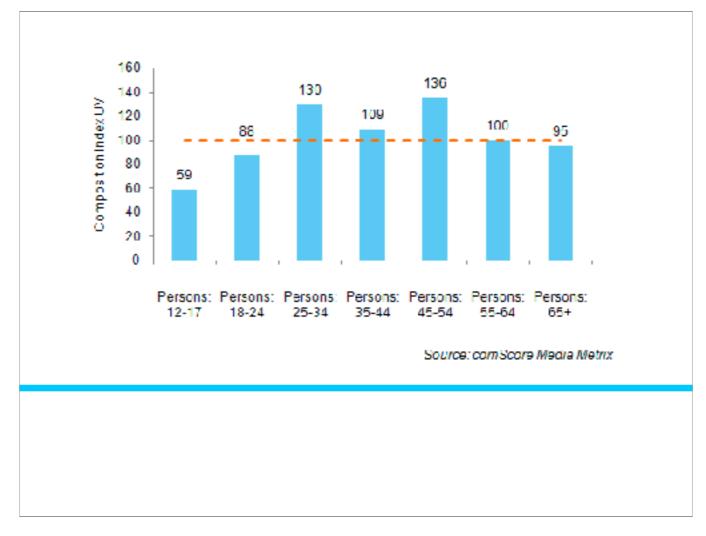
Indeed, here's an outside analytics estimate by a web traffic tracking company, estimating Twitter's total users at 10 million people (note how many more of them are overseas).



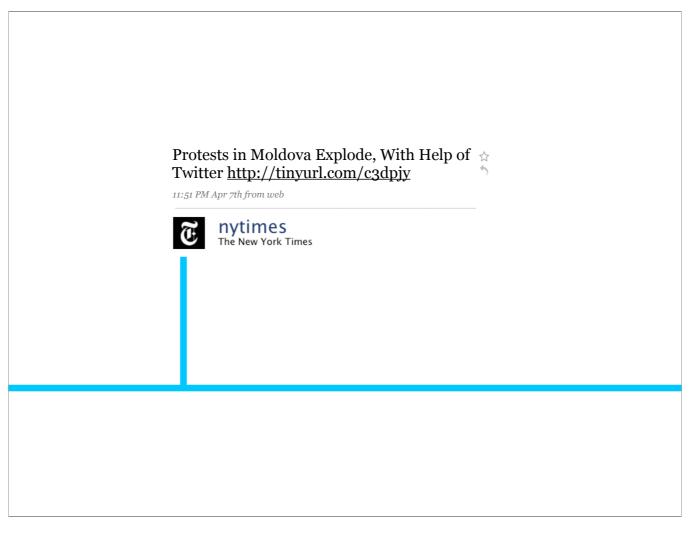
This has been accompanied by coverage of twitter from all parts of life, business, sports, culture, technology, even politics...

Similarly, here are articles in the Times about Twitter in the last year. These are articles tagged as being about twitter, not just stories that mention twitter. Note that it steadily creeps up to about one article a day.

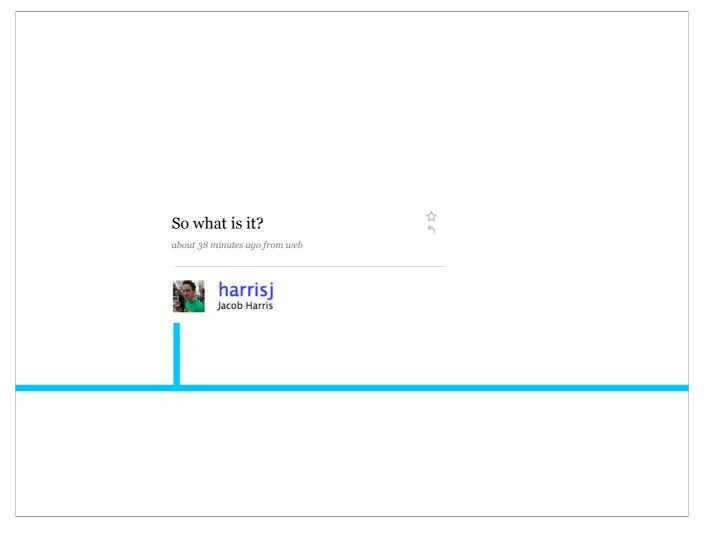
That last bit is me prorating. We've had 37 articles about Twitter in the NY Times in April so far and it's only roughly a third of the way over.



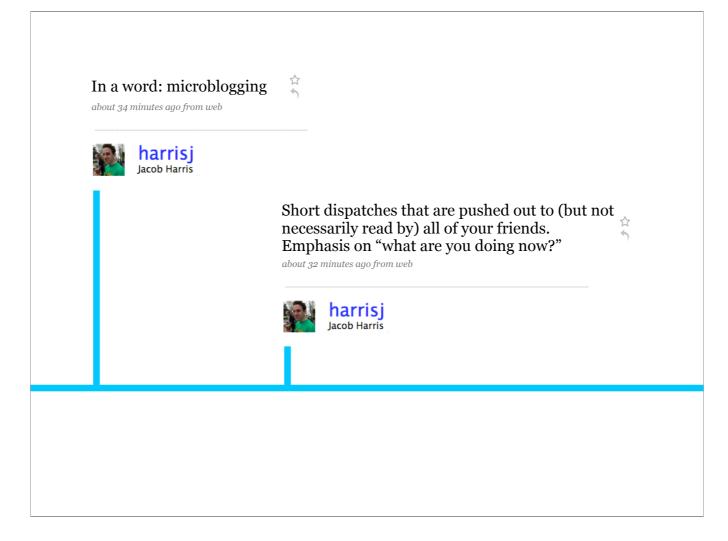
While I'm flashing charts I thought I'd also share this one for people who think that Twitter is just for the young and famous (or those who'd like to pretend to be either). It's not the easiest to make out, but the largest group of users on Twitter is actually people aged 45-54... take that young whippersnappers!



Lest you think it's all just celebrity fluff and tween infatuation, we are starting to see signs of twitter being used as a serious newsworthy communication medium. Many witnesses to news now tweet their perspectives first-hand and as more people become net-savvy, twitter is being used to organize and connect... and is part of the news story.



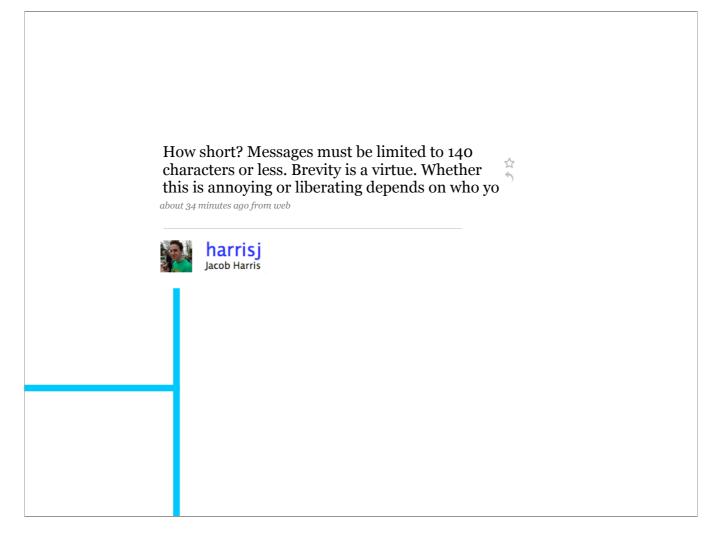
But before we talk about twitter as a global phenomenon, let's talk about twitter as a user experience



But what kind of messages?

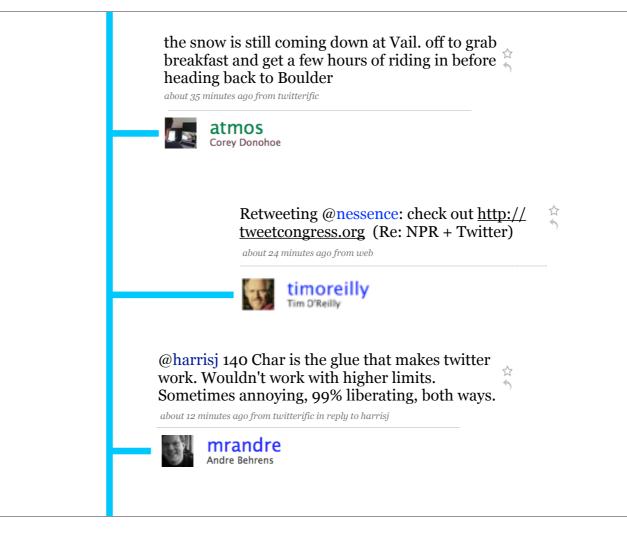
Twitter only allows very basic communication, of 140 characters or less. So, speaking directly and succinctly is a necessary virtue, although most people stick to written English instead of SMS-style abbreviations.

Which seems surprising, since twitter was originally a SMS service.



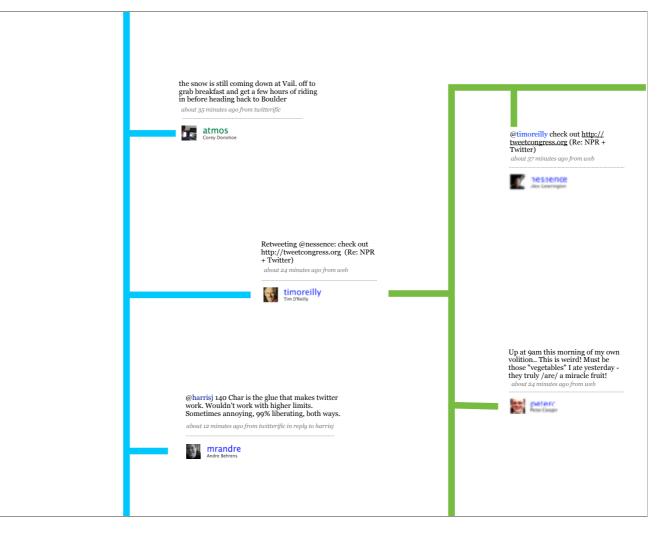
Twitter was launched as a service that could send and receive messages via the website, IM, an API, or SMS messages. SMS proved very popular at SXSW in 2007 until people received their next phone bill. Still, the constraint remains even as SMS usage has waned, much to the consternation of some users, but most embrace it.

Here's what some of my friends say...



And of course, my friends are having their own conversations as well. Put a sequence of messages and you have a feed of messages from people I'm following. Here are 3 more messages from around the same time... Note that these messages do not necessarily have to occur within a particular context, like comments in response to to a blog post or answers below a question....

Also, not all these people are my friends, but I'll get into that in a little bit...

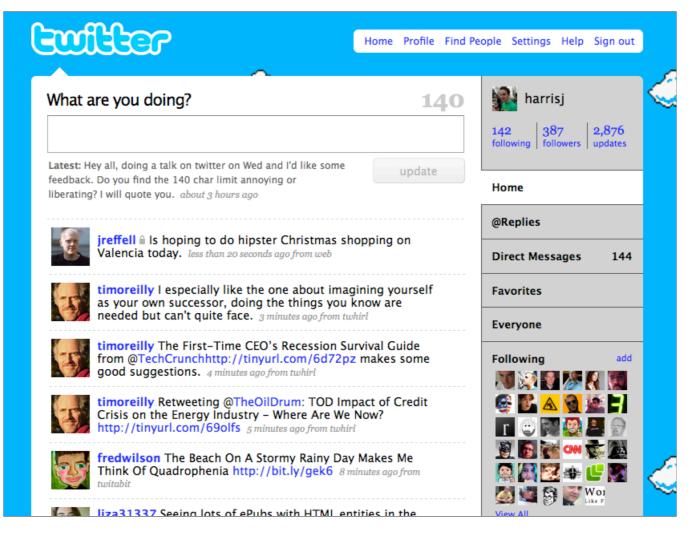


Furthermore, that is just my feed from people I am following. Each user may have their own distinct feeds and may see messages from people they are following that I don't see (because I'm not following them).

You could think of us as truckers on a long highway with CB radios. People who are following me are within range and hear me, but I may have a buddy way down the road who is listening to other truckers too far away for me to hear. The upshot is I may only see one side of a conversation if it's unfolding (although I can often navigate through to the pages of people I'm not following to see the other side).

Back to Tim though, if he hears something he'd like to share with people following him he could repeat it or "retweet" it, propagating it to his network of followers. This is what timoreilly is doing here.

But what does Twitter actually look like?



There are a few things to note here:

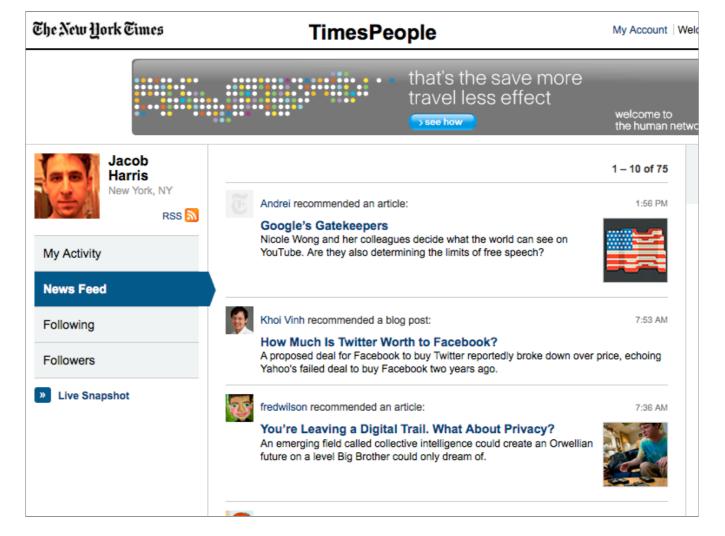
1. This is a feed, not an inbox. While I can scroll back and read old tweets if I have the time and inclination, twitter does not have something like an inbox with unread items. Instead, the model is passive notification.

2. When you have a lot of friends online, twitter creates a mental state commonly called "ambient intimacy". Basically, what this means is I have a very rough superficial idea of what all my friends are thinking and doing, even if I haven't talked to them in depth.

3. Notice the lock icon next to jreffell's tweet at the top. One common misconception about twitter is that everything is out in the open and public. If you want to keep your tweets private, you can specify that so only friends you can read can see them.

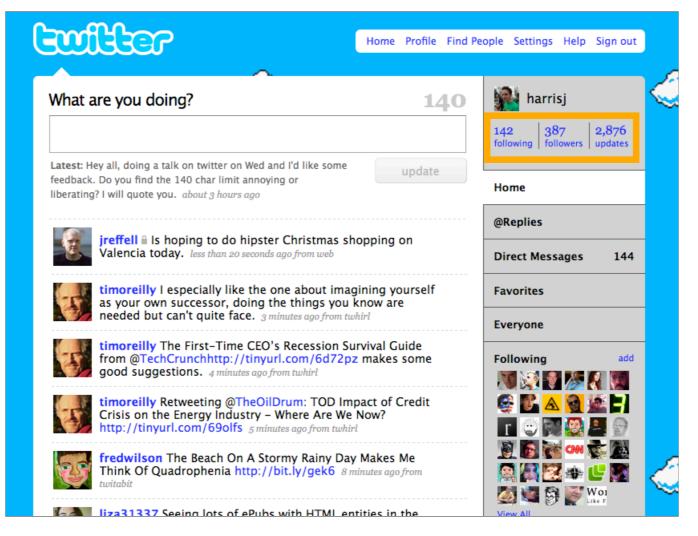


Of course, status updates are not unique to twitter. Facebook allows you to make status updates and they recently made the dialog box more prominent up there to emphasize that functionality. But I've never really liked it. Mainly because it seems ancillary to the main purpose of Facebook, which is annotating and browsing your social network. Status updates are an add-on to the social network. Twitter's raison d'etre is the status update: the social network merely allows you to control what messages you want to see.

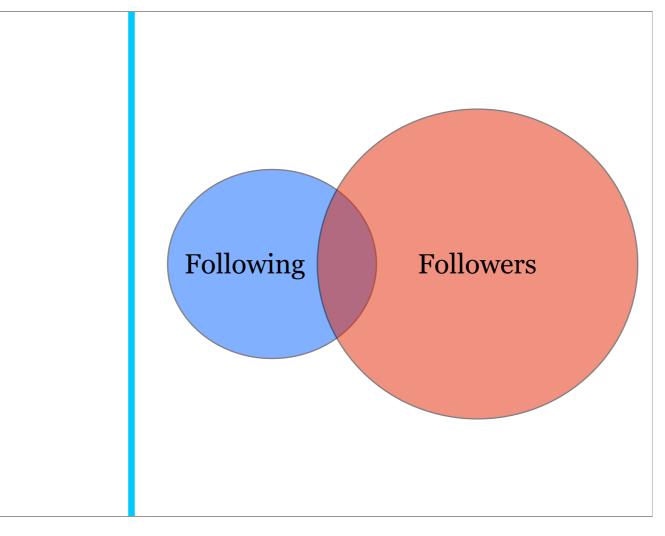


Closer to spirit in Twitter is the new TimesPeople social network, although instead of messages I'm seeing what Times articles my friends are reading. TimesPeople and Twitter are also unlike Facebook in that they allow for assymetrical friendships. What do I mean?

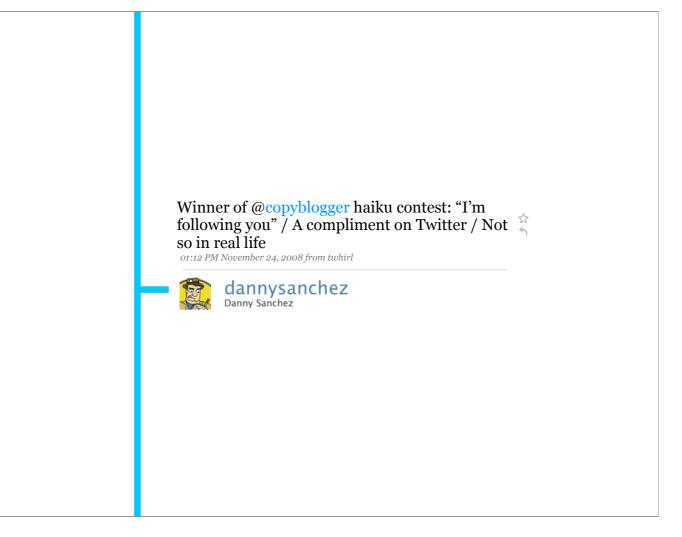
In Facebook, you can only see messages from a person if both you and him and her agree you are friends. You see their messages, they see yours. It's symmetrical. Twitter is different in that it breaks down your relationships into followers (people who read your messages) and people you follow, with no real requirement that you vouch for people to be your friends.



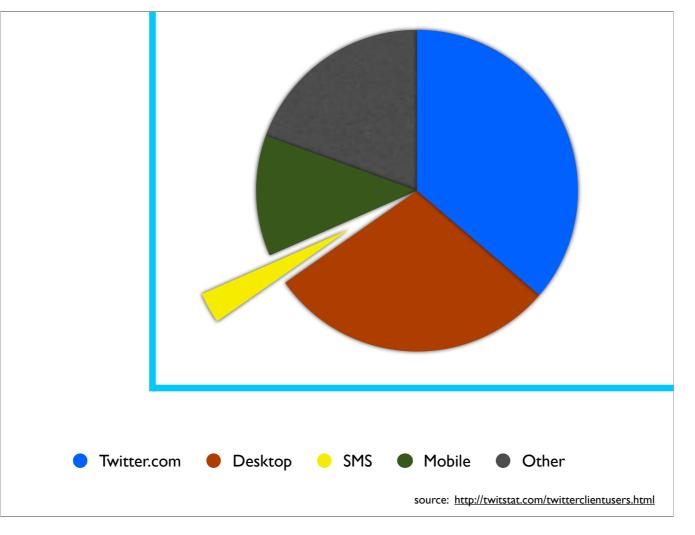
As you see here, I have many more people following my dispatches than are following me... What's that about?



This does seem really strange if you are thinking in social networking terms like Facebook. How can I be someone's friend and he's not mine? But remember, it's not about friendship, it's about communication. It makes sense if there are people whose dispatches I want to read and they are not my friends, and indeed there are some influential people like Tim O'Reilly who doesn't have an inkling who I am... Or to phrase it another way, imagine you could only read Krugman's Op Eds only if he agreed you were a personal friend of his.



Still, the term "follower" does sound a little creepy sometimes.

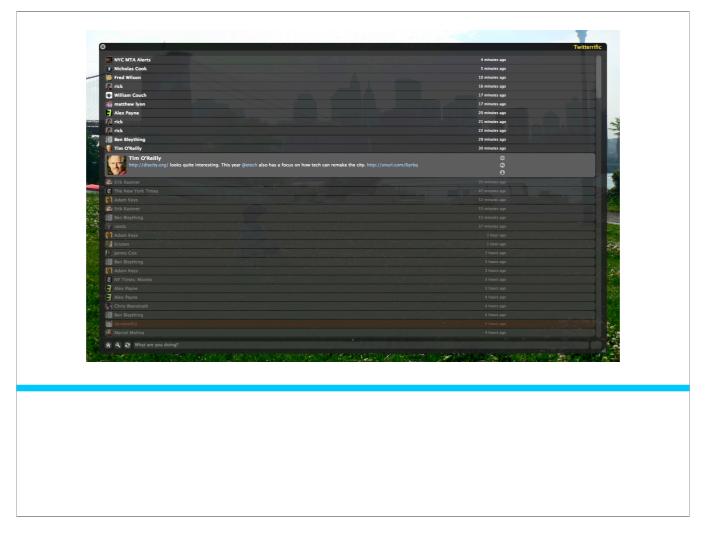


The other thing about Twitter is that it's more than the Website. Twitter was certainly not the only status-update site to emerge a few years ago, but it has managed to fend off all of its competitors (another one, Pownce, just folded this week) because it wasn't just friendly to users, it's friendly to developers too.

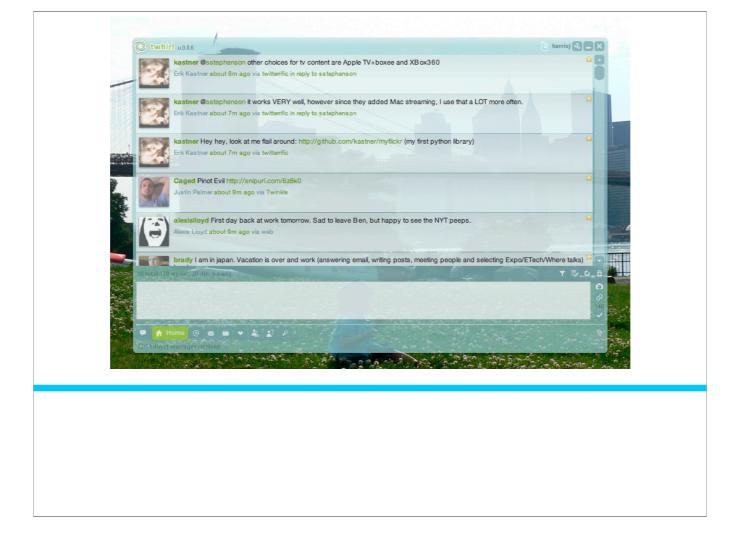
Here's a chart of how people post to Twitter made by the site twitstat.com. What's interesting to note here is only about 36% of twitter users are using the website to read and post tweets. Twitter has a simple Application Programming Interface (or API) which makes it easy for developers to create new programs to talk to twitter.

So, if we look at the other wedges:

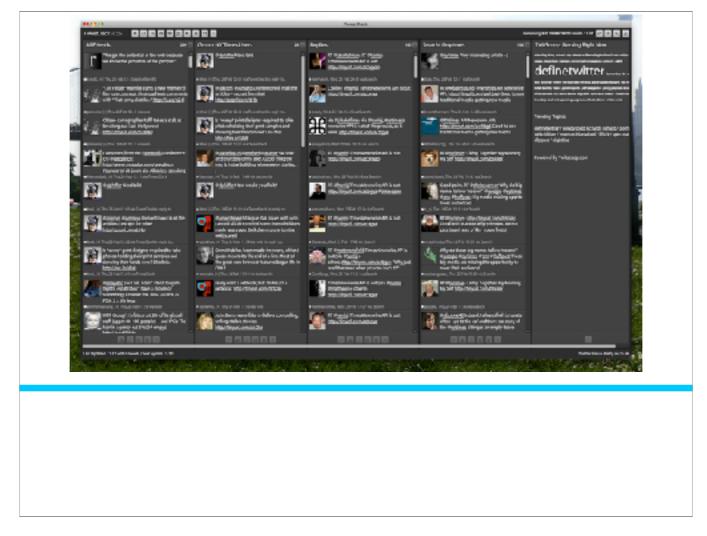
- * 29% are using some other desktop application for twitter
- * 3% are using text messaging, while 12% are using dedicated applications on their mobile phones
- * and 19% are other. This includes websites that reskin or add twitter posting, automated programs, and all manner of other programs.



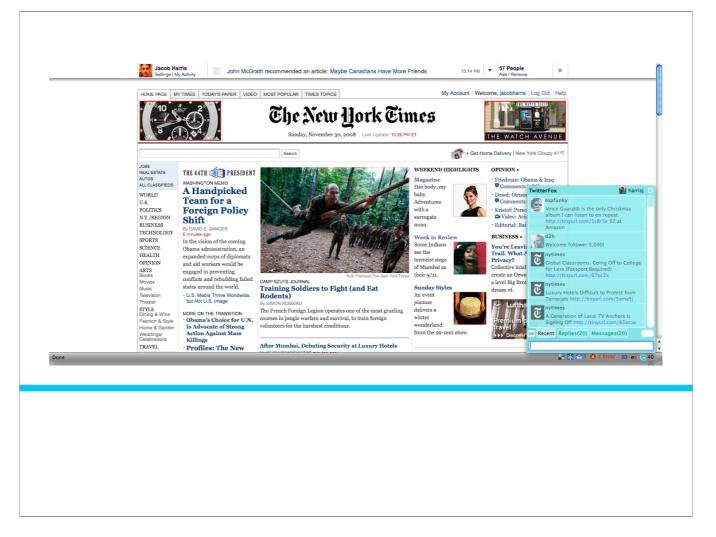
Here is the Mac application Twitterific which has contributes about 8% of the traffic. This is what I use on my machine.



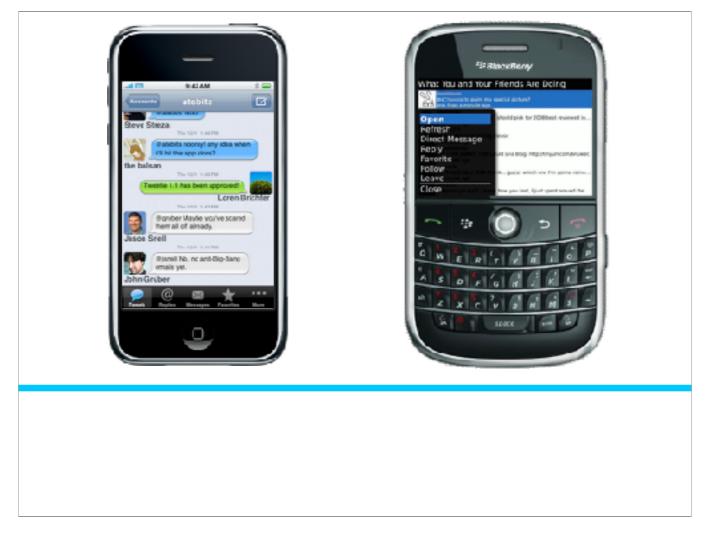
Twhirl is another application that runs on Macs or PCs



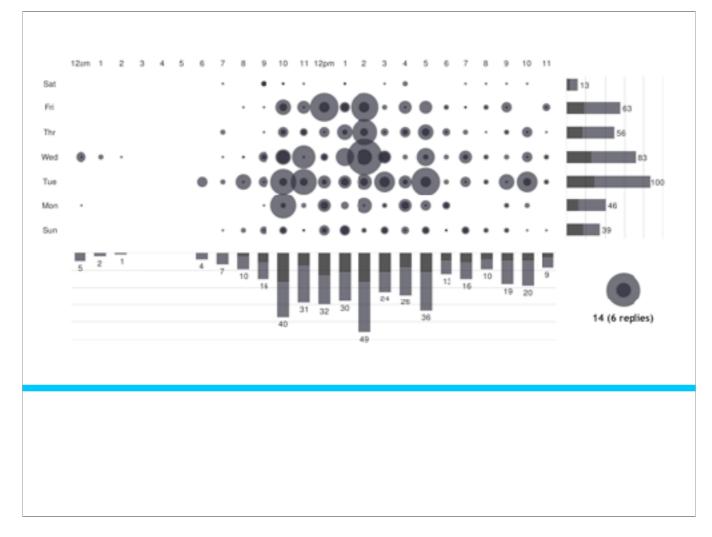
TweetDeck is kinda complex, but accounts for an astonishing 12% of twitter traffic now



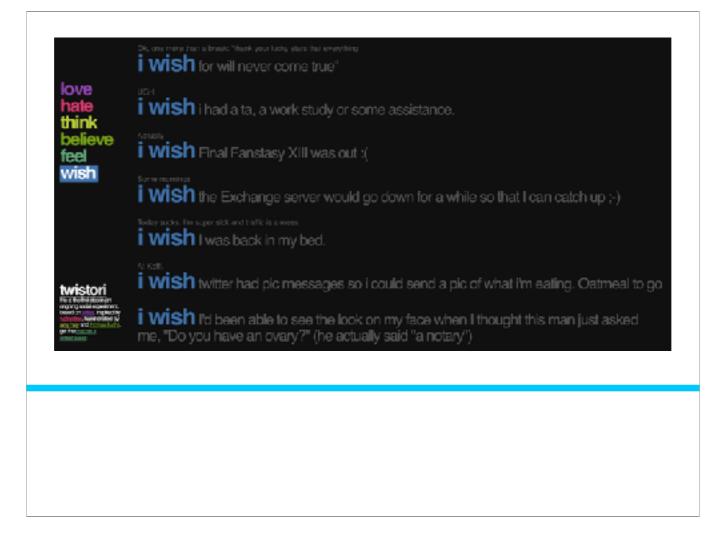
Here is an example of the TwitterFox plugin for Firefox



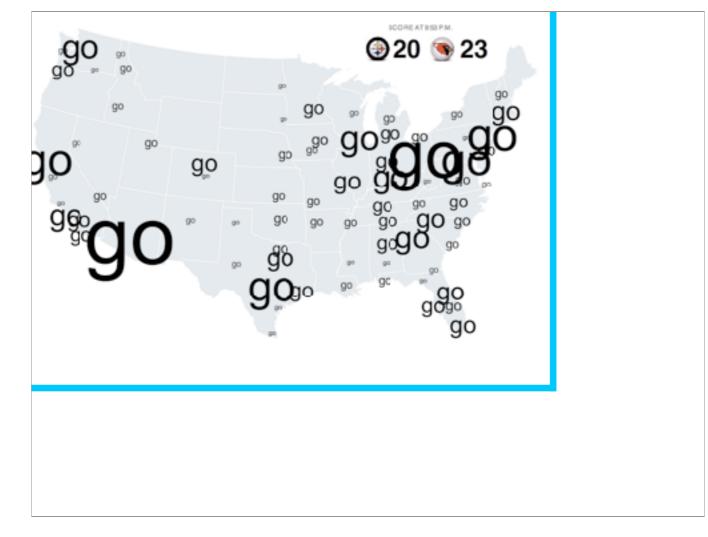
And of course there are applications for your mobile phones. On the iphone, there are both optimized websites and full-fledged applications. For the blackberry, there are at least 2 strong applications as well. And so on for your favorite smartphone.



And there are other interesting applications and websites that play with the Twitter API. Here's one of many that visualizes my personal Twitter usage pattern



This site twistori displays a zeitgeist of sorts by showing you twit



And here's a recent visualization done by the Graphics department of tweets made during the Super Bowl. THi sis the word "Go" near the end of the game.



It's phenomenally easy to sign up and find a few friends. The biggest hurdle for most users is usually the soul searching that follows...

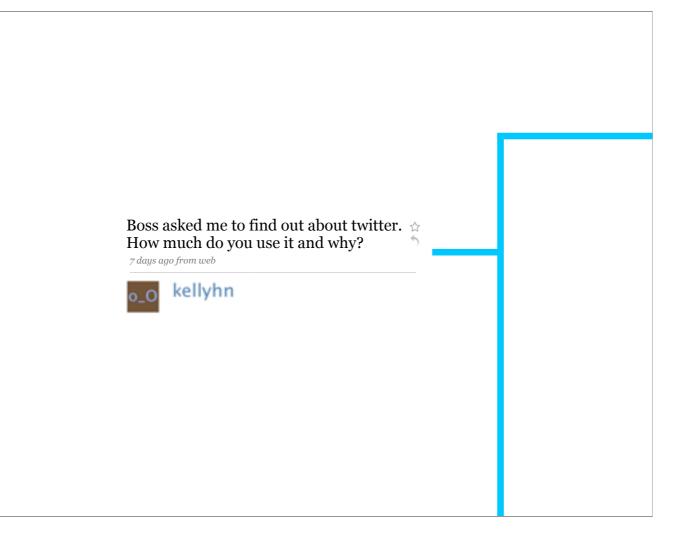
The first stage for many users is soul searching, or Why Bother?

This sort of existential malaise grips most newcomers to twitter, especially if many of their friends aren't on it. I am amused by how many tweets I'd see about "giving up on twitter" that were then followed by other messages...

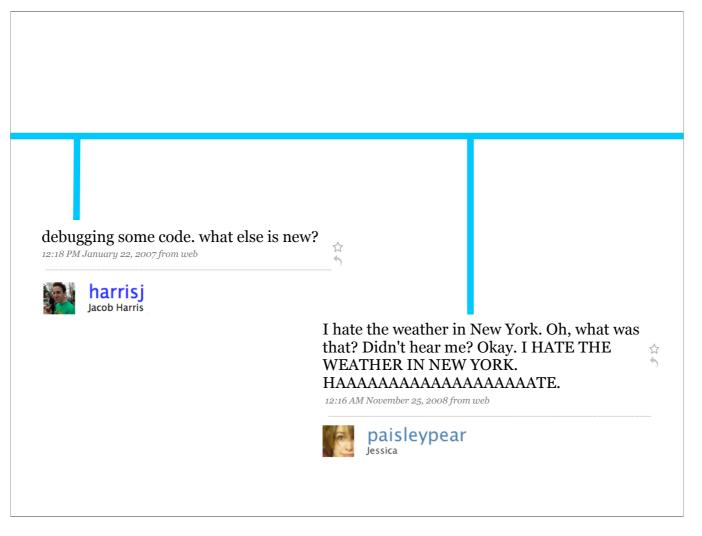
Still it's a good question, why would the world care what you are twittering about? And the truth is, in most cases, the world doesn't! But I bring this is, because there is an interesting point here about twitter. But you're not twittering to the world, you're twittering to your friends and family. And they do care...

People who attack twitter for being mundane and banal are missing the point. It **is** mundane, but then again so is most of what I talk about during the day. When I'm talking to my friends we don't quote epigrams from Voltaire or compete to create choice bon mots. We make dumb jokes, we talk about the weather, what's on TV, our weird dreams whatever. The stupid and the trivial are the social glue of conversation.

I like to say that Twitter is stupid, but it's the right kind of stupid...

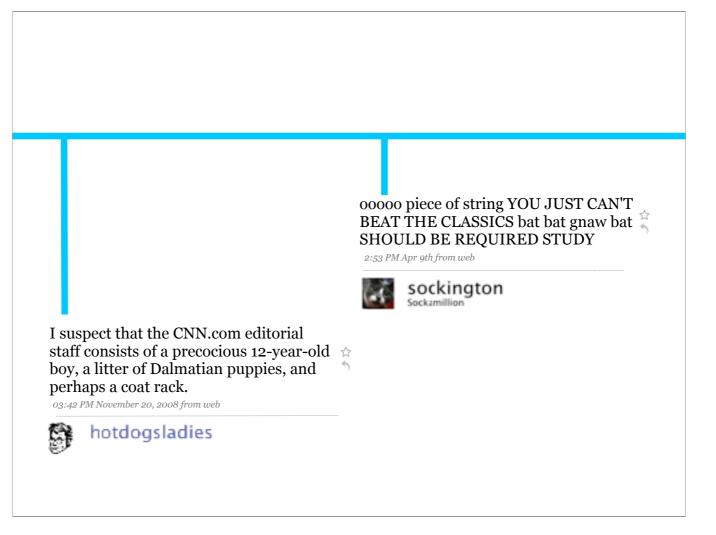


So what do people twitter about anyway?



To be honest, there are a lot of boring responses to the question "What Are You Doing Now?" That's my very first twitter on the left. Wow, I am exciting.

And of course, it makes a lovely electronic soapbox for rants

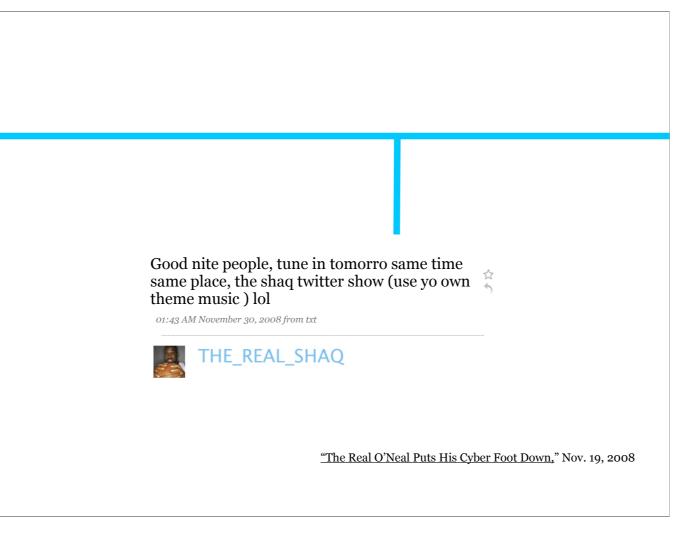


It's a good place for making fun of things or playing around with identities.

You may laugh but Sockington the cat has 300K followers.



Some people like to have fun pretending to be other people, sometimes even real ones. (Of course, you could argue everybody is pretending to be someone online, even if our online personas are ostensibly ourselves).



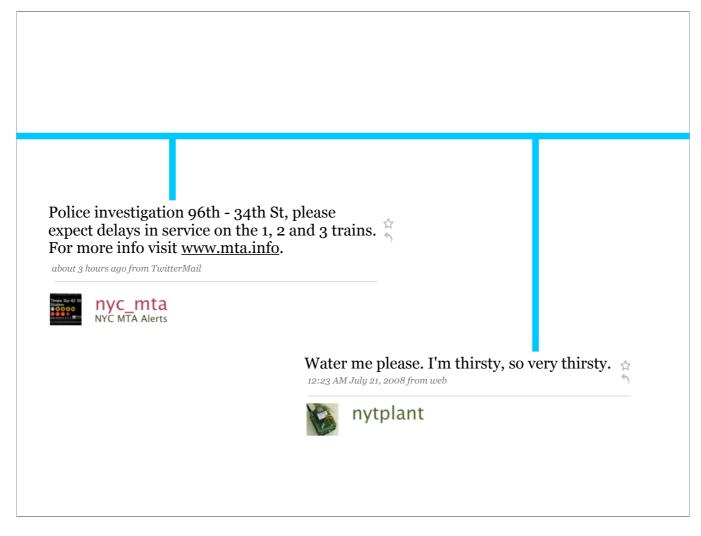
And of course there are real celebrities too.

Several funny Shaq facts:

1. He set up a twitter account because there was someone pretending to be Shaq on Twitter already (in a good-natured parody way, not a malicious identity theft way).

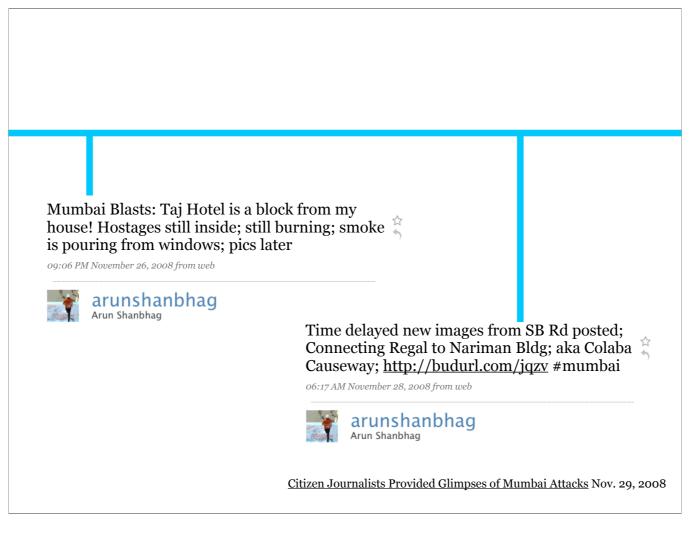
2. He now has TKTK followers

3. He's one of the few people I've seen who's still using SMS for twitter



And there are automated programs that use the API to post messages, for things that are both big and small

The plant example is particularly funny. Someone sells a kit with a soil monitor that can post to twitter (via a computer interface). R&D bought one of these kits, so I was seeing how well they take care of their plants. Sadly, this tweet from July was one of the last tweets. I'm starting to get concerned....



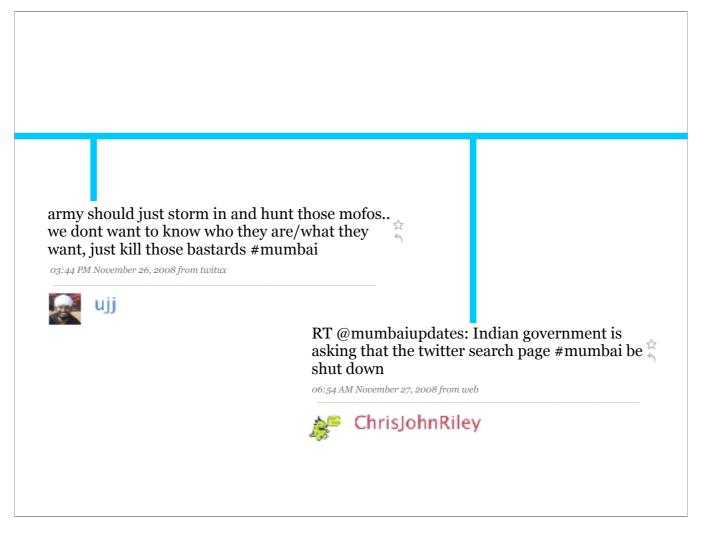
And sometimes Twitter is a source for news. Here are some tweets made by an involved blogger about the recent terrorism in Mumbai. He also augmented his coverage with blog posts, flickr photographs, etc. The result was a compelling firsthand account of how things were unfolding, interspersed with the occasional personal tweets like "Getting lunch"

Twitter also broke personal accounts of Sichuan earthquake, etc.

Of course, there are drawbacks to calling this the new journalism. For starters, twitter doesn't reach where the Internet doesn't, whether bandwidth is scarce or censored. And there is the problem of verification... and volume...



Here is a chart of twitters mentioning Mumbai. At its peak, there were 100 tweets a minute. That's a lot of volume to keep up with! The problem is most of it wasn't news...



The bulk of the messages were tweets like this. Expressions of sympathy or rage, or Retweets of other user's messages.

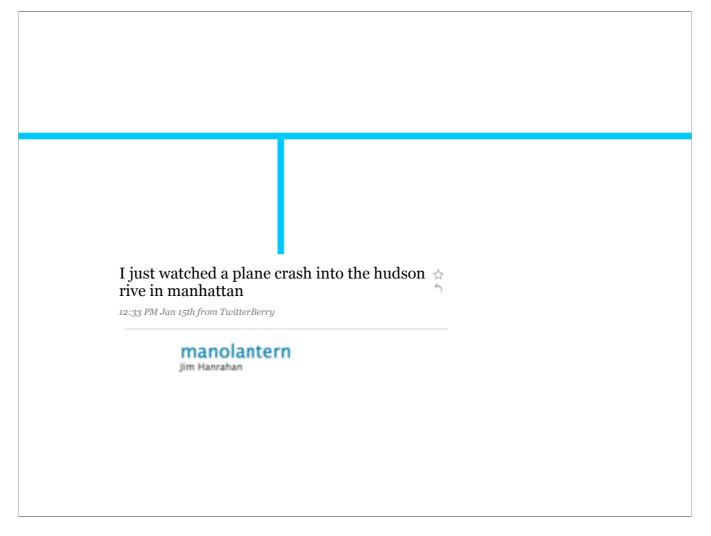
This second message is particularly interesting because it's a rumor that was an utter fabrication with no basis in reality besides the idea that maybe the terrorists are reading twitter and we shouldn't tip them off... Fair enough, but the Indian gov't didn't say this. And most organizations (except the BBC) were smart enough to actually fact-check that first...

The future of media is being split into two streams: one that consists of raw news that comes like a torrent from sources such as Twitter, mobile messages and photos, the other, from old media. The eyewitness dispatches (and photos) via social media are an adjunct to the more established media — which needs to focus on providing analysis, context, and crucially, intelligence — in real time.

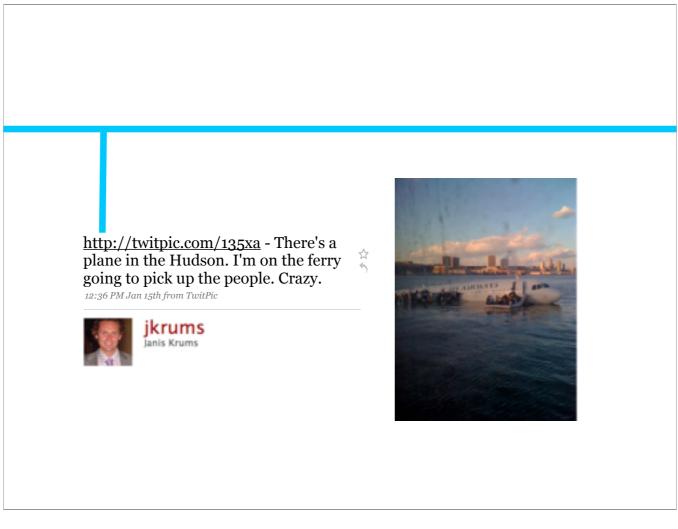
Om Malik, <u>With Twitter, a Desperate Need for Context</u>

And the biggest problem with the twitter stream is there was no way to see the big picture of what's happening. Even if every tweet were factual firstperson perspectives, it's hard to figure out what was REALLY happening and how events were unfolding. It's hard to construct a high-level view from thousands of personal reports flooding in.

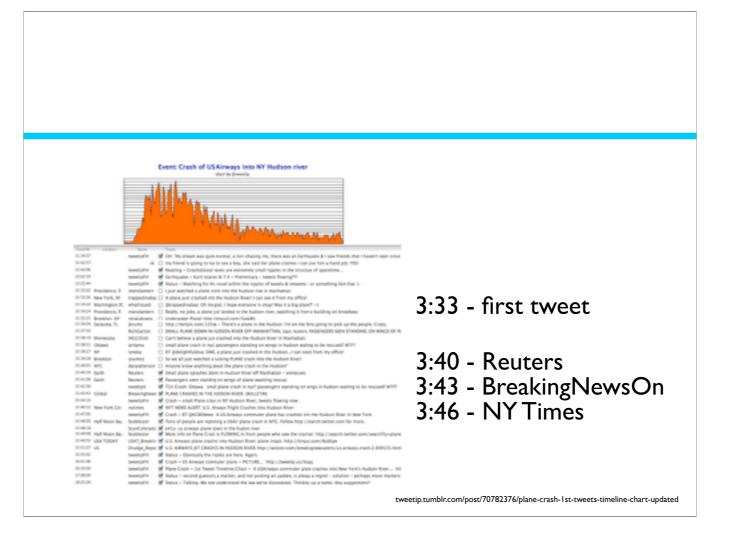
Your best bet there? You can guess...



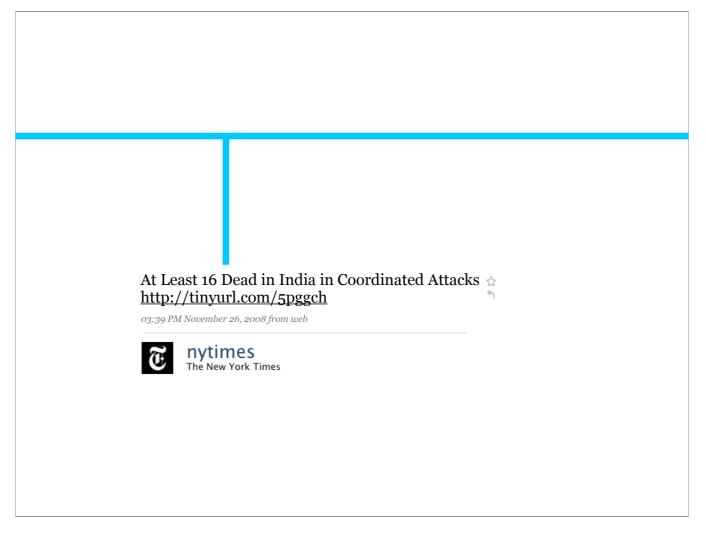
Lately a lot of the discussion of twitter and the news is how twitter "scoops" the major media. In some sense, this is nothing new. Eyewitnesses at events will always scoop news organizations. But before they might just call a few friends, tell some coworkers. Now they're on a public stage...



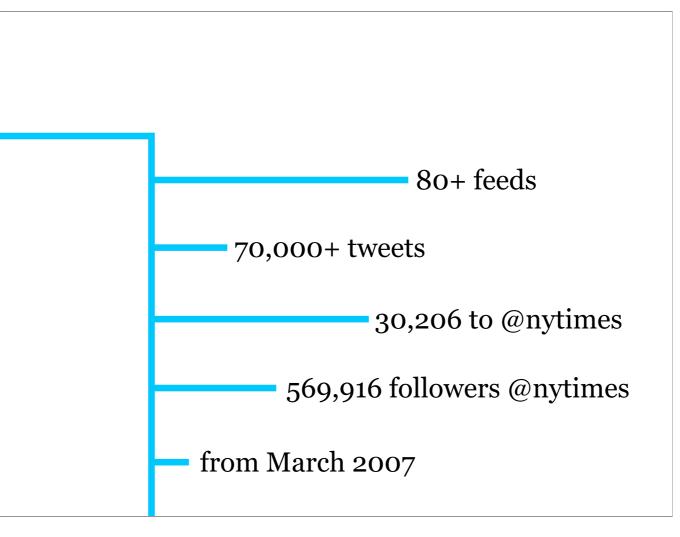
And of course, twitter sometimes is part of the news. This is a tweet that got a lot of attention in the aftermath of the US Airways crash, because it showed the new ways in which twitter, cell phones, and eye witnesses are intersecting with how we report the news. More on that later in the talk.



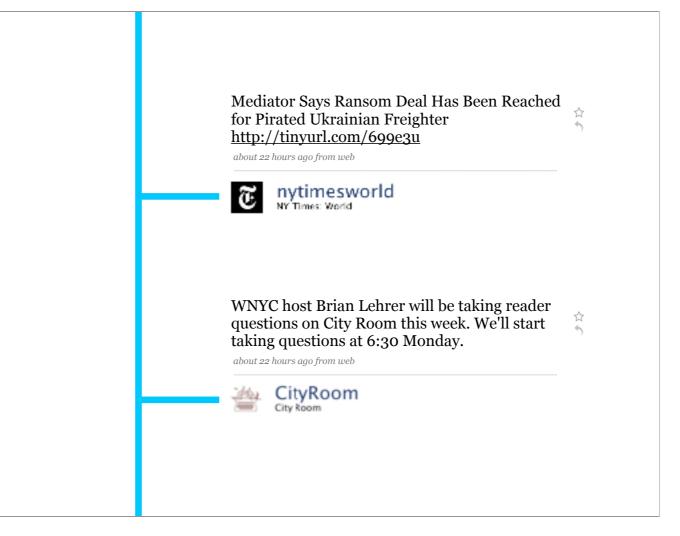
But let's put things in perspective.



Of course, we are on twitter too... this is the first mention of the Mumbai attacks from the @nytimes twitter account, which is an automated feed of articles posted to the homepage. We also have similar automated accounts for all sections and many blogs. As the story developed on the website, further articles were also posted to the feed.



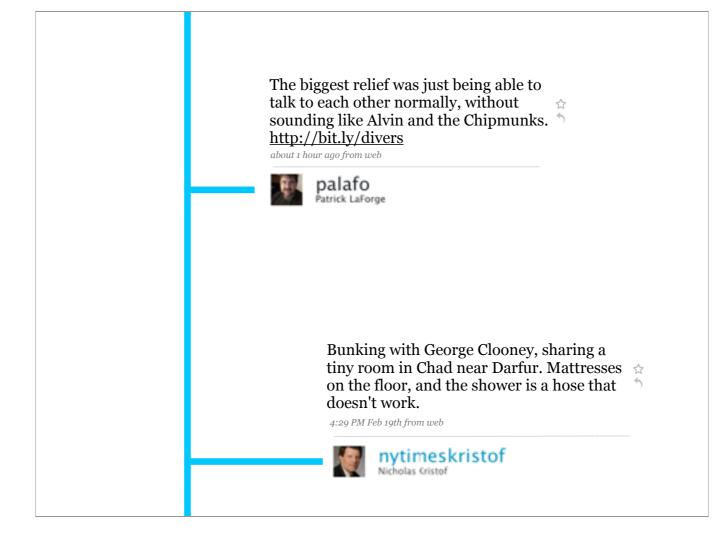
To give you an idea of numbers, here's information on how long the NY Times has been on twitter and what all our feeds have been doing.

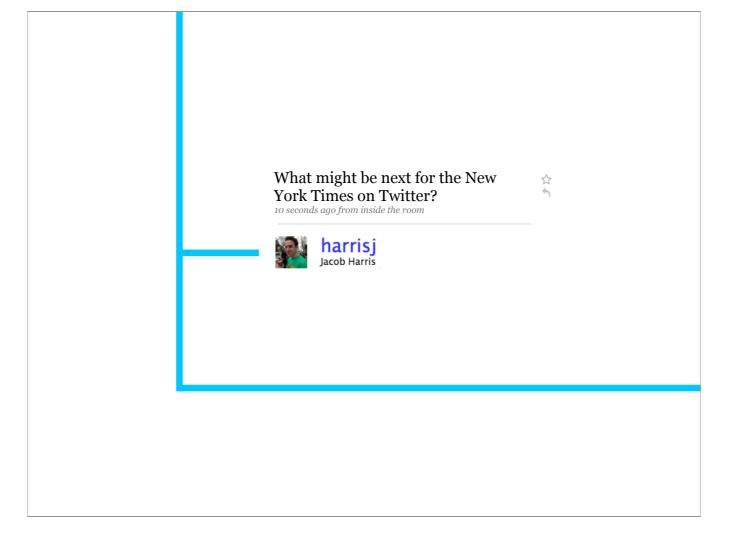


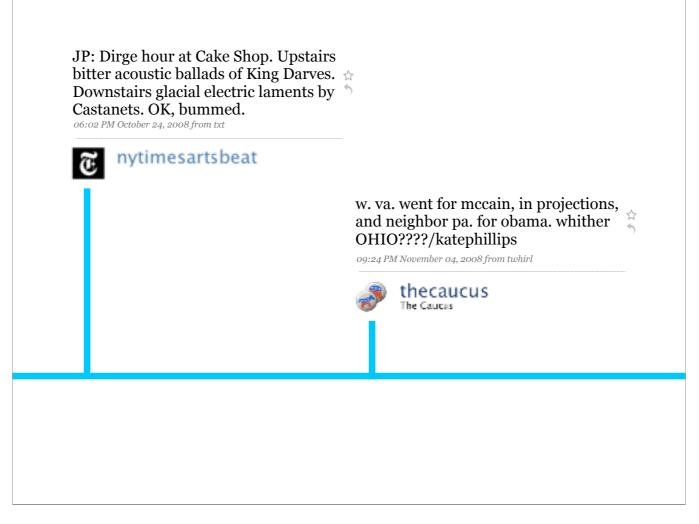
There are feeds for the newspaper and feeds for blogs.



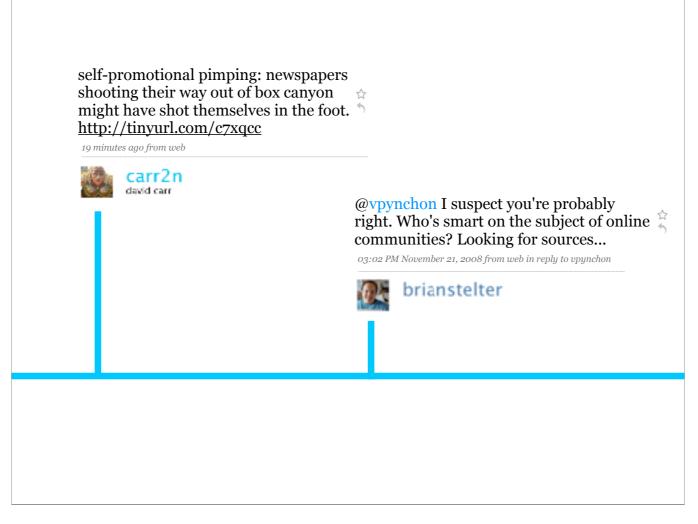
And we also recently added Breaking News Alerts.





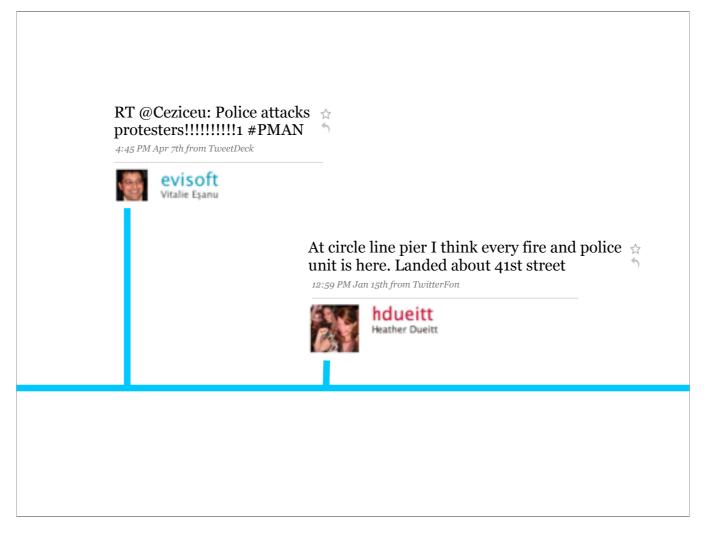


One possibility would be live-tweeting instead of live-blogging (we could figure out how to feed into the live-blog post potentially). As some examples, here is ArtsBeat describing one part of their total CMJ music marathon experience. And Kate Phillips from The Caucus did some live tweets on election nights and during the debates. Since there will be conversation on twitter around major world events, the idea here is to be a part of it. It's of course easier when the event is scheduled (the Olympics, election) vs. breaking news...



One other thing that might be interesting would be journalists twittering. People like having a connection with the journalists of the NY Times and some level of transparency (as long as it didn't violate ethical or publishing standards of course) might be engaging to the journalist who's able to directly communicate with his readers...

Here are 2 journalists at the Times who twitter already...



One other possibility might be to use twitter as a tool for reporting, with the caveats from Mumbai in mind. On the left, you can see Brian Stelter talking to his readers directly to get leads for a sidebar where several celebrities who twitter were mentioned. This is an excellent channel for talking to readers, since his followers are friends, family, and fans, and this would not work so well on the TV Decoder blog.

The right case is also a little interesting, as it's part of the saga on the Motrin Moms. To give you a backstory, Motrin posted an advertisement in which a female voiceover snarkily suggested that baby wearing had become a fashionable accessory used by moms desperate to show they're "official" and then tried to sell them painkillers. They forgot Advertising Rule #17: Never Patronize the Mommy Bloggers. And so a protest backlash developed online over the week with many people branding their posts #motrinmoms to show their affiliation (or their argument against). 2 days later Motrin backed down, pulled the ad, and apologized. Yeah, it was a bit of tempest in a teacup, but it was interesting how I saw this story develop because the #motrinmoms tag started showing up in my feed. And it surged to be the most popular keyword on twitter on that weekend. In this case, Lisa Belkin of the Motherlode blog followed it to a story.

I think this case is interesting because here twitter was part of the news, but in a way that spoke to its strengths, allowing technically-sophisticated and socially-connected mommy bloggers to coordinate their protest on Motrin, rather than bystanders expressing their passive rage or sending along rumors. The twitterers were the story, and I think we'll see more of this as protest movements both large and trivial get organized electronically. Obviously this is more likely to be savvy web moms rather than monks in Myanmar, but I'm curious to see where it goes.



In this talk, I'm going to tell you what twitter is, look at some of the ways people use it, and finally tell you about how we're using it here at the Times.