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THE PUBLIC EDITOR

Numbed by the Numbers, When They Just Don't Add Up

By DANIEL OKRENT

Some people in the newspaper business - including, I suspect, a few sitting upstairs from me, in the New York Times Corporate offices - were displeased by a story that ran on Jan. 10, "Your Daily Paper, Courtesy of a Sponsor." The article, by Jacques Steinberg and Tom Torok, was a pretty sharp pin stuck into the circulation numbers of many American newspapers, revealing how subscriptions paid for by advertisers are delivered to readers who haven't asked for them.

I fielded a couple of days' worth of objections from the newspaper industry, and while I concluded that the piece was largely entirely accurate (if somewhat overstated), I do think it could have been more candid about The Times's own practices. Readers wanted to know how The Times fitted into this story didn't find out until (more likely, "unless") they made it to the 30th paragraph. Even then the article was slightly less than forthcoming. By studying circulation patterns of Sunday papers, the article made The Times appear less reliant on advertiser-subsidized subscriptions than it would have if the comparisons had been based on weekday circulation.

In fact, one could say there's a stark difference: according to the most recent available numbers, the quantity of the paper's third-party-paid subscriptions on a given weekday is 79 percent higher than the comparable Sunday number.

This sounds very ominous. It sounds somewhat less ominous when you realize that these same third-party-paid subscriptions account for 1.4 percent of Sunday circulation, and 2.5 percent of weekday circulation. And it sounds not even worth noting (take a deep breath) if you consider that the difference between the number of weekday subsidized copies and Sunday subsidized copies is 0.4 percent of weekday circulation, and 0.27 percent of Sunday circulation.

Set aside the question of whether The Times should have stated its figures higher and more completely in the piece. (No, let's aside: Caesar's wife should speak early and loudly.) There's another issue rolling around all these numbers - namely, numbers have any idea which of the figures I've cited, all of them accurate, are meaningful?

Neither do I.

One of the appealing things about the complaints I receive about innumeracy at The Times is their ecumenical origin; when it comes to how it handles numbers, The Times is an equal opportunity offender. Like a bad cough that spreads its germs indiscriminately misapplied and ill-explained irritate the sensibilities of the right and the left, the drug company official and the animal rights art collector and the Jets fan.

Number fumbling arises, I believe, not from mendacity but from laziness, carelessness or lack of comprehension. I'll put myself in the latter category (as some readers no doubt will as well, after they've read through my representation of the numbers that follow the journalists I know who enter the profession comfortable with numbers write about sports, where debate about the meaning of statistics is a daily competition, or economics, a field in which interpretation of numbers will no more likely produce inarguable answers than will finger painting.

So it is left to the rest of us who write for the paper to stumble through numbers, scatter them on the page and hope that readers understand. Does it matter if many of these figures are meaningless symbols serving the interests of the parties that issue them? As is evident from recent lawsuits: A man is suing the city for $20 million arising from charges, eventually dismissed against him for kidnapping and sexual abuse [story]. The mother of the football player Derrick Thomas, who died in 2000, is suing General Motors for $75 million [story]. Villagers on an Indonesian island are suing Newmont Mining Corporation for $543 million [story]. Not one of these numbers is grounded in anything more substantial than the imagination of a plaintiff's lawyer, but even the author of print.
No different, really, was Wednesday's assertion that Bernard J. Ebbers, if convicted of all charges in the MCI-WorldCom accounting scandal, "could be sentenced to as much as 85 years," a formulation that bears no relationship to any conceivable outcome yet serves the prosecutor's public case very nicely [story].

Numbers issued by those measuring criminal enterprise ("In Mexico, drug trafficking is a $250-billion-a-year industry" [story]) or the economic impact of a new stadium ("Bloomberg said that he expected the arena to generate about $400 million a year through various economic activities" [story]) don't deserve to be published without challenge; it doesn't serve agencies who want to fight drug trafficking to underestimate the problem, nor can any politician support a development project without hyping its potential benefit.

Still, The Times persists. In November, when New York City Comptroller William Thompson released a study purporting to show that New Yorkers purchase more than $23 billion in counterfeit goods each year, The Times repeated the analysis as if it were credible [story]. Quick arithmetic would have demonstrated that $23 billion would work out to roughly $8,000 per city household, a number ludicrous on its face. (In the Web version of this column, I've linked to an excellent dissection of Thompson's report, by freelance journalist Felix Salmon.)

Last Sunday, an article on the city's proposed $1.1 billion investment in three stadium projects cited the assertion by the president of the city's Economic Development Corporation that "for every dollar invested by the city in the three projects, taxpayers would get a return of $3.50 to $4.50 over 30 years." [story] It didn't say that the same $1.1 billion invested in a 30-year Treasury bond would return $4 for every dollar invested, and a lot more reliably, too. (Credit where it's due: reporter Charles V. Bagli did note that the $1.1 billion could pay for 25 schools housing 600 students each.)

Sometimes the absence of a number is as deflating to an article's credibility as the presence of a deceptive one. Few articles noting that President Bush received more votes than any candidate in history also mentioned that more people voted against him than any candidate in history. Quoting Michael Moore's assertion that standing ovations in Greensboro, N.C., proved not only that President Bush received more votes than any candidate in history also mentioned that more people voted against him than any candidate in history. Quoting Michael Moore's assertion that standing ovations in Greensboro, N.C., proved that "Fahrenheit 9/11" is "a red state movie" disregards the fact that metropolitan Greensboro has over 1.2 million people [story]: you could probably find in a population that large enough people to give a standing O for a reading of the bylaws of the American Dental Association.

Of course both Moore and the reporter who wrote that piece operate in the movie business, where records are about as meaningful as promises. "Shrek 2" is not, as an article in The Times Magazine had it in November, "the third-highest-grossing movie of all time" [story]; if you consider inflation, it's not even in the Top 10 (and "Titanic" is far from No. 1). This record-mania has spread everywhere. "Record-high gas prices" summoned up last year weren't even close; at its summer peak, gas cost 80 cents a gallon less than it did in 1981. Says economics reporter David Leonhardt, "Treating 2004 dollars the same as 1981 dollars isn't much different from treating dollars the same as rupees. The fact that 10 is a bigger number than 9 doesn't make 10 rupees worth more than $9; nor does it make $10 from 2004 worth more than $9 from 1981."

Inflation isn't the only culprit stalking the record books: "Record deficits" may not be records when they're expressed as a percentage of gross domestic product, a far more reasonable measure than any raw number.

Numbers without context, especially large ones with many zeros trailing behind, are about as intelligible as vowels without consonants. When Congress allocated $28.4 billion to the National Institutes of Health, was that a lot or a little? [story] I'd certainly begin to have a sense of it if I knew that this came to 3 percent of all discretionary spending. When John Kerry proposed tax cuts of $420 billion over 10 years, was that a meaningful number? [story] Tell me that it amounts to about $150 per person per year, and I can grasp it. When Harvard announced that it was allocating $2 million more to financial aid for poor students, bringing the total to $82 million a year, was it really being generous? [story] Well, in 2004, $82 million was about six days' income from the Harvard endowment, and the heralded $2 million increase that prompted this fairly prominent article was the equivalent of what the endowment earned every 3 hours and 36 minutes.

If all these numbers make your eyes roll, then you're finding yourself in the same position as a lot of readers, and apparently a lot of reporters and editors as well. (I haven't even gotten into deceptive stats that have the patina of authority, like those three all-time champs, the Dow Jones Industrial Average, the unemployment rate and batting averages; if you're interested, I take a few swings at them in my Web journal, in Posting No. 42.)

Although everyone who writes for The Times is presumably comfortable with words, every sentence nonetheless goes through the hands of copy editors, highly trained specialists who can bring life to a dead paragraph or clarity to a tortured clause with a tap-tap here and a delete-insert there. But numbers, so alien to so many, don't get nearly this respect. The paper requires no specific training to enhance numeracy, and no specialists whose sole job is to foster it. David Leonhardt and Charles Blow, the deputy design director for news, have just begun to conduct occasional seminars on "Using and Misusing Numbers," and that's a start. But as I read the paper and try to dodge the context-absent numbers that are thrown about like...
shot.puts, I long for more.

In "Floater," his 1980 novel about life at a newsweekly, Calvin Trillin introduced the Rhymes-With man - a mysterious character locked in a padded room who is allowed out only to provide readers with parenthetical clues to the pronunciation of foreign words, like ratatouille ("rhymes with lotta hooey"). Maybe The Times could sign up several Number-Means people to help the staff - and the readers - through the sticky digits.

_The public editor serves as the readers' representative. His opinions and conclusions are his own. His column appears at least twice monthly in this section._