2004—International Symposium on Online Journalism

Saturday—Panel 1: Research on Online Journalism

Panelists:
Paula Poindexter, associate professor, School of Journalism, UT Austin (moderator and presenter)
Guillermo Franco, editor, ElTiempo.com, Bogotá, Colombia
Steve Outing, Senior Editor Poynter Institute and columnist, Editor & Publisher magazine
Rosental Alves and Amy Schmitz Weiss, School of Journalism, UT Austin

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PAULA POINDEXTER: Do you know if you were at Texas at A&M that the first speaker would start by saying, "Howdy?" Did you know that? So be thankful you're here at the University of Texas at Austin. I'm Paula Poindexter, Associate Professor of Journalism and Chair of the Journalism Graduate Studies Committee. In preparation for this morning I looked back at my remarks at a 1985 electronic publishing convention in London to see if I had said anything of value.

For two years before going to the London conference one of my responsibilities as Special Projects Manager at the Los Angeles Times had been to be in our electronic publishing ventures. I was liaison to Times Mirror video techs and the Los Angeles Times editorial department's online publishing staff and advisor to the Times' president on electronic publishing activity in the company and around the country.

In this capacity I had access to research that was being done on the electronic publishing efforts throughout the Times Mirror company. Research eventually told us there was no consumer market for videodisc service. That included an electronic version of the Los Angeles Times and the experimental service, which had cost tens of millions of dollars, was shut down.

Since most of the early electronic publishing experiments in the Times Mirror company were shut down, I obviously didn't have the answers back then but I did a pretty good job at posing questions that are still relevant today when I attended that convention in London.

Can we supply an electronic version of information from our news, and perhaps other sources, sort it, index it, tailor it, enhance it and satisfy a consumer need? Through the electronic information we provide can we save the end user money or time or help them work more efficiently or smarter? Can we satisfy their need to know, to be entertained, or their need to have more convenience in their lives?

Most of the research I do today focuses on the end user of news media - those who read news online and those who don't. I always study the online newsreader in relation to use of traditional media, such as newspapers and television news. There are some troubling trends.

The gender gap in online news reading has not disappeared. Unfortunately, among college students, females are also less likely than males to read news online. The accidental online newsreader is a significant part of the audience for online news. The accidental online newsreader is more likely to be female.

Fortunately, there is at least one encouraging sign. Young adults have not turned away from online news the way they've turned away from newspapers or television news. Young adults are more likely than older adults to read news online.

As we hear the panelists this morning we should keep in mind, how can we satisfy the needs of women and accidental online newsreaders? And now that we're getting young adults to pay attention to news, at least through the Internet, how can we support that effort with our content and marketing?

Our panelists this morning are, and I'll introduce all of them and then they'll come up and speak individually…Steve Outing, where's Steve, Senior Editor of the Poynter Institute for Media Studies, where he writes and conducts research on digital media issues. Currently, he's heading up Poynter's Eyetrack III research study of online news consumer behavior in the broadband area. In 2000 he won the **Epy** award for Outstanding Individual Achievement in recognition for his contribution to the online news industry.

Guillermo Franco is the Content Manager of the new media unit of Casa Editorial El Tiempo. He is also the Editor of ElTiempo.com and a professor for post-graduate programs related to online journalism in Columbia and Ecuador.

Rosental Alves is Director of the Knight Center for Journalism in the Americas and professor in the School of Journalism where he holds the Knight Chair in International journalism. In his former life, Rosental was a foreign correspondent based in Spain and he was responsible for the first online news service to be offered by a Brazilian newspaper, and I might add, he's a wonderful, wonderful colleague. He paid me to say that.

Amy Schmitz Weiss is a Ph.D. student here in our School of Journalism. She formerly worked for the online newspaper *The Chicago Tribune* as a producer and writer. And Amy is a great Ph.D. student and we're very happy to have her. And we'll begin with our first speaker.

STEVE OUTING: Ok. All right, well, the last, boy, quite a few months now, I've been involved with a very fun, and I think you'll find, interesting project at Poynter. This is the Eyetrack III. This is the third time Poynter has been involved in an Eyetracking study. When I first agreed to accept this invitation to speak here I fully expected that we would have all of our findings out by this date. I was a little bit disappointed to come here and we're not quite ready. The findings, I'm hoping, will be totally done by the end of May. Nevertheless, I think I could show you some pretty cool stuff here this morning, including some early observations – kind of a sneak peek at what we're doing. So, I hope this will still be worth your time. I think it will.

So, what do you see, what do readers see, when they interact with news websites? You know, we could find, figure out some things from looking at our usage logs, seeing what they look at. Noting what links they click on and what not. We can find out some things by asking them questions in questionnaires and focus groups. But wouldn't it be really cool if we could actually be inside their heads and look at the page and look at the screen, see where they're going, and find some patterns that even they can't spot themselves? And so that's kind of the idea behind Eyetrack.
What I thought might be interesting for you is I've got a couple of little video clips. This is just one person looking at a web page. And I'll get into how the study worked, but the, it's not the Yahoo thing, what you'll see is one of about ten different mock page, mock

websites, that we created for this study. This is just one person looking at it. So let me just run it and you can see for yourselves.

So what you're seeing, these dots are fixations – and a fixation is just when the eye sits on a particular piece of content for at least a fraction of a second. And the blue lines are obviously the paths between these fixations, what are called "**cycads**."

ROSENTAL ALVES: Is this a normal person?

STEVE OUTING: That's a normal person. I'll just let it run through because it's interesting. After going off the homepage this person clicked through to an individual article. This particular page is testing a three-column article format, something like IHT.com does. And then we had another set of people who were looking at the same page, basically the same design page but in one-column format.

AUDIENCE QUESTION: Were they directed at all?

STEVE OUTING: They got some instruction very early on and they could call for help at any time from the narrator, the supervisor in the room, but generally they were left on their own.

AUDIENCE QUESTION: (inaudible)

STEVE OUTING: Oh, I'll get into that in a minute. I just thought this was just kinda fun, just to introduce you to it and I'll explain this in a few minutes. Yeah, this is what you all do.

AUDIENCE QUESTION: How old is this person?

STEVE OUTING: I don't know, specifically.

AUDIENCE QUESTION: But you would guess…30…?

STEVE OUTING: I could find that out and maybe when I go to post these on the web I'll actually do that. …Yeah, it's amazing how fast this person's looking around the page…not much time spent on anything, which is a fairly consistent finding. There's a point where the person is actually reading something.

AUDIENCE QUESTION: (inaudible)

STEVE OUTING: No, no, that's actually not very recent. I'm not sure. We ran the test in late '90, or late 2003, late last year. There's just a lot of number to crunch so that's why it's not quite ready to release yet. I don't know, so anyways, this is just kinda fun to watch. If you care I have one more that's a little shorter if anybody's interested. Yeah? Ok. Ok. This particular page design, we wanted to test a page where you didn't have any scrolling and a fairly small amount of content, just to see what kind of patterns we would get versus a busier page. So this is the compact page.

AUDIENCE QUESTION: You know if this is a different person, Steve?

STEVE OUTING: This was probably a different person, yeah. Ok. So. Ok, so I just thought I'd start you out with something fun. Now that was just a single person so I'll get into how you determine, how you take about 50 of these people and find some patterns about that.

First, briefly, just a little bit of history of Eyetrack. Poynter's been involved in Eyetracking since about 1990. The first one was done, on the left here, this was Eyetrack I, which was done with Gallup Applied Science in 1990 and that was a study of print newspapers. The main focus of the study was, what's the impact of adding color to newspapers? This was back in the days when color was still fairly uncommon.

As you can see from the headgear this guy's wearing, it was pretty cumbersome. That thing on the left, on his head, has two cameras – one focused on his eye and another one a little mirror that's reflecting what he's looking at.

About a decade later, Poynter and Stanford did a second Eyetrack study of, the first Eyetrack study of news websites, kind of in the narrowband era. As you can see the headgear had shrunk a little bit then, but still not exactly a natural reading environment. There there was only one camera on the device, so it was a little bit better. Still pretty unnatural reading.

Now, now we come to today. And as you can see, this person is not wearing anything. He's just sitting at a computer monitor and if you look, you may not be able to see it because of the table at the bottom, but at the bottom of the computer monitor is a small camera which is simply trained on his eye and can track within about, no more than a centimeter's variation. So, it's pretty accurate. Usually, it's less than that so it's pretty accurate.

The guy sitting at the computer is Colin Johnson, who is the president of I-Tools, which is a company in San Francisco that we used for this project. Now it's been you know five years, nearly five years, since the first online Eyetrack and you know quite a bit has changed then. Back then most people were used to narrowband, dial-up connections and there's actually one fairly controversial finding that came out of that one which was that people always looked at the text first and kind of ignored the photographs even though that test was on a broadband connection and the photos came up quickly I think people are conditioned because of their slow dial-up connections or in the office for the, to look at the text and the photo would draw slowly.

So, now we're in a Broadband Era and most people even if they don't have it at home, they probably at least have broadband at the office so they more and more conditioned to that.

Websites today are far more sophisticated. Obviously, we're using much more multimedia, as we talked a lot about multimedia editorial content yesterday. All the stuff that MSNBC, the New York Times, the Washington Post and others are doing and as we talked about it's growing more and more and more so we really felt like we wanted to take a look at, use some of this Eyetracking tools to see what we could learn about multimedia use. And it's just so great that we were able to do this without the test subject having to have any headgear. I mean that really makes such a difference in making it a little bit more realistic than in the past.

Actually the way that this worked is initially we had to calibrate the test subject's eyes to this, which takes 30 seconds or a minute and then after that they can move their head around like about this, and it will still keep track of them. And if they want to get up and go to the bathroom or get a cup of coffee, they just sit back down and they don't have to recalibrate it. So, we've really come a long way with this stuff.

We use the I-Tools Inside Reporter, which is this new software and analysis package from I-Tools in San Francisco. And the I-Tools folks actually did the testing. So, what do we want to learn? Well, how the various design and presentation elements affect user behavior and satisfaction. How the different writing styles affect user interaction with content. I'll get into details of this. How are users behaviors and recall comprehension affected when stories are presented in multimedia versus text format? I think that one will be really interesting. And, just what are some typical user behavior patterns when people experience multimedia editorial content.

So, our goals, this is, we're calling this a pilot study and we covered a lot of ground, a lot of variables and we'll have a lot of observations about different aspects of websites. The idea is, hopefully by late - the end of next month - to present these preliminary findings to the industry, profession, and then we really want to solicit opinions, feedback, reaction to this, ask you to tell us what you think of what we've done and then go on and pick some more narrow areas where we can do fairly short term studies.

Like we might be able to have some observations about some online advertising, or let's say navigation. I have a few observations that we'll be able to give about navigation placement. That might be something where the industry decides we really want to know more. We want you to study the DHTML navigation, where you have, say like on MSNBC where you put your mouse over something and it clicks up – maybe there's some more fairly fine-tuned things that you'd like us to do. So we really want to hear that. And so consider this to be a pilot study and we hope that the start of a journey over the next year.

Let me just quickly go through the procedures of what we had done. So, there's several parts to this. The first thing we did was we created five mock websites and we looked around at what, general designs that a lot of sites seem to use and categorized them into five different types. And then we had a designer, who at Morris Digital Works, **Nick Willitz**, who's their Chief Information Architect, and he designed these five sites for us. And what we did was we created two of each design and then varied, and then created, had a variable for each of these.

So, for example, one headline, one design with a homepage would have had maybe just headlines, purely headlines, no blurbs. And then we had another identical page that had headlines and blurbs. And then we had 25 of our people look, our subjects looked at one website and the other 25 looked at the other and then we could learn some things from that control variable.

So, the variables we were using – these are for the homepages – were headlines with blurbs versus headlines without, size of headline type, size of text type, the amount of content. We had a page that you didn't have to scroll and then another one where there was a lot of content and you did have to scroll. And then we just had another one where we were experimenting with the more unconventional advertising, where we had - one had a more conventional 468x60 banner - another one had one that you put your mouse over and it scrolled down, automatically scrolled down to cover most of the page.

Also did the same thing on some article level pages where we varied within articles the different people saw, we varied the photo size. You saw in the earlier one we had a three-column article layout, so we one set of people looking at some three-column

layout article pages and others that looked at one column. And we also varied another set where we varied paragraph length, and another one where we would sometimes use subheads and not use subheads. And I think you also this on the little video clip, one of them we used a summary graph – kind of a big deck underneath the main headline, and another one that we just went straight into the story. Those are the ones where we very precisely controlled the variables.

We also did some other, had some other things within all of the mock websites that we created where we tested navigation placement and we did some comparison of the homepage designs to see which ones maybe worked a little better. We varied the advertising placement on some of them and the advertising formats that we used, and the animated ads and what not. And also the homepage photo sites.

And on a lot of those things all we're going to be able to offer this time around is really some observation. I'm not going to call these findings even… But I think that you'll find them useful and interesting and, again, this may point to some areas that we may want to go back and look at with some fairly short term, focused Eyetracking studies.

So what these were – these were fairly realistic looking mock websites with quite a bit of content. You know, not as much as WashingtonPost.com, but quite a bit. The articles were real. Most of them were relatively timely, but they might have been a month or two old. We selected them so they'd still be interesting to people. There was also one part on most of the pages where there was a live AP feed, so there was some live news on it as well.

Part II was, we created, and I think this one's going to be really interesting, we took a couple of New York Times multimedia graphics, and we worked with the people at the Times and we actually scaled down one of, a couple of their multimedia editorial features and then we created a text version of the same multimedia feature and had people take a comprehension test.

So first they were given a story to read – a control article - and then at the end of that they were asked a few questions to get them prepared for the idea that they were going to be asked a few questions. Then they have two more stories like that to look at. First they might look at a text story and read it and then have to answer a few questions. And then next they would get a multimedia feature – a different story – and then answer a few questions on that.

And so we had, again, two groups of 25 and so half saw one story in text and one in multimedia and then visa versa, if that makes sense. And then we're able to compare the results.

I think that should be really interesting because we can, once we get the results in, and I don't even, I don't have those specific findings yet – we're still kind of crunching the numbers on those – we should be able to look at if in the multimedia piece, for example, if we didn't, if one particular question was answered wrong by the people who looked at the multimedia piece we can – I tracked all this – so we can go back and look and see, you know, this piece of information was here in this animated info graphic, and maybe start to figure out why so many people missed that. So that should be interesting.

And then, the last part of it was we've found about eight really high quality, some award winning multimedia editorial features and just let people free roam these things. They got

to select which ones they wanted to look at and we just put the Eyetracker on and we just wanted to try and learn some patterns, try and figure out what's going on. And hopefully that will give us a little more information about what specifically we might want to test in some later, more in depth, Eyetracking studies.

So we've a total of 50 participants took part in this test. It took place in San Francisco. It was conducted by the people at I-Tools and we invited a mix of participants. The ages were from about 18 to 55. And the reason they're not any older, it's for reasons I can't fully explain. It's a little bit harder to track people's eyes when they're over 55.

And we also had to, we also decided that we would exclude people who wore eyeglasses this time. And the reason being because it's much harder to track people with eyeglasses with the technology where you don't have to wear headgear. And we felt that that outweighed it. You know, so hopefully, contact lenses were fine. We got a lot of people with contact lenses. So there's a tradeoff.

The actual testing took about 50 minutes to go through all of these, these exercises that we had. And then the last, oh, I'm running out of time. In the last 10 minutes we're gathering demographic data from the participants. Ok, I gotta speed up.

Just a few of these sample pages. Here's one, I think we were varying text size on this one, on the other one. This is the one I showed you earlier – this is just a test of a page that you didn't have to scroll. Ok, so here's a couple of the pages I showed you earlier. So here's the difference. Twenty-five people saw the one on the left. This particular homepage only had headlines. Another 25 people saw the one on the right, which had headlines and blurbs. And some interesting patterns emerge from that.

Let's see. This is just what a single user session looks like. And you can't tell a lot but there's, it's kind of interesting to look at. The green dot here is where the person entered the page initially. You would actually be able to follow these lines – there are numbers on these squares, which this is probably too confusing to do it but the researchers can actually follow this thing and see where this person went.

Let's see, the X's are, excuse me, yeah, the number, the circles are the fixations. And the lines are the **cycads** – the paths between the fixations. And there's thicker lines that you'll see kind of on the left there – it's a concentration of where this person looked multiple times. And then, the red dot, which is actually on the photo, is where the person last looked on the page.

Actually, I'm running out of time so I better breeze through that one. These are just pages I showed you earlier. This next thing, which looks like a Doppler radar map is actually, it's called a heat map, and this is an aggregate image of the 25 people who looked at each of these pages. And so the area of most concentration is going to be the red and the orange and the yellow. So the red is where most everybody fixated their eyes at some point on that page, whereas the darker areas very few people did. There's a little key up at the top. You can probably see it.

The X's are where people clicked and you'll also notice some red lines. The first line that you see there is actually is the bottom of the screen that is visible without scrolling, and then you'll see other lines down below, which will show where different people, how far down they scrolled on the page. A lot of people don't scroll down to the bottom of the page of course.

I have to skip past that one…So I can't, I really wish that I could be able to give you some findings today but I can at least throw out a few observations I think you might find interesting. This particular one was about the page that just had headlines and another one that had blurbs with headlines.

And some of the things that the researchers can learn by looking at this is that there is quite a bit more concentration on the one on the left, which is just headlines and people tended to look and focus on more stories than did the one on the right with the blurbs. The blurbs seemed to capture people's attention and so they didn't get as far down the page. Also, I gotta wrap it up.

Another one, just kind of interesting, we had a bunch of different page designs but we did notice one fairly typical scanning pattern where they tended to concentrate a lot, no matter what the design was. They often concentrated up in the upper left part of the page, and then tended to work a lot horizontally before going down the page. Obviously, it can vary with design but.

Again, don't take these too seriously because these are kind of early findings and they may end up getting modified a little bit before we release this.

You know, again, fairly predictable that people's eyes don't tend to fixate on ads a lot. But you'll notice over on the page on the right where we tested some text ads – these were job listings – some pretty intense interest on there.

Again, an observation on some findings: We also looked at photo size and as you would expect you're going to get more fixations the larger it goes. But it was kind of interesting from a small photo to a, say, medium sized photos it's a pretty huge jump in fixations. But then it went, say, to a much larger photo versus a medium size one, there wasn't that much of a jump. Maybe that indicates that medium size photos, you know, do actually pretty well.

A couple of real quick things: Visual barriers seem to really have an affect on people looking at ads or other page elements. You know, for example, an ad at the bottom of a page would have different readings whether, depending on whether there was a thin rule above the ad or not. You know, if you got rid of the rule than it seemed to get a little bit more activity on the ad, which is kind of interesting.

Not quite ready to go out with the multimedia comprehension thing. But some early indications seem to indicate that text does pretty well and people do seem to miss some stuff with multimedia. So there will be a bit more of that later.

Navigation placement is generally pretty much the same but the top navigation actually did perform a little bit better than everything else.

AUDIENCE QUESTION: (inaudible)

STEVE OUTING: Yeah, we tried top left and we actually tried putting a navigation on the right. You don't see that very often but there are a few sites that do it. So we thought, we were just curious what would happen, and seemed to be pretty comfortable. I'm really, ok, I'm done.

Ok, so anyways, we'll announce this in hopefully late May. I don't have a specific date. We're crunching numbers as fast as we can and I'm going to type up the reports as quickly as I can, so that's what we're shooting for. And really hope that we hear from all of you as we come out with this thing so that we can move this thing forward and thanks.

GUILLERMO FRANCO: This is our research, is more qualitative research without high technology. Maybe we can call eye crash study, yeah. What is good web design and bad web design? Who knows? I don't have the answer, but nobody has the answer maybe. But we can provide some clues to result that equation.

I'm going to talk about a text quality from the user ? from the, and from the quality text I'm going to try to result the equation what is good and bad web design. Why I'm going to talk about text? Two reasons: Text will remain the key component of the human ? and second, content on the web is still ? by text narrative.

? statement. The ? use of the print design resource to present text on Internet is negatively affecting usability of homepages but people are ? of newspaper those make an information delivery inefficient. When I say print design resources I refer in the first place to uses of headlines, summary and text. As they were designed for ? publication and those with text that make use of the inverted pyramid structure.

We are going to see some examples. I don't want to criticize anyone, please forget the name of the newspaper. The newspaper are important because it represent friends. First, I pointed to here the subhead, the heading, sorry, subhead of flat line of heading. Second, we have the headline and third who had the ?. I pointed to it because in our country there are different names to refer that ?.

How can we describe the design? First, the first headline is bigger than other ones. It's not enough that the ? headline appeared first and the designer decide behind the screen, "this is the ? headline," without different size of typography. But this is the first, the first of ?.

Let me show you more about this type of design. If you read the subhead and the headline there are information, please read. This is one example. And now please leave the ? or ? or blue, ?. Did you see before there are a lot of information repeated? Let me show what kind of information.

They have two ? for you to ?. The list terrorist has been arrested in France. ? Is an efficient way to present text of content? I really don't think so. I really don't think so. Again, this is a friend in web design. You can find a lot of size, a lot of homepages with this kind of structure.

Given the way information ? are distributed through the subhead, the headline and the ? within the homepages it's clear the editor of journalist of Desmundo.s presumed the user read word by word and in that order is one of those ? obtained another picture of what information is about.

Let me explain. If you read the subhead they have two ?. Who are they? You need to read the headline to understand who are they. Then you presume, the reader read first subhead after headline. The headline solve the lack of the context in the subhead. Other, you can even, when the headline is not complete you complete information with the ?. Then it's an efficient content? I don't think so.

The editor presume the reader read word by word. But the investigation about this topic say ? tend not to read the stream of text fully. Instead user is scan text and pick out key word, sentence and paragraph of ? while is keeping ? of the text they care less about. Then the people who read word by word is 16%. You can say there are, the people that scan these, more than 80%.

Let me show you second example. This is ?. This is not the first headline – is the second headline and it's bigger. You have the people behind decide, keep in mind, think concepts to present web content. Again, the headline is bigger than other headlines. The third headline is smaller and the ?. Let me show you the content, let me offer ?. Again, you can find with underlined text, the ? that is repeated.

Is it a different to present content? Please answer. I don't think so. Yes, again, the text following the headline solved the lack of the content in ? in the headline. And the editor assumed, presumed the reader read word by word.

Forget the name of the newspaper please. Washington Post managed the concept of the headline deck on their homepage better than anyone else. It almost never repeat information, which make very efficient. And in the first page you can find a lot of information, a lot of headlines. For example, you cannot find information repeated.

But there is a little problem. The editor presumed the reader had minimum context to understand the headlines. This isn't always true. Especially when we see an International reader. You can see these by the use of the ? names in the headlines. Bush most popular, very popular, no. Somebody ?. For International reader, less known.

But let me show you this example from ElPais.s. What happened when you mention Cozo? Who is Cozo, no? But this is Washington Post style to present headlines, no. But let me, no, uh oh, ok, again, to understand the headline you have to read the first paragraph, no. This is an example of El Pais, no, but the headline it look like Washington Post style.

When the user reads the inside page he finds the text as you are going to appear in the print form. I think the biggest problem is not in the homepages. It's in the inner, or inside, pages. You can find a block of text, linear block of text, blaa, blaa, blaa, blaa, blaa, blaa. In Spanish we say "blaa, blaa," many words. Blaa, blaa, blaa, blaa. Blaa, blaa, blaa, no.

? find this ? of text writing with inverted pyramid structure, linear block of text layout, no hyper ?, no scan ability. And you can find, again, this is the way to present content in print media, not in web media. In just first screen you can find the same information.

Oh, please, let me show you, no, sorry. Headline, deck, yes, and the first paragraph – disappointment. The same, no? That's because the people behind decide. Keep in mind the print design's concepts to present the content.

In the side page there is also a ? due to the ? those printed structure. But you can see the problem is minimum importance as compared to the benefit of having ? an efficient homepage at presenting information, no.

We presume that when the user gets in the ? level, he or she is ? to ?, to ? with ?. But maybe it's not true. I don't think so. No, ok.

Sometimes Washington Post is perfect, but sometimes appears something like that. ? dies, no. ? man dies horribly, no. ? paper ? dies, deck, ? who rule Uganda for much of the 70's dies horribly. You can rewrite that text to avoid the reiteration of the repetition of information. This is less obvious example, but you can find the same information, no. Or you can find new, you cannot find new information.

This is another example. This is La Nation ? is the daily newspaper from Argentina, no. Look at the subhead. They use, La Nation use ? subheads. This is the main legacy of the print design, no. La Nation don't repeat information, doesn't repeat information in homepage, no. But ? use to help in the homepage. Is probably the most remarkable legacy of the print design and allow us to deduct, the editor of La Nation, ? the user read each unit, each news unit on their home page word by word, again, no.

Let me show you some example of subheadings, no. ? 24 hour ? in Buenos Aires. You were ranking the Olympics. This is example of subheadings, no. With that kind of subheading you presume the reader read word by word and ? this subhead line and after that the headline, no. And, again, is that the behavior of the reader? I don't believe, I don't think, no.

The ? to the ? is one that works as a full unit of information, no. Or, in other words, a sentence with a full ?. This is a, forget the newspaper please. This is an experiment, no. ElTiempo.com creates one sole version of its news, writing according to the principle of inverted pyramid and typographically different ?. The first sentence of the third paragraph ? into the headline. If the news is properly writing according to the inverted pyramid principle, the second sentence will never reiterate information of the first one, no. It will only be a complement of it. In the homepage, the second sentence acts as a deck, no.

Let me show you, this is maybe the result of that type of ?. Means eliminating the headline and deck or summary as they are considered in the print media, no. In this type of presentation the first sentence is just a typographically difference ?. It's another concept different from print media, no.

Let me show you this example in Spanish with Mr. ?, no. And let me an offer an English version. The first sentence of the lead was as a headline – Columbia ? Requests ? to U.S. Secretary of Defense Donald Rumsfeld. Second sentence of the lead was in the homepage as a deck. It consists of ? related data on the location of Army ? as well as training for the soldier in the jungle.

There is not repetition of information, no. This is first homepage of the Wall Street Journal, no, and it's a similar approach in the homepage, no. The first two or three words is the ? by ? something like that, but there is no repetition of information here.

The NewYorkTimes.com. I think this is transition mobile. Five months ago, no more, his homepage systematically repeat the information contained in the headline and the first paragraph or deck. It occurred five months ago or six months ago. Now you can find some example of repetition or some example without repetition, no. Look at this example, no. Yes.

It's the same information, essentially the same information. When there is a breaking news, there is, this is the homepage of the New York Times. Is there any information

repeated? Yeah. What do you think? Yes. Yeah. Even though there are new elements, the repetition of the other one are obvious. You can read that twice that he, Richard ?, Chief of the New York Stock Exchange, resign, no. Also, you can read twice the reaction that there was ? of his 140 million compensation package of ? overpay. It's the same information with different words, no.

Now this is a more recent example, no. There will be a news conference. Again, the same information, no, and inside pages, inner pages you can find concepts of the print design to present content. If you read, you can find the same information just in the first screen. Is an efficient way to present content? We don't think so. No. Ok.

How, what can we do? This is a suggestion from someone who designer hate, Mr. Nielson. Jacob Nielsen is the most hated people in the world by designers, no. Yes, no? You can make texture without sacrificing depth of the content by splitting the information into multiple ? connected by hyper ?. But nobody do this. Nobody, no.

Each page can be brief and yet the full ? space can contain much more information that would be visible in a printed article. Lone and the ? information can be regulated to the secondary pages, no. ? you can find in the New York Times and Washington Post, no, this kind of presentation, no.

Hyper-text should not be used to ? and ? multiple page. ? hyper-text ? is not a single ? on the page too. Look at, no. In Washington Post and New York Times everywhere you can find this, everywhere. Continued, continued, no, next, no. Instead it's ? information that ? chance that each focus on a certain topic. The guiding principle should be to ? the reader to select those topics they care about and only download those pages, no. This is, the ?. Again, the most hated people in the world by designers, no.

Ok, why do this happen? In the first decade of the system of the World Wide Web has been used primarily as the new content distribution channel. Yes? I'm going to finish now, no. That's, we are using the web in a minimal, the potential of the web is minimal use by these kind of presentation, no. Ok.

How big is the problem, no? Internet journalists is the largely a medium of a second hand material usually from the old media. In this case, print media, no. A larger ? of the ? pieces are 42%. Where a story posts without any ? by other ?, particularly the ? and Reuters. This is from the Excellence Projects of the Columbia University, 2004. Ok, thank you very much.

ROSENTAL ALVES: ...For instance, would combine and it finish talking about how much of the content of news nowadays are just a repetition of things that are recycled from the other medium. And our research was aimed exactly to measure that. I mean, to see how many times during a given day the homepage of newspapers are changing.

One of the most important challenges of the creation of this new genre of journalism is to understand the dynamic of the new medium in terms of updates, and we have been listening to the people from the video-text era that the electronic journalism will be tomorrow's newspaper that you can consume today. But when the web came we had this wonderful expression called "shovelware," that was done by most of the newspapers and it's still done by most of the newspapers, so from the premise that this new genre of journalism will be effective when it separates itself from the newspaper.

And believing that the online edition should be an entity of itself, that should be totally sep – I believe that it should be totally separate from the print edition - and should use the print edition just as a news provider, but has it's own generation of news, using sometimes, you know, the colleagues of the print edition, etc. but having more, you know - Naka's going all over the world with cameras, etc. but also generating news.

And so from that perspective we started a project to measure how many times in a day newspapers were updating the front – the home page. And also, what are they changing? You know, one of the things that strikes me that I was commenting to someone last night was it's unbelievable that most of the newspapers in the - the stories they post during the day, they don't put the hour. You know, it's a, and they don't do like the Washington Post has done since the beginning. That has a very clear difference between what comes from the newspaper and what they have produced during the day.

And I was telling last that I think not putting the hour of a story that you updated, that you posted in the day, is the same thing of having a newspaper without the day, just the month. Because if you put just the day its like a daily paper puts out December. I mean, it doesn't matter if it's 15 or 16 or 25th, and many papers are doing that.

It's a big challenge to adapt to the dynamic of that. So we went to the list of 100 top circulation newspapers in the country. We took the top 10, the middle 10 and the bottom 10 and we did a content analysis for two weeks, having a company in California that Amy, I don't know how, but she managed to find out while we were working on the software to do that. She find out that there was a company that had software that would go visit the newspaper every hour, take a shot of the homepage, go an hour later to the same newspaper website, take another shot, compare the algorithms of the page and see if there's anything new, and if there were some things it would highlight and send us an email.

PANEL 1, PART 2 (SATURDAY)

ROSENTAL ALVES: ...So we received about 21,000 emails and pages and we developed a codebook and we had a team doing the analysis. We have not written the paper yet because I have several hats and I don't know how can I manage my life. But anyway, we will have these as a sort of an ongoing project because I believe firmly that the development of online journalism will lead to a separation of the two products and that the industry will want to understand that and update more the page and I want to measure that evolution. So, I'm going to pass to Amy and she's going to give some highlights of our findings.

AMY SCHMITZ WEISS: Good morning, everyone. As Rosental said, we did the project actually last summer. We looked at 30 online newspapers from *Editor and Publisher* magazine's top circulation list where we picked the top 10, middle 10 and last 10 on the list. We looked at the two-week time frame between June 23 and July 4th, Monday through Friday only. We excluded the weekends. We actually had TV also included in this but we ended up putting that aside for this presentation today to just focus on online newspapers.

And as Rosental said, what we did is we worked with a company out in California called iMorph where they actually have the technology set up for us to be able to track the pages over 24 hours to see if there had been any changes with any of the 30

newspapers that we had from that two week time frame. And they actually sent them back to us so that we could compare the two pages to see how the changes had occurred and what those changes actually were.

Some of the variables that we did look at, as you can see here, were headlines, briefs, a category would be topic, for instance, what the actual content of that headline, or blurb, was and how it might have changed from one hour to the next.

Position on the page: Whether it had moved up or down or towards the middle of the page, as well as interactive elements. So, if one hour later there was a video that had been added or a related story or photos, we were tracking those as well.

Location of the story: If it was a national story, local or international. And also news angle: To see if there were more hard news or soft news that was being changed throughout the day.

These are just some overall results that we found. We ended up having over 20,874 changes tracked over the two weeks. The majority actually were headlines, instead of just headline and brief changes. The majority also were new content, because we looked at a variety of aspects of changes, in the sense of if it was just a sentence or couple words that had changed or if it was a completely new story that had been posted. And the new content actually falls within that variable of looking at if it was a new story that had come up from an hour before. These are the other percentages that we had for the other aspects of the different types of changes that had occurred.

For the news category, we actually had 14 categories. I only listed a couple here for today but we have all of the research if you're interested in looking at all of it. And for news categories what we found was that actually business and economy was the one that had changed the most, followed by politics and government and military and war at 14%, and sports was the next third category down as for the majority of changes. We were really surprised because we honestly thought that maybe sports might have changed the most throughout the day, but actually it was business and economy.

AUDIENCE QUESTION: (inaudible)

AMY SCHMITZ WEISS: Oh yeah, the sports was at 13.6%.

AUDIENCE QUESTION: (inaudible)

AMY SCHMITZ WEISS: Yes, actually, part of our variables that we did look at we excluded any editorial, any advertising, weather, as well as any stock tickers as part of that and also, we were also excluding any AP news feeds that came up. We wanted to exclude those because we knew those were probably updated more frequently within an hour timeframe versus where there was actually manipulation done by the editor behind the news, behind that homepage.

ROSENTAL ALVES: I think that's one of the diseases in this country compared with other countries - is the advantage of having such an efficient thing like AP because you just say, "oh no we have this feed of AP," so you totally give up of your power as an editor to decide what is information that is important for a community. And some of the essence of journalism is because you have those guys, nice guys of course and very intelligent, but those guys in New York, you know, deciding for you so you don't have people

working and doing journalism in your online. So that's the reason why we exclude the AP box or Reuter's box that is automatic.

AMY SCHMITZ WEISS: One of the things that we looked at actually was the time and looking at how often were the majority of changes happening to these home pages. And what we had found is that there's a prime-time aspect across all three groups that we looked at, which was very interesting. And the numbers that you see there are actually the totals that we had came together over the two weeks for the three different categories, the three different groups.

But what we found, that basically there was a time frame between 8 a.m. and 6 p.m. where the majority of the changes were happening, which really kind of shows the emphasis on the business worker and how a lot of the online newsrooms are catering to that audience and providing them with new information, or changes over time.

The other thing that we also found was that some of the changes had actually occurred for the middle and bottom 10 newspapers from 9 a.m. to 1 p.m. as well, which is an interesting aspect to look at in comparison to the top 10 group as well.
AUDIENCE QUESTION: (inaudible)

AMY SCHMITZ WEISS: This is actually, what we did is we matched up all the local times for this chart. The other aspect of it too that we were interested in looking at was how those changes were set up over time during the prime-time time frame that we were looking at, and most of them were from 11 a.m. with new content, additional features and related stories. And content changes occurred at 1 p.m.

There was a slight surge in all the changes that seems to occur, again, at 5 p.m. showing that production schedules may be made during these times when stories are developing or stories are starting to come in for tomorrow's print edition for the print newspaper across all three groups.

AUDIENCE QUESTION: (inaudible)

AMY SCHMITZ WEISS: New content is actually a brand new story that had just happened from the previous hour that was posted, whereas content was actually, if they had changed a word or a couple sentences within a headline or a brief that had appeared on the homepage.

The other aspect that we looked at was overall, across all three newspapers. What we found was that the top 10 newspapers accounted for 54% of the 20,000 pieces that we tracked. And the top, bottom, middle and bottom 10 were a quick one at 23% of overall changes.

So actually this is showing that the top 10 newspapers are actually making a lot more changes to their homepages throughout the day and within the 24-hour time frame then – the middle and the bottom 10 newspapers are.

We also looked at, as I was mentioning earlier, what the region of the story was coming from – if it was local, national or international. And as you can see here the top 10 newspapers were focusing more on national changes, which reflects of course the top 10 newspapers that actually have a national focus from most other newspapers. And the

middle and the local actually focused more on the local or regional stories, actually focusing on those parts their areas.

This is a, I was trying to get everybody's newspaper up here but it wouldn't have not fit on the whole slide actually because we had all 30 newspapers here. But what we found when we looked over the two weeks was actually that Long Island News had the most changes over the two weeks. They had 2,027 changes.

USA Today came in second. Houston Chronicle was third. Chicago Tribune was fourth and New York Times was fifth, whereas New York Post and Tampa Tribune actually almost the least amount of changes in these two weeks, which was really surprising. We actually had one that was lower than this at 97 changes over the two weeks, which is somewhat low.

But we also, one of the things I did not include up here, because I was trying to fit everything on the slide, was we actually did average number of daily changes by publication too. And what we found was that, for instance, the New York Times had 127 changes on average a day. The Los Angeles Times has 121 changes average during the day. And Washington Post had about 115 average per day.

However, one of the other parts that is interesting is we had also averages by prime-time in which a majority of those changes were happening. We found that with the Washington Post for instance 64 of those changes happened within that 8 to 6 time frame during the day and 62 for the New York Times between that 8 to 6 p.m. time frame.

ROSENTAL ALVES: One thing about the time ? is that it was kind of disqualified for the research because later we found out that they have another site, the ? online, the TBO, yeah. So, they don't really update the, you know that website is just a shovelware so that's why they were so, it's a newspaper that has another operation, which is kind of part of what I'm, I've talking about. I mean, how do you want to understand the medium, right?

And in the case of the television we did measure MSNBC. The problem is that we had some problem with the – since the pages was dynamic you had a carousel. We were not sure that the, we did MSNBC and CNN and wanted to have just as a reference, although the focus was the newspaper industry, but we want to compare - actually a guy from MSNBC kind of convinced me when I was starting doing that, he said why don't you measure to see if we are better than newspaper.

But we have the data and we can revisit the data and do that comparison. So, anything else?

AMY SCHMITZ WEISS: So basically at this point we had a lot more research but trying to fit it all in within 10 minutes is a little hard. But what we thought was interesting was these findings, granted they only reflect two weeks in 2003. However they do show how these 30 online newspapers were making changes during those two weeks.

And I think if there's a chance for more longitudinal research to be done actually looking at this aspect we can actually get a sense of how some common online news practices are starting to happen, and actually looking at that in depth.

I think the other important thing that we found too is that there's the surge in prime-time changes is significant as well, with the attention that's being put towards the work place user and how the medium is transforming in that sense.

And lastly, one of the things that we had noticed when we were tracking these changes is some of the coders would come up to me and they say, "you know somebody had died in this fire an hour ago and it was listed at 20 people but now they came back and they changed it and it's only 15." They're like, what happened over that time period?

And one of the things that we were also thinking about is the implication of posting and making these changes as hours go by. And the question of what happens to those pieces of information that change hourly from an archival standpoint? Because that's a record of information as well at looking at what had happened at that point in time. So, just a few questions, so, thank you.

PAULA POINDEXTER: I know there are a lot of questions. Jeremy, you look like you want to ask a question - one of my students too. And the presentation by Rosental and Amy, if you looked at those newspapers by group, meaning the Knight Ridder newspapers, the Gannett newspapers, you know the Los Angeles Times now would be part of the Chicago Tribune newspaper, what would you find?

And it would, it's another way of looking at the commitment, the resources and so forth, because a lot of this is driven from the top. I mean, if there's a corporate commitment than that commitment will filter through an organization or different newspapers. I know when I was at the Los Angeles Times that the commitment to electronic publishing experiments and ventures was really driven from the top and so it would be interesting to make that comparison on that.

ROSENTAL ALVES: Yeah, another interesting aspect that we should look at is the number of people working for the online edition. Yesterday we saw that very interesting survey about online journalism in Latin America that Guillermo did, and Guillermo commented, you know, we are in Latin America, far away from here in the United States to have this big newsroom. And I was almost saying, "no, no, no they are here," in some aspects even with less people working in the online. That average that he found there probably is higher than the average here. There are many newspapers here that have two or three online people only - very, very profitable newspapers. And they are doing just shovelware and one of other stories.

The other thing that reflects in what we saw in terms of the smaller papers – but we are talking about the big papers, the big100, right, you cannot the others – is the fact that there is a submission, total submission, of the online to the print in the sense that in many newspapers the online team is not independent enough to publish.

I mean, they, you know, in the Connections Conference last year I heard big newspapers saying we can not post anything until 11 because only in 11 the first people with gray hair from the newspaper come to work and we cannot, you know, post anything. I said, I mean this is a totally misunderstanding about the dynamic in what online journalism is about. So, we gonna see if in the future we can also cross with the staff.

PAULA POINDEXTER: And that goes back though to an issue about commitment from the top, because, yes, because if the commitment is that the online staff is completely separate and independent as opposed to being subservient to the regular newspaper

staff then they can go on and to publish. But, otherwise, if it's not happening from the top then there are going to be problems. Are you ready with that question?

AUDIENCE QUESTION: I do have a question. I'm not just trying to make you happy Dr. Poindexter. This is kind of a joint question for Steve and Guillermo I guess. I'm curious, I know that you talked about in your Eyetrack study how you had done a knowledge game kind of questionnaire and I'm curious, in terms of presentation efficiency, is there something that's gained by presenting the information more efficiently and not having repetition as opposed to having repetition, which might increase people's retention of the information? Do you see what I'm saying? So, like, do people, do, in other words, if the information is presented efficiently by not being repeated do people then, do they retain it more? Or do they retain it less because it's not repeated?