Day 2, Panel 5: Issues in Online Journalism Research

Moderator/Chair:

Paula Poindexter: Associate Professor, School of Journalism, University of Texas at Austin

Panelists:

Phil Auter, Ashraf Galal, and Mahmoud Galander, University of Louisiana at Lafayette and Qatar University: The Image of the United States Portrayed in Arab World Online Journalism *

Fernando Zamith, University of Porto (Portugal): A Methodological Proposal to Analyze the News Websites Use of the Potentialities of the Internet *

Richard Stevens, Southern Methodist University: Usability 10 Years Later: Are We Listening? *

João Canavilhas, Universidade da Beira Interior (Portugal): Hypertext Newswriting Effects on Satisfaction, Comprehension and Attitudes *

* Refereed research papers (blind reviewed)

Paula Poindexter: I'm Paula Poindexter, Associate Professor of Journalism at the University of Texas at Austin, School of Journalism. I'm also the Co-Grad Advisor for our PhD and Masters Research and Theory students. One of the exciting aspects of this world of digital journalism is that we -- and it's one thing that we don't talk enough about, but it's the opportunity to address issues in online journalism research and develop, apply, and test new research methods designed specifically for journalism produced in a variety of digital platforms. This afternoon we have the opportunity to learn about some of these issues and applications when it comes to journalism research.

I'm going to introduce our panelists, and then once I introduce out panelists, they are going to have each about 10 -- maximum 12 minutes to speak. And

then after that, because we have four panelists that we're going to make sure that we have time at the end, so that you can get your questions answered.

Our first speaker, he's over there at the end, his paper, "The Image of the United States Portrayed in Arab World Online Journalism," and his name is Ashraf Galal, from Qatar University, and his co-authors, who are not here with him today, Phil Auter and Mahmoud Galander. And they are from University of Louisiana at Lafayette. I am apologizing in advance about my pronunciation of some of the names [chuckles], so you'll hear me struggling, but I'll do the very best that I can.

After our first speaker, then we'll have Fernando Zamith, who is from Portugal, University of Porto, yes. "A Methodological Proposal to Analyze the News Websites Use of the Potentialities of the Internet." And then I can do Richard Stevens. Richard Stevens, [laughs], from SMU, Southern Methodist University, who will be talking about "Usability 10 Years Later: Are We Listening?" And this will be my greatest challenge, and we practiced, so I really do apologize. And I'm going to try, and he's going to correct me after I get it wrong. João...

João Canavilhas: João.

Paula Poindexter: No, not too good. [audience laughter] Canavilhas. [audience laughter] He's going to correct it when he comes up here. [audience laughter] Also from Portugal. And Uni--... Help me. Help me. Please, help me. [laughs]

João Canavilhas: Universidade da Beira Interior.

Paula Poindexter: Okay. Thank you very much.

[Audience laughter.]

João Canavilhas: [Inaudible.]

[Audience laughter.]

Paula Poindexter: [laughs] And I can. I absolutely can pronounce the title of his paper. And he's going to be talking about "Hypertext Newswriting Effects on Satisfaction, Comprehension and Attitudes." And we will begin with our first presenter.

Ashraf Galal: Thank you very much. I would like to express about my pleasure to be here at Austin, after 32 hours long trip to be here from [unintelligible] the land of Jazeera network. I'm very happy to be here. I would like to start by thanking Dr. -- Professor Alves and his assistant Amy and [unintelligible] and all of the assistants for this wonderful symposium.

Also I would like to thank my department, my college, and my university, Qatar University, which I belong to and working as an Associate Professor. Also my thanking to my colleagues Dr. Phil Auter and Dr. Mahmoud Galander.

The research today is about a big project, the research about the image of Arab. This is about a research. I'll start presenting the research and [I'm] expecting many questions.

This is the image of the United States as portrayed in Arab online journalism. Let's start with some questions, to be a dialogue not a lecture. Do we have an image about each other? I know the Arab and the American all [unintelligible]. What about the nature of this image? Is it about our values, culture, system, people, policy, or something else? Is it biased, distorted, good or bad, in-depth or superficial, or something else? How could we judge? How it had been formed? And measured? Would we really want to change the false image? Would we have enough motivation to change it, or not?

I'll start with some photos, and I'll leave the judgment for the attendees. Could we change it? How? And why? This is the way how an American media portray Arab. This is a very, very false image. Arabs not like this. Arabs, they have civilization. They have tradition. They have many, many values that we can talk about. This is number one. Number two, by the way, how the Arab media portray United States internally. They are talking about the taxing system. They are talking about the internal problems of the American society, especially unemployment. So biased image, isn't it? Yes. This is the situation at Iraq and this is the situation at [unintelligible]. How the Arab media portray United States externally. Biased image, isn't it? This is to democratize the [unintelligible] in one image. This is the relationship between [the] internally and externally image. This is a bad image that we are to talk about. This is also an image. You can notice this is our demand for forever -- U.S.A. and Israel, our enemies forever. And this is the way that we are dealing with each other. This is a black glass, and this is a black point of view. I'm not defending about Hezbollah. I'm not defending about the American system. I just wanted to put them together to make the judge for yourself.

This one, instead of rolling at the schools, those children are every day, or every hour, or every second, or every moment, they know it owes blood to all of humanity. So they have many reasons and motivations to be hostile with United States.

So this is the domino effect for all the effort done by the United States.

This is just an imagination about the American foreign policy, which the Arab world only look to the United States from this very small and very limited point of view. America is not just a foreign policy. America is a culture, is a tradition, is a system, but this is the way to come by the end of 2006. This is

from the point of view of the United States. By all means, whether by this or by war or by threaten or by anything, this is the way that we are looking to the United States.

So our social -- our research problem, it is to examine, to what extent the online journalism in the Arab world has adopted biased coverage of the United States. Because this is the major issue in the Arab world.

It is commonly believed that media in the Arab world portray the United States in a negative light; although, all efforts are done by the United States whether by Al Jazeera or many other media in the Arab world.

Research importance. Increasing importance of the media and images through a number of regional and international bodies. Rising up the rates of viewing talk shows. Growing of criticism directed to media presenting biased coverage for the others. Also, increasing importance of civilizations dialogue as a result of the biased media coverage as well as false stereotypes. There is a case of mistrust between the United States policy and the people who don't know too much about the foreign and other countries.

I'll go quickly just to be on time. Our research hypothesis. There is differences between -- among websites, whether biased or not, in image, type, covered topics, U.S. image, used evidence. There is a positive correlation between image bias, (totally biased, totally objective somehow), objective or biased, and image type, (negative, neutral, or positive). Third one is there is a correlation between website affiliation (Arab and non-Arab) and website bias, U.S. image, whether negative, neutral, or positive. Four, there is a correlation between U.S. image and used appeals, evidence, evidence type, and the main concentration of the materials.

This is the research methodology. We assigned eight online news websites [that] had been selected among fourteen [which] are considered the most important news websites in the Arab world, based on nomination of the experts in this field. Analysis had been started from March 2007 to February 2008 using a structured refereed tool, included all the content analysis items. After applying the reliability and the validity tests. This are the items that we analyzed. We targeted the United States material and defined this item in the following definition: Any news or editorial material that includes a U.S. name in a literal way. Has to be fair and objective. Data analysis and [unintelligible] had been subject to intensive training as to make a balance and to make the validity test.

Added value of this research as well as the big research project that I talked about presenting many techniques and strategies to improve mutual image and false perception of the Arab and American. This is sample of sites and distribution. About 1,624 items have been analyzed. It includes news and editorial material. This is a sample distribution for our websites from the

foreign websites that issued in Arabic language: CNN in Arabic, Reuters, [unintelligible], BBC in Arabic, and the fourth Arabic one, Islamic Online. [unintelligible] Islamic Online recorded for the most important day 260 million visits per page in Arabic, Islamic Online. And AlJazeera.net [unintelligible] .com for news.

This is a sample distribution according to websites. This is according to the Arab or non-Arab affiliation. This is according to content. This is according to page, either the front page or inside. And this is according to the material submitted or presented: written, sound, or video material, as a conversion media. Sample distribution according to year 2007 or 2008.

Rosental Calmon Alves: [Inaudible.]

Ashraf Galal: Yes, I know about time and I hurry because of time. It's okay.

[Audience laughter.]

Rosental Calmon Alves: [Inaudible.]

Ashraf Galal: We have a very firm [unintelligible].

Paula Poindexter: I've got my stopwatch.

Ashraf Galal: That's okay. Review of literature. The conclusion of the review of literature. Arab opinion of United States policy in the Middle East is heavily influenced by the Arab media. Image and sounds of violence in the West Bank and the Gaza Strip are captured and delivered by Arab satellite news channels, radio, and near simultaneously by news service to millions of Arab and Muslims.

As they presented one of the jokes that we have to talk about, the hosted city of the Arab area. But they don't -- they didn't say, "This is Arab area." They said "Arab/Muslim area." They asked three versions from the Arab area about, what about your opinion in eating meat? Those nationals were Iraqi and Egyptian and Sudanese. The Iraqi answered, "What do you mean by opinion?" And the Egyptian answered, "What do you mean by meat?" And the Sudanese answered, "What do you mean by eating?" This is the way that we are portrayed in the American media. So we have to talk about this issue as a critical point of view.

Also, American effort to present a clearer picture for U.S. society and policies have been largely inconsequential. Washington sponsors an array of Arabic-language media outlets, including Al Hurra, Radio Sawa, Hi Magazine. \$62-million in 2004. These stations and the publications have failed to win significant Arab following or to boost American credibility in the region. The

Arabic audience is very sensitive to [inaudible] and this tradition and to the Palestinian/ Israeli issue.

Testing hypotheses. All the testing hypotheses have been approved. This is some of the result. Our examination varied a line for the probability of the test. This is a positive correlation between image bias and the bias and the image type for the United States. And you have to stop here to just to see how biased the Arab or non-Arab websites are portraying the United States. This is the red column, totally biased. This is a very big result in this research.

H3 is a correlation between website affiliation (Arab and non-Arab) and the image type. And this is the hypothesis number four.

We have to stop here. This is the image of the United States: unfair country, imbalanced in using law to justify aggression, violating law, imperial country, and others. And this is a very, very basic image for the United States. And you can see how each point of view had been represented by many items and by many proofs and evidences.

So we can come to conclusion that we are in a bad need to change the image of the United States. Conclusion and recommendation: U.S. has a very bad image at the Arab media. This is very, very important issue. U.S. image associated with many bad symbols and meaning that we have to cooperate with each other to change this image. We actually need to provide, communicate, and develop an updated accurate information, enabling them to have an excellent, solid data that changes its image. Finally, formulating critical factors. We need -- more intensive efforts are needed just to change this image, so we have to start and do the maximum that we can, even if it's slowly but surely in the Arab world.

Thank you for listening, and than you for everything. I just wanted to say brief that I'm not coming here to present my research with my colleagues, but I'm coming here to give all what I have for you and to invite all of you to Qatar University, as we have a slogan to enhancing research, teaching by research. So we are welcoming any idea or any part of the great research we do at Qatar University and Austin or any other university. Thank you, President. Thank you.

[Audience applause.]

Paula Poindexter: As our next speaker is setting up, I'm going to ask each of our three panelists if they might be prepared at the end before we take Q&A to give us their three main points from their results. Okay? And so that way we'll be able to have a summary of your three main results, each person.

Fernando Zamith: Okay. Hi. I'm a journalist for 20 years at a Portuguese news agency, Lusa, and I am also for six years a teacher of online journalism at the University of Porto in Portugal. I'm sorry for my bad, bad English. I am trying to do my best, okay? What we have here? My study was to try to create a methodological methodology to understand how the news websites use the potentialities of the internet. The first problem was, what are the potentialities of the internet?

Audience Member: [Says something about speaker needing to be louder.]

Fernando Zamith: Louder? Yes, okay.

Audience Member: Your voice.

Fernando Zamith: My voice, okay. [chuckles] Maybe it's better. The potentialities of the internet. The three first potentialities that we can see there are the consensus ones: hypertextuality, multimediality, and interactivity. But there are many others. You can see there some of them. The problem is that we -- I couldn't find a methodology that embraces all of those potentialities. You can see in this here the seven potentialities that I've just showed you. Just one explanation. This is from Ramon Salaverria and [unintelligible]. And with the three on the bottom is something that I just put it on. And you can see there's a high level of potentialities -- potentiality of the internet. And yeah, that the old media not so high.

And I have to begin with something, and I found most of you know this grid of [unintelligible] Schultz, a grid that he applied to 100 online newspapers back in 1998, and only for one of the potentialities: interactivity. Just so one could use it, you see there 15 points is maximum, but if you count all the points, it's 16 and not 15. I've sent an email to Schultz and he confirmed the mistake. So it's 16, not 15. And with this beginning, I had now something to work on.

From here, I create a new grid with all the potentialities. You see there we have 25 points for interactivity. Of course, I've updated the Schultz grid with the new items. And I have created new items to analyze all the other potentialities. The maximum points is 100. It's easier to read the figures, the numbers, after we applied the grid. So if some news websites has 50 points, it's 50% use, has a 50% use of the potentialities of the internet. And you know why only 12 in multimediality. For instance, there are only 12 in memory and so on.

Of course, some items, in some specific locals, we can find different potentialities in one only -- in one only place. So we have to do a cross analysis. Then with items, I can show you. This is the first 16 points of the Schultz grid. The other ones that I've updated. And hypertextuality, for instance, you have there lots of -- lots of different other potentialities that we

can—with the cross analysis—can find in those different items. For instance with the old hyperlinks that we found, that we can find in the news websites, can have -- can be -- we can measure not only as extra textuality, but also as contextualization, as, for instance, memory, as multimedia, the related video, related [unintelligible] infographics with the image gallery, slideshows, etc. The other ones are multimediality, immediacy, ubiquity, memory, and personalization. The last one was creativity, because there's some news websites that could have something different. So the three last points were -- the three last points were for something that I couldn't -- I couldn't -- I didn't put in the other seven. Okay?

This grid was applied the first time in November 2006 to the 12 news websites of Portuguese national and general information news websites. Not all the Portuguese news websites, only the national and general information. One year later, I have applied again the grid. Then there was 5, 27 news websites. The results: Only 23% use of the potentialities of the internet in 2006, and falls to 21.2. But if you count only the 22 first ones, it's mostly the same, 23.2%.

The top ten. The first place, Público, we have here. And [unintelligible] is the editor from Público -- has 47% of use. And the other ones, at the bottom, the last one only two. It's one of the newest free papers, free national newspapers. We have a lot now in Portugal.

And two curiosities, finally. Immediacy, you can see has -- is the potentiality more used by the news websites. 43.5% in 2007, and is only the grid. When we do the cross analysis, it falls to 30.8. Hypertextuality very, very low use. Only 3.9% use if we applied the grid. The other ones you can see. Multimediality, it's -- it's growing a little bit, and creativity also. So that's new ways of using the internet that we can find.

Another one. You can see here that the old audio/visual radio and TV are using more of the potentialities of the internet. Third press are using less of the potentialities of the internet.

And another, another slide. The last slide only to view that Portugal in 2006 has less use of interactivity than the 100 online newspapers that Schultz analyzed in 1998.

Thank you very much.

[Audience applause.]

Richard Stevens: Is it on? Okay. Usability 10 Years Later. This piece, this paper actually is a part of a larger piece of research that I'm doing that's looking at the usability of some of the American mainstream media sites to assess how we are doing in terms of honoring or adhering to the principles

that are laid out by some of the people in the software community. This particular paper is actually only mainly going to draw from two sites. I'm going to be looking at The New York Times and the Washington Post, because they are... In the midst of doing this research, I found something pretty interesting that I thought would be very apropos to this particular setting. So these are the two places that I'm going to be looking at in terms of trying to get down to it.

So let's talk a little bit about usability; what it is and where we're coming from. Usability has been defined in many ways, but Jacob Neilson defines it as a balance between art and engineering. As I said, the software community has done a lot of work on this, starting in the eighties, looking at software apps and user interface design, things of that nature. In 1999, we began to start applying some of those principles to the web.

There are four areas that traditionally have been looked to in terms of measuring how usable a website is: navigation, response time, credibility, and content. I'm going to be further narrowing by looking at mostly the content today of those two websites in particular. And I'll explain where I'm going with that in just a minute.

Content is very important. That's what our industry is about, is making sure that that content gets in front of people and that they can actually use it. We have seen that newspapers in particular have struggled when dealing with the usability principles of content. Jacob Neilson in '99 argued that if you were taking a New York Times story, for example, and putting it on the web, that you should rewrite it so that it loses half of its words. We have since seen other people come in and be a little bit more aggressive, such as Steven Krug, who said that a good usability principle for taking print media -- the print medium online would be to get rid of half the words and then try to get half -- get rid of another half.

Largely, researchers in this area have said that, partially because of the lower resolution of screens on the web. In a book, we are usually looking at a resolution size that is six or seven times what we are seeing on a computer screen. But also just the propensity to be distracted is very, very high on the web, so we try to keep that as low as possible.

(I have to use the mouse. Sorry.) Okay. When we look at journalism, why we don't often quickly adhere to usability, a lot of it comes down to our business model. We've actually heard quite a bit about this yesterday, about how the adaptation process is very slow. Early on, we invented this term we called shovel-ware, basically recognizing that in our early approaches to multimedia, we're to take what we were already doing and shovel it into various platforms. In other words, to write one version of the story and just distribute that across many multiple platforms. That by and large is still the way that most news operations are approaching multimedia distribution.

And, of course, I have up here some reasons why it is that we've had such a problem with that and why we've resisted the standards that suggest we should rewrite our content, largely coming down to the cost of doing business and the amount of time it would take to do that.

So I want to spend some time talking about the web, but what I also want to spend some time on—this is where some stuff gets really interesting—is start to talk about the mobile phone platform. Because there hasn't been a whole lot of research on what happens when you send text to a mobile phone. And I picked these two outlets, because they have very different approaches to how to disseminate this content across those two platforms.

When you are dealing with mobile phone content, it has largely been suggested that the web usability standards apply, but that ease of use needs to be the primary component. If you think about what's happening, if I'm reading a news site on this device, that is a very different experience than if I'm sitting down at a computer. I really can't afford to become absorbed in this, especially if I'm driving or trying to catch a subway. It's a very different experience. So it needs to be even easier to use.

Some statistics that we're looking at. Mobile usage, of course, is on the rise. In terms of global statistics, there are twice as many cell phones in operation as there are computers in the world. By 2005, in our country, mobile phone subscriptions passed landlines. There are more of us that have cell phones than have landlines at this point.

A new internet Life report recently issued talked about how most Americans report that it would be harder to give up their cell phone than their internet connection at this point. And if you reduce that down to the population surveyed below 49, they suggested it would be harder to give up their cell phone than their television, which kind of indicates the rising importance of mobile data. 62%, according to the same report, of all Americans have experience with data through mobile devices; although, news is only a small subset of that. That's part of what we're talking about. And that of the 75% of Americans that are mobile users, 42% of those engage in data activities daily, and of course, that report from the Pew Center breaks down all the different activities that go into that. News is a small part of that. I'll come back to those figures, because I want to talk about how we present information and how that plays in.

So, what am I after? Well, the broader project is after two things. I want to look at the way in which we are presenting our content on the web, comparing it to these now ten-year-old usability guidelines. Are we following these suggestions? Some of them we are, many of them we are not. I want to measure that across different platforms. But also this second question, as we start moving to a mobile centric platform, are the rules different? Should they be? Those are some of the sub-questions here.

So to do that, I pointed out before, the larger project has twelve outlets that I am drawing from. I built a constructed week. That's usually what I do to compare one given year to another to make sure that I don't catch a particularly hot or cold news cycle. So this is my Sunday through Saturday. From each of those days, I select the three top stories that were presented in whichever manner that those outlets present that. So we wind up with 21 stories per outlet times the number of outlets that we have up there, gives us about a sample size of 252 stories that I'm looking at and measuring. I am looking at the ways in which that content is presented across both the mobile and the web platform and then looking at how that breaks down in terms of the usability principles.

In this case, what I did was I actually looked at it on two different devices. It's very difficult to talk in terms of web usability until you start thinking about, which devices are we talking about? Most of us, especially those of us in urban areas, are often thinking about Smart Phones, often thinking about this device. However, I also wanted to know what happens when we try to read the same news stories on this device. Okay? It is very different. Because when you start getting to other research, not everybody has this device. This is the more commonly distributed format.

Okay. This is the sample, and you don't have to look at all the numbers. I'll be pulling that out for you. But largely, though both outlets shovel most of their content onto the web platform... We're talking about the Washington Post, because they were actually rewriting their stories for their cell phone content, which I find very interesting. We started to break down and look at some comparisons. I'll throw up the aggregate data comparing the two in just a moment. The New York Times tends to have more words per story, but also tends to put more of those words on the screen for fewer jump links, which is actually pretty consistent with what Neilson said early on, "The more jump links you have, the greater the chance of losing your audience along the way. You need to minimize those." So that's what their focus is on that.

When you look at the mobile devices, though, we get to an interesting situation. The average Times story takes ten mobile page views. In other words, if I'm on this little phone, I have to advance ten times, okay, to get through my story. Since that device is basically restricted to nine links -- nine lines and is a 225-character width on it, that means for the average New York Times story from this sample, I have to scroll down 1,356 times to take in the whole story. Now on the Smart Phone, it's a lot easier. First of all, I'm advancing 11 lines at a time with every scroll. I don't have to go line by line. I'm also having more of the content presented on that so it's significantly less. It's about 100 scrolls. Okay? SO this is a new metric that I just wanted to throw in there -- scrolls -- because honestly, your thumb gets tired after 1,300 scrolls. That's one story. I don't know that you go onto story number two.

The Washington Post... Oh, I could have shown you this. Actually, I wanted to pull that up. So when we are looking at this, this is what an average New York Times story looks like on the small phone versus the Smart Phone. I don't know if we call these dumb phones yet, but that's where we're headed. That it takes about five-and-a-half Smart Phones per story, but it takes, like, I said, about ten of the smaller one.

The Washington Post. Let me show you something interesting. It actually takes twice as many. Although they have 46% less content in their stories, it takes actually twice as many screens to read a Washington Post story on a Smart Phone. That's what they do. Their web version is very similar to that. They have smaller amounts of text per page, more jump links, which is probably not a good web usability principle, but it's -- we're going to find out that that's actually a good way to do the smaller phone. And on their Smart Phone, it's roughly comparable the number of screens that it takes to see. So let's pull that up together.

Okay. So here's what we're seeing. On the computer screen, The New York Times average number of jump links is a little over one-and-a-half. When we're looking at The Washington Post, we're looking at two. So The New York Times is probably appearing a little bit more close to the web screeners. But when you get to the phones, particularly the small phone, the fact that it takes me 1,356 scrolls to read a story is -- that's pretty labor intensive, versus on The Washington Post, the way they have it set up, it takes about 100. And then when you look at the Treo, the Smart Phone, The New York Times takes about 100 scrolls versus The Washington Post 35. Okay?

So where are we going with this? Why is it important? There is still a propensity to shovel content onto the web. There is still going to be that argument. And of course, some people will just say, "We are in the content business. We are never going to be usable the way that some designer sites are." And both of these sites do [inaudible] usability but struggle with that --with that basic equation of, is it better to have more text and fewer jump links, or is it better to have fewer jump links and reduce the number of texts on a screen? Largely, what we are finding is that on the web, that is still a religious debate going on. But when you get down to the phone level, it is incredibly important to reduce the amount of text per screen, so that you don't have to leave these people scrolling down continually trying to read line by line as they are in traffic or whatever it is that they are doing when they are trying to consume that information.

Okay. So this is where we're going to stop, mainly to say this, when you break it all the way down, we're talking about 7% of Americans who daily access their cell phone for information, for news. And that statistic is widely touted to say, why should we invest money in this platform? But I would argue that that might also be a function of the fact that if I have to scroll

1,300 times to read that content, that is not something that I'm going to do. We may be biasing our own decision making process by giving people a really bad experience with this data. And I said this is reminiscent of the early HDTV debates. Is the technology better? Which, of course, Mark [unintelligible] came back and said, "Well, if there's nothing on, why is this a technology question?" Content does matter in the experience with that.

And then largely just to leave it with, from the early data that I pulled from television websites and cable websites, they tend to rate higher on usability, but largely, that's because they are having to rewrite their content for the web in the first place, which allows them to write in a more usable fashion. Print really does struggle with this, particularly when we start talking about phones.

I'll stop there.

[Audience applause.]

João Canavilhas: Good afternoon. My name is João Canavilhas. I'm here to replace Joel Canavilla. [audience laughter] And I came to talk about hypertext newswriting. This is a part of a big investigation, where I propose a language for web journalism. Usually, I don't call [it] online journalism or cyber journalism, because I think web journalism is a different thing. A journal is made for a special medium called web. And that means we must change a lot of things. In this case, we work in hypertext. If we have good results with hypertext, we hope we can have good results, too, with video infographics and audio, and with it, all those things.

So in this particular case, the research question was that, do readers value the use of hypertext in the news? And the dependent measures. First, attitude regarding the journalist product. And we are waiting for three items. Innovation: contents add something new to the information they know. Adequation: coherence between content and the media, the web. That's important for us. And expectations: predisposition to interact with content. Second, perception of theme comprehension. Again, wait for two items. First, comprehension perception: the news is understood. And second, contextual perception: that means the theme has been sufficiently explored. And third, satisfaction.

Okay. Results. Or first, participants: two groups of 25 students from my university. We use SPSS statistical tests. And all the experiment used this procedure: two news with the same textual content. The first one is this. The second one is similar, but we have several texts. This number one is usually we learn, we read anew in the newspaper. The second one, we have just a little piece of text, and after we have links for different texts. We built this with different levels. You will see at least what we have done.

Well, impact on attitudes. We have the two items, I told you: innovation and adequation. And there are the findings. Significant differences in innovation item and significant difference in adequation item. That was really important for all the work. In both cases, hypertextual group presented higher levels.

In the comprehension, again, we have two factors: comprehension, contextualization. Again, we find significant difference in comprehension. That was really important for us, because newspapers are afraid to use hypertext, as we see in Fernando's presentation. Once again, hypertextual group presenting the higher levels on comprehension and perception.

And finally, the findings in impacting on satisfaction. We have differences between groups, but in this case, not significant differences. Anyway, the group which read the hypertextual news presented higher levels of satisfaction.

First conclusion is obvious. And I'm running, because we have no time, you are tired, and I am the last one. The important conclusion of this part was that hypertextual writing has a significant impact on attitudes, on comprehension perception, and on the satisfaction levels of readers of web news.

And based on these conclusions and the other conclusions we made with the infographics, audio and video, I present a second conclusion, and I present here maybe journalists need answers for these five W's and one H in web journalism. Well, first of all, who is the important one? I think when we have hypertext, the important one is the reader, not the journalist. Second, what can you do with so much information?

And here, this comes from another work. I propose a new paradigm. We start the news with this level, and we answer to four questions. We have a second level, and you know people want breaking news. The second level, and we answer why and how. A third level, and we have more information about the W's and the H. And finally, we have the archive and external links. That means four different levels of information, and that responds to all the needs. If you want just to know what's happening, maybe you stay in first level. But if you want something more about something particular in the news, you can go deep and deep in the news.

Well, that means a new paradigm. We are not interested in the build the new, starting in the most important and finishing in the less important, but we start with less information and we go to more information. And that's what I propose, not an inverted pyramid but a tumbled pyramid. Starts in the base unit, explanation level, contextualization level, and finally, exploration level, if you want to know more about the subject.

The third, when to publish. And I think it's immediately on the web and not waiting for the next edition paper. And we know if you have something new and you publish in your online version, the day after, you have more sales. So if you have something new, just put online.

Which kind of content to link? Well, in this case, I think we need a multimedia grammar. And in this step, I propose how to link, when to link, why to link, where to link.

And finally, not finally, but where to link: words with a strong semantic connection. This is obvious. This is the base of all this new language.

And finally, how to link. My proposal is in-text links and not in the menu. What? Because we are talking about convergence. Yes, it's true, convergence, but by integration, not by accumulation.

And that's all. Thank you.

[Audience applause.]

Paula Poindexter: This is my latest American expression. I have to turn on the mike to give you my latest American expression.

Rosental Calmon Alves: Yes, for millions of people.

Paula Poindexter: Which is "Wow!" with an exclamation point. Wow!

Rosental Calmon Alves: [Inaudible.]

Paula Poindexter: Huh?

Rosental Calmon Alves: [Inaudible.]

Paula Poindexter: Yes. Yes. So this is absolutely terrific. All the panelists in giving us the -- well, the future is now, but it's also the future, particularly the one that you, you know, just at the end. I'm going to ask each panelist if they will just give us the three most important points from their research. Because we had to go so fast, and I do thank everyone for going quickly, so that we could get in all the presentations. And so we'll start at the end. Three. Just three most important points.

Ashraf Galal: The first important one, that the Arab website not describe or not attribute or not portray the America as a country, [but that] it describes or portrays the foreign policy. So we are in a bad need to make a sort of [unintelligible] for the Arab and American communicator for us to be more responsible and more fit. And number two, websites affect negatively on all Arab public opinion. So we have to consider this fact: the Arab public media

is very sensitive to anything about the Israeli-Palestinian conflict, so we have to educate the communicators how to be neutral in this issue. Also, we are in a bad need to apply both the professional ideology and the code of ethics, so as not to find any discrimination regarding two race or nationality or religion or anything like this. Journalism and the mass communication curriculums must encourage the rational dialogue between the Arab and the American, so as to achieve the civilized dialogue between both of us. Thank you.

Paula Poindexter: Let me pass mine. Oh, you have it? Okay.

Fernando Zamith: It's okay. Yes? Okay. Three things, yes? The first one, I think it's this is a work in progress, the matter that I've shown you. I think it needs to have more contributions. And I would like that some other people of other countries, of other context, could apply this grid and to have some more information about how the news websites are using the potentialities of the internet all over the world. I think that's all.

Richard Stevens: Okay. Rewriting content is important for the web platform, but it is absolutely critical for the mobile device platform. I think making sure that we're measuring all the way down to the kind of granular user experience is very important. What are they doing with their thumbs? What are they doing with their eyes? And then just generally when we're talking specifically about the cell phone platform, that more page jumps are definitely justified if it reduces the number of scrolls. That's how it's different from the web.

Paula Poindexter: Again. You gave us your three points, but just give it to us again.

João Canavilhas: Well, nothing. We have time to put questions, so I have nothing more to tell you. [audience laughter] Just ask me.

Paul Poindexter: Okay. Okay, on that note, we'll open it up to questions.

Audience Member: I just had one question about your mobile phone study. You suggested that writing shorter is one approach to writing better for mobile phones, but is there any other suggestions besides obviously designwise and increasing more of the page jumps?

Richard Stevens: Well, one of the things—and this will have to come out from actual user experience—one of the things The Washington Post does is minimize the number of links in cell phone contents. You know, on the web, clicking is very easy. On the cell phone, it's not quite as easy. Mainly getting back is not as easy. So there is a different — it is a different language. We have a tendency to want to do the web on our cell phone. But shorter, usually one paragraph per screen. You know, usually on the good stories, I'm only scrolling once or twice and then advancing to the next one. Removing

much of the multimedia and hyperlinks at this point ... at least for the small phone. For the Smart Phone, you can do more.

Audience Member: Question on the hypertext writing. The people, were they clicking through? Perhaps you explained this and I missed it, but were they simply reassured by the presence of the hypertext links that there was greater context available to them, or were they actually clicking through these links to read that content?

João Canavilhas: Yeah, they click. They click. And I can explain you. The previous work I did was with this template pyramid when I propose. What I did was just capture film with what the people are doing when they read the news. And I realized that people in -- well, now I don't remember, but I think when they have two, in two they can-I don't know-in two or three steps, in two or three steps, we have 25 different ways to read the news. And that was important to understand that people -- people are different. The content are the same, but you have different places to arrive to the same place. Different people do different things. And the journalist must answer to the difference of the audience. That's important, because we can read something, but I want to feel me comfortable with the contents. That's why we give all the possibilities to read the same news, the same content.

Paula Poindexter: So, do you think...? I guess I have my own mike, so I don't have to use yours. So, do you think that your model for the way news should be written will work on a mobile device? Or what would you...? I mean, that was a very exciting, but complicated model. So, what would you have to remove to make it work?

João Canavilhas: Well, like I told you, the experiment was text versus hypertext. After, text versus text, more video. For example, I used football in the text. We describe the goal. In the video, we just say, "Goal at 22 minutes," and we put the video in the text, inside the text, integrate in the text. The point is to a mobile phone is difficult, because we have no place to put the text and the video. In fact, we are starting now a European project to start the subject of how to make journalism to a PDA. How to make journalistic games for a PDA. But we are now starting, but we have -- the problem is, we have no place to put everything, to put video, to put infographics. Because if you write infographic and you have just something like that to read, it's difficult. You can adapt with video, but with infographics, for example, it's difficult. Well, you have the audio. It's a question of explore all the different type of contents we have.

Audience Member: My question is for Mr. Galal. I've been noticing a lot of new initiatives from companies in the Middle East trying to open new publications, often enough, with collaboration of partnership with North American companies. Is this a trend that you believe is going to help achieve the goals that you are talking about? And my second question is, most

companies, media companies in the Middle East have some kind of control from the royal families or the governments. Is it possible to do independent journalism in that region already?

Ashraf Galal: For the first question, I think it's a good trend, but it's not enough. It is not enough, because we are so sensitive to the American image. And we have to start with the curriculum of the mass communication. We have to start with the journalists themselves or the syndication of the journalist and the people who are working at the different division. So this is a good trend, but it is not enough, because it is working as a scattered island, not a collaborative effort. Number two, you are true, this is correct, but let me tell you something about Jazeera. It is considered a breakthrough in the Arab media, because it is now competing with the BBC, competing with the CNN. In some cases, it achieves high scores more than those channels. So, I think, we are on the run, but the issue, it needs -- exacted effort must be needed to change these items, not on the short run, but it would be on the long run.

Paula Poindexter: Okay. Any other questions? All right. Thank you very much.

[Audience applause.]