Part I Why Flash Journalism?

Chapter 1

A New Form of Storytelling

On January 26, 2001, an earthquake struck the city of Bhuj in northern India. The disaster left most of the buildings in rubble, and tens of thousands died. Half a million people in the state of Gujarat lost their homes. On the other side of the world, news coverage of the devastation seemed both familiar and very remote: a television reporter's voiceover; video of broken concrete, dust, and ruined streets; reports of people who were injured; interviews with other people describing the missing and the dead. Media attention focused on the losses and relief efforts.

The first example of Flash journalism I remember seeing is a slideshow from the Associated Press about the Gujarat earthquake. Tears came to my eyes as I watched it on my computer. The slideshow begins with a low hum of voices and some thumping and crunching, like chunks of concrete dropping onto rock. Photographs of huge collapsed buildings fade in, then fade out. One or two voices become distinct, speaking a language I do not understand; they sound concerned, worried, urgent. Photos show a lifeless hand protruding from a truck, a man wiping his eyes, a row of covered bodies in the street. Car horns blow. People stand in line for food. A child cries out. A man carries a sobbing girl, her ankle wrapped in white bandages.

No voices in English can be heard. No text appears on the screen. There is no motion apart from the fading in and out of each photograph. Somehow the combination of photographic moments and on-site audio put me in the middle of the scene of destruction and pulled me close to the stricken people—in a way video on television never had. Bhuj became nearer to me. Seven months later, on September 11, I remembered those people and that earthquake in India.

The AP slideshow about the Gujarat earthquake is one example of a way to tell a story online, on a computer screen. This type of presentation combines two media forms that have been available for more than a century, still photography and audio recording. The form bears similarities to

video—in fact, video images could have been edited to produce a similar presentation—but this form is distinct from video in that it uses only still photos, which capture and freeze a single instant in time. This form differs from a typical TV news segment of the same length in that there is no introduction, no voiceover, no captions. All the sound is natural sound, from the scene, without an interviewer's questions.

SLIDESHOWS WITH PHOTOS AND SOUND

By 2005, most Internet users had seen photo slideshows, some of which play automatically, while others require the user to click a button to change the image. Most of these slideshows include text for caption and credit information. In some cases, the caption is not visible until the user clicks or rolls over a certain element in the window. In other cases, the caption is always visible below or beside the photo.

This slideshow format is specific to digitally delivered media—although photographers have long used slide projectors to show their work to an audience gathered together in one room, and it could also be argued that clicking Next or Back is similar to turning the page in a book or magazine. By itself, then, the slideshow format does not constitute a new form of storytelling. By itself, it is simply a new way to present or deliver photojournalism—a storytelling form that has existed since Roger Fenton went to Balaclava in 1855 to photograph the Crimean War.

TO SEE EXAMPLES OF PHOTO SLIDESHOWS

The (Durham, N.C.) Herald-Sun Gallery: http://www.herald-sun.com/gallery/

MSNBC.com: "The Week in Pictures" http://www.msnbc.msn.com/id/3842331/

Star Tribune Slide Shows (Minneapolis): http://www.startribune.com/stories/319/

washingtonpost.com: "CameraWorks" http://www.washingtonpost.com/wp-srv/photo/



Sound adds a dimension that photos with text captions do not, and cannot, possess (Figure 1.1.01). A photo alone engages only one of the five senses. Sound adds information to the experience of a photo, which can change the story that the viewer experiences:

- If the person in the photo speaks about the moment when the photo was taken, the listener receives one view of the story.
- If the photographer speaks about taking the photo, the listener receives a different view.
- If the audio track contains the natural sound of the scene, the listener receives additional information about the site where the photo was taken.
- If the natural sound was not recorded at the time when the photo was taken, the listener may receive a false impression of the scene.
- If the audio includes music, the listener's emotional response might be manipulated.

The use of audio in these slideshows is not startlingly new; documentary filmmakers have used sound to enhance their visual stories since the 1930s. Recordings of journalistic interviews and natural sound are edited into audio story formats every day for broadcast on public radio stations around the world. In fact, from a radio journalist's point of view, it could be said

Fig. 1.1.01 Combining on location audio with photo-journalism: The Orange County Speedway, a NASCAR racetrack in North Carolina, comes to life in this multimedia feature story from *The* (Durham, N.C.) *Herald-Sun*. Printed by permission of *The Herald-Sun*, Durham, North Carolina. Package produced by Dave Cone

that *adding photos* to the sound changes the story that the *listener* experiences:

- The scene in the photo might show something that cannot be adequately described with words.
- The photo might show something that differs significantly from the impression given by the speakers in the recorded audio.
- A wide-angle view or an extreme close-up might convey a great deal more than words or natural sound can.

Not all online slideshows include sound; the decision to include it or not depends on the goals for the presentation, as well as professional realities. Sometimes it is just not possible to get relevant sound to accompany photos.

Sound can detract from the quality of the presentation if the audio quality is poor, if the sound editing is badly done, or if the content of the sound is either redundant or irrelevant to the visuals. Done well, however, the addition of sound to photojournalism can exercise tremendous power over the user.

ANIMATED INFOGRAPHICS

In newspaper offices, the word *infographics* (or sometimes just *graphics*) refers to a specific type of illustration that helps tell the story. Usually such a graphic includes one or more blocks of text that help explain what is illustrated. Television newsrooms use the word *graphics* to refer to similar storytelling visuals. Television graphics are usually specified as either OTS (over the shoulder) or full screen; they may be still or motion.

Larger news organizations employ graphic designers to create original news graphics as needed for the daily newscast or print editions. Both large and small news organizations use ready-made graphics provided by subscription services such as the Associated Press, Reuters, and News in Motion (part of Knight Ridder/Tribune Information Services).

After an event such as the destruction of the space shuttle *Columbia* on February 1, 2003, TV viewers expect to see animated graphics that explain what happened. The animation for television might be created with exactly

the same software tools as the animation published on a news Web site. If the tools are the same, does that mean the two animations (on TV and on the Web) are likely to be the same?

Not necessarily. While the online graphic designer *could* create an animation that simply plays from beginning to end, exactly like a TV animation, in most cases the online designer will build in some options that enable the user to control parts of the animation. *Control* is the primary difference between an animation on TV and an animation online. The online designer is *not required* to give control to the user, but it is always possible for the designer to do so.

USA Today explained the space shuttle Columbia disaster with a package of several animated infographics, including one ("Shuttle Breakup/The Final Hour") that opens with a map showing Africa, Asia, Australia, and the Pacific Ocean. The shuttle appears inside a circle located off the west coast of Australia (Figure 1.1.02). The time is noted: 8:16 a.m. The control in this case affects the pacing of the animation: When the user clicks the Next button, the shuttle moves eastward; the time shown is 8:19 a.m.; the caption text explains that the shuttle began its descent at that time.

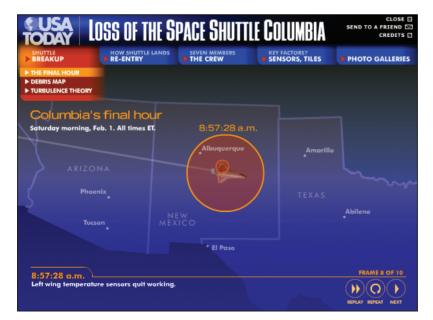


Fig. 1.1.02 USA Today's "Loss of the Space Shuttle Columbia" includes an interactive map that illustrates what happened, as well as the location of the shuttle, at what time. Printed by permission of USA Today.

USA Today's "Loss of the Space Shuttle Columbia": http://www.usatoday.com/graphics/shuttle_evolution/gshuttle_disaster12/flash.htm

Evolution of *USA Today*'s Shuttle Columbia Disaster Graphic: http://www.usatoday.com/graphics/shuttle_evolution/

This page illustrates how journalists constructed this breaking news story package online, producing the first version less than one hour after the first reports of a problem with the shuttle, on the morning of February 1, 2003, and continuing with updated versions through April 23.

By clicking multiple times, the user can watch the shuttle cross the Pacific as the map zooms in closer. The time and the caption change with each click. By 8:52:59 a.m., the shuttle is just west of California, and a blinking circle and a warning tone indicate that a sensor in the left wing has gone offline. The use of sound here is especially effective. By 8:59:33 a.m. the map zooms in and the state of Texas almost fills the window. The shuttle is over the city of Dallas. With the last click (Frame 10), the animation of the shuttle fades and is replaced by an inset square showing detail of the debris field.

What distinguishes this example (and other online animations) from those shown on TV? The online user can:

- Absorb the information step by step, at a pace he or she chooses.
- Replay the animation immediately.
- View the animation at a time that is convenient to him or her.

The user's ability to control the pace affects the storytelling significantly. Knowing that users can proceed at their own speed, graphic designers can pack in more detailed information, including text and audio.

In another segment of the *USA Today* shuttle package ("Key Factors/Clues to Columbia's Breakup"), for example, sensors are illustrated in a cutaway view of the shuttle's left wing. Dragging the cursor across a timeline animates the sensors' activity from 8:52 to 8:59 a.m. When the cursor rolls over any of the shuttle's sensors, a text label appears, describing what that particular sensor monitored. The sensor activity tells part of the story of

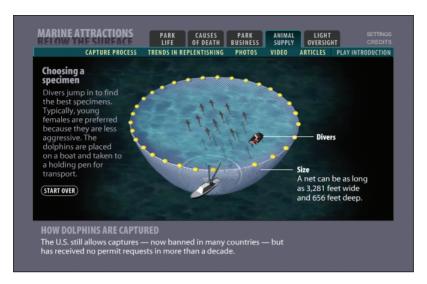


Fig. 1.1.03 The South Florida Sun-Sentinel's package "Marine Attractions: Below the Surface" includes a four-part animation that explains how wild dolphins are captured for sale to amusement parks. Printed by permission of the South Florida Sun-Sentinel.

how systems failed on the shuttle; the user can choose to pursue those details or not.

The sensor section of the *USA Today* shuttle package obviously required a great deal of research and fact-checking as part of its production. The visual approach to this part of the story actually reveals what happened—although not necessarily *why* it happened—with a clarity that could not have been achieved in another medium. Journalism, when done right, helps us understand the world. Sometimes animation provides the best way to tell a story, to make it easy to understand.

PACKAGES

News organizations discovered years ago that they could bundle numerous elements and stories together into an online story "package" by creating links on a Web page. These packages (also called "shells," in some cases) may include photo slideshows, animated infographics, video, audio, maps, charts, longer text stories presented as regular Web pages, and links to resources at other Web sites. Usually, a single Web page serves as an entry into (or contents page for) the package, and all the package elements are linked to that page.

Some linked elements may appear in smaller pop-up windows, while others may be full-size Web pages (which typically link back to the package front page).

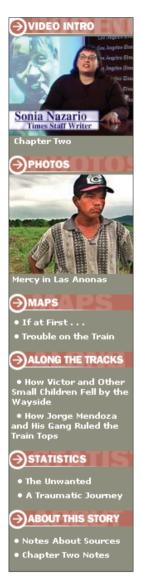


Fig. 1.1.04 Each of the six chapters of "Enrique's Journey," from the Los Angeles Times, includes a consistent right-hand rail with links to the photo galleries, maps, and other elements that accompany that chapter. Printed by permission of the Los Angeles Times.

Any number or mix of elements can be combined in a package. A package may be a one-time, one-shot story that is launched and never altered. In other cases, a package may be a collection of elements from an ongoing news story that has not yet concluded; this type of package must be designed to accommodate the need for updating.

News organizations typically create an online package page for major ongoing stories such as the war in Iraq or a national election. The headlines of the latest text stories usually are linked automatically, thanks to a script in the Web page code that searches for a keyword. This kind of page is constructed *dynamically*, using information pulled from a database. A one-shot package can be a *static* page, without using any database technology.

"Enrique's Journey," a six-chapter story from the *Los Angeles Times*, follows the quest of a boy from Honduras to find his mother, who left him at age 5 to find work in the United States. Based on three months' reporting work by writer Sonia Nazario and photographer Don Bartletti, the online package includes the text stories and maps that ran in the printed newspaper, as well as a video introduction by Nazario to each chapter of the story, photo slideshows specific to each chapter, charts and statistics in separate pop-up windows, and extensive background notes about Nazario's sources for each event and fact. The elements that accompany each chapter are clearly linked and labeled in a right-hand rail on every Web page in the package (Figure 1.1.04).

The photo slideshows (which do not include audio) mark one of the larger differences between the online and print presentations of Enrique's story: more than a dozen large color photos (100 in all), each with a detailed caption, accompany each of the six chapters. Another difference: the map for each chapter starts with the same large view of Central America but then plays a zoom animation specific to Enrique's location in that chapter.

Some online packages contain few or no examples of Flash journalism. In some cases, a package is simply an archive of past stories about the same topic. In other cases, a package may be a single text story with several elements linked to it, such as a video, a photo slideshow, and a map. The linked elements may have appeared first in another news medium, or they may have been constructed specifically for use online.

EXAMPLES OF PACKAGES

The Guardian/Guardian Unlimited: "Special Report: European Union" http://www.guardian.co.uk/eu/

Los Angeles Times: "Enrique's Journey" http://www.latimes.com/news/specials/enrique/

The New York Times: "Dangerous Business" http://www.nytimes.com/ref/national/DANGEROUS_BUSINESS.html

South Florida Sun-Sentinel: "Marine Attractions: Below the Surface" http://www.sun-sentinel.com/news/custom/interactivefeature/sfl-marine-flash.htmlstory

In other words, not all packages include Flash journalism, and not all examples of Flash journalism are part of packages (although most examples of Flash journalism are linked to a text story).

It is also possible to build a package *entirely* in Flash. Because Flash can incorporate audio, video, animation, photos, and text, and can harmonize all those elements within a single, consistent interface, Flash can be the ideal delivery vehicle for some journalism packages.

INTERACTIVITY

Many digital media products are called *interactive*, but producers and users alike disagree on what "interactivity" means. Before claiming that interactivity makes digital storytelling forms different from other media forms, it will be helpful to take a look at some attempts to define *interactivity*.

Nathan Shedroff, an interaction designer, pointed out that human conversations, playing soccer, and games (online and off) are interactive, whereas Flash, JavaScript, CD-ROMs, and novels are not. (When Shedroff wrote this in 1997, it was far more difficult to include interactivity in Flash.) Shedroff noted that *most* storytelling *is* interactive. He lists six major components of interactivity:

- Feedback
- Control

- Creativity
- Productivity
- Communications
- Adaptivity

A pair of communications researchers, Edward J. Downes and Sally J. McMillan, listed six "dimensions" of interactivity:

- Direction of communication: One-way, as in traditional mass media, or two-way, as in interpersonal communication.
- Time flexibility: Synchronous (real-time, immediate) or asynchronous (stored, accessible at any time).
- Sense of place: Geographical distance, embodiment, presence or telepresence in virtual places.
- Level of control: Does the sender (author) or the receiver (reader) control the experience?
- Responsiveness: Effort required from the user, customization, extent to which current responses depend on earlier responses or on exchanges between the user and the system.
- Perceived purpose of communication: Persuading, informing, collaborating, etc.

If you compare the two lists, you will find many similarities between them. Shedroff did not mention "direction of communication," but he did list "feedback." Much of journalism is "one-way" in directionality, rather than "two-way," but there are cases in which feedback (from readers, viewers, and advertisers) has had an effect on the work of journalists in both print and broadcast. "Adaptivity" might be the same as "responsiveness"; "productivity" might be close to "perceived purpose."

Another communications researcher, Jens F. Jensen, offered three dimensions of interactivity, each of which functions as a continuum, from least interactive to most interactive:

 Conversational: The degree to which users can create and publish their own content in a two-way media system.

- Selective: The degree to which the users can choose content, either from a fixed set of options or by submitting requests.
- Registrational: The degree to which information about the users is captured and employed to respond and adapt to the users' actions and goals.

Jensen also described a four-dimensional model proposed by another researcher, Lutz Goertz:

- Degree of choices available
- Degree of modifiability
- Number of selections and modifications available
- Degree of linearity or non-linearity

An interesting aspect of Goertz's model: It differentiates between the *areas* in which users can make choices and the *number* of choices possible in each area. Thus, a movie in DVD format would score higher in interactivity than

a movie on videotape because the DVD user can select any chapter of the movie from the table of contents and also can select a language for subtitles or soundtrack from a list. If two DVD movies with these two choice areas were compared, the DVD with more chapters and more languages would be rated as more interactive, according to Goertz's model. By merely quantifying levels of interactivity, this model does not determine whether *more* is *better*.



Goertz and Jensen both consider choices or selections available to users, while neither Shedroff nor Downes and McMillan specify that choices contribute to interactivity. All four models or definitions include control, although exactly what can be controlled is not specified. Goertz refers to the *linearity* of the experience, which some researchers explain as a restriction of choices: Must the users follow steps (or parts of the story) in a predetermined order, or can they skip around in any order they like? In a computer game, for example, can the players go anywhere at any time (Figure 1.1.05), or must they complete certain tasks before they can progress to a new level?

Fig. 1.1.05 P.O.V.'s

"Borders," a series on the PBS Web site, includes two "interactive playscapes" created by the Web design firm Futurefarmers. Both look at the environmental implications of the choices we make about what we eat. Printed by permission of P.O.V.'s Borders (http://www.pbs.org/pov/borders/). Design by Futurefarmers.

So, keeping in mind that more is not always better, and that to be most effective, different kinds of stories require different treatments, here are some questions about interactivity that a journalist or producer might ask in the planning stages of an online story project.

Feedback from the Audience

- Can users comment on the story?
- Can they see/hear/read the reactions of other users?
- Can they respond to other users?
- Can the subjects of the story add their point of view?
- Can users ask questions and receive answers?

Adaptivity or Modifiability

- Can the story be updated easily in the future?
- Can corrections be made?
- Can links be added to the story?
- Can new content be added?

Control

- Is the story linear? Is there only one place to start and one place to end?
- Can the users pause something that plays continuously (audio, video, animation, slideshow)?
- Can they mark their place and continue from that point later?
- Can they easily replay or repeat a segment?
- Can they bookmark the presentation? Can they save it on their own computer?
- Can they copy text from the presentation?
- Can they lower or raise the volume of the soundtrack?

- Can they make text larger or smaller, to improve legibility?
- Can they increase the size of images to fit their computer screen?

Choices

- Can the users choose their own path through the story? Is the story constructed in several modular pieces?
- Can they easily skip over parts that do not interest them?
- Can they get more information easily? If they want more detailed information, is it available? If they need a definition or an explanation, can they get it?
- Can they go beyond the site where they are? Can they access original
 documents, past stories about related issues, and/or external organizations that allow them to become involved and participate?

Communication

- Can users link directly to the story from their own Web pages or Weblogs?
- Can they e-mail a link to their friends?

Responsiveness

- Does the presentation or package "learn" anything about the user? Does it know what the user has already viewed, for example?
- Can the user provide information that enables the presentation to adapt itself to the goals of that individual user?
- Does the user receive an impression of having an effect on the presentation? That is, does anything about the presentation *change* in response to the user's actions?
- Does a script automatically check the user's system and adjust the presentation to provide the best result for that system's configuration?

These questions can be used to determine whether a particular example of Flash journalism is interactive. They are not meant to serve as rules for every Flash presentation. Some stories warrant more interactivity than others—

just as some stories would be improved by audio and others would not. Most examples of online journalism today do not have a high degree of interactivity; this may change in the future as journalists become more accustomed to telling stories with the tools available to them in this medium.

EXAMPLES OF INTERACTIVITY

In MSNBC.com's "Airport Security/Can You Spot the Threats?" you take a 2-minute shift as an airport security person, and find out whether you can spot weapons or explosives hidden inside carry-on baggage.

http://www.msnbc.com/modules/airport_security/screener/

In PBS P.O.V.'s "Borders/Environment/Earth," you can explore a garden, learn about the plants in it, water them, plant new seeds, and leave messages for other visitors to read.

http://www.pbs.org/pov/borders/2004/earth/

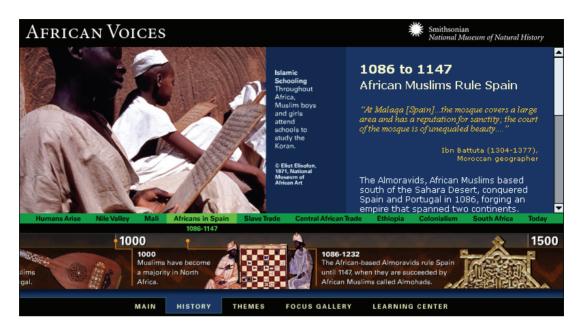
"What Is a Print?" from the Museum of Modern Art, New York, lets users try out the techniques used in four types of printmaking: etching, lithography, screenprint, and woodcut.

http://www.moma.org/exhibitions/2001/whatisaprint/print.html

INTERFACE

How do the users know what they can do and what a package contains? The typical Flash journalism package uses the same kind of interface as most Web sites—links. Links may look like buttons, tabs, or perky icons, but when you get right down to what the interface does, it is just a list of links. Click one and you get some new information.

Other possibilities beckon. Maps provide an obvious interface for some journalism stories: the movements of troops in wartime, the events at a crime scene, points on a journey. Timelines (Figure 1.1.06) and calendars work well for retrospectives and biographies.



What other methods could be used to help users enjoy and understand a story? A New York–based company named Kuma Reality Games creates military mission simulations based on real current events and makes them available to subscribers to the company's Kuma\War gaming engine (http://www.kumawar.com). The company does not market the games as journalism, but a company press release said, "Kuma\War enables consumers to experience actual missions of real soldiers in the war on terror."

While any attempt to associate a video game with journalism would raise numerous ethical issues, a video game interface (without scoring and, say, body counts) could be designed to present a complex story as a puzzle, or possibly as a detective novel. As anyone who has ever played a video game knows, you learn a lot through playing, and the more you know, the better you play. Maybe any attempt at a game with a journalistic mission would turn out more gimmicky than useful, but who knows? It could provide the interface that makes buttons obsolete.

Fig. 1.1.06 The History section of the Smithsonian's online exhibit "African Voices" employs a timeline (at the bottom of the window) that can be dragged left or right. Clicking in the timeline displays a new image in the upper portion of the window. Printed by permission of the African Voices Web site (http://www.mnh.si. edu/africanvoices/) in support of the African Voices exhibition at the Smithsonian Institution's National Museum of Natural History.

SUMMARY

If online media enable new forms of journalistic storytelling, it must be possible to identify differences between how stories are told online and how

The CBC's "Anatomy of a Refugee Camp" uses a compass to allow free movement across an illustrated version of a location. Small icons scattered about the camp indicate where the user can click for more information. A more traditional menu is also provided.

http://www.cbc.ca/news/irag/presentations/refugees/refugee.html

In the *Los Angeles Times*'s "High Stakes Pipeline," a clickable map of Cameroon and Chad serves as an interface to eight videos about the towns affected by an oil pipeline; the story integrates graphics, video, and five photo galleries into a single Flash presentation.

http://www.latimes.com/news/nationworld/world/la-pipelinemain-g,0,6979464.flash

National Geographic used a combination of a map and a timeline to tell the story of the Japanese attack on Pearl Harbor. (Click "Attack Map" to open it.)

http://plasma.nationalgeographic.com/pearlharbor/

The design firm Terra Incognita created the Smithsonian National Museum of Natural History's online exhibit "African Voices" in 2001. Compare the interface with that of a 2004 project (also from Terra Incognita), the Indianapolis Museum of Art's "Cycles." Both sites avoid a typical buttons-only interface.

"African Voices" http://www.mnh.si.edu/africanvoices/

"Cycles" http://www.ima-art.org/cycles/

360 degrees/Perspectives on the U.S. Criminal Justice System, from the interactive design studio Picture Projects, employs an interface of floating circles to engage the user more actively with the content. The motion of the content orbs tends to hold the user's attention.

Launch page: http://www.360degrees.org
Other projects: http://picture-projects.com

they are told in broadcast and print news media. Simply showing photographs or video on a computer screen is not very different from showing photographs in a book or newspaper, or video on a TV screen.

This chapter has provided several examples of stories told uniquely online. While elements such as audio and photos are used in other media, the

ability to *combine* these forms online marks one—but not the only—significant difference between online and other news media. (The differences between video and still photography must be taken into account as well.)

Both television and print news media use infographics to help tell stories more completely. Printed infographics cannot be animated, but they can include more text than is practical to show on television. Television news graphics can be animated, but they cannot be interactive; they must play in a linear, start-to-finish manner. The addition of depth and viewer control (interactivity) to online infographics makes them different from their counterparts in print and broadcast media.

Multiple media may be combined into a single presentation, such as a map that serves as an entry point to videos shot in several locations (Figure 1.1.07). Multiple presentations, or elements, may be linked from a single Web page to create a story package. While television journalists use the word "package" to mean one finished story that airs during a newscast, online journalists use "package" (or sometimes "shell") to mean a compilation or set of elements that are all related to one story. An animated map may be one of the elements included; a photo slideshow may be another element in the same package. Some online packages are primarily archives, a set of links to text or video stories that were previously printed or aired.

Interactivity involves more than merely providing several choices to the user—although *choice* is one aspect of interactivity. The ability to provide a real user-controlled experience distinguishes online media from other news media; much more could be done in the future to allow users to get what they want from journalism online and to engage more deeply with the story.

The interface of a multimedia package lays out the options available to the user. Options may be arranged in a simple list, using text or icons, but video games demonstrate that there are many other ways to invite a user to explore and experience an information space. More compelling interfaces might lead to more compelling journalism in the future.

Online media put new ways to tell stories into the hands of journalists. The number of good examples grows every month. As journalists gain an understanding of the tools needed to produce engaging stories in online media, they are proving again and again that Flash journalism really is something new. Online, journalists can convey ideas to which text, video, photos,

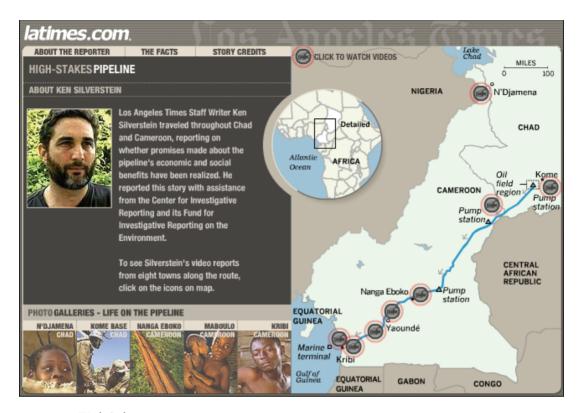


Fig. 1.1.07 "High Stakes Pipeline," from the Los Angeles Times, combines Flash video with a map and several photo galleries. Printed by permission of the Los Angeles Times.

audio, or graphics alone cannot do justice. Journalists will continue to tell stories via broadcast and print media, of course, but they will also adapt their craft to the new possibilities offered by online media.

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