

We are facing a new media revolution: Internet and Television are implemented in a small device to carry around – the cell phone

**I**f war is the “father of all things,” as Heraclitos claims, then new technologies are children of the battlefield. War technology shows us “the next step” as human invention stands under the Sword of Damocles. World War I developed the airplane which World War II multiplied until the skies were filled with commercial airliners for a burgeoning travel industry. Artillery ballistics in WW I spawned the V-2 missiles for WW II, which eventually led to rockets for taking humans to the Moon. Allan Turing cracked the German Enigma code and his Turing Machine envisioned computers circuits for the 1990s. And so on ...

So what about the Iraqi War? What are its technological offspring? Today's war zone shows, in the eyes of some theorists, a new kind of communication gaining ground over the decade-old Internet. The mobile phone or cell phone swallows the “medium of all media” (the Internet) by adding mobility to the images, videos, writings, and whatever else can be beamed by satellite to interactive pocket devices. Such is the view of Paul Levinson, chair of Communications at Fordham University whose book *Cellphone* shows how battlefield cell phones are transforming other media including TV. Levinson says: “When media historians look back at the Iraqi War, they will no doubt observe that it was then that television first became part of the cell phone revolution.”

TV journalism became wedded to cell phones on April 13, 2003 as CNN's Brent Sadler used his video-cellphone to provide live broadcast coverage of a real-time story of American trucks entering the city of Tikrit, the last military stronghold of Saddam Hussein. While Sadler narrated through his cell phone the dangerous maneuvers of that day, his video-phone provided shaky images of combat in the Iraqi countryside, all of which was broadcast via satellite live and unedited on CNN. With insufficient time to unpack his large up-link dish, Sadler had used his cell phone for war reportage that offered an immediacy and authenticity unknown in Ernest Hemingway's world of newspaper reportage.

While the Hemingway style and tone outlives the wars he covered, Sadler's cell phone brought TV viewers a powerful experience no printed words can convey, and all this accompanied by the vulnerable presence of Sadler's living voice on every step of the near-fatal way. The battlefield cell phone points to the larger transformations of society we experience as our pockets carry devices that allow us to produce, send, and receive personal news at any time in any place to anyone we may choose. ➤



.COMMUNICATION

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## KURZFASSUNG

Der Artikel in 15 Sekunden

The first public cell phone call was made on April 3, 1973. From 1985 to 2003, the number of cellular telephone subscribers in the United States grew from under 350,000 to nearly 159 million. And then came the Second Iraqi war. “When media historians look back at the Iraqi War, they will observe that it was then that television first became part of the **cell phone revolution**,” writes Paul Levinson, chair of Communications at Fordham University.

**The first public cell phone** call was made on April 3, 1973 when Martin Cooper, director of research and development for Motorola Corporation spoke from midtown Manhattan in New York City to a friendly rival scientist at Bell Labs in New Jersey.

Motorola had by then invested nearly \$100 million in research on the cell phone from the late 1960s to the early 1980s while AT&T's Bell Labs had been pursuing research on phones for the automobile, the kind of car phone that had appeared in cinema fiction of the 1954 movie "Sabrina" which showed Humphrey Bogart in the role of a millionaire who speaks on the phone in the backseat of his limousine.

Motorola's Martin Cooper was one of the many scientists who are devoted readers of science fiction. When Cooper made that first cell phone call in 1973, nearly four years had passed since the original "Star Trek" series had gone off the air. That NBC television series, running from 1966 through 1969 had become successful in reruns on syndicated TV stations throughout the world. The series featured a little chirping "communicator" which was attached to the uniform or held in the hand by Captain Kirk, Mr. Spock, and the crew of the Starship Enterprise.

Prior to Star Trek, millions of people saw the cell phone used in the 1940s Dick Tracy cartoon with the detective's two-way radio wristwatch. Unlike popular fiction, however, the first cell phones were not carried around comfortably as they weighed almost two pounds and sold for around \$4,000 each in 1983.

As with the cost of printed books, which would cost an average person's weekly salary in 1800, the price of cell phones dropped when the mass market raised profits by expanding the base of users while making the cost of the phones more widely affordable. From 1985 to 2003, the number of cellular telephone subscribers in the United States grew from under 350,000 to nearly 159 million, which represents about two-thirds of American adults.

**New industries are springing up** around cell phones. A Communications giant in San Diego has invested \$800 million for bringing new content to hand-held phones. Mobile content includes streaming video of the latest sports event, news, and entertainment. Users will be able to play 3D video games on cell phones as well as watch music videos accompanying the songs they download from the Web to the cell phone.

A Wireless Company has begun to offer broadband cellular distribution of sports clips, music videos, and movie trailers to 75 million customers. In 2004, a 150-million-dollar industry emerged to sell customized ring tones to personal cellular phones. Want to hear your favorite song played whenever your best friend calls? Or hear your least favorite song when your boss calls?

The wireless content industry is sparking parallel developments for hardware that creates better resolution on miniature screens, more accurate in-the-ear buds for higher-quality listening, more extensive satellite coverage across the country. Phones now have color screens and built-in cameras.

The cell phone adds mobility to information. We are peripatetic creatures who not only hunger for information but who also walk as we

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## SERVICE

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Mobile Lösungen von mobilkom austria

➤ **Vodafone live!** Die ideale Plattform für Information, Freizeit und Unterhaltung: News, Sport, MMS, Video, Musik, Games, E-Mail, Klingeltöne und vieles mehr.

➤ **Vodafone Mobile Connect Card.** Macht aus dem Notebook ein Büro und Unterhaltungsmedium für unterwegs

➤ **A1 TV.** Nachrichten von CNN, BBC, ORF, Euro-News; Sportsendungen, Wetter, StauCams und TV-Unterhaltung am Handy.

➤ **MOBILE OFFICE.** Mobiles Arbeiten per Smartphone, PDA oder PC-Karte im Laptop. Unterwegs surfen und E-Mails abrufen (mobiles Intra- und Internet). Optimale Tarife für Datenübertragungen.

➤ **MOBILE FILES.** Egal ob Textdateien, Grafiken oder Bilder, man hat unterwegs jederzeit Zugriff zu wichtigen Geschäftspapieren.

➤ **MOBILE GUIDE.** Suchen und finden per SMS oder WAP – vom Restaurant über Hotel und Bankomat bis zur nächsten Apotheke.

➤ **MOBILES BREITBAND.** Mit der Vodafone Mobile Connect Card surft man mit Breitband-Speed über UMTS/GPRS zum Fixpreis.

➤ **m-commerce.** Mit dem mobilen Endgerät einkaufen: Produkte oder Dienstleistungen werden per SMS oder WAP bestellt. Die Bezahlung wird übers Handy abgewickelt (u. a. Automatenlösung handy.cent, SMS Ticketing).

➤ **Mobiles Marketing.** Der mobile Draht zum Kunden.

➤ **business paybox.** Die sichere, mobile, bargeldlose Zahlungslösung für Unternehmen.

➤ **Fuhrparkmanagement.** Zur Fahrzeugverwaltung: A1 CARFINDER, A1 FAHRTENBUCH sowie FLEET-MANAGER.

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Mobile Lösungen von  
Telekom Austria

➤ **WLAN in Haushalt und Büro.** Verschiedene WLAN-Lösungen für bis zu 25 Personen pro Gerät (WLAN Access Point) für kabellose Breitbandkommunikation.

➤ **Public WLAN Access points.** Schneller, kabelloser Zugriff aufs Internet von unterwegs aus.

➤ **Housing mit remote power control.** Ein- und Ausschalten von Businesskundenservern im Housing-Center.

➤ **Hosting mit remote management.** Telekom-Austria-eigene Kundenserver werden damit von der Ferne aus überwacht, installiert und rückgesetzt.

➤ **Web- und Mailservices mit remote configuration.** Mail- und Webservices können übers Internet ortsunabhängig konfiguriert und weltweit von jedem Internetanschluss aus abgefragt werden.

➤ **Teleworker 0804.** Durchwahlnummer, über die sich alle Teleworkerzugänge in das Firmennetz einwählen.

➤ **LIC Plus Remote Access.** Einbindung mobiler User ins Firmennetz.

➤ **Marketing Lines.** Funktionieren auch, wenn das Unternehmen geografisch seinen Standort wechselt oder außerhalb der Geschäftszeiten Anrufe an anderen Zielen landen sollen.

➤ **Calling Cards.** Der Anwender kann überall aktiv telefonieren und benötigt dabei kein Bargeld.

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## DER AUTOR

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## the cell phone-user needs some basic rules

talk and move as we think. Mobility expresses our deepest aversions and attractions. (The very terms of desire imply "moving towards" or "moving away from.") We need more than thinking to survive; we also need to move. A device that feeds our hunger for information with an infinite supply, like the Web, gets better by becoming a device that also supports our ability to move about in the world.

The smart digital phone outfits our moving bodies with all the information of human cultures as well as with the interactive option of sharing thoughts with other human beings. No longer simple ear-to-mouth telephony, the cellular phone has become an Internet freed from the constraints of a single physical location. It is the Web as an omnipresent extension of human thinking, speaking, and willing.

**Omnipresence has its downside**, of course. Your omnipresence may not harmonize with the thinking, speaking, and willing of my omnipresence. Visit any movie studio in Hollywood, California, and you will see a long folding table in front of the studio door where you will have to dig into your pockets and find every cell phone and PDA (personal digital assistant) which you then contribute to the mountain of tiny devices already piled on the table. The check-in person at the table will not allow you to enter the studio, even if you are Clint Eastwood, until you have added yours to the pile of devices that are forbidden inside the recording areas and can be retrieved only after you are again outside the sound-proof walls. Every reader can think of many other places where the cell phone's breach of attention is unwanted and where omnipresence bumps against the finite limits of human sensory input.

Our interactive devices ring their alerts because, as we move about in the world, our attention is drawn to many things. In the past, the ring of the home or office telephone trained us, like Pavlov's dogs, to stop everything and respond to the ringing sound. Before the ringing telephone, it was the peal of the church or temple bells that called the public to gather together (Old French *apeler* and the Latin *appellare*, to entreat or to plead). Bells as a form of centralized mass communication preceded the European printing press by nearly a thousand years. The peal of church bells and the ring of the telephone both resonate with public insistence. Now, threatened by a multitude of individual

private devices that push their announcements into public air, the ear needs to protect its personal acoustic space. Often the discordant public ring for private attention precedes a quasi-public conversation that intrudes on the private space of everyone within earshot of the phone conversation. To establish some manners for a not-yet telepathic society, communication specialists are scrambling to formulate protocols for reasonable people to harmonize the discord. Paul Levinson suggests some basic rules of engagement. He says there are three kinds of places for the ringing of cell phones: Always wrong, never wrong, and sometimes wrong. The always wrong places are the sacred ceremonies, like funerals or church services, where everyone is present to show respect for what lies over the horizon of our busy lives in the world.

**Certain places**, like the hospital operating room, require such focused respect for life that they too are almost always off-limits. ("Almost always" because there may be some last-minute medical information that has life-and-death relevance for the person on the operating table.) The "never wrong" category includes those totally private moments in the woods or on the beach, or even when we are having lunch with a friend who knows that we are expecting an important call. The next category, "sometimes wrong," has the graduated spectrum that we see, for example, in restaurants that range from "no cell phones please" in high-class restaurants to the tacit "anything goes" of a casual deli or McDonald's. The closer the ring or conversation is to other tables, the more offensive. Time of day also makes a difference. Who can digest food within earshot of a heated business deal in an early morning breakfast coffee shop?

As helpful as these rules may be for improving social life with cell phones, they do not challenge the dubious assumption that humans live only to communicate with other humans. While social communication is an important aspect of life, especially in the information age, we also need to occasionally turn off the cell phone and walk away from modern life with its insistent pressure to "only connect." A Thoreauvian dictum we might add to the ground rules of mobile communication: "Sometimes disconnect and have a chat with your deepest self in silence." ■