

Thumbs are the new fingers for the GameBoy generation

Amelia Hill
Sunday March 24, 2002
The Observer

Use of hand-held technologies, such as mobile phones, GameBoys and computers, has caused a physical mutation in the under-25s, according to new research.

The study, carried out in nine cities around the world, shows that the thumbs of the younger generation have overtaken their fingers as the hand's most muscled and dexterous digit.

The change affects those who have grown up with hand-held devices capable of text messaging, emailing and accessing internet services. Experts claim it proves technology is causing physical alterations that previously happened over generations.

'The relationship between technology and the users of technology is mutual: we are changing each other,' said Dr Sadie Plant, author of the study and founder of the Cybernetic Culture Research Unit at Warwick University. 'The fact that our thumbs operate differently from our fingers is one of the main things that defines us as humans. Discovering that the younger generation has taken to using thumbs in a completely different way and are instinctively using it where the rest of us use our index fingers is particularly interesting.'

Plant, who has written three books on the social impact of technology, spent six months collecting data on hundreds of mobile phone users in the world's largest cities, including London, Beijing, Chicago and Tokyo.

She noted how, while those less accustomed to mobile phones used one or several fingers to access the keypad, younger people used both thumbs ambidextrously, barely looking at the keys as they made rapid entries.

'They used the absolute minimal movement,' she said. 'Simply exerting pressure with the thumb rather than tapping at the phone.'

'There are many ways to input information into these devices, but for some reason kids under 25 most often choose to use their thumbs over any other digit. There is no question that choice is having a clear effect on their physicality: thumbs are the new fingers.'

In Japan, the trend was particularly marked. Plant even found the under-25s referred to themselves as oya yubi sedai - the thumb generation, or thumb tribe.

As their thumbs become stronger and more dexterous, Plant found that the thumb tribe is using its favourite digit for other tasks that are traditionally the finger's job, such as pointing at things or ringing doorbells.

'The mobile is fast becoming an essential prop in the social life of 20-year-olds,' she said. 'It has even become part of their mating display, with young men trying to impress women with the advanced technology of their phones.'

Youth Let Their Thumbs Do the Talking in Japan

By JAMES BROOKE, April 30, 2002



Janet Jarman for The New York Times

For young people in Japan, the phrase "all thumbs" means nimble rather than awkward. Aki Goto deftly thumbs through mail on her cellphone in Tokyo.

OKYO, April 29 — Leaning alone against a wall, wearing sunglasses on a rainy afternoon, Daisuke Yoshioka is a black-jacketed image of urban loneliness. But, for this member of Japan's thumb generation, a cyberweb of friends is only thumb strokes away.

"I get about 80 e-mails a day," this 18-year-old college student says, his right thumb flicking expertly through a directory of incoming e-mails on the screen of his Web-capable cellphone. "Some of my friends now only use their thumbs for pressing doorbells, or pointing at things."

In a quiet technology-driven change, young Japanese are developing hyperagile thumbs, the fruit of childhoods spent furiously thumbing hand-held computer games and now young adulthoods spent thumbing out e-mail messages on cellphone key pads.

"Their thumbs have become bigger, more muscular," said Sadie Plant, author of a new report of "On the Mobile," a study of cellphone habits of people in eight major world cities. Talking from Birmingham, England, she said that Japan's "oya yubi sedai," or "thumb generation," was "the most advanced in the world."

"What impressed me in Tokyo was their ability to tap in a message without even looking at the keypad," she said of her study, which was financed by Motorola.

Television stations in Japan have held thumbing speed contests. Last year, one young woman was clocked thumbing out 100 Chinese characters in a one-minute burst, similar to typing 100 words a minute, a feat normally done with all fingers flying.

While thumb-operated computer games have been around for years, thumb-operated, Web-capable phones are new. The number of Japanese cellphones equipped for e-mail has jumped to 50 million today, about 40 percent of the population, from 10 million two years ago. With the United States years away from such mass use of cellphones for messaging, Japan has become a national experiment for intensive thumb use.

"In the U.S., those young people who hang out in the mall will become the American thumb generation of the future," predicted Jeffrey L. Funk, a business professor at Kobe University and author of the new book, "The Mobile Internet: How Japan Dialed up and the West Disconnected." (ISI Publications; 2002).

Sending text messages appeals to Japan's passion for discretion. Messages can be sent and received silently in university lectures, business meetings, and in crowded commuter trains where talking on cellphones is often banned.

Aki Goto, a 21-year-old college student who carries a tiny American flag and a hot red KISS ME sticker on her phone, said of her text messages: "I am not intruding on others when they are in the middle of doing something. The receivers check them whenever it suits them."

Across town, in a white tablecloth restaurant where talking on cellphones is discouraged, Ayako Inaba's right thumbnail — peach pink with little silver stars — silently guided her through the electronic tree in her cellphone display.

"It has changed how I live," said the 22-year-old fashion journalist who bought her Web-capable cellphone as soon as she moved back to Tokyo from New York last spring. "We used to say, 'We will meet at 7:30 in the Ginza in front of the lion of Mitsukoshi department store.' Now we just say, 'Let's meet at 7 in the Ginza.' "

Wandering Tokyo's premiere fashion district, Ms. Inaba and her girlfriends negotiate their dockings by thumbing out messages with their coordinates. In contrast to this fluid style of living, she said that in New York, "I missed a lot of meetings."

Thumbing through her in box, she read from the text index — a message in English from her boyfriend in Italy, a message in Chinese characters, or kanji, from an old boyfriend in Japan, and a message from a college girlfriend.

"She is saying that she has a boyfriend, but is seeing another man; I messaged back, 'You like him? Go for it,' " Ms. Inaba said, focusing intently on her flip-top cellphone, the indispensable life tool for the modern young Japanese.

In the restrooms of chic bars and clubs, women are often seen thumbing out progress reports on their dates to girlfriends.

"I am spending less and less time with my parents, so I report my activities to them by e-mail," said Ms. Goto, the college student. Using the Japanese word for cellphone, she continued: "Girls use keitai mail more than boys. I get about 50 mails a day. I send out mails like, 'I am here!' or 'Are you there?'"

Using a cellphone that retrieves most frequently used characters from memory, Ms Goto said: "My thumb has become faster and more agile."

Thumb skills are spawning thumb snobs.

Kannon Konno, a 20-year-old college student, paused from perusing her e-mail to watch a middle-aged man pecking at his cellphone with an index finger. She commented drily: "I think he should use a P.C."

On a cellphone, speeding thumbs make road kill of grammar and punctuation. Some cellphone companies include 200 pictographs in an electronic vocabulary.

Interviewed by e-mail, Etsuko Yano, an airline employee, thumbed back this high-speed missive: "Honestly, I am an expert in to punch out with thumbs! My thumbs remember exactly the right place of words. I always send mails to my friends from my cellphone using only one hand, I mean only one thumb. Very easy and fast and sooooo convenient to make mails for me."

In Japanese, cellphones are eroding people's writing skills. In a poll of 3,000 Japanese adults conducted in January by Yomiuri Shimbun newspaper, 27 percent said that the use of computers and cellphones had made their handwriting worse, and 52 percent said they had forgotten some characters. With more young adults reading cellphones in subways, sales of books and magazines in Japan dropped last year, for the fifth year in a row.

In the future, Japanese thumbs could suffer from the repetitive stress ailments that sometimes afflict the hands of computer workers.

But so far, thumb stress is mild, partly because cellphone text addicts glide their thumbs across the keys, exerting minimal pressure. Dr. Yasuuki Watanabe, a Tokyo neurologist, said of thumb cases he has treated: "The number is small, I have just seen several."

Thumbs, the doctor cautioned, should not be belittled. Scientific research indicates that "thumbs dominate a huge area of the brain. In Japan, if you lose a thumb, you are redesignated under our national labor legislation as heavily handicapped."

<http://www.nytimes.com/2002/04/30/technology/30THUM.html?ex=1155960000&en=7c5aa17abf4abdb7&ei=5070> (consultado a 16/08/2006)

The Home Forum
from the October 15, 2004 edition

Now you know

Technology breeds agile thumbs. The trend is most notable among Japan's young "oya yubi sedai" or "the thumb generation." Ninety-seven percent of all Japanese college students have cellphones; 79 percent of high-schoolers do. And while infrequent cellphone users tend to hold the phone in one hand and tap it with the other, Japan's mobile masters clasp the phone in one hand and press the keypad with their thumb. Sending text messages using kanji characters requires special dexterity, and such messages are very popular. Young Japanese consider it rude to call without "texting" first. Observers note that the "keitai" (cellphone) kids are using their thumbs more often to point at things and to ring doorbells.

Sources: 'On the Mobile: The Effects of Mobile Telephones on Social and Individual Life,' a study by Sadie Plant; 'Beyond the Net,' by Janine Warner, Miami Herald for April 7, 2003.

<http://www.csmonitor.com/2004/1015/p18s03-hfgn.html> (consultado a 16/08/2006)