

Research with Amazon tribe turns linguistics theory on its head, writes **Ron Grossman**

Shaking language to core

To get some idea of the brouhaha currently enveloping linguists, occupants of a usually quiet corner of the ivory tower, suppose a school physics teacher found a flaw in the theory of relativity.

Students of language consider Noam Chomsky the Einstein of their discipline. Linguistics is a very old science, but beginning in the 1950s, Dr Chomsky so revolutionised the field that linguists refer to the time prior to his work as BC, or before Chomsky.

They may have to add another marker: AD, as in after Dan.

Daniel Everett, chairman of languages, literatures and cultures at Illinois State University, has done field work among a tiny tribe in the Amazon. He reports that their obscure language lacks a fundamental characteristic that, according to Dr Chomsky's theory, underlies all human language.

With that declaration, Dr Everett pitted himself against a giant in the field, and modest Illinois State University against the nation's elite universities. In the process, he drew national attention to this arcane field and enveloped scholars around the world in a battle that plays out over and over in – this is academia, after all – conferences and seminars.

The ideas behind it are fairly basic: some birds squawk, and some animals grunt, alerting winged or furry compatriots to danger, but only humans can share complex thoughts.

A Scottish professor illustrated that at a recent gathering with a nursery rhyme: "This is the cat that chased the rat that ate the malt that

lay in the house that Jack built." In those lines, the word "that" is what linguists call a recursive device. Recursion allows humans to link various parts of our experience: to direct others to not just any cat, but to the one that chased the rat.

The device enables humans to pool knowledge and skills, share hopes and ambitions, build sophisticated societies, and elaborate technologies.

Dr Everett, however, fired a volley straight at the theory when he reported that the Brazilian tribe he was studying didn't use recursion.

"For a long time, I said to myself, 'Maybe if I just hang around the tribe long enough, I'll find it,'" he said. "But after 30 years, I don't know how much longer I'm going to be able to hang around."

When word got out of his research, *New Yorker* magazine sent a writer to accompany Dr Everett on an expedition up the Amazon. This past spring, three dozen linguists, psychologists and anthropologists came to Illinois State University from Germany, Finland, Sweden, the Netherlands, Hungary, England, Scotland, Croatia and Denmark for a conference that was basically a scholarly referendum on the proposition: "Who is right, Everett or Chomsky?"

Dr Chomsky's followers can't shrug off Dr Everett's claim as an insignificant exception to the rule. By their theory, all humans are hard wired for speech essentially the same way. Yet here was an upstart claiming to have spoken with people who lack one of the wires.

As news of Dr Everett's findings spread through the linguistics community, Dr Chomsky – a professor at the Massachusetts Institute of Technology – and two associates fired back in a 2005 article in the prestigious journal *Science*,



insisting that recursion marks the boundary between humans and our animal friends.

They dismissed as irrelevant the "putative absence" of recursion in one language.

At the recent Illinois State University conference, Dr Chomsky's followers took a similarly hard line, among them Tom Roeper, of the University of Massachusetts.

"No! No!" Dr Roeper shouted when another participant argued that recursion didn't appear until relatively late in the Indo-European language, a theoretical precursor to French, German and other tongues. To Dr Chomsky's followers, the rules of language are the same always and everywhere.

Yet other participants were

equally convinced that Dr Everett's data can't be ignored.

"I've been a Chomskyan linguist for 20 years," said Ljiljana Progovac, a faculty member at Wayne State University in Detroit. "But Dan is on to something. Anybody can make a mistake, even Chomsky."

Dr Everett took a circuitous route to his role as the potential Jack the Giant Killer of linguistics. He notes that the journey cost him his marriage and his faith.

Dr Everett's early training was in theology, partially at the Moody Bible Institute in Chicago, from which he graduated in 1975. He and his wife went to Brazil as missionaries and studied tribal languages in order to bring natives the word of God. They set up a base



The challenger: Daniel Everett (top), a linguistics professor, in a Piraha village hut in the Amazon, where his research was done. The champion: Noam Chomsky (above)

among the Piraha, a group that steadfastly had resisted the outside world.

Their way of life was simple and their language spare.

"They have no words for left and right, orienting themselves with reference to the river," Everett said. "When a group was taken to an unfamiliar location where they couldn't see the river, they were disoriented until told where the river was."

Another conference participant, Robert Futrelle of Northeastern University in Boston, noted that the Piraha's example suggests a link between culture and language.

"Maybe our languages are more complex because we have more to talk about," Dr Futrelle said. "As

They have no words for left and right, orienting themselves with reference to the river.

Daniel Everett, referring to the Piraha tribe in Brazil

culture has gotten thicker, a language had to get thicker."

Dr Everett recalled that, after years with the Piraha, his grasp of their language was sufficient to translate the Gospel of Luke. He sat members of the tribe down and read it. "They listened but were unmoved by the story," he said. "Thinking about that, I realised that I wasn't moved by it, either."

When he announced that to his wife, she left. He said she was trying to get him to come back to the faith.

"For a long time I thought, if I pray more, it'll come back," he said. "But it didn't."

So he retrained as a linguist, completing a doctoral degree in 1983 from the State University of Campinas, in Brazil. At first, orthodox linguistics seemed a new revelation. "Chomsky's theory was beautiful," Dr Everett said.

After years of looking in vain for those missing recursives, though, he broke ranks. In 2005, he published an article in *Cultural Anthropology* titled *Cultural Constraints on Grammar and Cognition in Piraha*.

Since then, former friends in the linguistics community have shunned him, he said.

Still, he holds a trump card: Since he speaks Piraha and his opponents don't, they depend upon his good offices if they want to try to prove him wrong.

He has been taking small groups of scholars to the Piraha's villages. It doesn't matter whether they agree with him or not; all Dr Everett asks is that they be open to letting the data shape their theories.

"If you believe in God, you're going to find evidence of him everywhere," he said. "It's the same thing if you're wedded to a theory, but that's not science."

Chicago Tribune

Wonderful World

People

Jailbird Paris a free bird on Tuesday

Paris Hilton will leave jail on Tuesday after spending almost 3½ weeks behind bars.

The release date was determined by the Los Angeles County Sheriff's Department's Inmate Reception Centre. The exact hour was not disclosed.

"There's no set time," said Deputy Luis Castro, adding that he did not know if any special arrangements had been made to return Hilton to her Hollywood Hills home.

Hilton, 26, who was sentenced to 45 days in jail for violating her probation in

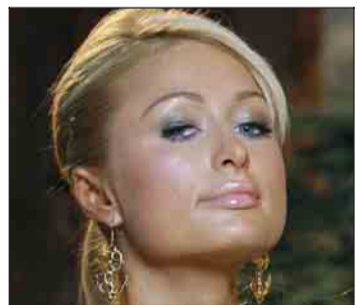
an alcohol-related reckless driving case, surrendered on June 3.

Sheriff Lee Baca released her to house arrest on June 7, citing an undisclosed medical condition. But the judge, who had specifically barred Hilton from house arrest, ordered her to court the next day and returned the sobbing hotel heiress to jail.

Although her sentence was for 45 days, authorities have said all along that with time off for good behaviour and because of crowded jail conditions, Hilton was likely to serve only 23. Tuesday will mark the 24th day since she surrendered.

Meanwhile, the NBC and ABC television networks sought to distance themselves from reports that they were offering money in pursuit of an exclusive interview with Hilton after her release.

An ABC source said the network had turned down the Hilton family's offer of an interview with Barbara Walters, while NBC said no interview had been arranged. AP



Spice baby Murphy's, DNA confirms

A DNA test has confirmed actor Eddie Murphy is the father of the newborn daughter of Spice Girl singer Melanie Brown, *People* magazine reports.

Brown, 32, gave birth to Angel Iris Murphy Brown in April and listed Murphy as the father on the child's birth certificate, but the star of *Beverly Hills Cop* and *Dreamgirls* has never publicly acknowledged paternity.

Earlier this month, media outlets

reported that Murphy, 46, had taken a DNA test and Brown's representative, Liza Anderson, told *People* the results,

confirming Murphy's paternity, were given to Brown on Thursday. Brown was "Scary Spice" in the all-girl British group. Group members have called a news conference for Thursday, sparking speculation they will reunite. Reuters

Accessorised Cameron upsets Peruvians with Mao slogan

Actress Cameron Diaz appears to have committed a major fashion faux pas in Peru. The voice of Princess Fiona in the animated *Shrek* films may have inadvertently offended Peruvians who suffered decades of violence from a Maoist guerrilla insurgency by touring there with a bag emblazoned with one of Mao Zedong's (毛澤東) favourite political slogans.

While exploring the Inca city of Machu Picchu high in Peru's Andes on

Friday, Diaz wore over her shoulder an olive green messenger bag emblazoned with a red star and the words "Serve the People" printed in Chinese on the flap, perhaps Chinese Communist leader Mao's most famous political slogan.

The bags are marketed as trendy fashion accessories in some world capitals. But the phrase has particular resonance in Peru, where the Maoist Shining Path insurgency brought Peru to the edge of chaos in the 1980s and

early 1990s with a campaign of massacres and bombings that killed almost 70,000 people.

A prominent Peruvian human rights activist said the star of *There's Something About Mary* should have been more aware of local sensitivities when picking her accessories.

"It alludes to a concept that did so much damage to Peru, that brought about so many victims," Pablo Rojas said of the bag's slogan. AP



Facts & Figures

Firefighters on a high after marijuana blaze

Firefighters who spent half an hour fighting a blaze in which 907kg of marijuana went up in smoke breathed so much of it in that they would have failed a drug test, a fire chief said. It took more than 35 firefighters, almost 4,000 litres of water and 19 litres of chemical suppressant to extinguish the warehouse blaze in Edinburg, Texas, Fire Chief Shawn Snider said. Snider said the firefighters were exposed to so much marijuana smoke that they would not have been able to pass a drug test, despite wearing air packs to prevent them from inhaling toxic or hazardous fumes. AP

The one that almost got away – after 67 years

An 84-year-old Dutch driver astonished police last week when he admitted during a random check that not only was his car uninsured but he had been driving without a licence for 67 years. Dutch media said the man had escaped detection because he had never got a speeding ticket or been involved in a crash. The man promised police he would ditch his car, which had never been put through a vehicle safety test. Reuters

Two-year-old joins Mensa elite

British toddler Georgia Brown has become the youngest member of Mensa – aged two. Georgia has an IQ of 152, putting her in the most intelligent 0.2 per cent of the population, reports the *Daily Mirror*. Mum Lucy, 44, said: "She was crawling at five months and walking by nine months. She would sit and read with a book." Professor Joan Freeman, who set the IQ test, said: "She swept right through it like a hot knife through butter." Georgia, from Hampshire, can count to 10, draw a near perfect circle, and knows all her colours and the difference between a square and a rectangle. Lucy said: "After seeing *Beauty and the Beast*, Georgia said, 'I didn't like Gaston. He was mean and arrogant'. We were amazed." Ananova.com

Tall Stories

Too much fun for a contraceptive

A vibrating condom has sparked a row in India over whether it's a contraceptive or a sex toy. The pack of three condoms, branded as Crezendo, contains a battery-operated ring-like device, reports the BBC. Critics say it is a vibrator, and should be banned under Indian laws that outlaw sex toys and pornography. The Crezendo has caused further outrage in the state of Madhya Pradesh, because a government-owned company is involved in marketing it. Makers Hindustan Latex say the Crezendo, which sells for £1.50 (HK\$23) a pack, "provides ultimate pleasure by producing strong vibrations". Madhya Pradesh's minister for roads and energy, Kailash Vijayvargiya, argues they should

be banned. "Sex toys are banned in India and the vibrating device is nothing but a sex toy being sold as condoms," he said. Ananova.com

Sweden's welfare system rocks

A Swedish heavy metal fan has been awarded payouts after doctors said his addiction to music was a disability. The ruling means Roger Tullgren, 42, will pocket thousands of pounds in state benefits to help finance his 36-year obsession. His boss is also letting him play his ear-splitting music at work and giving him time off for concerts, reports the London *Daily Mirror*. It marks an end to Tullgren's 10-year bid to have his "condition", which began when he started listening to Black Sabbath in

1971, officially classified as a handicap. "The fact I am into music so much has affected my work situation to the extent that I have had to quit some jobs," he said. He will get £65 (HK\$1,000) a week top up to the money he earns as a part-time restaurant dishwasher so he can buy concert tickets and CDs. Ananova.com

Referred pain guarantees injured man gets attention

A Polish man called emergency services from his hospital bed after nurses ignored his cries for help when he needed painkillers. Patryk Sielski, 42, was admitted to the Srodmijskiego na Solcu hospital in Warsaw after breaking his leg. He called the local 999 number for an ambulance after persistent

attempts to alert nurses that he desperately needed painkillers were ignored. "I didn't know what else to do," he said. Ananova.com

Concrete overcoat fails to silence drunk

A drunk Russian woman had to be pulled out of a newly laid road after she fell into a concrete mixer. Elena Pavlovna, 43, had been walking home after a lunchtime session with pals in the town of Kemerovo. She saw her path was blocked by machinery left by workers who were taking a break from resurfacing a road. She tried to step over the machinery but slipped and fell into a concrete mixer that had been left on and after a few minutes of being twirled around inside with the concrete

mix she was "poured" out with a pool of asphalt. A rescue service spokesman said: "Despite the fact that only part of her mouth was out in the open she did not shut up and kept on telling us what we should be doing. It was really annoying." Ananova.com.

Boy's name too unreal for birth registry

New Zealand authorities have blocked a couple's bid to officially name their new son 4real, saying numerals are not allowed. Pat and Sheena Wheaton said they decided on the unusual name after having an ultrasound and being struck by the reality of his impending arrival. "For most of us, when we try to figure out what our names mean, we have to look it up in a babies book and ... there's

no direct link between the meaning and the name," Pat Wheaton said. "With this name, everyone knows what it means." But when the parents filed the name with the Registry of Births, Deaths and Marriages, they were told names beginning with a number were against the rules. AP

Gravedigger fulfills pipe dream

A gravedigger in Fitchburg, Massachusetts, stole body parts – including a skull and a thigh bone – from a broken casket at a cemetery and took them home to make an ashtray and pipe. Police discovered the theft after a woman called to complain her husband had killed her dog. The body parts were found in his belongings. AP