

No law has been able to prevent it, no court has been able to stop it and probably no human has been able to avoid it.

Not that people don't know better.

From the Ninth Commandment to the whipping post, we have been drilled in the evils of deceit — in the meantime, we have perfected the practice.

But recent technology may be bringing us up to 1984 before we're ready.

The standard lie detector has been used routinely by business and police for at least 20 years and is regulated in most states. Since its use demands cooperation from the subject, lie detection has generally gone unchallenged as an invasion of privacy — until now.

More recently marketed instruments, called voice-analyzers or psychological stress evaluators (PSEs), are advertised as being capable of spotting lies in statements made over the telephone or recorded on tape.

Hagoth Corporation, based near Seattle, plans to sell 8,000 of its voice analyzers (called Hagoths) this year after starting in the truth business only two years ago. Hagoths cost \$1,500 each.

Richard Bennett, president and founder of the corporation, says most of his machines are sold to businessmen who want to test employees, customers or colleagues.

The original prototype for the Hagoth and similar instruments was a psychological stress evaluator developed in 1970 by two retired Army intelligence officers.

According to the developers, inaudible frequency modulations in speech reflect internal stresses in a person's voice caused by attempted deception. These inaudible variations are automatic and can be measured by PSEs, they claim.

Few states regulate sale and use of voice analyzers, but since the devices can be used covertly, any regulation short of banning would be difficult to enforce anyway.

Oregon has outlawed use of PSEs within the state, but Washington, California and 36 other states have left them unregulated.

Alan Carlisle of Portland got around the Oregon law by testing tapes with his Mark II Voice Analyzer in a small Vancouver, Wash. Office he maintained across the river.

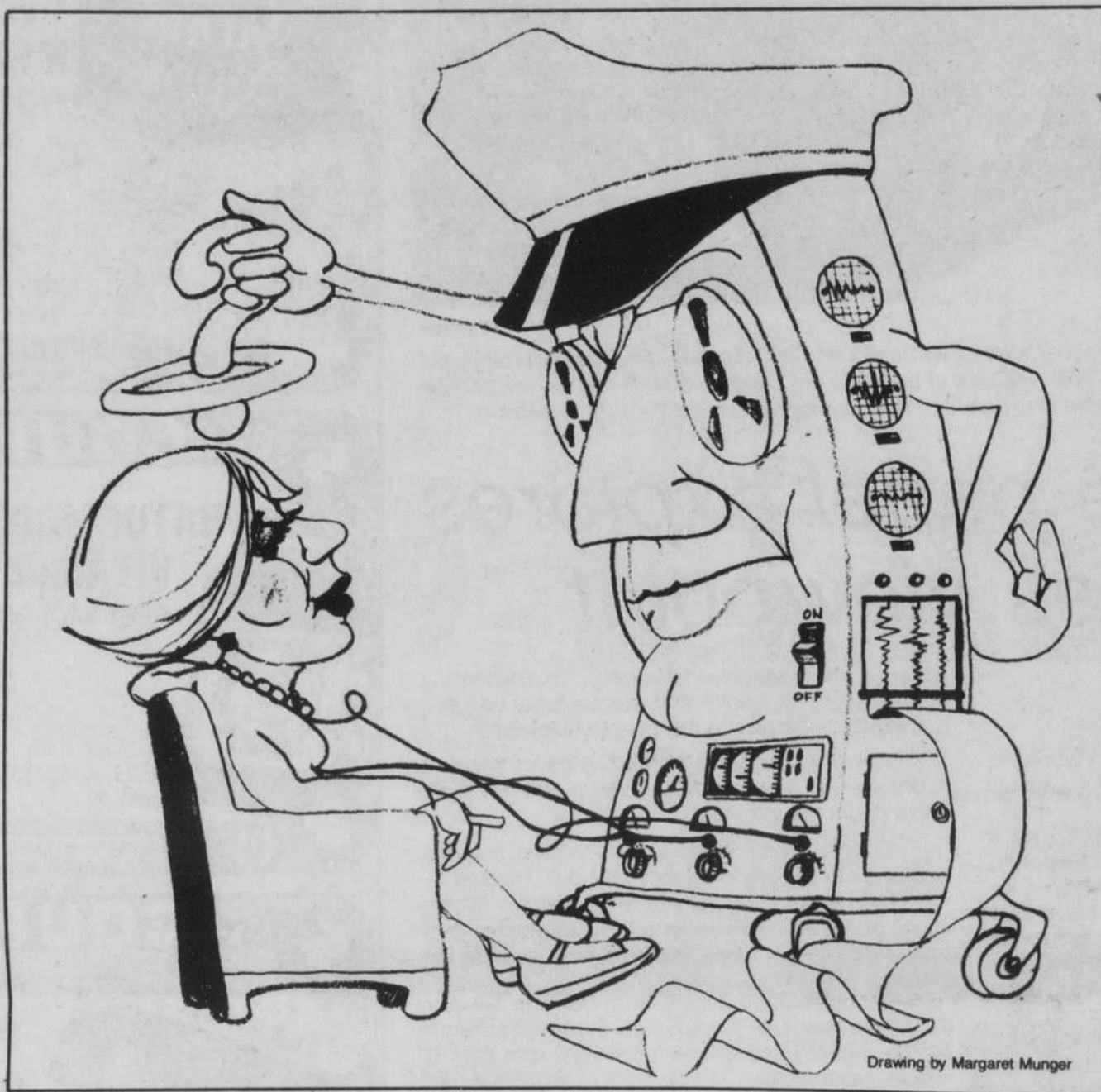
"I gave it up last year when the opposition (from polygraphy associations) got to be too much."

Carlisle is now retired.

The reliability of voice analysis

Voice analyzer use rises, yet controversy remains

Stories by
TOM WOLFE
Of the Emerald



Drawing by Margaret Munger

has been repeatedly challenged by polygraphy associations and government tests.

Both Air Force and National Security Agency research found PSEs "insufficiently reliable" for lie detection.

Army tests in 1973 found voice analysis "less effective" than simple observation.

Regardless of such findings, PSE sales are mushrooming in the private sector, especially by U.S. businessmen — businessmen willing to try anything to curb employee theft, dishonesty and espionage now costing them \$50 billion annually.

Makers of the machines officially admit voice-analyzers only measure psychological stress in the human voice — not deception itself.

Literature advertising voice-analyzers is more boastful.

"Both Air Force and National Security Agency research found PSEs 'insufficiently reliable...'"

A pamphlet circulated by Carlisle in Portland explained PSEs this way:

"Since stress is present under deceitful conditions, the examination, when completed by a competent examiner, is extremely accurate."

Suggested uses for voice analysis by Carlisle included verifying the truthfulness of employee applications, determining the applicant's permanency intentions and identifying thieves.

Business have been eager, sometimes too eager, to follow through on such suggestions.

Larry Gustafson, a security chief for Church's Fried Chicken Restaurants in Houston, Texas, was recently charged with violating the state's licensing law after testing a cashier to see if she was telling the truth about some missing chicken. Had Gustafson simply tested over the phone with a Hagoth, the cashier would probably have never known she was tested.

More sensational uses of voice-analyzers have been dramatized in Penthouse Magazine and National Enquirer.

"Lee Harvey Oswald Was Innocent," declared a story in Penthouse, April, 1975. The author claimed to have not only determined Oswald's innocence (based on PSE analysis from tape recordings of his denials) but also several other details of Kennedy's assassination.

National Enquirer used the same approach in its article exonerating Patty Hearst of wrongdoing by analyzing tapes of her voice released to the press while Hearst was a fugitive.

Another suggestion is to analyze press conferences tapes to see if the president or other public figures are lying — no one has committed himself on this one yet.

Ideas and stories like these have "probably been the most effective publicity for voice analysis," Frederick Link, PSE critic and military polygrapher, says.

But the major reason for tremendous growth in PSE sales is rampant business theft.

With estimates of employee pilferage ranging from four percent to six percent of gross earnings, about one in five large U.S. companies now uses lie-detection in hiring or investigation, according to February's Personnel Journal, a trade magazine for employers.

In a survey of 400 firms, the magazine found 20.3 percent reported some use of polygraphy in their personnel programs. Fifty percent of major banks and retailers surveyed said they use polygraphy.

Traditionally, this work has been done with the same polygraphy techniques and machines used by police. Those machines measure three or four independent physiological functions to determine the veracity of a statement. When used properly they are considered to be 80-90 percent accurate.

But use of voice analysis is cheaper, easier. In addition, it is largely unregulated or unregulatable.

No federal law currently applies to voice analysis, but a commission set up under the Privacy Act of 1974 has recommended its prohibition. The Equal Employment Opportunity Commission has also studied the machines and could recommend lie-detector restrictions.

Congress too, may step in.

Birch Bayh, D-Indiana, introduced a bill to limit lie-detector testing that was recently discussed in a Senate subcommittee he chairs. More hearings are scheduled this spring.

If restrictions are considered, strong opposition can be expected from big business, now firmly committed to mechanized lie detection.

Polygrapher takes hard line with would-be liars

Eugene's resident truth-teller has moved from makeshift quarters in his home to an executive suite downtown.

Not only has commercial lie-detection grown respectable — it's profitable.

Lt. Paul Dueber was making \$10 to \$25 an hour in Eugene as a private investigator until he found a bigger market in truth-telling than fact-finding.

He's an innovative businessman, 35 years old, his own boss. He sits behind an oversized executive desk explaining his work in serious tones, an eager grin betraying delight in his new-found opulence.

"My Eugene business hasn't grown that

much since last year, but I've started working in Portland two days a week. It looks like I might move up there if things keep picking up."

At \$40 to \$75 per test, Dueber examines 25-30 people each month, usually to verify employee applications or investigate thefts. His counterpart in the Eugene Police Department, Sgt. Gordon Mitchell, only made four evaluations this month.

The mechanics of giving a polygraph examination are relatively simple.

Dueber's polygraph is a portable electric machine the size of a large attache case with four built-in measuring devices.

One piece of black rubber tubing circles the upper-chest and measures breathing there, while a second identical tube measures abdomen respiration.

A blood pressure cup follows pulse rate and intensity. Finger-tip structures measure perspiration changes. All four indicators monitor continuously and scribble out their findings onto graph paper — four needles sweeping and skipping, recording every breath and heart beat.

"During the actual testing, extreme nervousness or the slightest movement can make it look like a person is lying, even when he's telling the truth," warns Dueber.

As the test continues, the polygraphy tracers are in constant motion, recording data by the second, all in synchronization. A stimulus as slight as a hand-clap will cause involuntary physical responses from the subject.

"Hardly anyone (less than five percent of the population, according to Dueber) can tell a lie without registering some physiological response, Dueber says. "We're trained from early on to distinguish from right and wrong, and by the time you're an adult you simply can't help reacting to that."

(Continued on Page 9A)

Wednesday, March 8, 1978

huronid yllat mogor