



Sumerian code talking

The Windtalkers

Many of us know about the U.S. government's assignment, during World War II, of Native Americans to the special mission of devising a lexicon describing the tools of war—tanks, battleships, fighter planes, machine guns, etc.—using the wording of their primary languages—Navajo, Sioux, Mohawk, Crow, etc. They were then tasked with the directive to communicate in their own language for the U.S. Marines fighting in the South Pacific. For their efforts, they were not fully recognized until 2008, when the Code Talkers Recognition Act (aka Public Law 110-420) was passed. In addition to the much delayed acknowledgment, each tribe that sent Code Talkers into WWI or WWII was awarded a Congressional Gold Medal, with silver versions for individual veterans or their families.¹

The first job of these so-called Windtalkers was to make up a standard set of “pro” words (words that the military uses to abbreviate and clarify radio/telephone transmissions²): One list was for the letters of the alphabet: “ant” (*owl-ka-chee*) was pro for “A,” “bear” (*shush*) for “B,” etc. The second job was a list of terms to describe the elements of combat: a fighter plane (*de-he-tic-hi*) was a “hummingbird,” a squad was a “black sheep,” a dive bomber (*gene*) was a “chicken hawk,” a bomber (*jay-shod*) was a “buzzard,” and so on.

Chester Nez, a Navajo Code Talker, recalled:

We were told to use our language to come up with words representing each letter, from A to Z. ... And they told us to come up with code words for military terms. They

put us in a room to work it out and at first everyone thought we'd never make it. It seemed impossible, because even among ourselves, we didn't agree on all the right words.³

They were trying force a fundamentally nontechnological language to describe technological objects. But the code completely stumped the Japanese—at Guadalcanal, Tarawa, Peleliu, Iwo Jima. Imagine the eavesdropping Japanese signal personnel listening to “gibberish” over the Marines’ air waves:

The Japanese, who were skilled code breakers, remained baffled by the Navajo language. The Japanese chief of intelligence, Lieutenant General Seizo Marisue, said that while they were able to decipher the codes used by the U.S. Army and Army Air Corps, they never cracked the code used by the Marines. The Navajo code talkers even stymied a Navajo soldier taken prisoner at Bataan. (About 20 Navajos served in the U.S. Army in the Philippines.) The Navajo soldier, forced to listen to the jumbled words of talker transmissions, said to a code talker after the war, "I never figured out what you guys who got me into all that trouble were saying."⁴

Sumerian “Code Talkers”

The Navajo Code Talkers, of course, recognized planes, seagoing vessels, military units, and the like. The ancient Sumerians didn't have the technological knowledge to understand what they were witnessing, nor did they have the literacy skills that they Code Talkers had to describe what they saw. Yet the Code Talkers and the Sumerians had a similar task: using a language with limited technological vocabulary to describe higher-tech phenomena. They did what they could, but the result was text that read like a poem rather than a historical account—a result that played into the mythological mind-set of the early translators.

In *Listening to the Ancients*, I present a stanza of praise to the ancient “goddess” Inanna. The passage describes Inanna leading the charge during a battle. In the traditional translation, she is said to “peck away” at the land, she is a “charging storm,” “with all the evil winds you snort.” Switch the mind-set to that of the Earth Chronicles, and assume that whoever is describing her in the moment has the lexicon of today, and “[propelled] on your own aircraft, you fire away at the land.” Like a storm, “you roar” ... “you blast away thunderously” ... “with all afterburners you blaze ahead.”⁵

This is not such a far-fetched notion. Roger D. Isaacs is a retired, self-described “public relations man” whose father brought him up to be a devoted student of the Bible.⁶

Of Isaacs's many writings, *Talking with God* is perhaps the most fascinating. He has the same message about interpreting Ancient Hebrew in the Jewish Bible as Zecharia Snitching had in interpreting the Earth Chronicles. Isaacs studied the use of commonly found terms describing the Ark of the Covenant—"holy, glory, sin, iniquity, clean, unclean and even soul"—and noticed that their translations offered differed in the first five books of the Bible (Pentateuch) compared to their occurrences after the last known use of the Ark during the reign of King David. He found that many such terms had other possible meanings than those typically showing up in the Bible.⁷ "Through this study," he concluded, "I was able to reinterpret certain phenomena in a scientific framework, specifically, modern physics and chemistry."⁸

The Ark as seen through the ancients' eyes

One of his examples is the Hebrew word *Qods*, which he translates as "conditioned" inasmuch as its various root forms all imply "separation" but which has been typically translated as "holy." With respect to the Ark of the Covenant and the cloud that formed when it was in use to communicate with God, separation from the Ark was necessary for shielding against the hazardous effects of the cloud, which Isaacs concluded was radioactive.⁹ His argument is more complicated than explained here, but suffice it to say that he subscribes to the probability that much of the terminology in the Bible has been misinterpreted over the millennia. For example, he concludes that, though bowing has come to be a sign of reverence, he thinks it was "a protective move," citing Exodus 34:5-8: "The Lord descended in the cloud ... Moses hastened and bowed [*qawdad shawchaw*] to the earth and he prostrated himself." Isaacs interprets bowing, self-prostration, and shielding the face with one's hands as self-protective measures by separating oneself from the effects of the cloud.¹⁰

Radioactive or not, the Ark was undoubtedly a tricky piece of equipment. *Leviticus* 10, for example, describes how Nadab and Abihu, two sons of Aaron, died when they didn't follow the ritual's specifications. On the eighth day of the Tabernacle's dedication, each of the brothers offered a censer of incense to the Lord, but it wasn't the specified kind of incense. They "offered strange fire before the LORD, which he commanded them not" (*Leviticus* 10:1). Fire shot out "from the Lord" and killed them on the spot (*Leviticus* 10:2). TB Sanhedrin 52a elaborates: The fire split into four, entered the nostrils of the brothers, and devoured them but not their clothes.¹¹

The death of the brothers foreshadowed that of Uzzah, who reacted reflexively and in good faith and who died for doing so. The Ark was being moved in an oxcart from Baalah of Judah to Jerusalem when "the oxen shook [it]" (2 *Samuel* 6:6). Uzzah put out a hand—as anyone

of us might have done—to steady the Ark. “And the anger of the LORD was kindled against Uzzah; and God smote him there for [his] error; and there he died by the ark of God”¹² (2 *Samuel* 6:7).

Why would the Lord want to kill someone for being protective? Uzzah had to have died for some other, technical reason. Was he electrocuted?

There are other accounts, such as that in 1 *Samuel* 4–6. In a battle with the Israelites, the Philistines captured the Ark. During the seven months that they had possession of it, the statue of their god Dagon is said to have fallen over and broken. Also, the Lord “smote the men of the city [Ashdod], both small and great, and they had emerods in their secret parts” (1 *Samuel* 5:9). That’s hemorrhoids.¹³ After seven months of this and other hardships, including a plague of mice, at the insistence of their priests, the Philistines sent the Ark back to Israel via oxcart, with a bountiful “trespass offering,” as a means of supplication for the Lord’s forgiveness (1 *Samuel* 6).

Hence the meticulous garb and “equipment” of the high priest and other priests of the temple. They were “geared up” not so much for ritual as for safety. (See the section “The Ark as communicator.”) They were “separating” themselves from the danger of the Ark.¹⁴

A November 2017 Israel365 News article reviewed Isaacs’ conclusion that the Ark was a communication device, paraphrasing Isaacs as saying that “common words like ‘glory’, ‘holy’, and ‘sin’ have been mistranslated over the millennia and originally had very different, technical meanings that related directly to a device, the Ark, that operated within the laws of physics and chemistry.” When asked what Isaacs hoped his findings would contribute, he replied, “There have been countless interpretations of what the words in The Five Books really mean. *I have tried in mine to adhere to the obvious logic expressed so clearly by those words and not to veer from their meanings.*”¹⁵

So the Ark could have had (presumably) unintended and at times lethal effects on people, but it was not intended as a weapon.

The Ark as communicator

What made the Ark a communicator—and “tricky” to operate?

Fred Harding explains. Working from an exegetical perspective, he also regards the Ark as a communicator, as Isaacs did. The engineering by-product, however, is that, due to the nature of the Ark’s construction, it could be lethal, depending on circumstances like the plugged-in radio that drops into a filled bathtub. The radio was never intended to be a weapon. Listen to David Kauffman, who quotes a 1933 “Dean of Electrical Engineering”:

[E]ven slight movements of heat rising in smoke—such as from burning sacrifices or even incense—would distribute lesser charges of static electricity, This, [the dean] explained, may have accounted for the collecting of bolts powerful enough to cause death.¹⁶

Kaufmann goes on:

For those who thought that it was petty to think that Aaron's sons, Nadab and Avihu died because they "wore the wrong clothes" I hope this [explanation] puts that in a new light—the Ark had the potential to hold a massive electrical charge accumulated from lighting and pyrocumulism [the "bolts" referred to in the previous quote], and approaching it and its dangerously high electrical fields needed protective clothing, like the Ephod—a highly prescribed precisely constructed, grounded, wearable Faraday shield meant to protect humans from the powerful forces of high voltage electricity.¹⁷

In his book, *God's Electronic Communicator*, Fred Harding explains how the Ark worked as a communicator, which could make it dangerous.

At its core, the Ark was crystal radio set. Harding describes how the common crystal radio evolved with the addition of an antenna to pick up the signal, a crystal diode to separate the audio signal from the radio frequency carrier wave, the crystal earpiece, a tuner, and the capacitor to improve audio quality.¹⁸

Harding says the secret was in what the priests had to wear (see Figure 1). The specifications for the material, the color, the tailoring, and the wearing were all detailed by the Lord, who added, "And thou shalt speak unto all [that are] wise hearted, whom I have filled with the spirit of wisdom, that they may make Aaron's [the high priest's] garments to consecrate him, that he may minister unto me in the priest's office" (*Exodus* 28:3).

The breast piece

On the high priest's apron-like ephod rested a breast piece (יָפֶתֶחַ), called "the breastpiece of decision" (חֹשֶׁן הַמִּשְׁפָּט), inlaid with 12 precious stones engraved with the names of the 12 tribes of Israel. These held the *urim* and *thummim* (*Exodus* 28:15–30; *Leviticus* 8:8). The ruler (*Numbers* 27:21; cf. *Yoma* 7:5, "only for the king, the high court, or someone serving a need of the community") made the request of the high priest. In the case of the Tabernacle in the Wilderness, this was Moses. The *urim* echoes the Tablets of Destiny in Sumerian mythology, i.e., the supreme authority that rested with the chief "god."¹⁹ Only the levitical priests could serve as the intermediaries of the *urim* and *thummim* (*Deuteronomy*, 33:8).²⁰



Figure 1 The high priest equipped for his encounter with the Ark.

Some think that the *urim* and *thummin*, carried in the priest's breastplate, were a kind of "binary" system for an up-or-down, yes-or-no response to such a question as, "Should we do battle?" It is known that sometimes the system didn't work. "When Saul enquired of the LORD, the LORD answered him not, neither by dreams nor by urim, nor by prophets" (1 Samuel 28:6).

The *urim* and *thummin* were the tools of the high priest alone; Moses could not use them, nor could, later, the Israelite kings.

The white garments

The High Priest wore the ephod, breastplate, robe, tunic, turban, sash, crown, and pants; the other priests wore the tunic, pants, turban, and sash.²¹

And all the priests all had to be barefoot, just as Moses had to be before the burning bush (*Exodus* 3:5) and Joshua in the presence of the Angel of God (*Joshua* 5:15). The linen garments were to be six-ply (woven from six intertwined strands) and were to be made in specific colors: gold thread, blue thread, purple thread, and scarlet thread: "And they shall take gold, and blue, and purple, and scarlet, and fine linen" (*Exodus* 28:5).²²

The High Priest wore hip-to-thigh underpants (*Exodus* 28:42);²³ a long-sleeved tunic, which covered him from neck to foot (*Exodus* 28:39);²⁴ and two girdles, one over the tunic and the other the so-called girdle of the ephod (*Leviticus* 8:7).²⁵ Around the tunic, the first sash (*avnet*) was wrapped to cover the priest's torso from neck to waist.²⁶ He also wore a turban and was forbidden to cut his head hair or beard (*Leviticus* 21:5). The turban was a *miznefet*, "mire" in the King James, sometimes "headdress" in other translations (*Exodus* 28:29). The other priests wore plainer garb (*Exodus* 28:40).²⁷

The gold garments

A plate of pure gold was placed on the forehead of the High Priest and tied behind his head by blue cords (*Exodus* 28:36).²⁸ A seamless, blue, knee-length robe was reinforced “that it not be rent” (*Exodus* 28:32). The hem was adorned with alternating gold bells and pomegranates (*Exodus* 28:33–35).²⁹ The ephod was a two-piece, embroidered linen apron, made of gold, blue, purple, and scarlet thread. It was worn back and front, and was joined at the waist (*Exodus* 8:7). The sash left the mid-breast uncovered, a space about 1 cubit (ca. 18 inches) square.³⁰

Covering that vacant spot was a pocket, about 9 inches square, that held the *urim* and *thummim* (אֲוִרִים וְתֻמִּיִּם), the source of revelations (*Exodus* 28:4, 15–30; *Leviticus* 8:8). An onyx stone was affixed to each shoulder. Attached to the breastplate were 12 rare stones, arranged in 4 rows of 3 columns, each with the name of one of the 12 tribes. According to the rabbinical commentator Nachmanides, the *urim* and *thummim* were not fabricated by the Israelites; rather, the Lord gave the material to Moses as a divine instrument of “knowing and receiving.”³¹ The *urim* and *thummim* have no other identified origin, even though they are mentioned often in the Hebrew Bible (*Exodus* 28:30; *Leviticus* 8:8; *Numbers* 27:21; *Deuteronomy* 33:8; *1 Samuel* 28:6; *Ezra* 2:63; *Nehemiah* 7:65). Also, *Revelation* 2 speaks of an *urim* and *thummim* that will be given to “each individual” who proves worthy of an inheritance in the celestial kingdom—again implying divine origin. Abraham speaks of “the *urim* and *thummim*, which the Lord my God had given unto me” (*Book of Abraham* 3:1).³²

Harding concludes that the *urim* and *thummim* were physical objects because the Lord instructed them to be inserted into the breastplate (*Exodus* 28:29–30).³³ So the stones, operating in tandem with the Ark and the Tabernacle itself, were intended for communication of the divine will to the Israelites. But why the strict adherence to the dress code? Harding’s answer is that every stitch of the High Priest’s clothing was a component in the radio set and that, as a result, the High Priest had to be protected against electrical shock and possibly death.

The gold ephod, for instance, was made of one of the best conductors of electricity available. Silver is the best conductor, followed by copper and aluminum.³⁴ (Gold was probably used for two reasons: It doesn’t rust, corrode, or tarnish, and the Israelites are said to have plenty of it—already mined, smelted—having plundered the city before leaving.) In fact, research has shown that, today, soldiers can intercommunicate by means of antennas woven into their uniforms.³⁵

Antennas are best connected to a ground. And the High Priest is “grounded” by reason of being barefoot.³⁶ The human body can act as a resistor and as a capacitor. As a *resistor* (which slow down electron flow),³⁷ according to the National Institute for Occupational Safety and Health (NIOSH), the resistance offered by the human body can be up to 100,000 Ω .³⁸ And inasmuch as wet skin lowers its resistivity, the High Priest should not be sweating, particularly in the hot climate of the Near East. Linen, however, is good fabric for such a purpose. (LineMe lists the benefits of wearing linen in the heat as breathable, moisture-wicking, heat conductivity [away from the skin], and heat reflectivity [again, away from the skin].³⁹) Linen kept the body’s resistance more or less constant.

The body can act as a *capacitor*, which rapidly stores and discharges electrical energy, if it is close to metal,⁴⁰ which the High Priest was wearing in the form of the body antenna. His underlying body tissue was one plate of the capacitor, and the ephod was the other. Between them was the less conductive “dielectric” of the epidermis—the skin layer. So the capacitor function of the skin enables the loop antenna to be grounded.⁴¹

The vintage radio crystal set would need a variable capacitor to tune to various signals. But the system embedded in the High Priest’s clothing and person needed only two radio bands, because it was a binary system, and needed only two crystal detectors: the sardonyx “stones” attached to the High Priest’s shoulders: These crystals were mounted in gold settings and attached to the straps of the ephod, each connected to one of the two coils of the loop antenna.⁴²

When I first read about this garb and equipment, I thought about U.S. astronauts “suited up” for a mission.

So, Harding concludes, the Ark and the High Priest made up a crystal-based radio transmitter. And it becomes easier to see why the High Priest had to get his uniform and gear right *every* time.

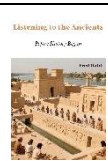
Takeaway

That was a long way around the block. What does all that have to do with Code Talkers?

Recall Isaacs’s conclusion that many words in the Bible—“holy,” “iniquity,” “sacred,” and the like—have been mistranslated. In the example of the Ark, such misinterpretations have severely misdirected history. We think in terms of the “holy garments,” not “safety gear” of the High Priest, who is not so much a priest as we understand “priest” today as he was a trained, skilled, and properly equipped operator/technician.

Scribes and redactors, like the Windtalkers, used a nontechnical language to describe high-tech phenomena. In the case of the Navajo Code Talkers, the goal was to be deliberately confusing—and that plan worked. Biblical, like Sumerian scribes, without any understanding of the technology they were witnessing, did the best they could with the language they had. And they were probably more accurate than we have given them credit for because modern-day translators, for various reasons, refuse to recognize the underlying reality of the accounts and adjust their thinking.

That is why the Code Talking operations were so successful. That is also why we have the Sumerian Code Talkers' message so wrong. In both cases, the interpreters got it all wrong.



For a fuller account of the story of mistranslation, see [Listening to the Ancients: Before History Began](#).

Notes

¹ “Code Talkers,” U.S. National Archives and Records Administration, n.d., <https://www.archives.gov/research/native-americans/military/code-talker> ; Dara Tolbert Brooks, “Code Talkers of World War I and World War II,” MyHeritageWiki, https://www.myheritage.com/wiki/Code_Talkers_of_World_War_I_and_World_War_II

² “Procedure Word,” Wikipedia, https://en.wikipedia.org/wiki/Procedure_word

³ Andrew Santella, *Navajo Code Talkers* (North Mankato, MN: Compass Point Books, 2004). Note: “Mention of Navajo code talkers was removed from the US Army website through an executive order by the Trump administration.” See video, *Mention of Navajo Code Talkers Removed from U.S. Army Website*, APTN News at <https://www.youtube.com/watch?v=yN4u2aOvqY>

⁴ “Navajo Code Talkers: World War II Fact Sheet,” Naval History and Heritage Command, n.d., <https://www.history.navy.mil/research/library/online-reading-room/title-list-alphabetically/n/code-talkers.html>

See also [I Couldn't Understand Anything Our Code Talkers Said | Watch](#)

⁵ See Fred Dahl, *Listening to the Ancients: Before History Began* (Chester, NY: Inkwell, 2026), pp. 72–80.

⁶ Roger D. Isaacs, *Talking with God: The Radioactive Ark of the Testimony* (Chicago: Sacred Closet Books, 2010), p. xvii.

⁷ Isaacs, p. xxii.

⁸ Isaacs, p. xxiii.

⁹ Isaacs, p. 21.

¹⁰ Isaacs, p. 23

¹¹ “Sanhedrin 52A,” Sefaria, <https://www.sefaria.org/Sanhedrin.52a.17?lang=bi&with=all&lang2=enk>; the Sanhedrin 52A is part of the “Babylonian Talmud: Tractate Sanhedrin, Folio 52A,” https://halakhah.com/sanhedrin/sanhedrin_52.html

¹² Based on: Stephen A. Newman, “An Electric Ark: The History of an Interpretation,” *Jewish Bible Quarterly*, <https://www.questia.com/read/1G1-519900168/an-electric-ark-the-history-of-an-interpretation>

¹³ KJV Dictionary Definition, <https://av1611.com/kjbp/kjv-dictionary/emeroths.html>

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- ¹⁴ Baruch J. Schwartz, “The Garments of the High Priest: Anthropomorphism in the Worship of God,” n.d., <https://www.thetorah.com/article/garments-of-the-high-priest-anthropomorphism-in-the-worship-of-god>
- ¹⁵ Staff Writer, “Hebrew Studies of Exodus Reveal Ark Was Dangerous Communication Device,” Israel365 News, November 1, 2017 (italics added), <https://israel365news.com/319553/biblical-researcher-uses-science-uncover-dangerous-secrets-ark/>
- ¹⁶ David Kauffman, “The Ark of the Covenant from an Engineering Perspective,” David Kauffman, May 9, 2024, <https://davekauffman.ca/the-ark-of-the-covenant-from-an-engineering-perspective/>
- ¹⁷ Kauffman.
- ¹⁸ Fred Harding, *God’s Electronic Communicator* (Barnstaple, UK: Tekline Publishing, 2017), pp. 30–36. See also Kauffman.
- ¹⁹ See Fred Dahl, *Listening to the Ancients: Before History Began* (Chester, NY: Inkwell, 2026,) p. 115.
- ²⁰ “Ancient Jewish History: The Urim & Thummim,” Jewish Virtual Library, n.d., <https://www.jewishvirtuallibrary.org/the-urim-and-thummim>
- ²¹ Harding, 70.
- ²² Harding, 70–71.
- ²³ Harding, 77.
- ²⁴ Harding, 78–81.
- ²⁵ Alonzo L. Gaskill, “Clothed in Holy Garments: The Apparel of the Temple Officials of Ancient Israel,” BYU Religious Studies Center, n.d., <https://rsc.byu.edu/ascending-mountain-lord/clothed-holy-garments-apparel-temple-officials-ancient-israel>
- ²⁶ Harding, pp. 81–83.
- ²⁷ Harding, pp. 83–86.
- ²⁸ Harding, 86–87, 90.
- ²⁹ Harding, pp. 90–92; Alonzo L. Gaskill, “Clothed in Holy Garments: The Apparel of the Temple Officials of Ancient Israel,” BYU Religious Studies Center, n.d., <https://rsc.byu.edu/ascending-mountain-lord/clothed-holy-garments-apparel-temple-officials-ancient-israel>
- ³⁰ Harding, pp. 92–94.
- ³¹ Ramban Nachmanides, *Commentary on the Torah*, trans. Charles B. Chavel (New York: Shilo Publishing House, 1973), 2:481, in Alonzo L. Gaskill, “Clothed in Holy Garments: The Apparel of the Temple Officials of Ancient Israel,” BYU Religious Studies Center, n.d., <https://rsc.byu.edu/ascending-mountain-lord/clothed-holy-garments-apparel-temple-officials-ancient-israel>
- ³² “Book of Abraham,” Wikipedia, https://en.wikipedia.org/wiki/Book_of_Abraham
- ³³ Antiquities, III:8:9, in Harding, p. 120.
- ³⁴ “Best Conductor of Electricity: Choosing the Right Metals,” QuestTech, December 20, 2018, <https://questtech.ca/blog/best-conductor-electricity/>
- ³⁵ Harding, pp. 129–136, 135–136; “Body Wearable Radio Detection Finding (DF) Antenna,” SBIR•STTR, n.d., <https://www.sbir.gov/content/body-wearable-radio-direction-finding-df-antenna>; Jason Ford, “Antennas Can Be Embedded Directly into Military Clothing,” *The Engineer*, August 23, 2011, <https://www.theengineer.co.uk/content/news/antennas-can-be-embedded-directly-into-military-clothing/>
- ³⁶ Harding, pp. 137–138.
- ³⁷ Nadir James, “What Is a Resistor?” DigiKey Maker.io, n.d., <https://www.digikey.com/en/maker/tutorials/2025/what-is-a-resistor>
- ³⁸ Raymond M. Fish and Leslie A. Geddes, “Conduction of Electrical Current to and through the Human Body: A Review,” National Library of Medicine, October 12, 2009, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2763825/> : “A calloused, dry hand may have more than 100,000 Ω (1K Ω) because of a thick outer layer of dead cells in the stratum corneum. The internal body resistance is about 300 Ω , being related to the wet, relatively salty tissues beneath the skin.”
- ³⁹ “Benefits of Wearing Linen Clothes in Summer,” LinenMe, August 21, 2020, <https://www.linenme.com/news/category/linen-for-summer/>
- ⁴⁰ “What Is a Capacitor?” Keysight, n.d., <https://www.keysight.com/used/us/en/knowledge/guides/what-is-a-capacitor-used-for>

⁴¹ Harding, pp. 139–141.

⁴² “Cloud, Cloud of the Lord,” BibleStudyTools, n.d., <https://www.biblestudytools.com/dictionary/cloud-cloud-of-the-lord/>