

Annual Review of Linguistics Fantastic Linguistics

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Abstract

Many nonlinguists believe that their ability to speak at least one language provides special insight into the essence of languages and their histories. One result of this belief is a plethora of theories about language from a surprising variety of perspectives: where particular languages (or all languages) originated, which languages are related by a shared history, how undeciphered writings or pseudowritings are to be read, how language figures in paranormal claims as "evidence" for reincarnation and channeled entities, and much, much more. This review surveys some of the major areas in which fringe and crackpot claims about language thrive. Only a few topics and examples can be covered in the limited space of a single article, but these should be enough, we hope, to suggest the range of wonderfully wacky pseudolinguistic notions out there.

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1. INTRODUCTION

This review surveys theories about language that range from the fringe to the crackpot. Fringe and crackpot claims about language display the standard pseudoscientific characteristics discussed many years ago by Martin Gardner (1957) and by numerous observers since then, such as Michael Shermer (2011). The difference between the theories we discuss and other pseudoscientific claims lies in the subject matter. Instead of focusing on a more common area like physics, evolution, or medicine, linguistic pseudoscientists concentrate on language. The scholarly literature on linguistic pseudoscience is scanty compared with the literature on physics and medical pseudoscience or even archaeological pseudoscience [e.g., Stephen Williams's (1991) Fantastic Archaeology]. However, at least two books have been published on fantastic linguistics: Mark Newbrook and colleagues' (2013) Strange Linguistics: A Skeptical Linguist Looks at Non-Mainstream Ideas About Language and Karen Stollznow's (2014) Language Myths, Mysteries and Magic.

The range of topics in this domain is huge. We have tried to cover the most prominent topics, but space limitations preclude detailed discussion of more than a few examples under each topic heading, and for the same reason we must unfortunately omit innumerable kinds of strange claims about language. We have decided to avoid topics about which professional linguists might disagree—that is, areas where linguists might disagree about whether a topic qualifies for fringe (much less crackpot) status. The fantastic linguistic claims that we discuss in the following sections fall into four general categories: first, claims about language history, including far-fetched proposals of genetic affiliation, strange notions about etymology, and ideas about the origin of language; second, dubious texts and decipherments; third, bizarre interpretations of genuine texts; and fourth, paranormal claims about languages.

In general, we try to avoid cluttering the text with shudder quotes to indicate our skepticism about a particular claim [e.g., that hypnotic subjects can be age regressed to earlier lives to provide evidence of reincarnation (Section 5)].

2. CLAIMS ABOUT LANGUAGE HISTORY

Some of the oldest claims about language history concern a question that has occupied Western thinkers since at least the Middle Ages. Because the Old Testament of the Bible is mostly written in Hebrew, a common assumption has been that Ancient Hebrew must be the world's original language—that it was the language spoken in the Garden of Eden. This is the position of the Jewish exegetical tradition because the name Adam gave to Eve was a Hebrew name. Hebrew is thus "imagined to be the language from which all other languages were descended" [Jespersen 1964 (1922), p. 21]. Jespersen [1964 (1922), p. 21] added that "the fact that Hebrew was written from right to left, while we in our writing proceed from left to right, was considered justification enough for the most violent transposition of letters in etymological explanations" that attempt to link Hebrew words to words in European languages. Hebrew continues to be a popular choice for the original language; for instance, a modern theory called Edenics, the brainchild of Isaac Mozeson, holds that all languages sprang from Hebrew (Laing 2013). However, other languages have also been the subjects of fanciful origin theories. Johannes Goropius Becanus (1519–1572) argued that Dutch must have been the original language because it stands to reason that the oldest language must be the simplest one, and the simplest language must be the one with the shortest words, and Dutch words are shorter than Latin, Greek, or Hebrew words (Liberman 2007). A particularly charming theory has long been attributed to Andreas Kemke, a patriotic Swedish philologist, who said that in the Garden of Eden, God spoke Swedish, Adam spoke Danish, and the serpent spoke French. However, this story may be seriously misleading: Elert (1978) wrote that the man's name was Kempe, not Kemke, and (more important) that his claim about the languages of the Garden of Eden was a joke, not meant to be taken seriously. Some Mormons believe that the incomprehensible utterances of glossolalia are in fact the language of Adam, although this is not an official position of the Church of Jesus Christ of Latter-Day Saints.

Perhaps the most famous pseudoscientific claims about language history are attributable to Nikolay Yakovlevich Marr (1864–1934) (Bjørnflaten 1982). He first proposed a relationship among the Kartvelian languages of the Caucasus, Semito-Hamitic (now called Afroasiatic), and Basque. He called this the Japhetic family and argued that it formed a substratum that preceded Indo-European in Western Europe. He subsequently expanded on this claim and argued that all of the world's languages descended from a single ancestor and that Proto-World developed from a set of four prelinguistic exclamations, the syllables *sal*, *ber*, *yon*, and *rosh*.

Marr successfully assimilated to the Marxist intellectual climate of the Soviet Union and characterized language as a superstructural phenomenon. He claimed that different social classes speak very different language varieties and that the versions of different languages spoken within a social class are linguistically more similar to each other than are the different social registers of the "same" language. These claims are of course empirically false. During his lifetime, Marr attained considerable stature in the USSR, but in 1950, Stalin himself published an article refuting Marr's theory (Stalin 1950).

Similar in some ways was the Sun Language Theory (Güneş Dil Teorisi) propounded by none other than Mustafa Kemal Atatürk (1881–1938), the first President of Turkey (Lewis 1997). According to Atatürk, primitive man worshipped the sun and uttered the syllable $a\check{g}$ on seeing it. This exclamation became the first morpheme. Other such pairings of object and exclamation led to other morphemes of the first language, from which all other languages are derived. That first language was a form of Turkish. Proponents of the theory also claimed that Sumerian, generally considered a linguistic isolate, is a close relative of Turkish, thereby pushing back the first attestation of the Turkic languages by 4,000 years.

The primitive morphemes posited were very abstract, and the rules by which they were fused into actual Turkish words were vague. Here is the etymology of *unutmak* 'to forget' put forward by one of the few foreign proponents of the theory, Hermann Kvergić (TDK 1937, p. 333) (the stem is *unut*; *-mak* is the infinitive suffix):

Its earliest form was $u\check{g}+un+ut+um+ak$, $U\check{g}$, 'discriminating spirit, intelligence', is the mother-root. The n of un shows that the significance of the mother-root emerges into exterior space. The t/d of ut is always a dynamic factor; its role here is to shift the discriminating spirit into exterior space. The m of um is the element which manifests and embodies in itself the concept of the preceding $u\check{g}-un-ut$, while ak completes the meaning of the word it follows and gives it its full formulation. After phonetic coalescence, the word takes its final morphological shape, unutmak, which expresses the transference of the discriminating spirit out of the head into the exterior field surrounding the head; this is indeed the meaning the word conveys.

The Sun Language Theory was presented at a conference convened by the Turkish government in 1936, to which a number of prominent foreign scholars were invited. The *New York Times* (Turks Teach 1936) reported as follows:

Work done by various scientists during the last fifty years goes to show that the Turkish race has been grossly maligned by older historians biased by racial or religious prejudices. The Turks are far from being a predatory race of barbarians. The Turks reached, in remote ages, a high state of culture which, during migrations into China, India, Mesopotamia and Asia Minor, they spread among the less enlightened peoples.

They should therefore really be considered the fathers of civilization and possessors of one of the greatest and most glorious histories in the world. As regards language, the new theory is called the "sun language."

The Sun Language Theory was part of the attempt to reposition Turkish civilization as the modern and secular descendant of the founders of human civilization (Aytürk 2004) and to dispel the image of Ottoman Turkey as backward and decadent. It briefly became the official theory of the Turkish government and institutions but lost this status rapidly upon the death of Atatürk. It still has a following among Turkish nationalists. There is at least one website devoted to it, and there have been disputes among Wikipedia editors as to how the theory should be portrayed.

Dubious historical linguistic claims are also common among ultradiffusionists, who believe that distant travels and migrations were more extensive and occurred at earlier dates than are generally accepted by scholars. An example is a proposal put forward by Ethel Stewart (1991, p. 470) in a lengthy book. Stewart claimed that the speakers of Athabaskan languages, found mostly in Alaska and northwestern Canada but also in the southwestern United States (Navajos and Apaches) and coastal northern California and southern Oregon, originated in Central Asia and fled to North America as a result of the Mongol conquest of the Xi Xia Empire in 1227 CE.

Stewart did not present direct evidence of this migration, but she based her case on purported evidence that the Athabaskans formerly had lived in Central Asia. One argument is nonlinguistic. Stewart observed that northern Athabaskans, who live in areas with no snakes or innocuous snakes of modest size, tell stories about monster snakes. She argued that because these stories were originally about alligators, the Athabaskans must have once lived in Central Asia. There are actually no alligators in Central Asia. Old-world alligators are found only in Anhui Province in eastern China.

The remainder of Stewart's evidence is linguistic. It takes two forms. One is the observation that Chinese is a tonal language and that some Athabaskan languages are tonal. Stewart concluded that Athabaskan must be related to Chinese. This argument fails for multiple reasons. First, both Proto-Chinese and Proto-Athabaskan are reconstructed as nontonal. Second, roughly half the languages in the world are tonal (Maddieson 2013). Being tonal therefore provides no evidence of genetic relationship. Finally, Chinese is not indigenous to Central Asia and was present there in the thirteenth century only as a foreign language.

The remainder of Stewart's argument consists of unsystematic comparisons between the names of Athabaskan peoples and places and words taken from a variety of Asian languages. Here, for example, is her explanation of the name of the Sekani people of British Columbia, which in their own language is *tsek'ane* 'mountain people,' consisting of *tse* 'mountain,' *k'a* 'on,' and *ne* 'human plural' (Stewart 1991, p. 470):

Secanais, Thikanies. Se-Cane and Thi-Cane have the same sound as the transcriptions made from sound. Se appears to be an abbreviation of the town of Se-to-ña, the winter residence of the Tu-ku-hun Kings of Shan-shan, situated to the southwest of Sa-cu. Can is listed as a clan name at Sa-cu, and the e ending is the genitive. Cane means of the Can clan. Thi, like kfwi, means Bald Heads, an old name for the Tu-ku-hun. The Se-Cane, or Thi-Cane, were Tu-ku-hun of the Can clan of Se-to-na.

To the weakness of the evidence adduced in favor of this hypothesis by Stewart we must couple the fact that the archaeology is very much against it. While the date of arrival of the Athabaskans in North America is disputed, there is strong evidence that it occurred long before the thirteenth century (Matson & Magne 2007).

Stewart's proposal has had little impact outside of Turkey, where the proposed connection to Central Asia is taken to mean a connection to Turkic-speaking peoples. However, she twice gave invited lectures to Turkish scholarly societies, and her book was well received in Turkey; it was positively reviewed in the leading newspaper, which reported that a Turkish sociologist planned to translate her book into Turkish (Özbayoğlu 1993).

3. DUBIOUS TEXTS AND DECIPHERMENTS

The most prolific discoverer of "ancient inscriptions" that supposedly provide evidence of pre-Columbian European and North African visitors to North America was the late Howard Barraclough (Barry) Fell, a Harvard marine biologist. Fell reported his findings in articles and in three books (Fell 1976, 1980, 1982). His methods are exemplified here from one of his numerous examples, petroglyphs on the walls of two caves in West Virginia.

The March 1983 issue of *Wonderful West Virginia*, a monthly magazine published by the State of West Virginia Department of Natural Resources, contains a series of three articles about two petroglyphs—rock carvings—found in the state. Two of these articles, by Barry Fell (1983) and his follower Ida Jane Gallagher (1983), claim that the petroglyphs are Irish Gaelic inscriptions in Ogam, an alphabet used in the first millennium CE by (primarily) pre-Christian Irishmen. Fell translated the markings as a message describing the birth of Christ. The methodology of his translations is instructive.

The first question that must be asked about marks on rocks is, what made them? Are they manmade, or are they the result of natural processes such as glacial action or fault fracturing? To judge by the photographs in one of Fell's (1976) books, some markings he identified elsewhere as Ogam writing were in fact produced by geological agents, not human ones (see, e.g., Cole 1979, Lee 1977). But that is not the case with the West Virginia petroglyphs; the one in Wyoming County, at least, was clearly carved by humans.

The second question is, do the petroglyphs represent writing, or are they pictorial? The West Virginia petroglyphs have traditionally been identified as Native American picture writing—that is, not true language-based writing. Mallery's [1972 (1893)] classic two-volume collection shows that such inscriptions are common in many parts of North America and that the picture writing was still used widely by Native Americans after they had come into contact with whites. There is therefore no doubt that Native Americans made such marks on rocks, and, before the seventeenth or late sixteenth century CE, there is no evidence of any human presence in West Virginia other than Native Americans (see, e.g., Goddard & Fitzhugh 1979). The burden of proof thus lies on anyone who claims that other people were there earlier and that the petroglyphs were carved by non-Native Americans.

If the carvings are genuine eighth-century writing, as Fell (1983) claimed, then Native Americans are excluded as an original source because no North American Natives had true writing systems before they came into contact with Europeans, and none of the true pre-Columbian writing systems in the New World (e.g., Mayan hieroglyphics) were alphabets. Fell's case would be considerably strengthened if the carvings turned out to be genuine alphabetic writing of any kind, and the link to Ireland would be secure if the writing turned out to be genuine Ogam representing (as Fell claimed) the Old Irish language. Such solid linguistic evidence, provided that the possibility of a hoax could be ruled out, would override the otherwise-powerful objection that eighth-century Irish visitors apparently had come only to carve rocks and had left no other traces of their impressive penetration deep into the interior of eastern North America. Fell provided no explanation for this remarkable behavior; nevertheless, if eighth-century Irish is carved on the rocks in Ogam letters, then the Irish (or their pupils) must have been there.

But the markings are not Ogam. Their resemblance to Ogam is, in fact, so slight as to require extraordinary determination to support a belief that they could be genuine Ogam. The petroglyphs present a number of features that are unique from the viewpoint of genuine

¹Fell (1983) in fact claimed that he had other evidence besides the "Ogam." However, as Goddard & Fitzhugh (1979), among others, have observed, there is no evidence of <u>any</u> old-world artifacts or skeletons in America dating from pre-Norse times.

Ogam attestations, all of which are in the British Isles, and Fell explained none of these features satisfactorily. For example, Fell (1983, p. 13) claimed that the inscriptions were written in Ogam Consaine, a style of Ogam writing that lacks vowels, but no vowelless variety of Ogam is reliably attested in the Old World, much less in the New. In addition, Fell's interpretation of the marks exhibits a high degree of arbitrariness, and again, none of his ad hoc decisions—such as the introduction of spaces between Ogam "letters" and of new "letters" where photographs of the rock faces show unmarked rock—are defended. And finally, although innocent ignorance could account for his failure to use up-to-date standard reference works on relevant linguistic matters, Fell's selective use of the sources he did cite suggests something worse than innocent ineptness. For instance, Fell seized upon certain points by Brash (1879) that supported his position, but he resolutely ignored information in Brash's and other works that might have weakened his position [Cole (1988, p. 8) mentioned this trait as a typical characteristic of the pseudoscientist]. For instance, Brash said that true Ogam had no connection to Christianity and that the fourteenth-century *Book of Ballymote* (on which Fell relied heavily) was composed mainly of alphabets derived from Ogam and had been made up for fun by medieval scribes.

4. BIZARRE INTERPRETATIONS OF UNDERSTOOD TEXTS

Texts whose meanings are unknown or that may not be texts at all are easy targets for proponents of unusual interpretations because there is no simple check on them. However, from time to time, someone comes up with an oddball interpretation of a text that is well understood. One example is the alternative interpretation of the Popol Vuh by Deal (1993).

The Popol Vuh is the creation story of the K'iche' Maya people of Guatemala. It was written down, in parallel columns in K'iche' and Spanish, by Father Francisco Ximénez in 1701 (Tedlock 1985). K'iche' is a Mayan language still spoken by 2.3 million people in Guatemala. The K'iche' of the colonial period is well understood (Dürr 1987) and is taught in some universities (Dürr 2015).

Motivated by similarities between the story of the Popol Vuh and that of the Hebrew Bible, Deal claimed that the Popol Vuh was actually written in a Semitic language related to Biblical Hebrew and that the similarities in both the story and the language are due to the pre-Columbian migration of speakers of Hebrew to Central America. The biblical parallels can easily be accounted for by the desire of the K'iche' to legitimate themselves and their land titles in the eyes of the Spanish Catholic conquerors. The use of a Semitic language, if real, would be much harder to account for without positing contact with Hebrew speakers as Deal did.

Deal obtained what he considered evidence of a Semitic language by taking words and phrases of the text, stripping out the vowels, and comparing the resulting sequences of consonants with the consonants of Biblical Hebrew words. For example, the K'iche' name of the god Quetzalcoatl is *q'uqulka:n*, spelled Kukulcan by Deal. In K'iche', /q'uq/ means "Quetzal bird," /-ul/ derives adjectives from nouns, and /-ka:n/ means "snake," so the term as a whole means "Quetzal-bird-like snake," a culturally appropriate name for a god depicted as a feathered serpent. Deal (1993, pp. 32–33) observed that in Hebrew, /hqq/ means "lawgiver," /'l/ means "highest," and /khn/ means "priest." He therefore proposed that Kukulcan means "lawgiver priest" and refers to Moses.

This procedure is problematic in several respects. The sequences of Hebrew consonantal skeleta that Deal proposed do not conform to the grammar of Biblical Hebrew. To account for this, Deal claimed that the language is actually "creolized Shemetic," a language with a Hebrew lexical base but without its grammar. He proposed, however, no scenario under which this creolization might have taken place. Moreover, the grammar of K'iche', while quite different from that of Hebrew, exhibits morphological complexity not expected of a creole.

Deal justified the omission of vowels from his comparisons by observing that vowels are meaningless in Semitic languages. He evidently was referring to the fact that in these languages, roots consist of sequences of consonants. However vowels are by no means meaningless in Semitic languages.

Since Deal required only vague similarities in the sequence of consonants, ignored the vowels, and was not constrained by the meaning of the K'iche' words and phrases, his probability of finding chance similarities between the K'iche' and Hebrew was very high. Whereas the entire text makes sense in K'iche' and has a known interpretation, both because K'iche' is a known language and because we have a contemporary Spanish translation, Deal was able to interpret only a few scattered bits as Hebrew.

There is a similar proposal that the Hebrew Bible contains hidden messages revealed by taking every *N*th letter (Witztum et al. 1994). McKay et al. (1999) have shown that these results are not statistically significant but may be attributed to chance.

5. PARANORMAL LANGUAGE

Three topics stand out in the domain of paranormal language: glossolalia, or speaking in tongues; xenoglossy; and channeling. The first two of these involve speaking in a language that the speaker has not learned in his or her current lifetime (though only xenoglossy explicitly includes claims of reincarnation), and the third manifests itself as English spoken with a pseudoforeign accent that is unlike the speaker's ordinary speech. We discuss each of these in turn.

Glossolalia is a religious phenomenon that, in the United States, came to prominence in African American Pentecostal churches. In that context, a member of the congregation is moved spontaneously to stand and speak in tongues; the utterance does not count as genuine unless and until another member of the congregation is moved spontaneously to offer an interpretation of the utterance. Each utterance, the original and the interpretation, is seen as a gift from God. The practice of speaking in tongues has spread to other charismatic churches, and it is also known in non-Christian religions elsewhere in the world.

A book-length linguistic analysis of glossolalia, William Samarin's (1972) *Tongues of Men and Angels: The Religious Language of Pentecostalism*, still stands as the main linguistic study of the religious manifestation. Samarin's findings, confirmed by other studies (e.g., Goodman 1972; see also Samarin 1974), show that glossolalia is fluent speech characterized by sounds and syllables from the speaker's native language arranged into CV and V syllables and by a great deal of repetition. However, there are no words or syntactic structures and therefore no elements that link to lexical meanings. It is not, from a linguist's viewpoint, language. This of course has no bearing on its religious significance.

There are many published claims (and surely many more unpublished claims) that particular instances of glossolalia do indeed represent real modern and ancient human languages, but no evidence that would convince any linguist has been offered to support any of these claims. Sumerian, a long-extinct language that is the earliest known written language, is a popular candidate. Other reports come from the early Pentecostal movement: Charles Fox Parham "claimed an ecstatic experience of speaking Swedish," and Agnes Ozman "both spoke and wrote in Chinese and other languages after Parham laid hands on her" (Damick 2016).

Unlike glossolalia, xenoglossy is claimed to be a paranormal manifestation of genuine human language. Hypnotic subjects are age regressed to earlier lives and encouraged to speak the languages they spoke in their earlier lives. The most prominent practitioner by far was the late University of Virginia psychiatrist Ian Stevenson, a prolific contributor to *The Journal of the American Society for Psychical Research* (e.g., Stevenson 1976, 1980). Stevenson (1974, 1984) claimed that there is a crucial distinction between recitative xenoglossy and responsive xenoglossy; he argued that only the latter, which involves conversational ability, can provide convincing evidence for

xenoglossy. His claim was that "one can only acquire the ability to use a language responsively by using it, not by overhearing it spoken" (Stevenson 1984, p. 160).

For two of his subjects, one ("Jensen") who supposedly spoke Swedish in a former lifetime (Stevenson 1974) and one ("Gretchen") who supposedly spoke German in a former lifetime (Stevenson 1984), Stevenson included interview transcripts that made linguistic analysis possible. The analysis shows that neither subject knew more than a handful of words and a few bits of the grammar of their purported earlier life's language (Thomason 1984, 1987, 1996). Their answers to interviewers' questions tended to be single words, often distorted and sometimes wildly inappropriate—as when Jensen was asked what he would pay for some item at the market and he answered, "my wife." When a subject failed to answer a question promptly, the Swedish and German interviewers (who were believers in the possibility of age regression to a previous life) often repeated the question in English translation, so the subjects had the opportunity to learn more words in the target language during the interviews. Many of the questions were yes/no questions, so the subject needed to know only the words for yes and no to answer appropriately. Furthermore, the interviewers had no way of checking the answers for accuracy since only the subjects could be expected to know anything about their previous lives. These features of Jensen's and Gretchen's respective supposed knowledge of Swedish and German show Stevenson's faith in "responsive xenoglossy" to have been misplaced (Thomason 1988; 1996, p. 843).

Here is a fairly typical example from the Gretchen transcript. At one point, the interviewer asked her, "Was gibt es nach dem Schlafen?" ('What is there after sleeping?' which means, in this particular context in the transcript, 'What meal do you have after you sleep?'). Gretchen's answer was "Schlafen...Bettzimmer" ('sleep...bed-room'). She clearly recognized the word for 'sleep,' but equally clearly she did not understand that the question was about meals, so she guessed that the question was instead about where she slept, and she answered with a calque from English *bedroom* rather than the actual German word for bedroom, which is *Schlafzimmer* (literally 'sleep room').

In a third case, Stevenson provided no transcripts that could be analyzed, but his description of the case shows clearly that the subject had ample opportunity, as well as a strong motive, to learn the language of the previous life. The subject was a native speaker of the Indic language Marathi, and in her previous life as Sharada, she was said to be a speaker of the closely related Indic language Bengali, a language and culture with which she felt a strong affinity in her current lifetime. Stevenson (1984, p. 73) reported that Sharada manifested Bengali spontaneously without hypnosis but in "an altered state of consciousness." The only trained linguist who evaluated Sharada's Bengali competence concluded, among other things, that her Bengali was "neither natural nor fluent, that her accent was foreign," and that "she spoke a nonnative variety of twentieth-century Bengali—definitely not a nineteenth-century variety," which was when she had supposedly lived her previous life as a Bengali speaker (Thomason 1996, p. 839).

A reliable test of a hypnotic (or other) subject's command of a purported previous life's language would be to ask the subject to translate the words on a Swadesh list of basic vocabulary into that language. Thomason (1984) used this technique in the 1980s when a local hypnotist in Pittsburgh, Pennsylvania, contacted her with a request to verify the previous lives' languages spoken by his age-regressed hypnotic subjects. The hypnotist's first subject was said to be age regressed to a previous life in early nineteenth-century Bulgaria and to speak Bulgarian. Like Stevenson, the Pittsburgh hypnotist was not a fraud: He did hypnotize his subject and ask her to translate the English words on the list—"all," "animal," and so on. The subjects' translations were not Bulgarian; on the contrary, they showed most of the characteristics identified by Samarin (1972) as typical of glossolalia: mostly American English sounds, much repetition (so that the subject's word for, say, animal was a slightly changed version of the word for all). The subject did have one sound sequence that is frequent in Bulgarian, but none of the words resembled Bulgarian words. And in fact the

translations could be shown to be unlikely or impossible as words in any natural human language; the hypnotist eventually became bored with eliciting the Swadesh-list words and switched to eliciting words for the numbers on the Swadesh list, and it turned out that the word for five bore no resemblance at all to the word for fifty, and similarly for other numeral words. The list was gibberish. The hypnotist tried again with a subject who was said to speak fourteenth-century Gaelic, in France. Many items on that subject's word list bore a strong lexical and phonological resemblance to French words and to Church Latin words; none of the items bore any resemblance to Gaelic. The hypnotist's third and last try was with a subject who supposedly spoke nineteenth-century Apache. This subject did not even try to translate the Swadesh-list words, the few "Apache" words she suggested were not Apache, and under hypnosis she spoke to the hypnotist only in stereotypical American Indian Pidgin English. Like Stevenson's subjects, the Pittsburgh hypnotist's subjects were failures at speaking the languages of their purported previous lives.

The third and final topic in this section is channeling—specifically, channelers (modern-day mediums) who, after entering a trance state, manifest entities who produce "wise utterances," usually in an accent that differs markedly from the channeler's native dialect. These (pseudo)foreign accents presumably help channelers impress their audiences: They hold workshops, sometimes in large lecture halls, and attendees must pay sizable sums of money to listen to them. Not all channelers adopt unusual accents; for instance, Ken Carey, who claimed to be a channel for Jesus Christ, simply spoke in his own American English dialect (Daynal Inst. 2010). However, most of the channelers we have listened to do speak differently in their trance and nontrance states. They typically resist efforts by interviewers to pin down their accents to a particular time or place. For example, Emmanuel (Melton 2001, p. 501), an entity channeled by Pat Radegast, commented, "And so I say to you, rather than to attempt to understand who I am, allow whatever experience comes to you to be honored" (quoted in Thomason 1989, p. 391). Channelers rarely mention historical facts that can be checked. They deliver their messages of (typically) peace and light and prosperity in a pseudoelevated, pseudoarchaic style, as in this statement by St. Germain, who was channeled by a woman named Azena Ramanda (see, e.g., St. Germain 1994): "That which is the tale has not been told. It is not for that which is the currency.... Anyone may perceive anything they so desire from anything" (quoted in Thomason 1989, p. 392).

If channeled entities speak in non-American dialects, linguists can use two methods to test the genuineness of the manifestation. The easy but rarer way is to make use of any historical facts provided by the entity. For instance, Ramtha, channeled by J.Z. Knight (https://www.ramtha.com/ prophecies), is supposed to be a 35,000-year-old refugee from Atlantis, and Mafu, channeled by Penny Torres, is said to be 32,000 years old [Mafu emerged in the 1980s as Ramtha's popularity was growing (see Melton 2001, p. 955)]. Both Ramtha and Mafu speak in vaguely British accents, an utterly improbable dialect for any entity who is supposed to be more than a few hundred years old. One entity, Matthew, who was channeled by Marjorie Buckley Turcotte (ConsciousCT 2005), did provide details of his life in sixteenth-century Scotland. He said he grew up in "a seaport town" called the Firth of Forth; apparently, the channeler was unaware that the Firth of Forth is a large body of water, not a seaport town. In describing his life, Matthew used at least two words that were not yet in use in sixteenth-century English: rapscallion, which is not attested until 1699, and bully boy, which existed in Matthew's lifetime but not in the pejorative meaning of Matthew's usage. Other features further mark Matthew as an improbable sixteenth-century Scot, among them the silent gh of neighbour, which would have been pronounced as a fricative [x] in Matthew's purported lifetime.

The harder but more interesting way of exposing channeled entities as frauds is to examine their speech for signs of features inconsistent with real human speech. Of all the recordings of channeled speech that Thomason listened to, Micciah, channeled by Julie Winter (2019), provided

the most interesting evidence of fakery. Winter described Micciah as "an energy entity who works with me while I'm in trance," and his voice quality was high-pitched and unnatural sounding, often a monotone. His vowels were long and distorted but were not distorted consistently in the same way. What was especially striking about Micciah was that his language sounded least like American English when he was speaking slowly and carefully; when he became excited in delivering his "wise words" with speeded-up tempo and extra loudness, his speech sounded more and more like ordinary American English—just the opposite of what one would expect from a nonnative speaker of English, as Micciah would have to be to produce the slow and careful utterances.

None of the channeled entities that Thomason listened to were plausible as real speakers of real languages or dialects; all of them (except for Ken Carey and his version of Jesus Christ) sounded fake, and most of them were demonstrably fake.

6. CONCLUSION

This survey of varieties of linguistic pseudoscience has only scratched the surface of the subject: There is more, much more, out there in all the categories we have discussed in this review. A Google search of key words—xenoglossy, channelers, and other categories—should give an indication of the breadth and depth of the Internet's attention to these matters.

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