Merritt Ruhlen (1944–2021)

Frank Merritt Ruhlen was born on May 10, 1944. His father, also Frank Merritt Ruhlen (1909–1997), was an administrative law judge for the Civil Aeronautics Board, and the family lived in Virginia, near Washington, D.C. His mother was Florence Ennis (Ruhlen) (1911–2007), who had worked as an administrative assistant before marriage. The couple had three children: the twins Merritt and Marian, and a younger daughter Janet. Merritt (junior) studied at Rice University, the University of Paris, the University of Illinois, and the University of Bucharest as a Fulbright fellow, and received his PhD in 1973 from Stanford University with a dissertation on the generative analysis of Romanian morphology. Subsequently, Ruhlen worked for several years as a research assistant on the Stanford Universals Project directed by Joseph Greenberg and Charles Ferguson.

Beginning in 1994 Ruhlen was a lecturer in Anthropological Sciences and Human Biology at Stanford University. In 2001 Merritt Ruhlen, together with Murray Gell-Mann of the Santa Fe Institute and Sergei Anatolyevich Starostin of the Russian State University of the Humanities, co-founded the Evolution of Human Languages Project, based at the Santa Fe Institute (see below). Since 2005 Ruhlen had been on the advisory board of the Genographic Project and held an appointment as a visiting professor at the City University of Hong Kong. He had also been a Correspondant of the Muséum National d'Histoire Naturelle in Paris, and served as a U.S. State Department interpreter in French and Romanian. Ruhlen knew and worked with Joseph Greenberg for several decades, and after Greenberg's passing in 2001 Ruhlen became the primary advocate and defender of Greenberg's methods of language classification.

Since studying at Stanford Merritt lived in Palo Alto, CA, with his wife Anca, who has a Master's degree in library science, and has worked in several different library collections at Stanford University, and in the Genetics Department. Anca informs us that Merritt was a very good father and raised his sons, Johnny and Ricky, to be polite and respectful. He was with them every day, all day, until they reached the age for college, and Merritt worked on writing his books at the same time. Their school teachers praised them as being good to the other children. As adults Johnny is in Adtech business development, and Ricky is a software consultant. Both live in San Francisco.

After a long battle with a serious illness Merritt suffered an accident at home, and perished a week later on January 29, 2021.

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Merritt Ruhlen's Legacy

Ruhlen was the author of several books, including A Guide to the Languages of the World (1975), A Guide to the World's Languages, Vol. 1: Classification (1987; second edition 1991), The Origin of Language: Tracing the Evolution of the Mother Tongue (1994a), On the Origin of Languages: Studies in Linguistic Taxonomy (1994b), and numerous articles in journals, books, and encyclopedias. The Origin of Language was translated into French by Pierre Bancel and has been published as L'Origine des langues – Sur les traces de la langue mère (1997a and 2007a); in Portuguese as A Origem da Linguagem: Reconstituindo a Evolução da Lingua Mãe (1998c); in Italian as L'origine delle lingue (2001c); and in Turkish as Dilin Kökeni: Ana Dilin Evriminin İzinde (2006).

Ruhlen's *Guide* (1987) came to be regarded as a classic, discussing in depth the genetic classification, and alternative taxonomies, of some 5,000 languages across the globe. It elucidated in detail the principles of genetic classification.

In many of his books and articles Ruhlen time after time revisited and rebutted what he considered misconceptions that had infected the field of historical linguistics. Among these were:

- A basic misunderstanding of linguistic taxonomy: that it was the result of identification of sound correspondences and the reconstruction of a proto-language. This is because most historical linguists work within the confines of a long-established language family, or a subgroup thereof, and have never had the opportunity, or inclination, to execute an original language classification themselves. To do so would require the use of multilateral comparison (see next point).
- The idea that multilateral comparison (less aptly called "mass comparison") is a novel technique invented by Greenberg, and "totally different from the traditional methods." In fact MC is really the most traditional method of taxonomy, used consciously or unconsciously by Mahmud al-Kašghari, Jan Amos Komenský, Gaston Cœurdoux, Philip Johan von Strahlenberg, and others in their early identifications of linguistic taxa, long before any discussions of reconstruction and sound correspondences.
- The idea that there is a "temporal limit," variously delineated as between 6000 years (coincidentally the approximate age of Indo-European), or slightly earlier, 7000–8000 years, beyond which genetic relationships cannot be recovered. Ruhlen, Greenberg, and their colleagues such as Sergei Starostin and Harold Fleming argued that there is no factual basis for such a temporal limit. One strong argument is the existence of the Afroasiatic (macro-)family, universally accepted, which has been glottochronologically dated by George Starostin at approximately 16.78 kya, which is consistent with Christopher Ehret's view that "the first two divergences in the [Afroasiatic] family fell in the rough time span of 22,000–15,000 BCE coincident with the Last Glacial Maximum."
- The idea that massive amounts of evidence are required to "prove" a classification, a concept unheard of before the twentieth century. "Instead of recognizing the simple basis of genetic classification, and thus linguistic relationships, twentieth century historical linguists put forth increasingly rigorous demands, generally involving reconstruction with regular sound

- correspondences, before genetic relationships will be acknowledged, demands in fact so rigorous that they can never be satisfied" (Ruhlen 2005).
- The idea that the existence of isolated errors, in the midst of large amounts of positive evidence, allows a critic to dismiss the entire proposal. "Historians and historical linguists not to mention paleontologists working from handfuls of bashed fossils use whatever material is available; they do not demand that the evidence be complete or immaculate" (1994f).

On the Origin of Languages (Stanford) was essentially a collection of Ruhlen's scholarly research essays, expressing in academic style the principles of genetic classification, once again, and defending or expanding on classifications that had been attacked or ignored. Possibly the best example of this is the chapter "Is Algonquian Amerind?," which starts with a discussion of Edward Sapir's (1913) discovery of a relationship between the Algonquian language family and the relatively isolated Wiyot and Yurok of Northern California, now universally recognized as the Algic language family. But in 1914 Sapir's hypothesis was attacked by the foremost Algonquianist of the time, Truman Michelson, on the basis of alleged "errors (real or imagined), an allusion to accidental resemblances and borrowings, a willful disregard of the most convincing positive points, a dose of taxonomic nonsense, and ... an appeal to authority." These false criteria were characterized by Ruhlen as "Diffusionist." Ruhlen noted that "whatever talents Michelson may have had as an Algonquianist – and these apparently were considerable – he had little understanding of basic taxonomic principles, and the vast majority of his objections to Sapir's hypothesis were irrelevant." Ruhlen went on to demonstrate that the same "silly" methods used by Michelson were now being applied by specialists in Native American languages to criticize Joseph Greenberg's book Language in the Americas (1987) and its hypothesis of the Amerind language family encompassing most of the languages of North and South America. Notwithstanding these detractors, Ruhlen predicted that "in time Language in the Americas will be hailed as a monumental achievement." Since then we have witnessed a substantial confirmation of a population corresponding to the postulated speakers of Proto-Amerind by geneticists (including the very small size of the founding population: e.g. Kitchen, et al. 2008: "a founder group with an effective population size of $\approx 1,000-5,400$ individuals"). David Reich entitled one section (pp. 173–76) of the American chapter of his 2018 book Who We Are and How We Got Here "The Genomic Rehabilitation of Joseph Greenberg," in which he states that "[t]he clusters of populations that [Greenberg] predicted to be most closely related based on language were in fact verified by the genetic patterns in populations for which data are available" (p.174).

Other chapters in *On the Origin of Languages* sought to buttress other more-or-less embattled taxonomic proposals: Sapir's Na-Dene, Starostin's Yeniseian and Sino-Caucasian, and Greenberg's Khoisan. Five of the chapters explore or expand on Greenberg's Amerind, including one that proposed that the closest relative of Amerind was his "Eurasiatic" (a large subgroup of the Nostratic megaphylum, largely accepted by the Russian Nostraticists and the American scholar Allan Bomhard). This concept, apparently developed by Greenberg and Ruhlen since the

1980s (Ruhlen 1989; Greenberg & Ruhlen 1992b; Ruhlen 1994b: 207–41) prefigures the discovery decades later by geneticists that there was an "Ancient North Eurasian" ghost population that eventually contributed to the Indo-Europeans and other West Eurasians, as well as to Native Americans, and "explains why Europeans are genetically closer to Native Americans than they are to East Asians" (Reich 2018: 82).

In the last chapter of *On the Origin*, "Global Etymologies" (co-authored with John Bengtson), Ruhlen dared to venture into even deeper taxonomic waters, with a list of twenty-seven etymologies meant to demonstrate that "the case for monogenesis of extant (and attested extinct) languages is quite strong." As a preface to the lexical sets the authors preemptively address the objections that would arise: borrowing, convergence, the alleged temporal limits of the comparative method, the absence of reconstruction and sound correspondences, unconvincing semantic changes, and whether errors in the data can override the hypothesis in general. Predictably, many critiques of this chapter employed the time-worn Diffusionist arguments, proving that the reviewers had not read, or at least not understood, the prefatory arguments. For example, one frequently encounters statements like "Bengtson and Ruhlen have tried to reconstruct the Proto-Human language," despite the authors' explicit denial that they were doing any such thing.

Ruhlen's other 1994 book, *The Origin of Language*, covers many of the same themes as the Stanford book, but in a decidedly more popular style, aimed at educated laymen rather than linguistic specialists. It explains the methods of language classification in the simplest possible terms, showing, for example, how languages can be roughly classified on the basis of a dozen or so basic words. There is also stress on the implications of genetic classification for historical population movements: "out of Africa," the Dene-Caucasians, Native Americans, the Bantu, Austronesian and Indo-European expansions, and the Algonquian homeland. Of course, some of these issues are vigorously discussed to this day.

Ruhlen (1994a, chapter 6; 2000a) offered a significant proposal that kinship terms like PAPA 'father', MAMA 'mother' and KAKA 'older brother' or 'uncle', etc., found in numerous "unrelated" languages throughout the world, did not evolve independently, and repeatedly, due to the babbling of children acquiring new consonants, but are actually inheritances from the original Proto-Sapiens language. Building on this the French scholars Pierre Bancel and Alain Matthey de l'Etang have conducted a thorough investigation of kinship terminology "that essentially confirms my hypothesis that it is indeed common origin—and not convergence—that is re[s]ponsible for the global distribution of these kinship terms."

Some other valuable scholarly contributions by Ruhlen, apart from the ones already enumerated above, are his in-depth case studies, of Amerind T'A'NA 'sibling' and MALIQ'A 'throat' (in 1994a), and QETS' 'left (hand)' (in 1995c). These are fascinating examples of particular historical changes, similar to Greenberg's brief discussion of KWA 'eye, round object' (Greenberg 1987: 298-99, grammatical etymology #40), which can only be done in the context of language families with great time depth. Some Amerind etymologies (Greenberg & Ruhlen

2007b) feature a convincing structure of three sequential consonants, *e.g.* Amerind SUNIK ~ SINIK 'nose', attested in the Almosan, Penutian, Chibchan, Andean, and Equatorial subgroups, and C'E-PUQ' 'elbow, knee', in Keresiouan, Hokan, Central Amerind, Paezan, and Macro-Ge. These two etymologies are not found in Greenberg's 1987 book, and must have been assembled by Ruhlen thanks to meticulous searches of Greenberg's Amerind notebooks. That all of these triconsonantal resemblances (see also MALIQ'A 'throat'), attested throughout the Americas, are purely accidental seems highly unlikely.

In 1998 Ruhlen published an article, "The Origin of the Na-Dene," in which he called attention to a number of resemblances between the Yeniseian language family in Siberia and the Na-Dene family in North America. Other scholars before this had implied a relationship indirectly, *i.e.* between Starostin's Sino-Caucasian (including Yeniseian) and Na-Dene (Nikolayev 1991), but this was the first direct comparison of the two families, and it included a proposal of regular sound correspondences. Edward Vajda seized upon this idea and in the following years has greatly expanded on it.

In 2001 Nobel physicist Murray Gell-Mann (1929–2019) of the Santa Fe Institute received a generous multi-million dollar grant from the John D. & Catherine T. MacArthur Foundation, to be used for a project of his choosing. Gell-Mann, who had studied and cherished historical linguistics since his youth, decided to dedicate the grant to a project that would help to bring historical linguistics closer to its full potential of the genetic classification of the world's languages. Quite naturally, Gell-Mann approached Merritt Ruhlen, together with Sergei Anatolyevich Starostin (1953–2005) of the Russian State University of the Humanities, a leader of the "Moscow School," and together they co-founded the Evolution of Human Languages Project, based at the Santa Fe Institute. For the first few years focused workshops were held at Santa Fe, with topics like "EHL Working Group Meeting" (February 2002), "The Khoisan Problem" (August 2002), "The Current Status of Sino-Caucasian" (October 2002) and "Linguistic Databases and Linguistic Taxonomy" (January 2003). EHL funding permitted transportation and lodging of scholars from around the world to the charming New Mexico city. Besides many eminent linguists, specialists in other anthropological fields, like archaeology and genetics, were brought into the discussions. Eventually the project sponsored linguistic databases, largely thanks to the technical skills of Starostin: see the Tower of Babel (https://starling.rinet.ru/main.html) and EHL (http://ehl.santafe.edu/) websites. Among other things, Ruhlen contributed A global linguistic database (phonetic and syntactic information on more than 5000 languages, similar to his 1975 book) and Interactive maps showing the distribution of dozens of language families and macrofamilies.

In 2011 Gell-Mann and Ruhlen collaborated on an article on "The origin and evolution of word order," which was published in *PNAS*. They concluded that the "distribution of word order types in the world's languages, interpreted in terms of the putative phylogenetic tree of human languages, strongly supports the hypothesis that the original word order in the ancestral language was SOV."

We have yet to see how Merritt Ruhlen's legacy plays out. But his career reminds us of what Dell Hymes wrote about Morris Swadesh, of an earlier generation: "Working at frontiers of knowledge, he could not always be sure of details, and sometimes went too far and fast for many of his colleagues to follow. He died before all could be woven together. Yet his explorations and the new dimensions he discovered have permanently extended our knowledge and conception of the contribution of linguistics to the understanding of the human past."

REQUIESCAT IN PACE

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