

REFERENCES

- BAAYEN, R. HARALD. 2008. *Analyzing linguistic data: A practical introduction to statistics using R*. Cambridge: Cambridge University Press.
- GRIES, STEFAN TH. 2006. Some proposals towards a more rigorous corpus linguistics. *Zeitschrift für Anglistik und Amerikanistik* 54.2.191–202.
- GRIES, STEFAN TH. 2009. *Quantitative corpus linguistics with R: A practical introduction*. London: Routledge.
- JOHNSON, KEITH. 2008. *Quantitative methods in linguistics*. Oxford: Blackwell.
- YAU, NATHAN. 2011. *Visualize this: The flowing data guide to design, visualization, and statistics*. Indianapolis: Wiley.
- University of Chicago
 Department of Slavic Languages & Literatures
 1130 E. 59th St.
 Chicago, IL 60637
 [sclancy@uchicago.edu]

Anthropological papers of the University of Alaska: The Dene-Yeniseian connection. Ed. by JAMES KARI and BEN A. POTTER. Fairbanks: University of Alaska Fairbanks, 2010. Pp. vi, 363. ISBN 9781555001124. \$40.

Reviewed by MICHAEL DUNN, *Max Planck Institute for Psycholinguistics*

This collection of papers presents and discusses a landmark achievement in linguistics: Edward Vajda's first demonstration of a plausible genealogical link between languages of Eurasia and languages of the Americas (apart from the more recent circumpolar movements of Eskimo languages). Dramatic discoveries are rare in historical linguistics: as befits an old and often library-bound discipline, the pace of change in historical linguistics is slow, and most contributions are of the incremental type. In contrast, the Dene-Yeniseian hypothesis is a big step, and whatever the eventual consensus of its truth turns out to be, the proposal of Dene-Yeniseian is an important event in the development of historical linguistics and deserves all our attention.

The collection is based on papers presented at the Dene-Yeniseian Symposium held at the University of Alaska in February 2008. It starts with two useful and informative introductions: the editors' introduction giving the historical background to the Dene-Yeniseian hypothesis, followed by an introduction from the linguistic perspective by BERNARD COMRIE, which explains to a non-specialist readership the basic principles of the comparative method in historical linguistics and sketches the typological characteristics of the two component families, Yeniseian and Na-Dene. EDWARD J. VAJDA presents the case for the Dene-Yeniseian link in a sixty-six-page paper, which he follows with another paper in which he discusses Dene-Yeniseian in the context of other long-range comparative hypotheses, with generous acknowledgment of all possible intellectual precursors to the idea. Vajda makes clear his sympathy for the 'long ranger' tendencies in historical linguistics, but sticks to a mainstream approach in his analysis.¹ Part 2 of the collection contains interdisciplinary perspectives from human genetics (G. RICHARD SCOTT and DENNIS O'ROURKE), archaeology (BEN A. POTTER), areal phonology and Na-Dene historical linguistics (JEFF LEER), 'geolinguistics' (JAMES KARI), comparative kinship (JOHN W. IVES, SALLY RICE, and Edward J. Vajda), and folklore (YURI E. BEREZKIN, ALEXANDRA KIM-MALONEY). Part 3 of the collection is devoted to commentaries: a series of reviews of the evidence for the Dene-Yeniseian hypothesis by major figures in linguistics. While all of the authors of this section agree that the evidence for

¹ For instance, he cites the thirty-six Dene-Yeniseian etymologies presented in Ruhlen 1998, although it seems that only one has been validated by Vajda so far.

the Dene-Yeniseian hypothesis is high quality and that the hypothesis should be taken seriously, there is not unanimous agreement that it has been decisively proven.

The core linguistic case for Dene-Yeniseian follows the gold standard of historical linguistics, and includes evidence for the common origin of certain morphological systems, as well as evidence for regular sound change. The evidence for shared morphological systems comes from several domains. There is evidence that both Yeniseian and Na-Dene tense-aspect-mood markers have evolved from an original bipartite verb system, with auxiliary and content verbs both hosting their own affixes. The pronominal systems are more problematic: Vajda states (53) that the lack of apparent cognacy relations between any first- and second-person pronouns is one of the reasons that few linguists have bothered to look further into Dene-Yeniseian connections. A number of possible cognates are investigated, along with a possible homology between the relative location of speech-act-participant and third-person agreement prefixes. Three 'shape prefixes' appear to have cognates in the two families, as do a set of elements that gave rise to Na-Dene classifiers. Finally, Vajda shows homologies between rather complex action nominal derivations (generally called 'infinitives' in descriptions of Yeniseian, and 'gerunds' in Na-Dene), which have been independently reconstructed in the two families.

In his discussion of the phonological systems, Vajda describes how a number of coda-reduction processes acting in parallel in Yeniseian and Na-Dene can explain idiosyncrasies in one family by the phonological outcomes in the other. Likewise, tones (observed in Yeniseian Ket and sporadically in Na-Dene languages) can be explained by parallel evolution from a single source. Vajda has identified regular phonological correspondences between the two families on the basis of one hundred cognate sets, identified after examining 'several hundred items of basic vocabulary' (94). These results are preliminary and are mostly expressed as 'Na-Dene correspondences to proto-Yeniseian' or 'Yeniseian correspondences to proto-Na-Dene', rather than as fully predictive reconstructions. The semantic correspondences are conservative, and we can expect considerable expansion of this set as the developing understanding of phonological correspondences feeds back into the cognate identification process. We are also promised an 'etymological dictionary of Dene-Yeniseian', which is projected to appear soon.

The first chapter of Part 2, by Leer, gives part of the most up-to-date reconstruction of Athabascan-Eyak-Tlingit (see also Leer 2008). This is the oldest reconstructable form of Na-Dene (i.e. not including speculative links such as Haida) and forms an essential basis for the wider Dene-Yeniseian hypothesis.

Continuing in Part 2, Scott and O'Rourke survey the genetics literature for support for the Dene-Yeniseian hypothesis. There is evidence suggesting a central Siberian origin for some or all of the indigenous peoples of the Americas, but nothing linking Ket and Na-Dene specifically. This, however, is not a strong strike against the hypothesis: there has been very little genetics sampling of Kets, and in any case, in such a tiny group the random effects of genetic drift would inevitably be very strong. Potter reports on archaeological evidence, including a fascinating series of maps showing the change in the distributions of archaeological traditions over the last 16,000 years. Potter also presents six archaeological hypotheses for the origin of Dene-Yeniseian, differing in age, location of divergence, and direction of migration (155–58). The weakest evidence (hypothesis 6) is for a very late divergence (2500–1000 cal BP); the strongest evidence supports hypotheses positing a west-east migration with a split in Asia, but the evidence does not allow him to decide between early divergence (14000–12000 cal BP, hypothesis 1) or late divergence (6000–4800 cal BP, hypothesis 4). Kari also offers a detailed hypothesis of the origins of Dene-Yeniseian, synthesizing archaeology, linguistics, and toponym information to argue for much earlier branchings within Na-Dene than are commonly supposed (with Proto-Na-Dene entering North America 14000–13000 cal BP) and for extremely long-term stability within Athabascan.

Ives, Rice, and Vajda present an analysis of reconstructed Na-Dene kinship systems in terms of forms and functions, along with a description of the kinship system and terminology of Ket. They note that the Ket system is anomalous in its region, and could plausibly descend from a common ancestor with Na-Dene, although given the antiquity of the relationships posited by the Dene-Yeniseian hypothesis this is very hard to demonstrate. Interestingly, they suggest that the seman-

tic structure of the kinship systems may have a greater degree of persistence than the actual words that encode them (see Jordan 2011). Berezkin discusses the distribution of folklore motifs in North America and, to a lesser extent, Siberia. These elements are known to be highly diffusable, and there is no evidence of a special connection between Na-Dene and Yeniseian, but Berezkin shows that they may nevertheless provide evidence toward reconstruction of deep prehistory (269–70). Kim-Maloney makes a microcomparison between Ket and Diné (Navajo) myths and reports some intriguing similarities involving fly/dragonfly motifs.

To my mind, the real challenges to the plausibility of the Dene-Yeniseian hypothesis come from the extralinguistic perspectives presented in Part 2. Could Dene-Yeniseian really be a family given the distances and likely times that separate Yeniseian and Na-Dene? The chronologically most plausible hypotheses from the linguistic perspective are the least plausible from the archaeological perspective, and vice versa. Many of the contributors are clearly wrestling with this problem.

Notice has been taken of the Dene-Yeniseian hypothesis in the press: for example, there has been a short piece in the journal *Science* (Diamond 2011), a review in the *International Journal of American Linguistics* (Campbell 2011, Vajda 2011), and a review article in *Diachronica* (Rice 2011). As mentioned above, Part 3 is devoted to seven commentary papers that also function as further reviews of the Dene-Yeniseian materials.

The linguistic commentaries are arranged in approximate order of polarity, from most positive (ERIC P. HAMP) to most skeptical (ANDREJ A. KIBRIK). Hamp gives an exuberant summary of what he considers the decisive evidence for Dene-Yeniseian and situates Dene-Yeniseian historiography within the historical linguistics of other established families. JOHANNA NICHOLS is more cautious, but concludes that according to her own statistical criteria (see Nichols 1996), the relatedness of elements of Dene-Yeniseian seems to be demonstrated to conventional significance levels (her caution remains due to uncertainty about her estimates of the size of the search domain, in terms of the number of words compared and the amount of semantic freedom allowed in identifying comparanda). MICHAEL FORTESCUE addresses the plausibility of the 12,000+ year time depth, and discusses some alternative historical scenarios that could bring this figure down. He presents arguments for a back-migration of Yeniseian from the Americas to Siberia, allowing for a much more recent date of separation. WILLEM J. DE REUSE echoes Fortescue's observation that Yeniseian looks more like an intruder than a remnant, and suggests a number of ways in which support for the Yeniseian back-migration hypothesis could be bolstered through searching for substrate effects in the intervening languages between the two branches. Kibrik is more skeptical than the other commentators, and lists a number of concrete questions that would have to be resolved for Vajda's comparisons to be convincing.

The final two commentaries are by archaeologists. Both are rightly concerned by the discrepancy between the apparent strength of the linguistic evidence for relatedness and the great times and distances of separation that have to be accounted for. Ives constructs an interesting case for searching for Dene-Yeniseian origins in, or in the interaction with, the Arctic Small Tool tradition (ASTt), 4000–5000 BP. DON DUMOND takes this further and questions the conventional association between the ASTt and Paleo-Eskimo.

This collection is clearly a very important contribution to historical linguistics and prehistory in general, but as the authors themselves point out, the Dene-Yeniseian hypothesis is a work in progress. In the best traditions of science, Vajda and colleagues have presented their evidence and arguments to the scrutiny of their peers, and there are exciting times ahead as in the coming years we can hope to see a scientific consensus emerge.

REFERENCES

- CAMPBELL, LYLE. 2011. Review of *The Dene-Yeniseian connection*, ed. by James Kari and Ben A. Potter. *International Journal of American Linguistics* 77.3.445–51.
- DIAMOND, JARED. 2011. Linguistics: Deep relationships between languages. *Nature* 476.291–92.
- JORDAN, FIONA. 2011. A phylogenetic analysis of the evolution of Austronesian sibling terminologies. *Human Biology* 83.297–321.

- LEER, JEFF. 2008. Proto-Athabaskan nasal codas and Eyak aspirated vowels. *Linguistic typology of the North*, vol. 1, ed. by Tokusu Kurebito, 1–16. Tokyo: Research Institute for Languages and Cultures of Asia and Africa, Tokyo University of Foreign Studies.
- NICHOLS, JOHANNA. 1996. The comparative method as heuristic. *The comparative method revisited*, ed. by Mark Durie and Malcolm Ross, 39–71. Oxford: Oxford University Press.
- RICE, KEREN. 2011. Dene-Yeniseian. *Diachronica* 28.2.255–71.
- RUHLEN, MERRITT. 1998. The origin of Na-Dene. *Proceedings of the National Academy of Sciences* 95.13994–96.
- VAJDA, EDWARD. 2011. A response to Campbell. *International Journal of American Linguistics* 77.3.451–52.

Max Planck Institute for Psycholinguistics
 PB310, 6500AH Nijmegen
 The Netherlands
 [michael.dunn@mpi.nl]

Chomskyan (r)evolutions. Ed. by DOUGLAS A. KIBBEE. Amsterdam: John Benjamins, 2010. Pp. xii, 488. ISBN 9789027211699. \$158 (Hb).

Reviewed by JOHN GOLDSMITH, *University of Chicago*

This book is a festschrift to Konrad Koerner on the occasion of his seventieth birthday, and at the same time a series of reflections on the ways in which the modern world of linguistics has fashioned a history of itself for itself, a history that is grounded both in the professional positions that linguists have taken and in the gradual emergence of ideas over time. The editor asked the contributors to reflect on whether there are ‘“revolutions” in linguistic theory (in the Kuhnian sense) and how ... Chomsky’s career support[s] whichever conclusion one might reach to that question’ (210).

These contributors generally come to their work with the conviction that things are not all fine in the world of linguistics, and that at least a part of the problem is the result of a sorry understanding of how we got to where we are today—and furthermore, that this results in good measure from the disproportionate influence that Noam Chomsky has had on the field over the last fifty years.

JOHN E. JOSEPH’S essay, ‘Chomsky’s atavistic revolution (with a little help from his enemies)’ (1–18), is for this reader the most interesting chapter of the book and certainly worth several readings. It focuses on two notions: MODERNISM, the intellectual trend that includes the thorough dismissal of all preceding movements, and IRONIC DISTANCING, a much more complex rhetorical relationship developed by an author speaking about his predecessors (‘Smith’s work was well ahead of its time, though it suffers from the lack of attention to rigor that is characteristic of its age’). This distancing is IRONIC because it is always simultaneously affirming and denying; it praises the previous work, all the while making clear that by today’s standards such work would not be considered adequate.

With a few deft examples, Joseph sketches the ways (quite varied, in fact) that the heroes of our field (William Dwight Whitney, Ferdinand de Saussure, Leonard Bloomfield, Edward Sapir) have employed ironic distancing in explaining their own relationship to those who preceded them. But his greater concern is Chomsky and Chomsky’s distinctive stance toward his intellectual predecessors, especially in *Cartesian linguistics* (1966), Chomsky’s long essay on Lancelot and Arnauld’s Port-Royal grammar. This book is, Joseph suggests, a ‘condescension-free zone’ (11) for linguists who antedate Hermann Paul; the work of the Cartesian linguists is discussed ‘as if they were active members of [the MIT] faculty’ (11): no ironic distancing asked, none given.

Joseph goes on to give a brief account of the withering criticisms that targeted Chomsky’s book, and he notes that after defending himself against these critics, Chomsky dropped the subject of the relation of his grammatical theory to that of his seventeenth-century predecessors.