Addendum to Robert Parkin, "On the origin of Crow-Omaha terminologies" (Poznan, August 2019): **summary of evidence**

NB: data on actual Omaha terminology from Barnes 1984, Tables 9 and 10 (pp. 132 ff.).

Comparison between the Kachin and actual Omaha terminologies (Trautmann 2012)

Kachin *Ji* links male relatives in the line of wife-givers' wife-givers (MMB, WMB etc.) with + 2 males in male ego's and his wife-givers' lines. This pattern closely resembles Omaha term 1.

Shu (ms) links female relatives in the line of ego's wife-takers' wife-takers with -2 male and female relatives of ego's and the line of ZH. Omaha term 14 links CC, ZSC, ZDD ws, as does this Kachin term, but the first set of specifications are not mentioned anywhere in Barnes' table, let alone equated (namely FZHZHZ, FZHZD, ZHZD, ZHZHSD).

Nam (ms) links male and female relatives of the wife-givers' line in -1 and -2, as well as MBDy, the prescribed spouse for male ego. These specifications are scattered across four different Omaha terms (4, 6, 14, 17). *Nam* (ws) links BC and BCC, categories spread among Omaha terms 10, 11 and 14.

Hkri (ms) links women in the wife-takers' line, as well as ZS. Two specifications (FFZHZ, FZHZ) have no Omaha equivalents, while the other specifications are spread between Omaha terms 12, 13 and 14.

Hkri (ws) links male relatives in the wife-takers' wife-takers' line in the medial three levels. Although the specifications FZHZH and ZHZH do not appear directly in the Omaha lists, they do appear in the form of what would be their equivalents in an asymmetric prescriptive terminology, namely HFZH and HZH (Omaha term 1). The remaining specification under this term, ZDH, appears in Omaha as terms 18 (ms) and 19 (ws).

Gu links FFZH and FZH, i.e. wife-takers, as in Omaha term 15, which, however, also maps out the descent line of WB etc. in Omaha, i.e. is symmetric in equating wife-givers and wife-takers. In both Omaha and Kachin, WB's line only has descending vertical equations (WB, WBS, WBSS).

Moi links the female equivalents FFZ, FZ, both in ego's line; these are respectively terms 2 and 5 in Omaha.

Ní (ws) links women of wife-givers' wife-givers, closely resembling Omaha term 2.

Ning (ws) links: a) women of the wife-givers' line in ego's, -1 and -2 levels, therefore including MBD: this line closely resembles Omaha term 4; b) women of the wife-takers' wife-takers' line in the medial three levels, without a parallel in Omaha; and c) women of the wife-takers' line in the medial three levels, also without an Omaha parallel, apart from the specification ZHZ appearing under Omaha term 14. a) would align partly with b) in a minimal three-line terminology, but the fit is not perfect because different generations are involved in the two cases.

The last term, *woi*, has lateral, not lineal extension, linking +2 women in the lines of ego's wife-givers and wife-givers' wife-givers, i.e. FM and MM. In Omaha these are equated under term 2, though with very many other specifications.

Apart from *ji* and *ní*, the resemblance in vertical equations in Kachin and Omaha is not that close or impressive, and the equations many other Kachin terms make are either spread over several terms in the Omaha case or are not present in Omaha at all. As already noted, one would not expect total consistency between the two terminologies, not least because this does not even exist among examples of either 'type' on its own viewed cross-culturally. It is obviously a matter of judgement how much resemblance there should be to make the hypothesis of a transformation from asymmetric prescriptive to Omaha reasonably plausible, but my own judgement is that the level of proof here is unsatisfactory.

Derivation of Crow-Omaha from Dravidian or Iroquois in North America (esp. Algonquian; Trautmann and Barnes 1998)

One way of approaching the question of whether Crow-Omaha derived from either Dravidian or Iroquois, at least in North America, is to examine the specifications for second cousins and first cousins once removed in an actual Crow-Omaha kinship terminology and see to what extent they match the other specifications they may be equated with in terms of Iroquois crossness as opposed to Dravidian crossness. If a large number of the respective terms show Iroquois crossness for all or most of the specifications they denote, the hypothesis that Crow-Omaha terminologies derived from Iroquois ones will be considerably strengthened.

For this purpose I have chosen the actual Omaha terminology, on which, thanks to Barnes' meticulous work, we have a great deal of information and discussion. I mostly use Barnes' Table 9 of ms kin terms (1984: 132-4), though I also refer to his Table 10 of ws terms where appropriate. I start with second-cousin specifications in ego's genealogical level, though it must be understood that, as the Omaha terminology blurs generational distinctions, quite a number of such specifications are equated with kin in other levels than ego's. Similar considerations apply to first cousins once removed, to which I turn secondly: though genealogically +1 or -1 generation kin, many of these specifications are equated with kin in other levels in the actual Omaha terminology.

In fact, inspection of the Omaha terminology reveals no consistent pattern in favour of either Iroquois or Dravidian crossness, especially in respect of the terms which equate second cousins in ego's level with +1 or -1 level kin. In ego's level, with regard to the terms that equate siblings and parallel first cousins with same-level second cousins, the latter are uniformly parallel kin in both Iroquois and Dravidian, as one might expect. In +1, regarding terms for P, PG and PGE categories, there are only two cases where the associated second-cousin specifications (MFBSS and MMZSS) align properly in terms of crossness with a PG specification, namely MB (*ine'gi*), both specifications being both Iroquois and Dravidian cross. The other terms in + 1 are completely non-aligned for crossness or only aligned in respect of Iroquois but not Dravidian or vice versa.

In -1, in respect of the terms for ZS and ZD (*ito$^{n'}$shka, iti'zhu^{n}*), who are cross kin to male ego, the crossness of the associated second-cousin specifications (FFBDC and FMZDC) is consistent in being cross in both senses, but in another case this is not so, this specification (MFZDC) being Dravidian cross but Iroquois parallel (note that these cases are the reciprocals of the three +1 examples involving MB mentioned above). The remaining -1 terms, for S and D (*izhi$^{n'}$ge, izhu$^{n'}$ge*), who are parallel kin to both male and female ego, show similar non-alignment with MFZSC, this being Iroquois cross but Dravidian parallel. In +2 and -2 there is extensive merging of cross and parallel, making the test irrelevant in these levels. Overall here, slightly more of the alignment in terms of crossness between these second-cousin specifications and core kin is Dravidian in type than Iroquois, though only by two cases.

A similar situation occurs when we examine first cousins once removed. Parent's cousins divide as follows: three specifications are equated with +2 kin in circumstances of an extensive merger of cross and parallel, so cannot contribute anything to this exercise; four specifications are parallel in both Dravidian and Iroquois and a further four cross in both, aligning correctly with Omaha terms in all cases; and there is a conflict in the remaining four, three aligning correctly in Iroquois but not Dravidian, one vice versa. In the case of cousin's children, four specifications are equated with + 2 kin; four specifications are parallel in both Dravidian and Iroquois and a further four cross in both, aligning correctly with Omaha terms in all cases; and there is a conflict in the remaining four, three aligning correctly in Dravidian but not Iroquois, one vice versa. In other words, there is a rough balance between agreement and disagreement with the Omaha distribution of cross and parallel.

Another approach is to take those second-cousin specifications that are involved in equations expressing the preferences for secondary marriage preferences with wife's kin – associated, as already noted, with Omaha equations generally since Kohler – and inspect them for similar alignments with other kin under the same term. Except that none of them involve sibling categories in ego's level – they are confined to +1 and -1 – there is no discernible pattern.

One further approach in both +1 and -1 is to consider the equated second-cousin specifications as a number of sibling pairs. In +1, MMZSS and MFBSS match the other specifications of their respective terms in both Dravidian and Iroquois, but MMZSD and MFBZD do not do so in either. FMBDS and MMBDS match in Dravidian but not Iroquois, FMBDD and MMBDD vice versa. In -1, FFBDC and FMZDC match in both Dravidian and Iroquois, MFZSC match in Dravidian but not Iroquois, MFZDC vice versa.

There are also six third-cousin specifications in Barnes' Tables 9 and 10, two in the former, the list of ms terms; three in the latter, the list of ws terms; and one in both. There is much more consistency of alignment here, only one ws specification showing a conflict between Dravidian and Iroquois. Both cases in the ms list show consistent crossness both ways, while all the others in the ws list are consistently parallel, as is the example in both lists.

Overall, however, the results of these tests do little to confirm the hypothesis that Crow-Omaha terminologies are transformations of Iroquois ones. In the case of the actual Omaha terminology, at least as many of the expected alignments are actually based on Dravidian crossness, not Iroquois, and there many cases where individual terms mix the two types of crossness.

Athapaskan data (Dyen and Aberle 1974)

- Some indications of C-O equations being introduced in this language family of NW N. America
- In the Ketchika River dialect, *-uze* is MB, MBS, a term usually restricted to MB and its -1 reciprocals in other Athapaskan, indicating that MBS is the introduced term here.
- Similarly, in Tahltan we find Crow equations in the following terms: *-sta* FB, FZS (but F, *-tę*, is separate), *-tsiʔa* MBD, BD, and also *-siiya* MBS, BS. Since in other Athapaskan *-sta* is normally a +1 term (with a core meaning of F) and *-tsiʔa* & *-siiya* are both -1 terms, it is evident that the cousin terms have been added subsequently in this language.
- Similarly, Chiricahua has the term *-ɣóyé* MB, MZ, ZC, FZD, the last two specifications forming a standard Omaha equation. Closely related Mescalero has the same term for MB, MZ and ZC, but not FZD. Generally in Athapaskan this term classifies +1 and -1 specifications and affines in ego's level, so the specification of FZD in Chiricahua looks as if it has been introduced to this term subsequently.
- Turning now to Californian Athapaskan, three languages have Crow equations, namely the Kato, Wailaki and Lassik term *at* eZ, PssGDe, PosGDe ms (thus including FZD) and FZ, MBW, giving rise to the Crow equation FZ = FZD. This cognate set is mostly associated with specifications in ego's level, both siblings and cousins, so in this case it appears that it is the +1 terms that have been introduced.

Nick Allen on Sherpa (*Man* 1976)

- Allen compares two Sherpa dialects, one of which, Tsumje, has considerable evidence of symmetric prescription, suggesting bilateral cross-cousin marriage in the past, though this is no longer practiced by the Sherpa
- However, there are also Omaha equations in the related Khambu dialect, where the prescriptive equations have lost their characteristic affinal specifications
- This suggests that in ego's level original terms for cross cousins-cum-siblings-in-law have retained the latter specifications but discarded the former

- As a result, MBC and FZC 'migrated' to the terms for MB/MZ and ZD respectively (+1/-1), producing Omaha equations
- Exemplified by *ajang* MB, MBS, MBSS, but also (prescriptively) WyB; *tsabyuk* FZS, ZS ms; and *tsabyung* FZD, ZD ms

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