If a language develops differential subject or differential object marking by case or adpositions, this is widely hypothesized to result from a universal effect of referential scales, similar to those known from inverse systems (e.g. Silverstein 1976; Moravcsik 1978; Comrie 1981; DeLancey 1981). This paper reports a test of this hypothesis, separately for differential subject and for differential object marking, against a database of over 350 case and adposition systems, controlling for possibly confounding factors of genealogical relatedness and areal spread.

There are two models of how referential scales can be thought to determine differential case marking: (1) In what we call the 'Type Model', scales predict specific case systems: each system with a split either fits or does not fit the prediction, or, formulated as an implicational universal: ‘if a language has a split in case marking, this split follows a universal scale’. (2) In what we call the 'Rank Model', scales are ordered factors that universally determine the relative probabilities of marked vs. unmarked cases: the odds for a marked case on a given argument correlate with the rank of that argument on a universal scale. We tested both models on various versions of scales drawn from the literature and also on versions derived from our data by a multi-dimensional scaling analysis of the distribution of case markers over referential categories (again separately for differential subject and differential object marking).

Our analysis reveals no statistical evidence for the Rank Model that is independent of family membership and has any appreciable predictive power. Testing the Type Model, we find that there are only very few families – viz. Indo-European (mostly, Indo-Iranian), Sino-Tibetan, Pama-Nyungan – and only a handful of isolates, that show a significant trend towards fitting scales. In addition, it is possible that Indo-European and Sino-Tibetan are not areally independent from each other in this regard (cf. Bossong (1998) on the Eurasian areality of differential O marking), which would still further weaken the statistical evidence. The families with significant trends furthermore tend to each fit different scales: for example, Pama-Nyungan tends to split subject marking by pronoun vs. noun or type-of-noun contrasts, while Indo-European tends to split on number categories or complex number/person combinations. For differential object marking, Pama-Nyungan tends to split on person or again on pronoun vs. noun or type-of-noun contrasts, while Indo-European tends to split on number categories or on definiteness or specificity.

What we do find, by contrast, is a strong area effect: once genealogical relationships are controlled for, differential argument marking shows a strong frequency peak in Eurasia and nowhere else. In addition, there is a (weak) signal for areal spread in Australia.

We conclude that the currently available empirical evidence is too weak to reject the null hypothesis that differential case marking develops through individual and unrelated diachronic changes – such as innovations of case morphology in nouns but not pronouns (Filimonova 2005), reanalyses of instrumentals as ergatives on inanimates (Garrett 1990), contact-induced calquing of definite vs. indefinite contrasts by means of case marking, or other idiosyncracies.
References