Conflation and Hierarchies*

Paul de Lacy

Department of Linguistics, University of Cambridge

This paper discusses an approach to express markedness hierarchies in Optimality Theory without the use of a universally fixed ranking (cf Prince & Smolensky 1993). Instead, for a hierarchy | α ⟩ β ⟩ γ |, there are a set of freely rankable constraints that refer to ranges of the scale, starting with the most marked element (e.g. *{α}, *{α,β}, *{α,β,γ}). Such constraints are shown to allow language-specific 'conflation' of markedness categories – where categories are ignored for a particular process. An analysis of sonority-driven stress in the Uralic language Nganasan illustrates the points made

1 INTRODUCTION

This paper compares two theories of scales in Optimality Theory. The aim is to identify the empirical phenomena that distinguish the two, and provide specific examples .

Prince & Smolensky (1993) present a theory of how scales are formally expressed in Optimality Theory. To summarize, for a scale | α ⟩ β ⟩ γ | there is a set of constraints || *γ » *β » *α ||. In this theory, it is crucial that the ranking between the constraints is fixed: this ensures that [γ] is more marked than [α] and [β] in every grammar. This approach will be called the 'Fixed Ranking' theory in the remainder of this paper.

The other theory discussed here will be called the 'Stringency' theory, after Prince (1997 et seq.). In the Stringency theory, a scale | α ⟩ β ⟩ γ | is formally expressed as a set of constraints with the form: || *{γ}, *{γ,β}, *{γ,β,α} ||. As an example, the constraint *{γ, β} assigns a violation for every instance of both [γ] and [β] in a candidate: [γγαβ] incurs three violations of *{γ,β}. The Stringency theory's constraints are not in a fixed ranking: like other OT constraints, their ranking is fully permutable. For a fuller discussion of Stringency theories, see Prince (1997 et seq.) and de Lacy (1997, 2002).

Both theories capture one aspect of scales: their hierarchical relations. In the Fixed Ranking theory, [γ] will always incur more serious violations than [β] because *γ always outranks *β. Thus, [γ] is universally more marked than [β]. The Stringency Theory gets the same result, though in a different way: [γ] is always more marked than [β] because there is no constraint that favors [β] over [γ] while there is some constraint that favors [γ] over [β]. In other words, every constraint that is violated by [β] is also violated by [γ] but not vice-versa. A fuller discussion is presented in section 2.

There is an important difference between the theories, though, found in 'category conflation'. To illustrate, one language may distinguish [γ] from [β]: it may actively avoid [γ] in favor of [β]. In a contrasting language, [γ] and [β] may be treated in the same way: neither is eliminated or avoided in favor of the other; in this case, [γ] and [β] have been conflated. As a more concrete example, stress in Gujarati actively avoids [ə] for high vowels (Cardona 1965, de Lacy 2002a). In contrast, [ə] and high vowels are treated exactly the same in

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