A NOTE ON SIGN LANGUAGE AND ICONICITY

Esa Itkonen

In the last issue of SKY Timo Haukioja argues that iconicity is not of much help as far as the acquisition of sign languages is concerned (cf. Haukioja 1991). Since I for my part argue in the same issue for the relevance of iconicity (as a special case of analogy), both in language acquisition and elsewhere (cf. Itkonen 1991), a few words of clarification may be in order.

First of all, the term 'iconicity', as it is standardly used in linguistic literature, including Itkonen (1991), means *structural* iconicity (or 'isomorphism' for short). Haukioja, by contrast, speaks of *material* iconicity, i.e. of material similarity between signs and their referents. What he is claiming is that sign languages (which *seem* to exhibit material iconicity) are not easier to learn than oral languages (which clearly lack material iconicity); and the reason is that signs that seem to be materially similar to their referents turn out on closer inspection to possess a strong element of conventionality. Thus, oral languages and sign languages are rather similar in this respect. However, they are also similar in possessing a strong element of *structural* iconicity, as Haukioja would be the first to admit.

Second, even on his own terms Haukioja seems to overstate (p. 137) his case that "infants are unable to perceive any iconicity" in the ASL verbs which he discusses and which he takes to be iconic by adult standards. These are, on the one hand, verbs such as GIVE, which indicate (or 'agree with') both the subject and the indirect object, and, on the other, verbs such as BOUNCE (FORWARD), which express simultaneously both the direction and the manner of movement. Children's alleged incapacity to grasp iconicity is evident from the *errors* they make: they fail to indicate the subject (= the source of the 'giving movement'), and they express separately the direction of movement (= linear motion) and the manner of movement (= stationary bouncing motion). These errors clearly result from something like *morphological analysis*: a form which expresses a complex meaning *A* is replaced either by a simpler form which expresses part of *A*, or by a set of (simpler) forms each of which expresses a simple meaning

and which, taken together, express a meaning synonymous with A. Hauki-
oja claims that these new incorrect forms are "less iconic" than the original
correct forms. It is important to realize, however, that they *are* iconic,
nevertheless: GIVE is still expressed by the characteristic 'giving move-
ment'; and BOUNCE (FORWARD) is expressed by two 'movement roots'
which, as Haukioja himself admits, are "highly iconic" (p. 129). Thus, it
can be said at most that what children fail to grasp is the *holistic* iconicity
of the correct forms. I think, however, that it would be more correct to say
that children do grasp it (since they are able to analyze it); they are just
(temporarily) unable to *imitate* it.

Third, there remains the problem of accounting for these facts.
Morphological analysis is always a 'complex computational task' (or so it
seems). How are children able to achieve it? One answer is, inevitably, the
innateness hypothesis. Another is Newport's (1990) 'Less is More'-hypo-
thesis: children's cognitive limitations somehow guide them into finding
the right form—meaning pairings. Haukioja tries to give a little more
content to this somewhat vague hypothesis by assuming (p. 134) that e.g.
'movement roots' mentioned above belong to universal perceptual cat-
egories. This is plausible enough. It would seem, however, that a more
informative answer can be given, once we *refine* the notion of iconicity
somewhat.

It is important to realize that the acquisition of oral languages
exhibits the same type of 'incorrect' morphological analysis as the one
discussed above. For instance, Slobin (1985: 1230) mentions "the tendency
in Spanish, Italian, and Hebrew for children to reanalyze verbs which
conflate motion and direction into separate expression of these two no-
tions". The examples he adduces here are, however, less revealing than
those adduced in another context (pp. 1202–1206). For instance, a French
child may use the (incorrect) expression *toutes les miennes de voitures*
instead of the (correct) expression *mes voitures* ('my cars'). The justifi-
cation for this reanalysis is obvious. The form *mes* expresses simultaneous-
ly several notions: totality, plurality, and possession by the first person
singular. The child, having correctly identified all these notions, prefers to
express each of them separately: *toutes* (= totality), *les* (= plurality),
miennes (= possession by the first person singular). The psychological
principle that underlies this reanalysis is of course the well-known principle
of 'one meaning—one form'. Interestingly enough, this principle has often
been identified with (one aspect of) *iconicity*. Personally, I prefer to call it

'form—meaning biuniqueness' (cf. Itkonen 1991: 81); but if the term 'meaning' is replaced by 'concept', resulting in 'one concept—one form', I can see no principled objection against speaking of ([{one type of} structural and] conceptual) 'iconicity' (or, rather, 'isomorphism').

Let us return to our original example, namely the acquisition of the ASL verbs for 'give' and 'bounce (forward)'. The original claim, made by Newport and others, and repeated by Haukioja, was that the (less-than-perfect) acquisition of these verbs is based on a failure to grasp iconicity. But now that we have seen that the acquisition of these verbs is based on the *iconic* principle of 'one concept—one form', it is obvious that Newport's and Haukioja's claim cannot be accepted as it stands. Rather, we have to distinguish, tentatively, between *two different types* of iconicity, to be called perhaps '(holistic and) referential' and '(analytical and) conceptual'; and then we have to note that adults seem to show a preference for the former whereas children seem to show a preference for the latter. Making such a distinction will have wider repercussions, which, however, cannot be pursued here.

Although we seem to be in the presence of a unitary phenomenon, Slobin (1985) treats of it under at least three different headings, or what he calls 'operating principles', namely 'maximal substance' (pp. 1202–1206), 'unifunctionality' (pp. 1227–1229), and 'analytic form' (pp. 1229–1231). Bowerman (1985: 1279–1282) is quite right to argue that, in spite of their obvious usefulness, Slobin's operating principles constitute a rather haphazard collection, without any clear indication of the *glue* which might tie them together. Now it seems clear to me that the notion of *analogy* provides precisely this type of 'glue', either because operating principles are just exemplifications of analogy, or because it is natural to define them by defining their relation to analogy. Proving this claim must, however, be left for another occasion.

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Address: University of Turku
                  Department of General Linguistics
                  Henrikinkatu 4
                  SF–20500 Turku 50, Finland