

Session 4: METHODOLOGY

SUMMATION BY CHAIRMAN

HAYES: Summations can be of two natures -- precreated or post-created. The trouble with the precreated is that they don't necessarily match what happens. The trouble with the post-created, at least for the chairman, is that he is too busy paying attention to what happens to be able to write down all his comments. There are a couple of things, however, that I would like to comment on. One is the role of mathematics in the methodology involved here. It is the easiest thing in the world, because of the nature of mathematics, to find mathematical analogs in virtually anything, including information theory, lattices, trees, and the like. So the question isn't whether something can be pictured as a lattice or as a tree but whether it gives you anything in order to do so. It presumably can, but the fact that you have said that something is a tree doesn't make it any more useful than to just ignore the fact that it is a tree. This is not one of the roles of mathematics. Essentially, it amounts to finding that a model is of value only if you do something with it. Merely to point it out doesn't help any. My second point relates to a number of topics which we have been touching on. One which was raised by Dr. Sebeok has been raised again in another way by Mrs. Rhodes, and which we have touched on in a number of ways in the panel comments. This concerns, the source of support, and the nature of the work. It appears to me that since dichotomies were raised initially by Dr. Edmundson that the final dichotomy which he touched on is of value. Namely, there are some workers in the field whose primary interest is research. The fact that it happens to be research in language translation is useful because money is available for that. It presumably also should be available for linguistic analysis per se and this is the point Dr. Sebeok was raising. Why is this not supported by the funds of the institutions involved rather than just by the government? I am thinking about research on computers in linguistic analysis and linguistic analysis in program design which is of enormous interest to

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the computer people -- the formalization of language -- as a tool in program development. Both of these are very important research areas and should be recognized as such. We are not developing language translation as a production technique by these research approaches, and to think that we are is foolish. We will gain from them as we gain from any research activity. It creates an environment, it creates a rising generation of people with this kind of background, but you are not going to get practical translations out of research programs. Being a computer-oriented person I tend to believe that computers can do things. I think that practical translation is available. The questions arise, what does practical mean, and what criteria are you using to measure the practical nature of the translation? I raise these as questions to be answered. I think that government support for these research programs is essential, and that government support for practical programs is essential. I think that there is a tendency to confuse the two.