

# Translation : Aids, Robots, and Automation

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...Man becomes all things by understanding them (*homo intelligendo fit omnia*)... (or)... man becomes all things by *not* understanding them (*homo non intelligendo fit omnia*)... When man understands he extends his mind and takes in the things, but when he does not understand he makes the things out of himself into them... Man in his ignorance makes himself the rule of the universe... he has made of himself an entire world.  
G. Vico, *Scienza Nuova* (1744)<sup>1</sup>

## INTRODUCTION

This paper examines electronic aids to translation, or computerized services and facilities, both as ways and means to automate translation, and as an approach to finding a solution to the problems resulting from the shortage of qualified translators in the face of a growing information overload. At present, electronic aids to translation can include *tools*, like word processors, *systems* for *machine translation* (MT), and MT-less systems for *machine-aided translation* (MAT). While tools are effective in automating translation, MAT systems are additionally useful in meeting many of the other challenges. The ability of MT systems to be an aid in meeting either of the two objectives is unclear. The proposal advanced in this paper is that MT is by its very nature *robotic*, and ideally suited for limited applications with a finite number of clearly defined states or situations. Since new situations (relative to the system) cause robotic MT systems to fail, in applications with a sufficiently large number of new situations MT systems cease to be aids, or even tools, and may *impede* translation. This has far-reaching implications examined below.

The proposal advanced in this paper is to view a spectrum of MT systems ranging from *robotic* MT to non-robotic traditional MT. An important new development in MT are various efforts limited to sub-languages of the type currently being developed at the University of Montreal. Although such efforts are not necessarily considered robotic, they approach the goals of robotic MT and can be called *semi-robotic*. Historically, MT is the “oedipal mother” of all efforts to automate translation. Yet, logically, the MT-less MAT must precede MT in the development cycle and continue to serve as a back-up and feeder system for all MT efforts.

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1. G. Vico, *The New Science of Giambattista Vico*, Anchor Books edition cited, p. 88, paragraph 405.