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Introduction

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In 1979, Alain Wisner, one of the founders of French ergonomics, referring to the quasi-failure of technology transfers to industrially developing countries, declared there was an urgent need to develop "a true anthropotechnology, i.e. an adaptation of technology to the people, which just as ergonomics, associates knowledge from the human sciences to improve the design of technical systems... and since the scale considered is different, so the sources needed must also be different" (1986).

Wisner reactivated the debate on technology transfers. He broke away from conventional partitioned single-discipline approaches and initiated a new approach that considers the multiple relationships between the microscopic features of human activities and the macro factors describing societal functioning. Analyses that focus on one of these levels will prove relevant only if they also consider the mechanisms occurring at the complementary level (Pavard, 1997: 3).

From now on, Wisner declared, another scientific domain must be included in a range of ergonomic studies: that of anthropology. Technological systems are increasingly being transferred to other countries, other regions, other firms. This means that differences in social and industrial fabrics are to be taken into account in addition to various fields of anthropology: physical anthropology (body dimensions, physical strength), cultural anthropology (value systems) and cognitive anthropology (linguistics, cognitive models: cognitive load in work situations). Actually, the link between anthropology and ergonomic analysis of work was to be incorporated in anthropotechnological interventions only in the early 1990s (Geslin, 1990).

Encouraged by the results and acknowledgement of this work, we developed the anthropotechnological approach in other situations, chiefly in the agricultural sphere, in France, the Philippines, Brazil and Africa. What follows is therefore based on our experience in the rural sphere. The frameworks for combining ergonomic analyses of work and the anthropotechnological approach are progressively being formalized (Geslin, 1999-2002). They contribute to producing technology that takes account of the socio-cultural environments and demands of the populations concerned...