How James L. Fozard started with gerontechnology and why

J.E.M.H. van Bronswijk
PEBE, Department of Architecture, Building & Planning,
Eindhoven University of Technology, Eindhoven, The Netherlands
E: j.e.m.h.v.Bronswijk@tue.nl

J.E.M.H. van Bronswijk. How James L. Fozard started with gerontechnology and why. Gerontechnology 2010; 9(3):359-360; doi:10.4017/gt.2010.09.03.001.00 After a career in aging spanning half a century, James Leonard Fozard was interviewed as to his reasons and perspectives on the field of Gerontechnology. In 1973, in the gerontology phase of his career, he embraced a transactional approach for understanding person-environment interactions. Twenty years later this materialized in his development of the domain of gerontechnology.

Keywords: technology, person-environment interaction, transactional approach

James Leonard Fozard describes his career in gerontology and gerontechnology in this issue[1]. I interviewed him for his scientific reasons to turn to gerontechnology.

As Fozard explained, it has been the transactional approach to understanding person-environment interactions first as it relates to human factors and later to aging in 1973[2]. This set the stage for both applied and basic research, and has strongly influenced his research and practice in this area. Fozard sees M. Powell Lawton as a towering figure in person-environment interactions in relation to aging; Lawton's classic paper with Nahemow[2] was the starting place for many subsequent developments in the field. Earlier Lawton served on the National Research Council Panel on Human Factors Research that produced a comprehensive research agenda on human factors in relation to aging[3]. He and Fozard had several conversations during the preparation of Lawton's keynote address for the second International Conference on Gerontechnology. Lawton liked the broad proactive interdisciplinary scope of Gerontechnology and its dynamic view of changes in person-environment interactions over time. It brought Fozard to writing dedicated gerontechnology papers, one of the earlier ones dated 1993[4], 20 years after his first thoughts on the subject. The fact this was an educational endeavor signifies Fozard's talent for education as well as research.

Lawton's take on Gerontechnology as a transactional view was expressed in his keynote address[5]: *"… Gerontechnology seems to me to be less a discipline than a world view which recognizes that relevant knowledge must be generated by many traditional scientific disciplines and, further, that much knowledge can be created only by research involving more than one discipline. Its roots lie in the areas of engineering, ergonomics, cognitive psychology, sensory psychology, and the design professions".*

Lawton continued: *"How can gerontechnology be most effective in influencing the age-inclusive nature of society? Proactivity is the mode. Gerontechnologists must create opportunities to influence the relevant structures that govern product design, production, and marketing. They must aggressively offer their services in setting design standards for housing, institutions, and consumer products. The advertising media and marketing communities in particular need to be made aware of the new lifespan demography and the hunger that increasing num-*

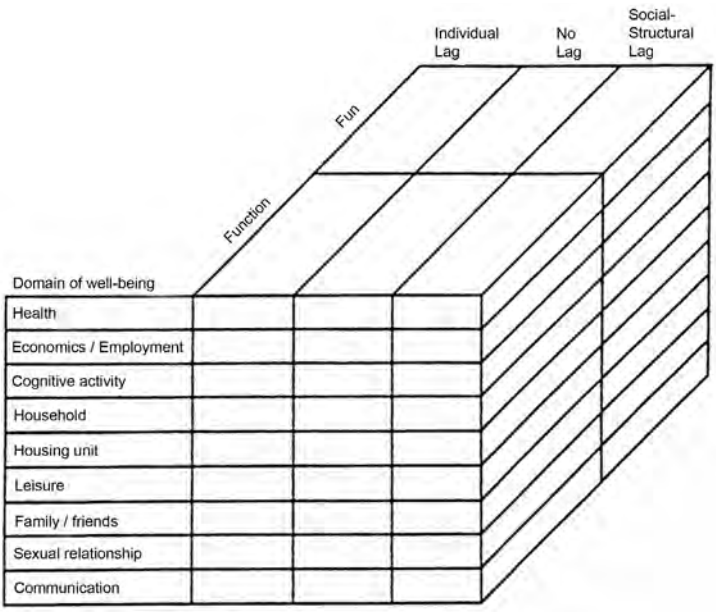

Figure 1. Interplay between personal needs and environmental and social resources; each domain of well-being consists of the interplay between a personal need and the environmental and social resources available to satisfy that person's needs [After Lawton[2]]

Lawton summarized his view in the scheme reproduced below (*Figure 1*). Here 'Lag' refers to the interplay between individual needs and environmental demands. Individual lag occurs when the individual's abilities do not meet personal or environmental challenges and require compensatory and care oriented technologies. Social structural lag refers to environmental conditions that inhibit or retard individual achievement and activity and require preventive and enhancement oriented technologies. In the area of health, movement aids are an example of compensation while exercise and diet exemplify prevention and enhancement of quality of life.

bers of elders will have for functional and fun-eliciting products. The social structures of law, including the regulatory agencies of government, have been influenced by the constituencies representing the disabled. Gerontechnology is potentially even more effective because it can trade on the idea that almost everyone will someday be a consumer of products, services, and environments that are age-accommodating".

I hope this special issue will have a twofold effect: (i) showing James L. Fozard that the gerontechnology community stays on the right (and his) track, and (ii) informing the readership on the strong influence Fozard has had on the development of Gerontechnology.

References

1. Fozard JL. My road to and through gerontechnology. Gerontechnology 2010;9(3):368-379; doi:10.4017/gt.2010.09.02.002.00
2. Lawton MP, Nahemow L. Ecology and the aging process. In: Eisdorfer C, Lawton MP, editors, The psychology of adult development and aging. Washington: American Psychological Association; 1973
3. Czaja SJ, editor. Human factors research needs for an aging population. Washington: National Academy Press; 1990
4. Rietsema J, Fozard JL, editors. Gerontechnology: Human Factors for an aging population. Instruction book of the First International Post graduate Course in Gerontechnology. Delft: Stichting Postacademisch Onderwijs; 1993
5. Lawton MP. 1996 (1998). Future society and technology. In: Graafmans J, Taipale V, Charness N. Gerontechnology: A sustainable investment in the future. Proceedings of the 2nd International Conference on Gerontechnology, Helsinki, October 1996. Amsterdam: IOS Press; 1998; pp 12-21