

Grandmaster Herman Bouma in short

Johanna E.M.H. van Bronswijk PhD EurProBiol

Editor-in-Chief of Gerontechnology
E: j.e.m.h.v.bronswijk@gerontechnology.info

J.E.M.H. van Bronswijk. Afterword: Grandmaster Herman Bouma in short. Gerontechnology 2012;11(1):56-62; doi:10.4017/gt.2012.11.01.004.00 The scientific foundation of gerontechnology is one of the main concerns of ISG-Grandmaster Herman Bouma PhD as taught by him in ISG-Master Classes, and included in this issue of Gerontechnology. Physicist by education, he started his career in vision, reading and related subjects. Around the age of 50 he gradually shifted to gerontechnology, a domain he invented and defined together with Jan Graafmans and the late Tonny Brouwers. Of his around 100 journal publications, about half he wrote in his third life phase, showing his practice of gerontechnology as well as its study.

Keywords: vision, gerontechnology, theories and concepts

The first ISG-Master-Class on Gerontechnology took place in Eindhoven in 2006. Both current ISG-Grandmasters, Herman Bouma and Jim Fozard, were teaching, together with Alain Franco, current ISG-President, and Jan Graafmans, one of the inventors of the term gerontechnology. Since then the ISG-Master-Class has been institutionalized as a central instrument to educate the new generation of researchers and designers in gerontechnology. Our new Grandmaster, Herman Bouma, never stopped stressing the need to develop and strengthen the scientific basis of the domain.

A SHORT BIO

Herman Bouma (1934), studied physics (MSc) and partly medicine (BSc) at Utrecht University and took his PhD in 1965 at Technische Universiteit Eindhoven (TUE) on a thesis dealing with light reactions of the human eye-pupil. He spent a postdoc year at McGill (Montreal, Canada) in physiological psychology with John O'Keefe and professors Hebb and Melzack. Back in Eindhoven, he worked as a visual scientist in the Institute for Perception Research (IPO), a combined institute of Philips Research and TUE, investigating form perception, visual aspects of reading processes, man-machine interactions, and compensation aids for visual restrictions. From 1975 to 1994 he was director of IPO and from 1978-1999 he held a chair at TUE in human perception and communication. In the mid-eighties, together with Jan Graafmans and the late Tonny Brouwers he reframed 'technology and aging' in gerontechnology, merging technology with gerontology. In 1991 he chaired the scientific committee of the 1st International Conference on Gerontechnology in Eindhoven, and continued this interest in 1994 as director of the Institute for Gerontechnology that existed until his retirement in 1999. During that period and aided by a grant from the European Commission, an international network was set up leading in 1996 to the 2nd International gerontechnology conference in Helsinki and in

1997 to the International Society for Gerontechnology (ISG) with conferences in Munich (1999), Miami (2002), Nagoya (2005), Pisa (2008), Vancouver (2010), and Eindhoven again (2012). In 2001, he helped the undersigned, in starting the quarterly journal 'Gerontechnology' in which most of his later papers were published. He is past president of ISG (2002-2008) and since 2008 honorary president. He is a fellow of the Royal Netherlands Academy for Arts and Sciences (1992), received the Royal distinction 'Ridder in de Orde van de Nederlandse Leeuw' (Knight in the Order of the Netherlands Lion) (1992), and is holder of the TUE medal of merit (1999).

In 1958, Herman married Elly Tijmes, a specialist in geriatric medicine. Their four children, Elisabeth, Coos, Tjibbe, and Enricke were born between 1959 and 1965. Although the children now live in several countries, Herman and Elly are close to them and their families, including their 11 grandchildren, now aged between 10 and 24. The Bouma-Tijmes combination of physics and medicine has clearly influenced the next two generations, whose professional interests span engineering, epidemiology, general medical practice, ophthalmology, pharmacy, physics,



Figure 1. Herman, the manager, always at the steering wheel



Figure 2. Herman, the freshman in physics at the age of sixteen

psychology, and international public health.

As a person, prof. em. Herman Bouma PhD has proven to be an excellent role model for scientists who combine social sciences and technology by understanding human beings with technical sophistication, always gentlemanlike, and taking care of other persons: sensitive but strong!

PEER-REVIEWED JOURNAL CONTRIBUTIONS

Citation is one of the measures of someone's academic impact. Based on 33 of his journal contributions that were included in Thomson-Reuter's Web-of-Science a mean citation score of 44 cites/publication can be computed (May 2012).

But Herman Bouma published many more journal contributions. A complete list follows (Including a patent). Also added are book chapters, not being conference proceedings. Publications are classified by field of research: Compensatory aids, Gerontechnology, Pupil of the human eye; Reading, Vision; and Miscellaneous. As far as available doi (digital object identifiers) are added to support downloading of the journal articles. Interestingly, almost half of his journal publications were written in his 3rd life phase. The grandmaster not only researches gerontechnology, but also practices it!

Following are also books and book chapters, not being proceedings of conferences.

Compensation aids

Peer-reviewed journal publications

Bouma H. The Philips television enlarger. American Foundation for the Blind Research Bulletin 1974;27:266

Veelen AWC van, Kinds GF, Wijnands HS, Bouma H. Verkennend onderzoek naar de TV-loep als nieuw hulpmiddel voor visueel gehandicapte kinderen bij het lezen. Nederlands Tijdschrift voor Geneeskunde 1974;118(18):664-671

Heijden PH van der, Meyer F, Sanders AHT, Sanders HAJ, Mélotte HEM, Bouma H. Writing apparatus controlled by head movements for motor handicapped people. Applied Ergonomics 1979;10(1):39-45; doi:10.1016/0003-6870(79)90009-7

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Book chapter

Bouma H. Research on technology for the blind at Eindhoven. In: Emiliani PL, editor. Techniques and devices for the blind. Brussels: Concerted action on Technology and Blindness. Medical and health research programme of the European Community; 1990; pp 99-102

Gerontechnology

Peer-reviewed journal publications

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Fozard JL, Rietsema J, Bouma H, Graafmans JAM. Gerontechnology: creating enabling environments for the challenges and opportunities of aging. Educational Gerontology 2000;26(4):331-344; doi:10.1080/036012700407820

Bouma H. Creating adaptive technological environments. Gerontechnology 2001;1(1):1-3; doi:10.417/gt.2001.01.01.001.00

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Figur 3. Herman, the family man, on vacation, with daughters Koosje (left) and Elisabeth (right), at Haamstede, Summer 1963

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gt.2010.09.03.007.00
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Figuur 4. Herman, the teacher, with his grandchildren serving as students of baby mice just collected

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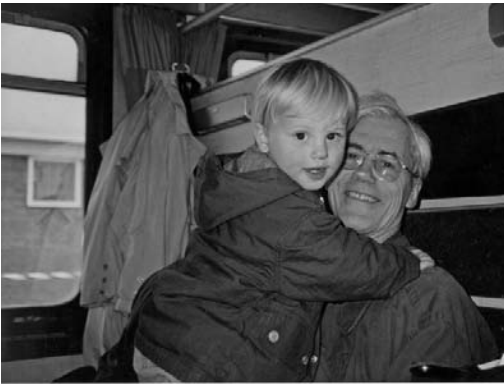


Figure 5. Grandfather Herman with grandchild Gijsje, traveling by train (1995)

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Figure 6. In their city garden in downtown Utrecht, May 1994; From left to right: Herman Bouma, James L. Fozard and Elly Bouma-Tijmes

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editors. True Visions-the emergence of ambient intelligence. *Gerontechnology* 2007;6(1):58-60; doi:10.417/gt.2007.06.01.011. 00

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Figure 7. The Bouma-clan in Gerona (near Barcelona, Spain, 2008); Herman and Elly Bouma-Tijmes surrounded by their grandchildren, children, and children-in-law