A. TINKER (Convener). ***Gerontechnology matrices as collaboration tools.*** *Gerontechnology 2012;11(2):145;* doi:10.4017/gt.2012.11.02.099.00 **Participants**: *A. TINKER* (UK), *H. BOUMA* (Netherlands), *R.E. MAYAGOITIA* (UK) and *A. PEINE* (Netherlands) **ISSUE** Herman Bouma and colleagues wrote a seminal paper in the first edition of *Gerontechnology* in 2007 proposing a matrix defining gerontechnology[1]. This matrix outlined the main disciplines involved: Physiology, Nutrition, Psychology, Sociology, Demography, Medicine and Rehabilitation. They then suggested 'the main discipline groups of innovative technology'. These were Chemistry/Biochemistry, Architecture/Building, Information/Communication, Mechatronics/Robotics, Ergonomics/Design and Business management. These concepts have been discussed on a number of occasions notably in the Gerontechnology Master Classes held in Eindhoven[2]. It will be argued that the defining concepts of gerontechnology would benefit from being updated. **CONTENT** The symposium will seek to build on the innovative matrices and suggest ways in which they can be improved. **STRUCTURE** Herman Bouma will describe the matrices, why they were devised and make the case for retaining them. The other speakers will suggest possible modifications from a social science perspective-conceived as a broad discipline that encompasses not only sociology and psychology but also economics and social policy-as well as architecture and engineering. A focussed discussion with symposium participants will follow. **CONCLUSION** A new consensus needs to be developed to improve the current matrices of gerontechnology.

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H. BOUMA. ***The interdiscipline matrix of gerontechnology; function and problems.*** *Gerontechnology 2012;11(2):145;* doi:10.4017/gt.2012.11.02.137.00 **Purpose** The goal of Gerontechnology is to help create an optimal technological environment for ageing people, taking into account their individual, social, and cultural background. **Function** The interdisciplinary matrix of Gerontechnology[1] reflects the collaboration between sciences of human ageing on the one hand and engineering sciences on the other, that are thought essential for the purpose. A taxonomy in the first instance, the matrix supports identifying disciplines of both sides where insights can be found necessary for specified endeavors. Also, the matrix is an invitation to scientists on both sides to consider other aspects of the lives of ageing persons than those belonging to their own discipline. **Problems** Problems stem from the vagueness of certain boundaries between disciplines. Examples are the penetration of information handling in practically all engineering disciplines and the many psychological aspects of rehabilitation. Therefore, we have to accept that the boundaries between disciplines are essentially vague as well as time-dependent. At issue therefore is to choose the most useful boundaries rather than chasing once-and-for-all essential boundaries. Also, the character as such of boundaries between disciplines is part of the teachings of Gerontechnology.

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A. TINKER. ***The inclusiveness and utility of the Gerontechnology matrix: Broader would make it better***. *Gerontechnology 2012;11(2):146;* doi:10.4017/gt.2012.11.02.518.00 **Purpose** This presentation addresses four questions: Is the Bouma et al.[1] gerontechnology matrix an accurate reflection of contemporary gerontology and those who view their work as falling under the gerontechnology umbrella? What disciplines are missing from the technology side? Is the matrix sufficiently flexible and dynamic to foster communication and collaboration within, as well as across, discipline groupings? Does it capture and highlight within its cells, key issues, topics and applications that have emerged over the last 5 years? **Method** The matrix is examined from the perspective of a gerontologist. At the outset it will be argued that some expansion and repositioning of the core disciplines of gerontology is needed. For example, typical divisions found in national and international gerontology organizations are: biology, health sciences, social sciences, and social policy and practice. The first and last of these are missing from the ordinal axis of the matrix. Also missing are the humanities, practitioners of which are formally recognized for their contribution to the health and well-being of older persons by being given separate divisional status in some organizations. While physiology and nutrition are present in the taxonomy of the y-axis, their selection and emphasis is curious and may reflect a particular bias on the part of the matrix designers with respect to the role of nutrition in the maintenance of health and well-being in older persons. There are also gaps in the taxonomy of the technology side, the most noticeable discipline missing being computer science. In the matrix cells missing or underdeveloped topics include tools and networks such as the interRAI family of assessment systems[2]; pharmaceuticals and cosmetic surgeries, such as botox, could be included in gerontechnology, as part of the lucrative (and some would say nefarious) products and procedures developed by the anti-ageing medicine industry[3]; and lastly, the use of social media by older persons and their families including a new issue in palliative care – allowing and enabling families to maintain contact with a dying relative in a hospice setting via Skype and Facebook[4]. **Results & Discussion** Much forward thinking is contained in the seminal article in which the gerontechnology matrix is embedded. Still, work remains to be done, to break down limiting beliefs, attitudes, and assumptions about what disciplines should be involved in the gerontechnology enterprise, which topics can be best and most cost-effectively addressed by a single discipline or sub-discipline and which topics require the input of a multi-disciplinary team, and further knowledge on older people and their capacities. The latter include the difficulties of unlearning and the interference effects of prior learning emphasized in the Bouma et al.[1] article.

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R.E. MAYAGOITIA-HILL. ***The gerontechnology matrix five years on: Interdisciplinary and educational issues.*** *Gerontechnology 2012;11(2):146-147;* doi:10.4017/gt.2012.11.02.148.00 **Purpose** Matrices are a favourite methodology in engineering and related fields. They can be used to give impose order on apparently dissimilar topics, to show comparisons, to show intersections, such as in the Gerontechnology matrix subject of this presentation, and can also be used to generate evaluations, when scores are added. The latter, in turn, often inform designs of new products, following consultations with potential users and other stakeholders. **Method** In the second half of the 20th century a number of new interdisciplinary fields of endeavour came into being, such as biomedical engineering, industrial relations and ergonomics, to name a few. They often de-

scribed themselves as the intersection between medicine and engineering, or psychology and business, and so on. Gerontechnology is another example but, coming in later than the other examples, it has been able build on their successes and failures. One of the great successes to gain recognition for a new field, move it forward in terms of new knowledge and bring it into the consciousness of both the general and specialised public has been a distinct field in higher education. A number of entries in the gerontechnology matrix have lacked until very recently their own field of endeavour to move them forward. However, some of them have greatly progressed in self-definition in the last five years, such as telecare and telehealth; so much so that the latter does not even appear in the 2007 matrix[1]. **Results & Discussion** It will be argued that it is not enough for students in a traditional discipline such as architecture to be taught about, say, domotics. The students also need to be made aware of how domotics fits in the wider, often multidisciplinary, context. It will be argued that the gerontechnology matrix can be very valuable to achieve this awareness within higher education.

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L. NEVEN, A. PEINE. ***Designing for enhancement & satisfaction.*** *Gerontechnology 2012; 11(2):147-148;* doi:10.4017/gt.2012.11.02.541.00 **Purpose** We revisit the gerontechnology (GT) matrix in its most recent incarnation[1], and focus on the distinction between issues of prevention, compensation and care, on the one hand, and enhancement and satisfaction on the other. We build on Fozard et al.'s claim that this latter dimension of the GT-matrix has, under-articulate compared to the other dimensions[2p193]. We trace this gap to a neglect in gerontechnology for the sociological and economic study of innovation, often simply referred to as 'innovation studies'[3-5], and claim that integrating insights from innovation studies provides important cues for further articulating enhancement and satisfaction. **Method** Our paper attempts to develop a theoretical argumentation; we focus on two prominent concepts from innovation studies on the notions of 'script' and 'domestication'[6,7], that both theorize the pro-active contributions of users and consumers to processes of technological change. We link these ideas about active technology users and consumption to problems of enhancement and satisfaction[8]. **Results & Discussion** We conclude that the GT-matrix, as it stands now, is incomplete because it has not come to grips with the dimension of enrichment and satisfaction. We show how integrating the discipline of innovation studies, and related ideas of active technology users and consumption, helps closing this gap. Finally, we propose the design criterion of 'domesticability' as an important addition to more traditional ideas about user needs that does justice to older persons' capacity to shape their environment[9,10].

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