

## Why cannot houses be as smart as cars?

Nowadays, cars are computer-based. First of all this concerns the making of cars. Design, construction of parts, assembling, and logistics all rely on software tools. This ensures a reliable construction at a reasonable price -of basic importance for everybody including older people. Also maintenance has become smart. But there is more. Several tools from the informatics branch assist the older driver in traveling more safely through sometimes intense and mentally stressful traffic situations and decrease health risks in the case of accidents. Just compare the 2002 car with its predecessor 10 years ago. The present issue of 'Gerontechnology' offers several options from the research side.

Compare the 2002 house with its predecessor from 10 years ago. There may be some different materials used for the construction, and perhaps there is a communication network. In apartments, a closed circuit television system may have been added to a telephone link to communicate with visitors. Temperature regulation offers more options for day and night, weekdays and weekends, normal weeks and holiday weeks, but it remains to be seen if the added complexity of the user interface (in ads unashamedly called easy) does in reality make both the actual temperature more comfortable and energy use more efficient. Also present electronic security seems to add to complexity rather than to security.

Otherwise, the house seems to have stayed the same. No such thing as a central lock that may close all relevant doors and windows at a single press, no automatic, silent outside ventilation for keeping air quality in kitchen and bathroom optimal, no suggestions or reminders as to necessary maintenance. Architects and builders may use software tools for their professional purposes, but in this respect they seem to have largely ignored

potential wishes and requirements of the users, including those of older users.

Yes, there are demonstration houses and yes, there is domotics. But the focus seems to be gadgets for luxury, rather than basic needs for health, safety, and security for the increasing population of older people.

So a suggestion to the housing industry might be to hire car designers and car engineers for getting a competitive advantage. Another suggestion might be to add feasible options to future housing regulations. Perhaps most substantially, we as research community should sort out what can be done, what user interfaces are required, what it will cost when applied in a mass market, and how much this will add to quality of life of older citizens. Well-established knowledge as the basis for massive application in practice. Who of us will be answering the challenge? Who will prove me wrong five years from now?

*Herman Bouma MSc PhD  
e-mail: heebouma@xs4all.nl*