

“Colours!”

The Active Ageing welcome less transient and extreme colour swings than those driven by fashion trends. They are attracted to kinder and more enduring colours, from sober to more character-full tones, considered sympathetic to ageing complexions and changing hair colour. They like colours influenced by the countryside, from deep rich tones to powdered pales, with references to flowers, berries, fruits, lichens, autumn russets, forest greens, with neutral slates and stones, but not beige, and avoiding the current predominance of black within current fashion.

Colour Harmonies

The colour card was derived in Co-design workshops with colour harmonies proposed representing individual interpretations. In general deeper colours were indicated for menswear and general leg wear, with more muted tones for base layers and richer tones for mid and outer garment layers.



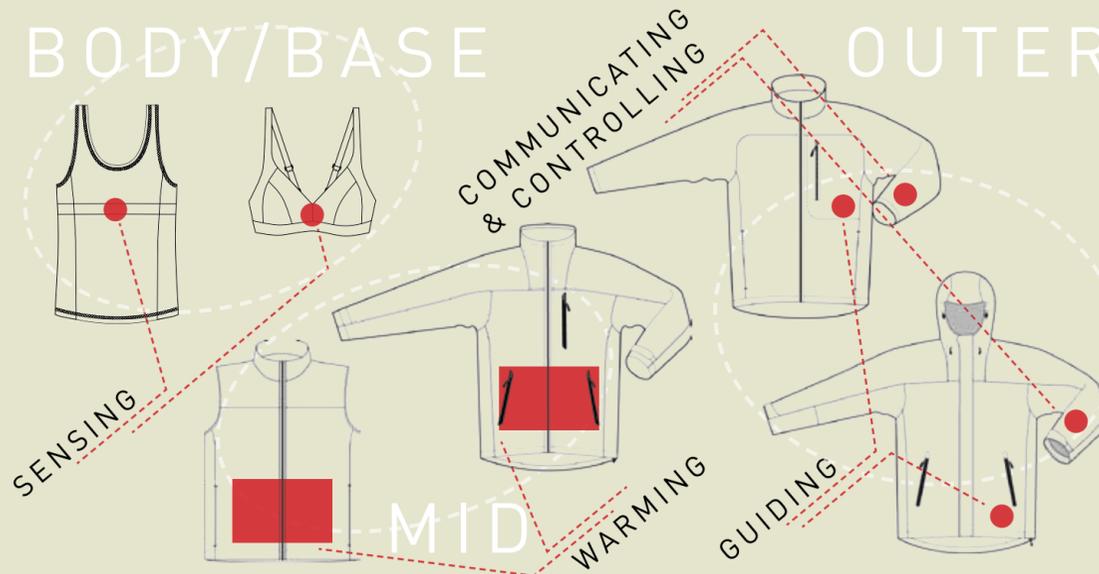
NB: Prototypes illustrated are made in neutral tones.

Due to a restricted colour choice within the range of available commercial fabrics, the prototype garments were produced primarily in neutral tones. The styles developed should be seen in the colours proposed within the colour palette.

THE CLOTHING LAYERING SYSTEM AS A WEARABLE TECHNOLOGY PLATFORM

The physiological needs of the older body may be addressed through the positioning, or 'body mapping' of appropriate materials around the body within a sports-type 'layering system' to aid moisture management, thermal regulation, support and protection. The functionality of the system may now be enhanced by the application of smart fabrics and wearable electronics throughout the layers.

BODY	BASE	MID	OUTER
Monitoring	Moisture wicking	Insulation	Protection
Female bras & male vests with textile knit sensors	Long and short sleeved fitted 'T's & body-mapped Santoni knits in Tencel/wool blends .	Fleeces, gilets, synthetic down garments & wind proof soft shells	Hard shells & water repellent soft shells in: jackets, coats and legwear
Vital signs monitoring		Warming	Communication, Navigation Soft Controls



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Improving the Quality of Life for the Ageing Population using a Technology Enabled Garment System:

Design Direction for the Active Ageing



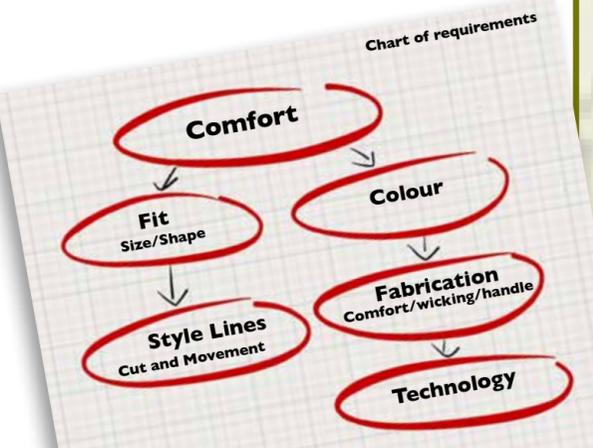
A positive image of ageing!

Fashion styling is normally subject to seasonal changes in silhouette and proportion, as dictated by trend forecasting, often with a focus on the youth market. There has been no trend prediction for the active ageing consumer apart from statistical projections in terms of the size and value of the potential market! Designers, buyers and marketers must beware of age discrimination. Older people today are relatively younger, more adventurous and more confident than previous generations, suggesting that more positive descriptors should be adopted with regard to the ageing such as; Experienced, Knowledgeable, Informed and Expert.

Co-design feedback from the 'Design for Ageing Well' project provides generic design direction for designers and product developers to address clothing needs and aspirations in response to the gap in the market created by the rapidly growing demographic trend - the 'New Consumer Majority'! Design research findings, shared in this newsletter, encourage a positive approach to design that enhances overall style, comfort and user satisfaction for the Active Ageing.

Less transient and fewer styles!

Active Ager feedback indicates user resignation to current ranges often looking very similar and with size and fit that is unpredictable. In general the demand is for fewer and less transitory styles to be available in more considered fit, in a wider size range, and with a greater choice of colours, fabrics and textures. Many older users admitted to buying more than one garment, in more than one colour, when they find a flattering style!



Design Direction for the Active Ageing

Garment Fit

'You learn to appreciate good fit and the reassurance of good fit' (Andrew Crawford, Sizemic 20.9.12).

Fit, along with colour, has been confirmed as a major consideration in product selection with terminology such as 'Skimming', not 'Baggy', and of a 'Decent' length. Active Agers express the need for more inclusive sizing to extend from extra small to extra large sizes and a choice of garment lengths to cater for variation in height in body, sleeve and leg length. Optional fit at waistlines are requested through full or partial draw cords.



Style Lines

Active Agers are more concerned with subtle, non-transient, age appropriate, flattering style lines to address the changing body as opposed to following dramatic swings in fashion. They wish for style lines that profile the body with a preference for softer organic contours, as opposed to angular seaming, with style lines developed to be sympathetic to the range of figure types. They like the curved hem lines of performance sportswear jackets; longer at the back to cover the seat and hollowed out at the front for ease of leg movement.



Garment Cut

Flattering side panels without side seams accommodate varied shape requirements from the bust or chest to waist and hip that, in turn, enable the elimination of side seams. Both men and women request subtle shoulder emphasis, to take attention away from their less defined ageing waistlines! Fluid contours may accommodate articulated elbows and knee cutting, and ample arm-lift, to address the ergonomics of movement and for bending, stretching and putting on and taking off garments. Articulated garment cut must be coordinated throughout the 'layering system' to enable garments to move in tandem and without friction.



Fabrication

The Co-design process revealed that the positive attributes of modern fibres and materials are not initially well understood by the Active Ageing. Since the early poor image of synthetics, some consider natural fibres, such as conventional cotton and wool, 'good', while synthetic and man made fibres are considered 'bad'. By means of the Co-design process older research participants have been introduced to the positive attributes of fibres and fabrics that have the potential to enhance overall comfort within the clothing layering system. Fibres and materials of particular interest are; Tencel for base layers, due to a natural type handle, mid layer fleeces and heated gilets, and the relatively softer and less noisy properties of Soft-Shell materials for outer layers. Wool fibre blends, often with Tencel, are also popular.



Ease of Movement

Stretch is important for comfort and shape retention as well as ease of movement. Enhanced movement is a requirement both in wear and in putting on and in taking off garments. Articulated cutting may be further enhanced through the 'body-mapping', or placement, of varied fabric constructions and through the use of the direction of stretch of a knit, or the use of woven bias, and with elastomeric fabric content.



Design Detail

Ease of adjustment is a concern for hoods, to ensure good visibility, and for cuffs along with subtle adjustment for waistlines. Neck lines should be designed with collars that are suitably protective when fastened but adaptable to look good when open, for more casual wear. Walkers are keen to have many pockets for specific items, and are happy to accept novel manufacturing techniques such as the 'clean' look of the heat bonding of zip insertions, of which they had previously been unaware. A Co-design seam-free knit workshop (Santoni) progressed the development of base layer garments engineered to offer less restricting fit, in a Tencel / Wool blend.



Branding

Co-design showed that functional clothing could be designed to be adaptable to a range of activities, both urban and more extreme. There is, however, a common dislike of brand logos – however discreet!



Wearable Technologies

Some Active Agers, primarily male, are aware of Wearable Technologies for monitoring heart rate, navigation etc. However, Co-design engagement has introduced far greater awareness of what is available and of the shortcomings. Active Ageing research participants feel that much of the existing technology is not yet user-ready, with connections not yet good enough to work in the 'real world'. It was found that user-interfaces are difficult to read and soft controls too closely positioned in terms of dexterity. However, female participants really appreciate heated panels in gilets!

