There have been six inter-related strands in my work.\textsuperscript{1}

1. **Raven Progressive Matrices**

The RPM tests measure the ability to perceive and think clearly. They are commonly regarded as the best available measures of Spearman’s $g$. Of all the measures developed by psychologists, $g$ is the only one that significantly predicts occupational and life performance.

This is not necessarily a good thing. Spearman himself was rightly concerned about the destruction of education by tests.

Important research results include:

Within-family variance in scores amounts to two thirds of overall variance in $g$. 11 year olds’ $g$ scores predict two thirds of social mobility, both upward and downward, and many other things including health and longevity.

In all cultures, scores have increased dramatically over the years (the “Flynn Effect”).

Thus, contrary to expectations, $g$ is hugely affected by the environment. But the important environmental factors are not among those usually expected. One finding illustrating this is that, at any given date, scores are remarkably similar across most cultures regardless of their GNP, level of education, and family size.

2. **Competence**

Much more important has been our research into the conceptualisation, measurement, and development of generic high-level competencies like initiative, creativity, and leadership.

A paradigm shift is required in thinking in this area. This involves moving from a variable-based to a descriptive framework analogous that employed in chemistry and biology/ecology.

Particular attention needs to be paid to the phenomenon of *emergence*.

3. **The educational system**

Many studies have shown that most people think that the main goal of education is to nurture high-level competencies like those mentioned above. Studies in workplaces and society confirm this. Yet the system generally fails to deliver.
The reasons for this form a self-supporting, self-extending, system, the main components of which stem from inappropriate public management systems and a network of social forces pressing irrevocably toward hierarchy.

4. Socio-cybernetically based public management

Adam Smith noted insuperable failings in “democracy” and bureaucracy.

He saw in “the market process” a basis on which it might be possible to build an alternative design which would innovate and learn without central direction.

His design does not and cannot work.

We have developed an alternative design grounded in socio-cybernetics.

5. Turning psychology inside out

Before Newton, it was believed that moving objects behaved as they do mainly because of their internal properties. They were animated.

After Newton, it was mainly because they were acted upon by networks of invisible external forces which could nevertheless be mapped, measured, and harnessed.

A similar re-focussing is required when thinking about human behaviour.

6. Mapping the socio cybernetic forces that have the future of humankind and the planet in their grip

Over endless millennia, numerous alternative management systems have been shown to be viable.

Yet all have been eliminated by powerful social forces.

We have been trying to find ways of mapping, measuring, and harnessing these forces in ways paralleling Newton’s.

It emerges that it is the endless senseless work constituting a hierarchy which compels participation in itself that is destroying our habitat, thereby destroying our chances of surviving as a species.

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i See [www.johnraven.co.uk](http://www.johnraven.co.uk). PDFs of more recent work (and opportunities to comment) at [www.eyeonsociety.co.uk](http://www.eyeonsociety.co.uk)