

# **Emergence**

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Identity, Reciprocity and Gift of Self**  
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## **Abstract**

In this paper I first list a number of areas in which recent research seems to reinforce the need to follow through on activities identified in Simonetta Magari's summary of the previous conference. A careful review of research in these areas would lead us into deeply mysterious psychological processes and underline the need to change the most fundamental assumptions on which modern psychology is built. Unfortunately, I am in no position to undertake this review.

Accordingly, I have settled for the lesser objective of discussing (i) the problems posed by the phenomenon of emergence; (ii) the dominant role that networks of *external* social forces play in determining behaviour (and the way these networks of social forces perpetuate and elaborate themselves), and (iii) the emergence of a network of negative social forces which seems to have the future of mankind and the planet in its grip.

I start by showing that one of the most important uses of the slippery word "intelligence" is to refer to an emergent property of a *group*. Groups can, to a greater or lesser extent, harness (or neglect and destroy) the diverse talents available to them to create cultures of intelligence or enterprise on the one hand and despondency and conflict on the other.

Whereas we, as a species, currently have the highest levels of individual intelligence ever, it seems that we have the lowest levels of collective intelligence ever.

But group and individual characteristics are not the only things transformed by networks of social forces. Time after time we see that well intentioned social action is transformed into its opposite by those networks of forces.

A systemogram of the social forces which transform the "educational" system into its opposite is then used as a basis for a discussion of the role of social forces more generally.

Two issues then stare one in the face. One is that our *governance* systems are ill equipped to promoting the kind of experimentation and societal learning that is needed. The other is the dominance of the "sociological" forces pressing unrelentingly toward societal hierarchy and division.

Unexpectedly, therefore, it emerges that two key tasks for psychologists, *qua* *psychologists*, are (i) to contribute to the design of a societal management system which will act more effectively in the long term public interest – that is to say, of maintaining life itself – and (ii) to map the network of social forces which are driving us so relentlessly toward our own extinction.

## **Introduction.**

I would like to follow on from Simonetta Magari's summary of the outcomes of the last conference.

I have always been intrigued by the mysterious communications between distal body cells (especially in the course of development), the equally mysterious connections between minds and between minds and Gaia, the evidence that at least much of the mind is located *outside* the body (never mind the heart), the evidence for reincarnation, the ability to be in touch with the past and future, the communications between species as in symbiosis, and the forces at work in evolution and the simultaneous co-creation/evolution of organisms and their habitats.

However, I have to confess that following the paths blazed by researchers in these areas leads me into places where I feel I am losing my sense of orientation. I come to feel distinctly uncomfortable and retreat.

I am therefore in no position to try to summarise research in these areas, still less to suggest areas for future research.

There are, however, areas closer to mainstream psychology ... but still distant from it ... that merit discussion.

For today, I have brought some of these together around the theme of "emergence".

## **A neglected area.**

Psychologists have, with a few notable exceptions, almost entirely neglected the dependence of what appear to be individual characteristics on their social context. Even more neglected has been the need to understand and describe the emergent properties of groups or societies.

More seriously, psychologists have almost entirely neglected the networks of invisible external social forces which, as I shall show, primarily determine human behaviour. And, because of that, they have entirely neglected the question of how these networks of social forces arise, perpetuate, and elaborate themselves.

## Life and death

Let me make a still more outlandish statement. So far as I can see, the emergence of life ... the co-creation of a living planet (which has properties which the laws of physics say it should never have had) and individuated plants, animals, and other organisms ... seems to have been accompanied by the development of an emergent network of social forces destined to lead human beings to destroy life itself. It seems to be one more example of Newton's law that "to every force there is an equal and opposite reaction".

In the course of my lifetime I have not been able to do much research into the processes which have been responsible for the emergence of life. But we have stumbled upon some insights into the way in which the network of forces which seems destined to destroy humanity, carrying the planet as we know it with us, operate.

## Emergent properties of individuals and groups

A classic illustration of what I mean by "emergent properties, is the way in which copper sulphate has properties that cannot be predicted from those of copper, sulphur, and oxygen taken individually.

Likewise, when groups of people each of whom has distinctive qualities (which have been obscured by current frameworks for thinking about individual differences and reductionist, variable-based psychometric models) come together, that group may have distinctive emergent properties. It might, for example, be characterised as a group having a culture of "enterprise" or "humane mutual support" or "endemic conflict".

Kanter, Schön, and others<sup>1</sup> have described how networks of self-organising groups forming around previously unrecognised problems can form the backbone of wider cultures of enterprise. These self-organising groups are made up of people with different characteristics: a, perhaps inarticulate, problem noticer, a publicist, a fund raiser, an ideas person, someone expert in quelling quarrels, an expert at industrial espionage, a political manipulator etc. Yet the proliferation of these vital self-organising groups often depends on a wider social climate which promotes, and sets aside time for, these activities; a climate which acknowledges that it is important to recognise the normally invisible contributions which people make to processes which are not identified in formal organisation charts.

We<sup>2</sup> have observed the same process in some primary schools in which, for example, pupils set out to tackle community problems. It emerges that, under appropriate leadership from the teacher, all pupils can develop important high-level talents or competencies of the kinds mentioned in the last paragraph.

Unfortunately, we, as psychologists, have failed to provide those concerned with an adequate framework for thinking about these diverse talents and the processes that are required to release, nurture, and recognise them.

## Transformation

But let us now note something else.

These activities not only harness and develop these individuals, *the group activities transform* those concerned. They do not become more or less of something. They are transformed. Many of those involved cannot even be said to possess the very competencies that turn out to be the most important except when they are interacting with others who contribute in other, but different ways. It is not merely that these qualities were not visible: They did not even exist before.

So self-fulfilment and the individuation of the self are very dependent on those processes. In short, as noted long ago: “One cannot *be oneself by oneself*”.

### **Educational goals and their transformation into their opposites.**

But now I would like to move on to something else.

Most countries have statements of educational goals which emphasise the importance of developing all pupils idiosyncratic strengths and characters, nurturing generic traits like initiative, creativity, problem solving ability, and the ability to understand and influence social processes<sup>3</sup>. These official views are widely supported by both public opinion<sup>4</sup> and studies of the competencies required to function effectively in workplaces and society<sup>5</sup>. Indeed, the word “education” itself implies a process which will “draw out” the diverse talents of individuals.

Yet, by and large, the so-called “educational” system doesn’t do these things. Instead, most “educational” programmes set about arranging people on a misleadingly-named hierarchy of “ability”. It does this using tests which, at best, measure temporary knowledge of a smattering of diverse, usually out of date, and personally irrelevant “facts” or processes<sup>6</sup>.

In fact, most schools do the opposite: of what the stated goals imply: they stifle diversity and creativity and instead inculcate “trained incapacity”. In most countries, approximately one third of pupils experience their education as demeaning and destructive ... and they do not change their minds as they grow up, get jobs, and have children<sup>7</sup>. Work, even in the largest factories and offices, is generally found to be a much more developmental experience.

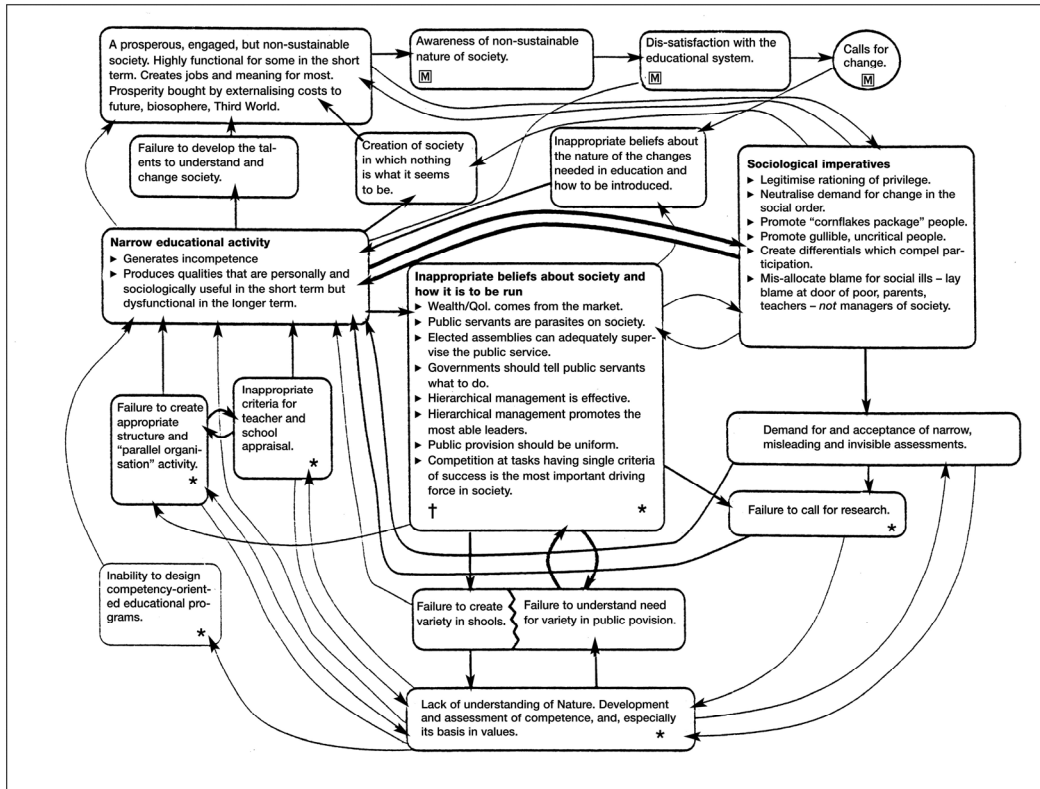
How does this come about?

There are many reasons<sup>8</sup>. These include the absence of a shared conceptual framework for thinking about multiple talents, the absence of a framework for thinking about how to nurture those talents in group settings, the absence of means of giving pupils credit for possessing diverse idiosyncratic talents, and the sociological demand that schools arrange pupils in a single and unarguable hierarchy of “ability” to legitimise social division.

But the most important observation we made in the course of our work is that these various factors do not operate independently but form a mutually reinforcing, and self-perpetuating, network, or *system*, in which it is impossible to change any one part without simultaneously changing others. Otherwise the effects of the intervention are negated by the reactions of the rest of the system or have largely unanticipated - and typically undesirable - consequences elsewhere in the system.

This network of social forces is sketched in the systemogram below:

Diagram 23.1. Feedback loops driving down quality of education.



\* Intervention in these cells would help change the nature of the qualities nurtured and rewarded in the system. Motives which could be harnessed to do this are marked M.

† These need to be replaced by acceptance of the need to make managed economies work – to find way of giving effect to information concerning the public long-term interest, the need to explicitly create variety and information on the personal and social consequences of the options, and to find ways of holding public servants accountable for, and getting them to at in, the long-term public interest. This means systematic, broadly based, evaluation and participative democracy.

Note that this system has *emergent* properties. As a result of the mutually supportive nature of the forces involved it is, self-perpetuating, self-elaborating and self-extending. In a word it is *autopoietic*: It has a life of its own.

Practically, it is very important to note that what happens is not determined by the priorities of teachers, pupils, parents, ministers of education or anyone else, but largely by the operation of the system itself.

It is therefore pointless to blame, or shout at, teachers, politicians, governments, or anyone else<sup>9</sup>.

### Some key insights into the developments needed to move forward.

But the diagram also highlights two more things to which we, as psychologists, pay insufficient attention.

One is represented in the central box dealing with the sub-system of governance. The other is hinted at in the box on the right where the network of social forces which exert so much control over education and society more generally is mentioned.

## Governance

As a host of observers over the centuries, and more recent work conducted by such people as Schon, Deming, Kanter, Kohn and others, has shown, centralised command and control management is extremely *inefficient*. In particular, it stifles innovation.

Yet all attempts - over many millennia - to change it by creating demonstrations of the feasibility and viability of alternatives have been wiped out by the operation of the system ... and especially by the processes briefly indicated in the right hand box labelled "sociological imperatives".

As far as the educational system is concerned, what is needed is a management system which promotes the development of a variety of educational programmes aimed at nurturing the diversity of students' talents. This management system needs to promote *comprehensive* evaluation of *all* the short and long term, desired and desirable, personal and social consequences of each of these alternatives and create opportunities for pupils and parents to make informed choices between them. That is to say, the management system needs to generate non-reductionist scientific information and feed it outward to the public, not upward in a bureaucratic hierarchy to committees of ignoramuses who are charged with taking decisions binding on all. Comprehensive evaluation of this myriad of experiments needs to pay particular attention to trying to identify the *systems* causes of "failure". And those concerned need to initiate further experiments which take this new information into account.

The task of a manager, and especially a public service manager, is, thus, not to issue orders and ensure that controls and checks are in place, but to create a ferment of innovation and learning.

The model of science required to inform this system is flatly at odds with the dominant paradigm of reductionist science. It is more important to get a rough fix on all important outcomes than to get an accurate fix on any one of them. Never mind to attribute those outcomes to single underlying "causes".

Psychologists have a crucial role to play in contributing to the evolution of this alternative management system<sup>10</sup>. It depends on the evolution of new organisational arrangements and new staff- and organisational- appraisal systems. It depends on feeding this information outward to a participative, network-based, monitoring system and not upward in a bureaucratic hierarchy to selected representatives. Thus it involves the application of the concepts and methods of organisational psychology to society as an organisation.

### **The network of social forces controlling society.**

But now we must turn to the box representing the network of sociological forces which so much determine the operation of the whole system.

Our understanding of the operation and significance of these forces has been greatly enhanced by the work of Murray Bookchin<sup>11</sup>.

What he shows is that the drift toward centralised command and control systems in society is based on the creation of a steep hierarchy of differentials to compel participation in the system. Everyone is terrified of the treatments meted out to those at the bottom of the heap. This drift has been proceeding inexorably for many millennia, negating all advocacy of, and demonstrations of the viability of, alternative ways of doing things. It is nothing new.

This system, this hierarchy, constitutes, and depends for its operation on, the creation of endless senseless work to legitimise, and compel participation in, the system. The work we refer to is the production and consumption of endless materialistic goods and services which contribute very little to quality of life. But it is this senseless work that is consuming the

resources, and producing the pollutants, that are destroying our habitat at an exponentially increasing rate.

### **Some implications, especially for psychologists.**

This process will shortly lead to the destruction of our planet as we know it, carrying homo sapiens as a species with it. Make no mistake about it: dramatic change in the way we live is now inevitable. Either we recognise what is going on and take appropriate action or we will be destroyed.

If we are to survive as a species, we need, rapidly and radically, to change the way we live. The pupils involved in our opinion surveys were right: the most important goal of education is to develop the capacity to understand and intervene in social processes.

But how *are* we to understand, stem, indeed reverse, the process I have described? Many have tried but all have failed. Such things as Focolori economic interventions, Grameen banking, the introduction of other local currencies, and Local Exchange and Trading Systems can ameliorate some of the worst effects of hierarchical division within and between societies, but they cannot stem the trend.

What have we, as psychologists, got to say about this? How are we to contribute to the transformation required to create a humane and sustainable world?

We have failed in our professional responsibility to seek to understand and predict human behaviour by failing to examine these social forces which so much control behaviour.

The problem we face is as fundamental as that which faced physicists in Newton's day. Before Newton, if things moved or changed direction it was because of their *internal* properties. They were *animated*. After Newton it was mainly because they were acted upon by a network of invisible external forces which could nevertheless be mapped, measured, and harnessed.

So what am I saying? An emergent, self-perpetuating, self-extending, and self-elaborating network of social forces has the future of mankind and the planet in its grip.

So it behoves us to seek to understand, map, measure, find ways of intervening in, and find ways of harnessing, that network of forces.

Such work is crucial if we are to legitimately claim expertise in understanding human behaviour.

Like the work I mentioned at the beginning of my talk, doing these things means "turning psychology inside out".

### **A few specific suggestions.**

But, whereas I was unable to suggest steps to promote a "spiritual" transformation of the world, I can suggest 101 concrete, if non-obvious and non-common-sense, things that it is important to do in the areas I have discussed.

A selection of the research topics that it is important to pursue is shown in Appendix Box 1. And some steps that might be taken to promote change in the way we live – ie to treat the cancer in our society – are listed in Box 2.

Yet, like the work that, as Simonetta Magari mentioned, has been done in the "spiritual" area, such work requires committed, adventurous, people who are willing to break out of conventional professional boundaries and thoughtways.

## Appendix

### Box 1

Research is needed to develop:

- New ways of thinking about individual differences and their assessment. Nothing less than a paradigm shift is required in this area.
- A framework for thinking about, assessing, and assessing the consequences of, a variety of types of developmental environment.
- A framework for thinking about and assessing emergent properties of groups and their consequences in different social contexts.
- Ways of thinking about, mapping, measuring and harnessing the network of external social forces which primarily determine the behaviour of individuals and societies.
- A better understanding of appropriate organisational and managerial arrangements.
- A clearer understanding of what is required of managers in organisations and society more generally.
- The tools required to hold public servants and other managers accountable for exercising high-level talents - and especially for doing such things as creating hives of innovation, initiating systems-oriented experiments, monitoring the effects of those experiments, and changing the inputs accordingly.
- The tools required to assess multiple costs and benefits in non-financial terms.

### Box 2

**Some ways in which individuals might contribute to the treatment of our societal cancer.**

- Promote wider recognition of the perilous state of the planet and humankind within it.
- Promote recognition of the major role public servants play in the management of society.
- Promote, and participate in, network-based supervision of the public service.
- Disseminate an understanding of the fundamental reasons why centralised, even apparently “democratic”, control is of little value.
- Promote wider recognition of the limitations of reductionist science and a move toward comprehensive, ecological, science.
- Challenge the hegemony of “economic” thinking.
- Promote systems thinking, especially socio-cybernetic studies.
- Promote alternative ways of organising, funding, and evaluating research.
- Advocate greater efforts to promote variety, experimentation, comprehensive evaluation, choice, and diversity as a basis for evolution of a radically changed society.
- Contribute to the creation of a pervasive climate of innovation – encourage diversity, personal professional responsibility, social experimentation (including toleration of “failure”), refusal to follow commands or authority without reason, challenge to conventional wisdom.



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## Endnotes

- 1 References to the publications of such well known authors are not listed here. All can, however, be traced through my publications.
- 2 Raven et al (1985).
- 3 Actually these “traits” are, in reality, mainly emergent properties in, and of, *groups*. For example, one cannot usually understand and intervene in social processes on one’s own. Creativity is always contextual: *in relation to a particular kind of task* the opportunity to undertake which depends on others..
- 4 See Raven (1994).
- 5 Raven (1984/1997).
- 6 In reality, these tests lack both construct and predictive validity.
- 7 Raven, (1994).
- 8 see Raven (1994).
- 9 see Raven (2012).
- 10 Much of my *New Wealth of Nations* (Raven, 1995) deals with the societal management arrangements required for a sustainable society.
- 11 Bookchin (2005).