



**Organisational Transformation requires
the presence of leaders who are
Strategists and Alchemists**

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First published in *Organisations and People*, vol 4.3 (1997)

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I was recently in discussion with a group of senior managers planning a culture change initiative in their research organisation. I asked them “Do you think it is possible to significantly change the culture of an organisation?” “Without doubt”, they replied, “and furthermore, it is our responsibility to do so”.

This confidence is not unusual; there is a broad belief among managers that far reaching strategic change can be achieved by careful design. But can it? Many change programmes patently fail, so much so that one of the highest levels of cynicism in organisations is about ‘flavour of the month initiatives’.

In this paper I explore the proposition that many senior managers lack the capacity to conceive, plan and implement change to a degree which is transformational, that this has to do with the meaning-making structure of the manager, and that as this capacity is developable, it is possible for managers to embark on a type of learning which will enable them to purposefully create particular types of organisational culture.

Developing capacity

It is important to make two things clear. First, ‘lack of capacity’ does not suggest that the managers in question are stupid, ill educated or slothful. It means that out of habitual ways of viewing the world managers, like all other people, come to restrict their potential for far reaching action. This habitual viewing renders ineffective any amount of effort in terms of long hours or extra worry.

Second, there are many reasons why change initiatives fail. Perhaps most pervasive is the sheer complexity of attempting to steer change in the chaotic and unstable world of organisations. The ‘lack of capacity’ in managers serves to compound this complexity, but even if all managers had capacity many change initiatives would still fall short of what was desired of them. ‘Capacity’ in common use often refers to a person’s intellectual ability, (“he hasn’t the brains to understand that”) or to their stamina and tenacity (“she has the guts to deliver that project”). To these common usages can be added emotional capacity (the ability to relate healthily at an emotional level to the world), the moral capacity to treat other beings with respect, the capacity for humour, the capacity to love, and the capacity to engage in a spiritual life.

As the list of capacities grows something interesting happens. We move from bottom line capacities, to analyse and to deliver, to other perhaps higher areas; to act morally, to love. All of these capacities are vital and yet I am proposing that there is a broad and fundamental capacity that underpins and influences all of these. This is the capacity to meaning make, not in a narrow analytic, intellectual way but in a holistic way which creates each person’s worldview or view-of-the-world-outside-of-me.

Meaning-making and developmental stages

I will digress a little to explore the notion of meaning-making. Kegan tells a tale of two brothers aged three and seven who are standing in the viewing gallery of the Empire State Building.

“Look at the people down there”, exclaims the younger, “they are tiny ants”. His older brother exclaims at the same time “Look at the people down there, they look like tiny ants”. Here we have a fascinating difference in meaning-making structure.

The younger recognises people, but sees them to be the same size as ants. No problem, his meaning-making is not troubled by logical consistency, (ants carrying shopping?), the people are tiny ants. His older brother’s meaning-making has evolved somewhat; he has the benefit of perspective and logic. He knows that the people down there are a long way away and just look like tiny ants.

What follows is an example of different meaning-making in two managers. “You must have been pleased to secure the funding for your multi-agency project. You’ve been successful.” he said. She replied, “Yes, I am pleased but I see it as symbolic, we all worked together to secure the funding and it was working together which was important, not the funding.” He has attached importance to the results, to what has been achieved. She has attached only symbolic importance to this, the real ‘success’ is in the coming together of different agencies.

Do adults continue to develop their meaning-making capacity as they mature? A group of writers which include Torbert, Loevinger, Cook-Greuter and Kegan believe they do and that some highly differentiated stages of meaning-making in the adult human being can be determined. This theory has profound implications for managers. In a nutshell; a manager is constrained by the self generated framework within which he or she makes meaning, just as the younger of the brothers was constrained by his meaning-making inferences. In fact, just as both brothers were constrained by their meaning-making, for we all operate within a meaning-making structure, or at least this is how I understand it from my own meaning-making framework.

Torbert and the others pick up from where Piaget left off, ie at the beginning of adulthood. They suggest that meaning-making capacity has the potential to develop through distinct stages, in which each stage encompasses the capacities of the previous stages before it. Torbert lists eight stages for the adult and Loevinger lists three broad phases within which specific stages can be identified. These are shown in Table 1.

A warning about language: care must be taken with the labels used to describe each stage – one might believe that ‘diplomat’ describes some Henry Kissinger type figure, negotiating and manipulating on the world stage. This is far from the description implied by the label.

Table 1

| Leadership Development Framework | Torbert | Loevinger |
|--------------------------------------------------------------|---------------------------------------------|-------------------|
| impulsive opportunist | impulsive opportunist | pre conventional |
| diplomat expert achiever | diplomat technician achiever | conventional |
| individualist strategist alchemist / jester ironist | strategist alchemist / jester ironist | post conventional |

What meaning-making capacities are necessary to enable managers to succeed at implementing change? It is my proposition that sufficient managers must have post-conventional meaning-making capacity (in Leadership Development Framework terms, Individualist and later). Research by Torbert in the US and by Harthill Consulting in the UK has shown that the key stages for managers are:

| Torbert – USA (4510 Managers) | | The Harthill Group – Europe (1556 Managers & Consultants) | |
|----------------------------------|-----|--------------------------------------------------------------|-----|
| Opportunist / Diplomat | 15% | Opportunist / Diplomat | 1% |
| Expert | 37% | Expert | 14% |
| Achiever | 30% | Achiever | 45% |
| Individualist | 11% | Individualist | 25% |
| Strategist | 5% | Strategist | 12% |
| Alchemist | 2% | Alchemist | 3% |

The European sample includes mostly people engaged in developmental activities and undoubtedly contains more late stage profiles than compared with samples of Managers not engaged in developmental activities.

Explanations of the main characteristics of these key stages are found in Table 2.

Some key attributes of the Strategist stage of development which support organisational transformation

My proposition is that only managers at the post-conventional stages, Individualist and later, can steer transformational culture change in organisations. Managers at earlier stages would either not see the need or seeing it, would not have the inclusive frame-making ability to realise it. Even at the Individualist stage the differentiated ability to engage in transformational meaning-making and action is limited. Only at the Strategist stage does this capacity emerge with any possibility of consistency.

There are a number of world views or meaning-making structures which differentiate those at the Individualist and Strategist stages of development from the earlier stages and impact directly on the ability of these later stage managers to engage in transformative change.

The most profound developmental characteristic of the Individualist and Strategist stages is the deepening awareness that all people, including themselves, understand their individual worlds by looking through the lens of their own meaning-making structures. The consequence of this is that all people understand the world slightly, and in some cases, profoundly differently. Perspectives are relative. The Strategist is engaged in striving to comprehend the worldviews of others and to engage in participative, rather than unilateral, meaning-making. This in turn leads to an inclusive way of operating in the world based upon inquiry.

This gives rise to an important agility for those at the Strategist stage. If 'reality' is constructed then any current framing of a situation is merely one of many possible framings. Strategists can equally quickly re-frame circumstances in order to transform action. When Brian Keenan was held hostage in Beirut he went on hunger strike to stop one of his captors physically beating him; reframing the situation so that he gave himself power from an almost totally disempowered position. He wrote:

“I felt no need for anger or aggression. My stubbornness had interiorised itself... I remember carrots were occasionally flung at me. I laughed and laughed. Here was a game I was winning; I was in control and control could not be taken from me.”

Table 2
Main managerial style characteristics of four key stages

| | |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Expert stage</i> | interested in problem solving; seeks causes; is critical of self and others based on “craft” logic; chooses efficiency over effectiveness; is a perfectionist; accepts feedback only from ‘objective’ craft masters; dogmatic; values decisions based on unquestioned ‘objective’ merit, sees contingencies, exceptions; wants to stand out, be unique; their positive ethic is a sense of obligation to a wider, internally consistent moral order. |
| <i>Achiever stage</i> | effectiveness and results oriented; has medium to long term goals; the future is vivid and inspiring; welcomes behavioural feedback; feels like initiator not a pawn; appreciates a systems view and understands complexity exists but tries to minimise it; seeks generalizable reasons for action; seeks mutuality, not hierarchy, in relationships; feels guilt if not meeting own standards; unaware of their own ‘shadow’; believes in objectivity and is blind to subjectivity behind it; their positive ethic is practical day-to-day improvements based on self-chosen (but not self-created) ethical system. |
| <i>Individualist stage</i> | concerned with the difference between reality and appearance; increased understanding of complexity; begins to question their own assumptions and those of others; understands the subjectivity of beliefs; talks of interpretation rather than truth; plays different roles in different contexts; seeks out feedback; intrigued by self. |
| <i>Strategist stage</i> | post-conventional; relativistic, aware that what one sees depends upon one’s worldview; creative at conflict resolution; recognises importance of principle, contract, theory, and judgment not just rules and customs; process oriented as well as goal oriented; aware of paradox and contradiction; has an alive sense of history in the making; enjoys playing a variety of roles; witty, existential humour; aware of dark side of power and tempted by it: positive ethic is creation of mutuality based on inquiry from within equal relationships |

Whilst those at the Achiever stage focus on performance within the given social system of an organisation those at later stages do not take the current system and its value base as a given but as relative, and may seek to change it.

The Strategist stage manager does however operate from deeply held principles and within a personal moral code. Key to these principles and built on the understanding of the relativity of viewpoints is the desire for mutuality and an inclusive rather than exclusive order of things. An important principle is that the use of power should tend towards inclusion and mutuality - that each individual should be given opportunities to self-maximise.

As managers move into the Individualist stage they become interested in how they use power. Their curiosity will lead to experiments – often relaxing control when contrasted with their previous Achiever perspective. Strategists will continue to seek systems effectiveness and they will also seek justice and legitimacy. They engage in a conscious inquiry about how power, and particularly their own power, should be used to bring this about. They will often experiment with their power, testing the limits of overt influence alongside covert manipulation. This presents intriguing dilemmas for the Strategist stage manager. Recently one manager put it like this to me; “I’m delivering on the bottom line stuff - but what I’m really interested in now is how to make this a truly fun place to work. I want people to get a buzz out of working here. I’m creating opportunities for people to relax more, to ease off, but in trying to create this I’m getting worried that I might be seen as manipulating - which would destroy what I’m trying to create”.

Achiever stage managers look for the most direct route through problems, their tendency is always to seek to clarify and simplify. (In fact ‘clarify / simplify’ is a key motto in one organisation that I work for). This accounts for the Achiever’s great effectiveness and high value to organisations. The Strategist stage manager however, becomes increasingly aware of the existence of complexity, paradox and ambiguity. This enables them to work in the relatively unstructured and fluid world of seemingly chaotic organisational change, where structures are being taken apart. This ability to work with complexity and fluidity is an enormously valuable resource of Strategist stage managers today: a capacity which is increasingly valued. It can also have debilitating consequences; Strategists are often seen as less decisive than their conventional stage colleagues.

The Strategist stage manager inquires by asking questions such as: “How do you see this?” “What sense can we make of it?” “How would you like to proceed?” “Can we view this in a different way?” “What can we learn from that experience?” and so on. This inquiry is fundamental to learning in the organisation and to the possibility of self generated transformation. Only together can sustained second order change take place - a mutual process of co-creation instigated by the Strategist’s inquiry.

The criticisms of this developmental model

I have found this model to offer a powerful interpretive framework for the actions and capacities of managers precisely because it considers their fundamental meaning-making processes and because it offers an incremental development framework. My use of it over the last ten years as a collaborative interpretive model has led to much personal development and to successful organisational interventions. However the framework has its critics, including myself. I identify two significant shortcomings:

- 1 The description tends to suggest that people are successful at each stage. For example, the Expert is described as being concerned with detail. The inference is that the Expert will be good at detail. This may not be true. I know of one Expert who fusses endlessly over such details as the presentation of reports and still manages to be terribly inconsistent and make mistakes. I equally know Achiever stage managers whose whole orientation is to the delivery of results, who nonetheless fail to make sound decisions upon which success would be built.
- 2 The descriptions lack a psychological perspective. There is a world of difference between a manager at the Achiever stage who is, for example, free from feelings of inferiority and one who is deeply troubled by feeling unequal to peers and friends. One can imagine the latter as a driven Achiever, with all the tensions associated with this. I meet people at every stage whose behaviour is as much impacted by their archaic psychological patterns as by their current stage of development.

Critics dislike the framework because it is hierarchical, it has an ‘upward and onward’ quality where, they claim, it is ‘better’ to be later stage than earlier. It is important, I think, to distinguish between it being hierarchical (it is) and there being particular values to being later. Put simply, people at the early stages can be as happy and satisfied with life as at the later stages. Think of an artisan - an Expert furniture maker deeply engrossed and satisfied by their work, a master of their craft, and how much more appealing this image is than that of the Strategist manager trying to make sense of an ever changing and alienating corporate world.

Critics also dislike the framework because it suggests that all human beings must progress along a road of meaning-making development, passing milestones in an exact order. I have sympathy with this criticism and yet in the time that I have inquired into the framework’s validity I have been surprised by how often it does seem to provide an accurate description of the developmental progress of individuals. I am reminded of Carl Rogers’ quote “I am at once struck by the great differences between people and the great similarities”.

These critical questions of the developmental framework provoke a useful caution and inquiry. As you reflect critically about the framework, what developmental stage informs your meaning-making?

An example of a Strategist stage manager

What does a manager manifesting these Strategist stage capacities look like? It is, of course, not outward behaviour, but the internalised meaning-making process which characterises each stage. This makes identifying any stage, and particularly Strategist and later, tricky. What inferences about developmental stage do you draw from this pen sketch of a real leader of a 1,000 person organisation?

Some people like and admire him, some do not. Most of the people near to him respect him very much, to the extent of being a little in awe or nervous of him. He will change his mind about an issue as he gathers information over time, so that people distant from him in the organisation think him inconsistent. Because he plays many roles; the gentle listener, the tough talker, the abstract theoretician and the rambling storyteller people feel that they do not really know him or that he is not to be trusted.

Yet those close to him are very loyal - they disagree with him on many things but respect his judgment, particularly as he'll often pursue a highly unusual route which turns out to be successful. He has a nose for 'political' trouble and his period of leadership has seen few unexpected crises. He often gives the impression of indecisiveness (which can infuriate his more decisive colleagues) and yet he holds a vision of where the organisation will go in the future.

He will be tough with what he demands of people for the organisation, but several managers attribute key aspects of their own development to coaching or timely tasks given by him.

Are organisations dependent on Strategist stage managers to enable transformative change?

I argue that in a hierarchically managed organisation true and deep culture change requires the presence of managers at the post conventional stages of development.

If this is true, what proportion of a senior management team at these later stages would be sufficient? Is one person enough? My own experiences, and I have written about this elsewhere (Organisational Transformation as a Function of CEO's Developmental Stage, Rooke & Torbert 1998) is that post conventional managers are required and that there must be more than one. If the leader is not able to frame from a Strategist (or later) perspective then profound change is unlikely.

Let me give two examples of change initiatives, one unsuccessful and the other successful.

A change initiative that lost the way

Using the Harthill Leadership Development Profile the management team of a multinational's UK subsidiary was profiled prior to embarking on a plan to change the culture of the organisation and its declining UK market share. The team profiled (using Torbert's nomenclature) in the following way (the first named stage is identified as the subject's dominant stage):

| | |
|------------------------|-----------------------|
| <i>Chief Executive</i> | Achiever - Expert |
| <i>Director</i> | Strategist |
| <i>Director</i> | Strategist - Achiever |
| <i>Director</i> | Achiever |
| <i>Director</i> | Expert - Achiever |

The initial impetus to engage consultants was created by the Strategist stage Directors who were experiencing increasing professional tension with their Chief Executive. Both Strategists felt that too much time was being spent by the management team, and particularly by the CE, dealing with business within a status quo framework, when far reaching changes to the culture of the organisation and its market positioning were required. Both looked for consultants who would help broaden the perspective.

During the time of the intervention (just over one year) the CE struggled to understand and deal with some of the complex issues facing the company, and in particular failed to operate effectively in an international senior group which was making important decisions affecting the UK operation. His Achiever - Expert framework had served him very well during the steady growth years of his industry, but now the environment was different and required different capacities.

One of the Strategists was eventually to leave the organisation after a series of confrontations with the CE about his management style. He was replaced with an Achiever stage colleague. The second Strategist continued to enjoy a good personal relationship with the CE but an increasingly exasperated professional one. Eventually this Strategist also left the team to take up a prestigious role elsewhere in the company, feeling that she could exercise insufficient influence within the team. This left the management team with no Strategist stage managers.

The ambitious change programme first withered and then was abandoned. Where trust had been built, it faded. From my perspective as a consultant the CE 'reverted to what was familiar' after a period of learning new approaches, some of which were influenced by his Strategist stage colleagues. Many in the organisation considered that there was a retrenchment into autocratic management and centralised control.

This was clearly an unsatisfactory change project and not one that I, as a consultant, am proud of. Given the balance of the management team, could it have been different? What was the learning? Interpreting this through the lens of the developmental stages model I make these observations:

The two Strategist stage managers had initiated the engagement of consultants - it had been they who had a vision of a changed organisation whilst the CE continued to focus only on issues of profit and market share within an unchanged organisational context. Had the CE been able to allow these two more influence over the areas of organisational development concerning them there may well have been progress.

In fact this had been an early game plan by the CE and the team, but his need to hold all of the details gave rise to a level of anxiety which prevented him from "letting the Strategists go".

If I were to approach this project again I would want to engage the CE in personal development coaching prior to the project starting - aimed at moving him into a greater self awareness of his own process of meaning-making and providing insights into the Strategists' frame. Throughout the process of change it would then have been helpful to provide coaching which continually enabled him to see his own perspectives and ambitions in relationship to those of others and to seek creative resolutions of these tensions.

The two Strategists became impatient during the change process - given the composition of the management team were their early expectations too high? Were they asking too much of their colleagues at the conventional stages? They (just like the CE) needed to work more on integrating the perspectives of others with their own so that a change process emerged built on mutual perspectives.

This opens up another door which I will just peep through and then close. Did the developmental stage of the consultants play a key part in the process? In this example did the two Strategist stage consultants (as we were) become too connected with the visions and hopes of the Strategist stage managers, and was this at cost to the project?

Change that worked

A lively account of successful organisational change and the Strategist in action is in Ricardo Semler's portrait of Semco, the Brazilian company well known for its pioneering of participative decision making and profit sharing. Semler reveals how he gathered other nonconformists (Strategist stage managers) around him as the experiment progressed and how several traditionally successful Achiever stage senior managers were replaced by Strategists to facilitate this. It is a fascinating account when read through the lens of the developmental stages framework and does much to confirm the need for the presence of several post conventional stage managers in order that transformative change occurs.

Nearer to home I have experience of working for a research division in which the management team had the following composition according to Torbert's nomenclature:

| | |
|--------------------------|------------------------|
| <i>Director</i> | Achiever -Strategist |
| <i>Senior researcher</i> | Strategist - Alchemist |
| <i>Manager</i> | Achiever |
| <i>Manager</i> | Expert - Achiever |

This was an unusual group in that its stage distribution was far later than most managerial samples and was combined with youth (two at thirty, one late thirties, one mid forties). The group set out together to build "a work environment which people are delighted to work in". The philosophy was of empowered participation, seeking to move towards consensus-based decision making and open management. At the same time the management team sought to instigate an ambitious and radically different organisational structure for research. The whole division also engaged, over a period of time, in setting for itself stretching research targets.

I have been struck by a number of aspects of this change programme which reveal something of the Strategist stage approach. The managers genuinely sought involvement from all others in the division. They questioned their use of power continually and sought to balance leadership with open participation. Innovative new structures were tried, in a mood of inquiry. For example the feedback - reward system was altered dramatically (and several times) in attempts to make it more just and effective. Each change was the result of extensive dialogue within the division.

Two non-managers joined the management team for a stint of six months after which they were followed by other non-managers - eventually a significant number, including graduate entrants, will have worked as equal members of the management team. The organisational structure moved from separate and sometimes competing projects to interdependent and cross-fertilising activity teams where boundaries were not always clear. The Strategist stage managers were happy to support this level of ambiguity, which worried their Achiever stage colleagues.

After deep concern from many of the research engineers (Expert stage?) about the scope of the changes, the management team (now including some of these engineers) pulled back with some of its ambitions. The Strategist stage managers realised that leaving people behind would serve no good purpose and that they needed to temper their ambition.

Nearly two years on from starting this change process the Division is in good health. Its technical research is progressing well and there is a climate of unusual openness and co-operation between staff. All management decision processes are open to view and future strategic direction and tempo is created by the whole staff. Notably very few staff have left, with the exception of the Strategist-Alchemist, who has moved on to a more senior management post where he is continuing the inquiry into organisational change.

The staff of the division continue to inquire together into how the division may evolve in the future and by the very nature of this collaborative engagement are becoming the organisation they dreamed they might.

Developing Strategist stage capacity

These examples and other experiences of change with organisations have led me to believe that significant change processes will not endure without the type of framing and reframing awareness which only post conventional managers bring. This is a disconcerting assertion, because research indicates that in samples of managers at all levels only 9% are to be found at post conventional stages, although this does rise a little in more senior posts. Does this explain why so many initiatives fail? As I have argued earlier, yes in part. But the matter need not rest here because Strategist stage capacities are developable, either through a conscious effort at development on behalf of the subject or through unconscious interactions with challenges that necessitate later stage responses.

Considering the latter, I have met many Achiever stage managers who have become deeply proficient within their Achiever frame in a clearly defined role such as Production Manager for a factory who have then been promoted to a much less clearly defined, more fluid and infinitely more political role such as Production Manager Europe. Suddenly the world of relative certainties (clear production, profit and quality targets) becomes far less certain. The French look at it this way, whilst their German sister plant looks at it another way. How can the European Manager, no longer within the power base of his plant, succeed in leading an international group of factory managers? By exposure to the challenge they may develop a Strategist capacity - if they can survive that long.

Purposeful development is of course possible. However there is a quantum step between conventional and post conventional stages. A radically different framing capacity needs to be created. Apart from exposure to a new order of challenge how can this be developed? It is important to recognise that this type of change takes time, Torbert suggests that people making a transition may take a minimum of two years, often longer. In my work with managers I've found the following to be important contributors to personal change processes that create post conventional awareness:

- the availability of a mentor who is post conventional
- post-conventional role models
- self reflective processes such as journal keeping which enable managers to carefully reflect on and learn from their actions
- surprising and tangential development processes (for example learning Aikido, a Japanese martial art, meditation or even a foreign language)
- bringing the metaphors and lessons into their lives
- reading widely and variously about post conventional heroes and anti heroes
- personal therapy
- membership of open and lively learning groups such as action learning sets
- attendance at a frame shaking management or personal development course
- traumatic life changes such as divorce, the death of a loved one or personal illness;
- the membership of a spiritual group or community.

Clearly none of these are sufficient in themselves to lead to step-change development; divorce does not always lead to development, sometimes quite the reverse. There is a question here of ripeness or readiness. Sometimes something comes along which, although a challenge at the time, eventually provides the learning to move a person to a new level of awareness.

The challenge facing Achiever stage managers is to let go of the familiar and step out into what can feel like a meaning-making void. And only if they choose to, for as I argued earlier Strategist stage capacity is necessary for successful organisational change, but it does not necessarily lead to greater contentment.

Discovering more about the Leadership Development Framework

Harthill is the sole UK provider of the Leadership Development Profile. A unique sentence completion form is used which generates information enabling Harthill to provide a Leadership Development Profile for an individual. The profile also shows the composite profiles of all respondents measured to date in the UK, by age and by gender. Individuals also receive a written description of how their own profile impacts how they 'make meaning' and how this in turn may affect their leadership capacity.

The cost of profiling is £200.00 plus VAT for a standard turnaround of 21 days or less. Please note that to minimise paperwork and follow up we require payment to be sent at the same time as you return your form. Please email lynn@harthill.co.uk for a sentence completion form.

Further reading

Fisher D Rooke D & Torbert W R, *Personal and Organisational Transformations through action inquiry*, Edge/Work Press Boston (2000) - This book can be ordered directly from Harthill at £20 plus £2.00 p&p

Keenan B, *An Evil Cradling*, Vintage (1992)

Kegan R, *The Evolving Self*, Cambridge MA: Harvard Press (1982)

Kegan R, *In Over our Heads: The Mental Demands of Modern Life*, Cambridge MA: Harvard University Press (1994)

Loevinger J & Wessler E, *Measuring Ego Development: Construction and Use of a Sentence Completion Test*, Vols 1 and 2, San Francisco: Jossey-Bass (1978)

Semler R, *Maverick!*, Arrow (1994)

Torbert W R, *The Power of Balance: Transforming self, society and scientific inquiry*, Newbury Park, CA: Sage (1991)

Cook-Greuter S, *Postautonomous ego development: A study of its nature and measurement*, Doctoral Thesis, Harvard University, Boston (1999); (copies available from author).

Piaget J, *The Psychology of the Child*, Harper Torchbooks (1966)

Rooke D & Torbert W R, *Organisational Transformation as a Function of CEO's Developmental Stage*, Organization Development Journal, 6.1 (1998)

Wilber K, *A Brief History of Everything*, Shambhala (1996)

