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Five years ago, I was allotted time in your International Conference (Germany) to read my paper on transformation management (L. Vansina, 1989). Since then a lot has changed in the practice of O.D. consultants, and consulting in general. Several of my colleagues had a hard time, vacillating between following the newest techniques, themes or buzz words in consulting or searching for the lost spirit. Indeed, consulting itself has undergone a major transformation. The *clinical model* in which the consultant worked with a client system on an experienced problem, in such a way that the client was enabled to solve similar problems on his own, has largely been lost in the commercialisation of the consulting profession.

Consulting has become a business: as much interested in growth of volume, equally sophisticated in competing for market share, and in aggressive selling techniques, as their clients. The concern is no longer to transfer knowledge and skills to client systems in a business-like way, but to acquire larger projects, which demand more resources over a longer period of time.

In pursuit of these interests, managers and students are exposed to new catch phrases, scaring new 'realities' that demand their breakthroughs in managerial thinking. This could be taken as another matter of fact, were it not that management and consultants alike, are taken by business schools and consulting firm to believe in and to become more preoccupied with these newest 'realities' than with managing their 'businesses'[1]. The dominant concern of these authors is more with language, making their ideas sound nice and powerful, than with finding out their validity and relevance in the real world. Re-engineering is such a new 'reality-idea', that along

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[1] The number of business books increased between 1982-92 in the U.S.A. by 38%, the number of business stores and sales rose during that period by respectively 444% and 118% (N. Nohria and J.D. Berkley, 1994, p. 130).

with buzz-words like cost-cutting, outsourcing, downsizing, flexibility, comes to dominate our thoughts while repressing proactive, strategic thinking, innovation and foresight to shape industry evolution and community development. As such, we may be in for a repeat of the old Mexican story of the hunter chasing the shadow of a hare until he himself dies from exhaustion. No wonder then, that many O.D.-consultants cope with -what I have come to call- a recession of the spirit. 'We are not alienated' -as L. Hirsschon (1988) wrote- 'because we inhabit confining roles, but because we take roles that are only weakly linked to the purposes of our work'.

Many O.D.-consultants believe in the search for understanding the realities of organizational life, so that one can learn to cope with them in a more effective and humane way. We believe in development of the good, and in spirit. We assist in transforming organisations so that work becomes more fulfilling for all the people involved, while achieving satisfying results in the market place. We believe that through participation, only those organisational changes will be endorsed by the membership that are seen to foster *simultaneously* the genuine development of the organisation and its members. Much like we advocate that our decisions and actions become more ethically sound when submitted to public scrutiny.

Now, we know that *development* is not the same as betterment, nor as progress. We become painfully aware that societies can develop over time while in fact their cultures and standards of living could decline (B. Vandenberg, 1993). In the middle ages, the knowledge and habits of the Greeks and the Romans pertinent to hygiene and sanitation, simply got lost. The current American family -and who says it is different in Western Europe-, with both parents working, enjoys a smaller income than the family in which they grew up with a single breadwinner! (A. Bernstein et al., 1991, K.H. Hammonds et al, 1994).

We observe, how in the name of customer satisfaction, organisational survival or, in passion to win, or to excel in the global competition, human fulfilment has been quietly cast aside. The individual manager or employee has once more become the servant, but this time, of their deified organisations and of sociopolitical, or overwhelming economic forces over which the individual has not any other control than to hop out.

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It has taken time, and an almost endless series of publications on the respective value of different forms of participation on satisfaction, performance and resistance to change (R. Chisholm and L. Vansina, 1993); its alleged communistic or authentic democratic connotations (E. Locke and D. Schweiger, 1979, pp. 271-272); its poverty as a scientific tool of management; its infringement on the sanctuary of ownership; and on participation as a normal, natural but necessary condition for collaboration (M. Zeleny, 1989) before we come to realize that our participation ideology suffers from basic human deficiencies (J. Neumann, 1989).

First, not all human beings have reached the developmental stage that makes them eager and capable to genuinely participate in organisational and social issues (J. Neumann, 1989). According to her estimation 'two thirds of the workforce typically choose not to participate in organisational change efforts when provided the opportunity (p. 208). In Europe, only a minority made use of its voting rights or obligations in the latest election for the European Parliament, in itself an emasculated institution.

Have we come to accept our powerlessness as yet another matter of fact? Or have we given up trying to create a better world because we fail to imagine what it could be like? Or has the positive thinking movement - with its glorified omnipotence of thought - confronted us with our limits of power over the material world, leaving us disappointed and discouraged to use whatever limited influence we have to change the course of events?

W. Pasmore and M. Fagans (1992) suggest the existence of a continuum of participative acts, ranging from the lowest level acts of simply joining and participating in a system: *conforming* over, helping to improve the existing system: *contributing;* to attempting to change the system slightly while retaining the existing structure and distribution of power: *challenging*; and subsequently, seeking to involve or support others who share the agenda of changing the system while retaining its essential characteristics: *collaborating*; over to the highest level of participating, designing the system itself: *creating* or even transcending the system to help to create a more hospitable environment for the system to inhabit. Each of these five levels of participation demands more of a person and carries with it more risks and greater potential rewards.

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These participative acts express eventually the developmental stage an individual has reached. Inspired by both the work of E. Fromm (1941) and I. Loevinger (1976), W. Pasmore and M. Fagans (1992) constructed a continuum of Egopreparation for participation. It contains five levels of human development. '*Ego-regressive*: a level in which the participative competence and natural inclinations to become involved in shaping decisions affecting one's future have been destroyed; *ego-potential*: one is prepared to participate in low-risk decisions as sanctioned by the system; *ego-prepared*: one is ready to take part in discussions that involve some conflict and self-definition; *ego-involved*: one is prepared to help change the system, and recognizes the importance of understanding both one's own and others' needs in this process: and *ego-committed*: one is prepared to put one's future and even life at stake to help bring about the fundamental transformation of an important system; one develops a high level of self-efficacy and a time perspective that stretches beyond one's own lifetime'.

These authors developed still another continuum, one of knowledge that can be placed along the two preceding ones (exhibit # 1). Knowledge availability can be ranged from lacking knowledge or skills relevant to the issue at hand: *uninformed*; to having general knowledge to talk about an issue but lacking specific expertise or skill to talk at: *aware*; to having acquired a minimum of competence to engage in a relevant way with the issue: *knowledgeable*; to be able to transcend the concreteness of a situation and apply knowledge of other situations and fields to help reconstruct the issue: *creative*; to having knowledge and wisdom to share with and to elicit pertinent knowledge and skills from others to bring to bear on challenging issues: *wise*[2].

Exhibit # 1

Individual continuums in participation

Level of participation	Ego-development levels	Levels of knowledge
· conforming	· ego-regressive	· uninformed
· contributing	· ego-potential	· aware
· challenging	· ego-prepared	· knowledgeable
· collaborating	· ego-involved	· creative
· creating	· ego-committed	· wise

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[2] This definition of the highest level of knowledge and skills has been slightly modified by the authors.

In general O.D. does not call upon much more that the first two developmental levels: ego-regressive and ego-prepared participation. While W. Pasmore and M. Fagans advocated that higher acts of participating also foster *ego-development*. The act of affirming oneself, through the expression where one stands or by advancing one's creative ideas, while encouraging others to express their views is in itself self-enhancing. Consequently, participating in socio-technical design teams seems to provide ideal conditions for personal growth.

Along the organisational and societal context that facilitates or hinders authentic participation, a continuum has been presented by these authors. It ranging from *control*: the organisations does exclude participation from lower levels; to *commitment*: openness to ideas that do not challenge the actual distribution of power or purpose of the system; to *alignment*: a negotiated state recognizing the interests and values of both those in power and those at lower levels; over *co-creating*: a genuine invitation to design a system that is new to both the ones who have traditionally the power and the ones at lower levels; to the most advanced condition: *transcendence*: an openness to study the organisation in its relations to its environments, its purpose and its reason of existence in society.

Yet, I believe that there are some more powerful forces within *society* that influence both organisations, private or public and individual members of the community whether or not they are customers; self-employed, employed or unemployed citizens. These forces often *escape rationality, even our consciousness*. Nor can they easily be identified as the product of an intentional act. They seem to emerge from an ever increasing global context in which the media plays an important role. The complexities in the world become increasingly difficult to grasp in their wholeness, and are subsequently subject to various interpretations. Partial realities or truths become presented as *the reality*, in such very subtle ways so that we -at a young age already- come to accept for real what is 'pictured'. A critical reflective thought is quickly pushed back by another attention catching image, or another catch phrase. Consequently, it is becoming increasingly difficult to find that innocent child whispering his own perception: '... but the emperor has no clothes on!'.

What has this all to do with 'Reengineering' ? I think quite a lot, as I will further try to demonstrate.

'Reengineering' was launched in an article in Harvard Business Review in 1990, by M. Hammer who is generally credited with originating the concept. His book, co-authored with J. Champy (1993) has been translated in 14 languages. Its hard cover edition is only surpassed in sales by T. Peters & R. Waterman's *In Search of Excellence* (1982). Like their predecessors, the two authors have in the meantime parted. Each one writing another book.

Since the publication of the pioneering work others have jumped on the bandwagon with their version of reengineering: *Reengineering and Beyond*, by the Boston Consulting Group (1993) and the over-ambitious, bombastic work of H. Johansson et al., *Business Process Reengineering. Breakpoint strategies for Market Dominance* (1993). By now, most big consulting firms have their own publications either on the concept and/or evaluation studies of their effects on business performances. Each of them showing that they were involved in large scale reengineering projects even before the concept was invented, or launched by M. Hammer.

1. What is reengineering ?

Informally, reengineering is defined as a clean slate approach to redesign an existing organisation by inventing a better way of doing work. This clean slate, green field, zero-budget approach to redesign more effective organisations is old hat. It has been around for more than one decade, in socio-technical systems design, overhead value analysis, transformation management and green-fielding. The latter approach was developed by the late Roger Roes and his Unilever colleagues in the early eighties to make organisational structures less costly and more effective (R. Roes et al., 1983). Probably, there is more in reengineering, if we examine its formal definition, its hard- and software.

'Reengineering is the *fundamental* rethinking and *radical* redesign of *business processes* to achieve dramatic improvements in critical, contemporary measures of performance, such as cost, quality, service and speed. (M. Hammer & J. Champy, 1993, p. 32)'.

Fundamental rethinking contains two elements: a) Why we do *what* we do; and b) Why we do it *the way* we do it. As such it is closely linked to *radical redesign* because one needs to *reinvent* the organisation. Therefore it calls for a *systematic departure* from the principles of the

division of labour as imparted by Adam Smith in his 1776 treatise 'The Wealth of Nations' and later incorporated in scientific management. The originators of reengineering spend again more than thirty pages contrasting scientific management with the changing nature of work (see exhibit # 2), as if these dramatic changes just happened overnight.

What may be considered new is the focus on *processes rather than activities and tasks*, although E. Deming in his pioneering work on quality already emphasized the importance of thinking in terms of processes and process controls. Business process, here is defined, as it usually is in systems theories, as 'a collection of activities that takes one or more kinds of input and creates an output that is of value to the customer' (M. Hammer & J. Champy, 1993, p. 35). Peter Checkland (1981) in his *Soft Systems Methodology* would call it the transformation process of a human activity system, while the ones who benefit or share the consequences of the transformation are called clients.

So far we have not come across anything that is basically new. Yet, there are certain ideas which are of interest, if only to enable us to arrive at a more realistic appreciation of what reengineering has to offer. For this purpose we distinguish the *hardware* or proposed methodology for redesigning, from the *software*, or the strategies used for changing the organisation.

Reinventing the organisation

(M. Hammer & J. Champy, 1993)

* several jobs are combined

* workers make decisions

* steps in the process are performed in natural order

* processes have multiple versions to meet different market requirements

* work is performed where it makes most sense

* checks and controls are reduced

* reconciliation is minimized

* a single point of contact with the customer

* hybrid centralized/decentralized operations are prevalent

* functional departments are turned into process teams

* simple tasks are turned into multidimensional work

* people's roles change from controlled to empowered

* job preparation changes from training (how) to education (why)

* focus of performance measures shifts from activities to results

* values change from protective to productive

* organisational structures change from hierarchical to flat

* executive roles change from score-keepers to leaders

2. The hardware of reengineering

It is disappointing to realize that there is not one *coherent methodology* to conceptualize, or to reinvent the organisation. As a matter of fact, Socio-technical Systems design has a much more advanced methodology than Reengineering, according a comparative analysis of L. Simonse (1994). The review of the state of the art of Socio-technical Systems design in the U.S. (T. Davenport, 1993), and the recent publication in the Benelux countries (a.o. P. van Amelsvoort and G. Scholtes, 1993; L. Hoebeke, 1994) proof this point of view. Design concepts, principles and sequencing are here defined on the basis of years of redesign work in a variety of

organizations. What we find in Reengineering is a more or less shared conception of critical ingredients.

a. The Business Processes are redesigned from the perspective of the customer

The Boston Consultants are most categorical in underlining the strategic importance of defining the core processes which improvements will be appreciated by the customers. They distinguish three generic process: a) customer value delivery processes; b) management processes and c) support processes. They advise to 'Focus only on strategic processes... processes that are necessary for survival, deliver value to customers, and establish competitive advantage' (p. 21).

G. Hall et al. from Mc Kinsey (1993), on the other hand, warn that the processes to be redesigned cannot be defined too narrowly (e.g. restricting them to one function), nor too broadly! Their advice, based on empirical data, is that the process should be 'critical for value creation in the overall business unit' (G. Hall et al., 1993, p. 121).

The Boston Consulting Group and Mc Kinsey have a markedly different perspective. The first see reengineering as a means to improve one's position in the market. While the second, at least, *measure* the effect of reengineering on *overall cost savings*, as an indicator for performance improvements.

Most consultants argue that reengineering is *not* another cost-cutting device. The primary purpose is to gain a competitive advantage over the competition in the eyes of the customer. Therefore, the process redesign is not confined to the internal transformation processes but deals with the whole end-to-end chain from suppliers, product development, product delivery to service to the customer.

Redesigning the *whole chain of processes from the perspective of the customer* differs from the traditional socio-technical systems approach. In the latter, the socio-psychological demands and the technological possibilities were jointly optimized against a satisfactory output. Later on, elements of continued improvement were introduced (a.o. L. Vansina, L. Hoebeke & T. Taillieu, 1987) but the redesign focus remained largely *internal*: to realize the company's strategic objectives while providing meaning, challenge and pride to the employees in their work.

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Although E. Trist (F. Emery & E. Trist, 1972) had already observed that an individual organisation could not be redesigned without changing the bureaucracy in the organisations that are part of the network. Interorganisational relations caught really our attention, first as part of Total Quality Management under the name of a.o. preferential suppliers; and second, to reduce stocks with just-in-time, or co-makership. About the same time, the ideas became equally applied to the selling end with or without the support of EDI (Electronic Data Interchange) the computer link-up of distributors (buyers) and producers. Consequently, over time, real networks of legally independent companies are formed to incorporate together the whole chain of transformation processes: end to end. Within this context, reengineering consultants warn management not to push process improvements into the domain of suppliers. They are to be included in the overall redesign work. Likewise, process improvements should also be taken into the market to better one's competitive position.

The redesign of business processes must subsequently be translated in job redesigns, revised organisational structures and adapted management systems (M. Hammer & J. Champy, 1993, p. 203). Gene Hall et al. (1993) use six organisational elements, which they call depth levers: 1) roles and responsibilities; 2) performance measurements and incentives; 3) organisational structure; 4) information technology; S) shared values; and 6) skills. They found that the more these six depth levers had been included in the redesign, the more the 20 companies studied, benefited from cost savings.

b. Ambitious targets are set on all of the four metrics: quality, cost, service and cycle time
Ambitious targets, which appear unrealistic under current conditions, are set to stimulate creative thinking. For a long time social scientists had forgotten this principle, already advanced by K. Lewin. We came to believe that objectives should be attainable. But once more, as happens so often, social scientists neglected the context. Effective objective setting calls for realism. Targets should only be slightly higher than current performance, whenever the *conditions* under which they need to be achieved *are taken for granted*. Within this context, people can only do better through extra effort and learning.

Whenever, we redesign, reinvent work systems, the target should be extremely *ambitious*, so that we are forced to re-think the conditions under which we used to work. For example, a 50% reduction of process time and 34% cut of process costs which cannot be achieved through

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fine-tuning, but through a radical change of the processes themselves. AT & T Power Systems set out to reduce the time from prototyping to market from 53 days to 5 days. The more concrete these targets, the greater their impact.

Originally, socio-technical systems redesign did not work with K. Lewin's principle. The coal-miners had rearranged their work systems, largely within the given conditions. The challenges in subsequent redesigns lay in creating a better joint optimization to reach *given realistic objectives*. In the seventies, the German government sponsored a major project called the *Humanisation of Work*. Within this overall project, some work was done, based on Sociotechnical Systems Theory, to improve both the work performance and the quality of working life. Only later, under the influence of Total Quality Control and Transformation Management, ambitious objectives became part of socio-technical redesigns, a.o. in redesigning the paintshop of General Motors Continental in Antwerp.

In pursuit of *total quality* as a minimal necessary competitive advantage, we became involved in reducing cycle time, in eliminating quality weaknesses in products and processes; cutting down work-in-process and order-to-delivery time, while improving after sales services. *Cost reductions*, through the elimination of waste and rework, and by linking work-stations into a flow process, were taken as appreciated by-products but they *were not the prime target*. Although the American approach to total quality management often found its drive in cost reductions (L. Vansina, 1990).

Time-based management and Goldrath (1984) with his theory of constraints were other improvement movements.

The four performance metrics: quality, cost, service and time are not completely independent. Yet, *in reengineering they are used simultaneously to strengthen the impact of the four combined on each one of them*. The emphasis on a particular combination of the four may, however, vary in function of their importance to the customer.

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c. Information Technology (I.T.) is considered not to be leading, but enabling radical process improvements

More than a decade ago, I.T. was believed to revolutionize, not only our offices but also the whole organisation. Now, we know that human communication cannot be replaced by any information technology available (J. Taylor, 1993). I.T. has an enabling role in automation and in computing information, thereby making it simultaneously available to an infinite number of people, at different locations. In this way, I.T. has contributed to the erosion of functional and hierarchical boundaries, and to the recombination of functions into three basic processes: product development, product delivery, support services. Its potential use in reinventing the organisation is summed up by M. Hammer and J. Champy (1993) (see exhibit # 3).

People talking about reengineering often hold the impression that technological advancement is the key factor in reinventing the organisation. In fact it is not. *Reengineering is driven by the economic belief in growth, that must be achieved in saturated markets, by gaining a competitive edge by whatever means possible.*

EXHIBIT # 3
IT's supportive functions
(M. Hammer & J. Champy, 1993)

OLD SITUATION	DISRUPTIVE TECHNOLOGY	NEW FUNCTIONS
• Information available only in one place at one time	• Shared database	• Information made available simultaneously at as many places as needed.
• Only experts can perform	• Expert systems	• A generalist can do the work of a specialist
• Organisational choice to centralize or decentralize	• Telecommunications network	• Organisations can simultaneously be centralized and decentralized
• Managers make all decisions	• Decision support tools : database access, modeling software	• Decision-making is part of everyone's job
• Field personnel require offices to receive, store, retrieve and transmit information	• Wireless data communication and portable computers	• Field personnel can send and receive information wherever they are
• Potential buyers are best contacted by persons	• Interactive videodisk	• Potential buyers are contacted effectively
• You have to find out where things are	• Automatic identification and tracking technology	• Things tell you where they are
• Plans get revised periodically	• High Performance computing	• Plans revised instantaneously

What then are the major new ideas in reengineering in relation to socio-technical systems redesign?

We may summarize by comparing the new ideas in reengineering in relation to current practices in socio-technical systems redesign (see exhibit # 4).

Exhibit # 4

Major new focuses

Reengineering	Socio-technical systems
* focus on processes translated in job and work systems redesign	* focus on job and work systems redesign: work and human processes
* interorganisational	* within an organisation

* ambitious metrics targets:
 	
    quality
    cost
    service
    time
	* realistic to ambitious output measures:
	
	    quality
	    cost
	    quantity
	    time

* to achieve added value in the eyes of customers and a competitive advantage	* to achieve company objectives: meaning, challenge and pride at work for the employees

3. The software of reengineering

The organisational changes are introduced by some in an autocratic top-down approach. 'One of the paradoxes of reengineering is that it is an extremely autocratic, topdown, undemocratic process', Hammer says. 'But when you are finished, you wind up creating an environment in which people are largely self managed and self-directed' (1994). For others, a.o. the Boston Consulting Group, reengineering is achieved in an iterative way. It alternates between a top-down and bottom-up approach: top management defines the strategic focus on core processes; subsequently these processes are redesigned by the people concerned; and later integrated, validated and implemented top-down.

All authors studied, recognize the enormous psychological and political problems inherent to radical, global change. These are, however, dumped into the lap of senior management. They are 'called' leaders who through their vision, explicit messages, symbolic action and management systems reinforce the reengineering message. G. Hall et al. (1993) conclude from their study that even with sufficient breath and depth, a redesign project will fail unless top-level managers are actively involved. Interesting to note, however, is that out of the five analyzed, reengineering projects that achieved their projected impact, four had new chief executives brought in before or during the project. Therefore, other factors than active involvement seem to matter: *the absence of established relationships*.

In the software we can distinguish three components : a) phases in reengineering; b) structuring of the change processes; and c) concern for and involvement of employees.

a. Phases in reengineering
The process contains three distinctive phases. In the first one, the strategic purpose and ambitious objectives are set on the basis of a rough overall diagnosis. Quick mapping, assessing readiness for change, market research, bench-marking and the identification of clusters in customers expectations are some of the possible techniques used to get a strategic understanding of the scope, purpose and goals of the reengineering project.

A second kind of activity is to create the scene for radical change: definition and communication of the 'compelling rationale for change' or its legitimation base; the search for agreement on

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what constitutes high-level performance; and the setting up of a structure for 'leading' the change efforts. Note that phase one alone can take two to twelve months.

In the second phase, the real creative work is done: the redesign of the strategic processes, or the core business processes, as some authors like to call them. One *breakthrough team* is made responsible for the redesign of *one* process. Once these teams have formulated their redesign proposals, they are brought together to become integrated, and validated in terms of their likely impact upon the customers and upon the organisation itself. The validation and integration of the various process change proposals is the most critical phase in the overall reengineering process. Here, the implications of the redesign proposals become more visible. Pilot tests or computer simulations may be used to gain a better understanding of the impact.

Integration and validation are the tasks of the *reengineering team*, composed for the most part of the team leaders of the breakthrough teams. Then senior management takes over to commit line management to the new organisation; to require that business plans, budgets and performance targets be build around the full implementation of the reengineering improvements; and to set a time-table for the implementation. With all the ins and outs, phase two is likely to take one to two years when more than one function is reengineered.

The third phase is the implementation of the reinvented organisation. While implementing the redesigned processes, the support functions, customer and supplier relations, are being adjusted. The organisation is then ready for continuous improvement. This phase can also demand 12 months of attentive work.

If we add up all these estimations of project time, we arrive at a sustained change effort that easily extends itself over more than two years. A period that goes beyond the time-span of momentum that was found in earlier studies by J. Gabarro (1987) and myself (1989).

b. Structuring of the change process
As may be expected nothing much new can be learned from their recommended way of structuring the change process. Authors differ in the, names they give to the various bodies and the extent to which they set up a change organisation which is de facto separate from the regular

management structure. For reasons of consistency in vocabulary, we discuss here the change organisation advanced by the Boston Consulting Group.

Senior management in their traditional role are in charge of the overall reengineering project, but they set up a special change structure consisting of a *Reengineering team* and *Breakthrough teams* which can call for support from Human Resources Management in the regular organisation. The multi functional *Reengineering team* has a *Reengineering Project Director* and is assisted by some senior managers who serve as mentors, and by the leaders of the Breakthrough teams. The *Breakthrough* teams have a team leader and members who are and are not familiar with the current process to be redesigned.

In other words, the traditional hierarchical organisation, in particular senior management, is used to implement the changes proposed by the temporary change structure. Once senior management has endorsed the reengineering idea and the consultants are brought in, management takes a powerful role. First, to select key managers to man the temporary change structure and to provide them with sufficient resources to do their job. Second, to sanction the redesign proposals and see to it that line management commits itself to implementing the change. We all understand what is meant then by leadership: a man with a Janus head. A compelling vision is up front, but everyone knows that the other face is just around and ready to back up whenever the compelling rationale seems to fail.

The proposed change structures are basically formal task oriented. In the redesign project of the paint shop (G.M. Continental in Antwerp) we explicitly assigned a double task to the 'Reengineering team' (then called work group) with about 30 persons and to the 'Breakthrough teams' (called study groups). Task one was respectively to formulate redesign proposals for the work-, and support systems; and to integrate and validate these proposals. Task two for the study groups was the development of a shared image of how these respective systems could work and their consequences for both the realisation of the business objectives and people's pride, challenge and meaning of work. Task two of the work group was the creation of a *transitional space* in which the various functions and hierarchical levels and the union representatives could explore and learn, in the still virtual world, *about new ways of working together*. Consequently, only when the work group felt that they could work together in a new

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way, required by the redesign proposals, could a proposal be recommended, for implementation, to senior management.

c. Concern for and involvement of people in redesigning their work

Nowhere, in the now abundant literature on reengineering, is there an indication that attention is given to the legitimate needs of the people employed. People appear in various categories: leaders, redesigners, people who ought to be flexible, committed to continuous learning or as subjects to be committed, to develop shared values and goals; and as an average of 20% who need to be moved out. 'Reengineering', Champy says (1994), almost always results in fewer but smarter people. On average, there is a 20% reduction in staff. It's a hard edge, but many companies have no choice!' *And what about the other companies that do have a choice?*

Employees are not so much invited to redesign their work, as is standard in sociotechnical design, but to reinvent 'their' organisation. Reengineering seem to hold two assumptions. If they are not met, than the project is likely to become one of the 70% that fail[3]. First assumption: redesigners and beneficiaries identify more with the organisation than with the people who make or break the organisation. Second assumption: people succumb to either the 'compelling' rationale of 'no other choice' to survival, or to the act of creating 'the rules that others (competitors) have to play by! (H. Johansson et al., 1993), and are willing to give up their membership when there is no more work left for them. Paraphrasing W. Churchill's description of an appeaser, we can define a reengineering designer as a person who keeps designing people out, hoping to be the last to be reengineered! Yet, there is *the customer perspective* which, if taken seriously, has at least the potential to lift people above their egocentric needs.

However, altruism or self-sacrifice does not go well together with putting your colleagues out of work to serve your customer better! The tendency to compartmentalize thinking and feeling, as if they belong to separate realities, is ultimately destructive to mental health.

Summary: the software of reengineering does not bring any new insights in organizing for and managing radical, overall organisational change. The Change is managed and carried out top-down. In Socio-technical Systems redesign there is more flexibility as long as space is left

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[3] M. Hammer (1994) concedes to this high failure rate. In his opinion, it has less to do with flaws in the concept than with the way re-engineering is carried out.

open for iterative adjustments. Sociotechnical Systems theory, however, does emphasize that strategic objectives come top-down; structural changes are realized bottom-up.

My major concern is not with the concept of reengineering but with the issues that are not talked about. Issues that are an integral part of the whole reality of flow-thinking in reengineering: namely, people working or out of work. It is in the presentation of a *partial reality* of radical improvements; in the *rhetoric of promises* of frog-leap advances that leaves the competitors decades behind, that I take a stance. As if there is nothing else that constitutes the reality of life in a society. As if people working in and buying from organisations, with the hope of satisfying legitimate human needs while allowing others to satisfy theirs, is not part of organisational and community life. What is omitted by the appeal to strong leadership, is the care and respect that we need to give to those people who's efforts are no longer required to meet customers' expectations; and to those who stay behind to realize the company's new strategic objectives.

4. Why then has Reengineering become the predominant buss word of the day?

Once management has put its organisations on the race-track to become the best rather than doing their best in serving society's needs, they will buy any concept they are made to believe to help them achieve this purpose. Reengineering provides such an attractive concept. It has a logic to achieve radical integrated improvements that will generate greater value to the customer. Furthermore, it provides strategic reasons to push through significant cost reductions. The elimination of an impressive number of staff follows 'smoothly' from the redesign to meet ambitious performance metrics like quality, cost, service and cycle time that are appreciated by customers.

Reengineering strives on what Charles Handy calls the 'Empty Raincoat': promises of economic growth even in those sectors where it is more than questionable whether it still can be achieved (at least in Western Europe and the U.S.A.), and on the assumed inevitability of competition (R. Petrella, 1994). The latter is reinforced - in a collusive way - by the commercialization of the consulting practice.

Jan Johansson (1994) puts it very clearly. Consultants used to be called in by companies to help them solve a particular problem. By solving their critical problems the companies acquired a competitive advantage and the consultants were bound by their professional integrity not to pass it on to the competition. Nowadays, companies are being sold particular products under the treat that if they don't, they will fall behind in the global competition. 'Either get on the train, or get under the train! ' says M. Hammer (1994). And consultants enumerate with pride the competitors, they have or are being reengineered!

Implications for O.D.

Let us now return to our participation ideology and what we, in O.D., can learn for the future.

If we take W. Pasmore's continua to appreciate where reengineering stands on these various dimensions, we come to some surprising conclusions and insights into what we can contribute.

1. The organisation clearly invites the Reengineering and the Breakthrough teams to design a system that is new to senior management and the participants. A limited number of people are asked to *co-create*, but not to *transcend*. The reason of existence of the organisation itself within society is kept out of the invitation to co-create. The redesign is done to meet the customers' and shareholders' needs, as if they are the only stakeholders. Indeed, organisations are still seen as predestined for global competition in a free market economy where the most ruthless and brave are to survive.

2. The most likely form of participation seems to be *collaboration*: involving and supporting one another on the agenda of reengineering the business, but with the explicit purpose to maintain its capitalistic features and position. Senior management not only sanctions the redesign proposals - which I consider legitimate - but forces others into commitment for the sake of beating the competition in pursuit of the customer's favours. In the redesign process *creative* mental capacities are stimulated into reinventing the organisation. But I am very doubtful about the inclusion of wisdom to elicit pertinent knowledge and skills for creating more value to the community! What

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the customers within the community gain is more than absorbed by what the community has to pay to support the unemployed.

3.   The lowest score I attribute to the ego-development dimension. One remains stuck at the level of ego-potential, a preparedness to participate in low-risk decisions as sanctioned by the system. E~o-commitment is not developed when people are forced to deny their own legitimate needs. Courage (and self-sacrifice) comes only from knowing beforehand what one risks to loose (P. Tillich, 1952); not by denial. Since the ambitious metrics do not include any indicator of fulfilment at work, nor respect for relationships, I am more than afraid that denial and short term creative thinking are being fostered. Furthermore, the reengineering jargon, presents an *inevitability*, which seriously impedes free will, as expressed in organisational choice.

The outcome may well be: more self-managing teams which may encourage further human development. But the process and the philosophy that led to their creation, as well as the concomitant human cost of a minimum of twenty percent cut in staff, causes wounds that do not heal without leaving scars.

I like to point out, however, that reengineering scores much higher on W. Pasmore's continua than most OD interventions. *Although it does not yet provide the ideal conditions for human development that advanced Socio Technical Systems design generates.*

What then can we, O.D.'ers, contribute to reengineering to improve its overall effectiveness!

First, Business Process Reengineering looks at *processes* as if they exist apart of the people that carry them out. Thereby they neglect the very basis of any organization: the pattern of relations between people who make the system work. The importance of these patterns of relations has been demonstrated over and over again. In this age of technology and information systems, G. Kervern (1993) found it necessary to remind us again that organizations are a network of *internal and external relations*.

The vocabulary of reengineering: 'nuking the organization', or 'the clean slate' is misleading. Reengineering is not designing as if nothing exists, but it is redesigning not just structures,

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routines and roles but is also radically changing internal and external relations. The key question therefore is, how much change in relations can a social system cope with before it breaks down in confusion? From simple observation we know that organizational members do not think, feel or behave in isolation. Together they form a causal context for organizational behaviour (J. Pfeffer, 1991). A massive disruption of the context may be fatal. For example, how many employees can be made redundant or put in different roles and positions before a massive psychic trauma is created in the organizational context? Therefore, redesigning processes cannot be successfully achieved without due consideration of the people and their interrelations. And, the radical redesign also needs to be implemented in thought-through incremental ways. O.D. does have an expertise in this domain.

Second, the customer perspective - considered together with the whole range of stakeholders - offers an opportunity to build a genuine reparative organisation. An organisation in which employees are enabled to experience psychological wholeness through the creation of value for others (L. Hirsschon, 1988). Reparative because it enables people to make good through working for others, whatever we may have done wrong, real or imagined, in our relations earlier in life or recently by removing people from office, cutting obsolete jobs and even making people redundant. This requires however that we bring into reengineering an all other quality of *concern for people*. The organisation is then not the rationale for their existence, but an instrument for achieving valued ends through people.

Third, we must part from the arbitrary dichotomy that divides people in employees and customers. As if every employee is not at the same time a customer! Most often an internal and definitely an external customer of several organisations in society. In this way, we bring back into redesign the notion of *wholeness and fulfilment* at work as well as in community life. And wholeness and fulfilment are inherently linked to free will and choice.

Fourth, we must bring in *the concern for people*: those who will have to change roles or jobs, whose services are no longer needed by the new organisation; and those who 'survived' the reorganisation and are expected to realize the new strategic objectives. There is empirical evidence that supports the logic that the way we deal with those who must leave, gives a clear message about the company's commitment to those who stay! The most loyal surviving employees are most likely to withdraw their involvement, commitment and loyalty when they

feel that the redundancy process was not handled with social justice (J. Blockner et al., 1992; L. Vansina, 1994).

The seventy percent failure rate, Hammer quotes (1994) cannot just be due to 'a small number of mistakes people make', or not having been ambitious enough. I suspect that the results fail to meet expectations partly because the 'survivors' have to work through the painful psychological consequences, e.g. the disprution of relations. Partly, because people's creativity became defective through their preoccupation with anticipated negative human consequences. Partly, because the reengineered organization loses so much tacit knowledge in the process, that its functioning becomes disrupted. Worrying anticipation, painful working through processes, loss of knowledge are however not part of the macho reengineering software.

Fifth, reengineering is conceived on the old paradigm that puts industrial enterprises at the center of the globe, above communities and nation states. They exist to win in the global competition for the recently discovered favours of the customers, regardless of ecological and human costs. All traditional boundaries are broken down or redesigned. Even suppliers and distributors, as legal entities, are included in the redesign. One boundary, however, is carefully kept out of the reengineering project. The boundary that separates the organisation from the community and enables the redesigners to privatize the profits and socialize the costs!

Despite the highly visible social costs of unemployment, we seem to be incapable of replacing this old paradigm. Macro regulations are left to the forces of the free market when these regulations are most needed as markets become more and more saturated.

We'll miss an opportunity if we don't put the community at the center, and fail to realize that all its institutions: educational, economic, health care and ecological, exist to jointly create and maintain a capability to generate a sustainable level of wealth and well-being. Therefore, we should not stop reengineering our organisations and institutions but extend the scope and humanize the process, thereby improving overall effectiveness. Then we will see that there are other, more radical, models of reengineering, as I. Mitroff and his colleagues (1994) are suggesting, which purposes do not limit themselves to mere economic growth. So; let us reinvent reengineering.

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