COMPENDIUM

Training Workshop on Leadership and Safety Culture for Senior Managers

Dates: 18-21 November 2014
Location: MOE100, IAEA, Vienna
Introduction to workshop

The International Atomic Energy Agency (IAEA) is continuing, through this workshop, its efforts to disseminate knowledge about how safety performance can be improved through culture, leadership and management for safety. The primary objective of the workshop is to provide an international forum for you as a senior manager to share your experience and learn more about how safety culture and leadership can be continuously improved. Through this, the workshop also aims to reinforce your understanding of your own role in influencing safety culture and leadership for safety across all levels of your organization.

To ensure the practical value of the workshop, efforts will be made to tie the course content back to the every-day life of the participants. In order to succeed in this, we ask each of you to prepare the following in advance of the workshop:

Please prepare to share the three key safety challenges you face as a senior manager in your organization.

Throughout the workshop, the facilitators will go back to the challenges faced by you and work interactively with the group to find solutions to these through the continuous improvement of safety culture and leadership for safety.

Efforts will be made to achieve a productive balance between presentations and dialogues, making room for interactive sessions triggering participants to get involved and communicate experiences, feelings, thoughts and ideas. The goal is for you to leave with two things in mind: “this has provided new insights and perspectives” and “I know how to apply these new insights and perspectives in my organization”.

In this compendium you will find
  ❖ introductions to the course facilitators;
  ❖ the workshop agenda;
  ❖ the IAEA normative safety culture framework; and
  ❖ pre-course reading introducing the concepts of leadership and culture.

Looking forward to meeting you in Vienna,

Monica Haage and the facilitator team
Workshop Facilitators

John S. Carroll, Gordon Kaufman Professor of Management, MIT Sloan School of Management and Engineering Systems Division, USA

Dr. John S. Carroll received a B.S. in Physics from MIT and a Ph.D. in Social Psychology from Harvard. He taught in the Psychology Departments of Carnegie-Mellon University and Loyola University of Chicago, and was a Visiting Associate Professor at the University of Chicago Graduate School of Business before joining the Sloan School faculty in 1983.

Professor Carroll has published four books and numerous articles in several areas of social psychology and organization studies. His research focuses on individual and group decision-making, the relationship between cognition and behavior in organizational contexts, and the processes that link individual, group, and organizational learning. Current projects examine organizational safety issues in high hazard industries such as nuclear power, aerospace, and health care; the focus of his work in these projects includes leadership, self-analysis and organizational learning, safety culture, communication, and systems thinking.

Professor Carroll has consulted to several organizations in the nuclear power industry on issues of operations, management, and safety culture. He teaches in the MIT-BP Operations Academy on issues of group decision-making, organizational learning, and process safety. He also advises Sloan MBA teams conducting analyses of organizations undergoing change as part of the Organization Processes course.

When you look closely at safety in industries where there’s a real risk of significant harm to employees, customers, and the larger community, you get to some fundamental questions about effective leadership. With so much pressure on business leaders...and for that matter political leaders...to deliver short-term results, it’s a real challenge for them to balance the inevitable friction between the folks with their foot on the accelerator and the folks with their foot on the brake. And yet, I believe that the capacity to strike that balance is not just a matter of doing what’s right, it’s a matter of doing what’s best over the long term for the organization and all its key stakeholders. To say it another way, it means that truly effective leaders must be principled leaders...leaders who understand that over the long haul, issues like safety and quality and the environment are inextricably connected to the success and even the survival of the organization, and therefore deserve the same attention as issues like productivity, revenue generation, and profitability.
John S. Carroll wishes that senior managers in the nuclear community would do better at:

- Listening, including to their own workers and to the ideas that come from other companies and other industries.
- Recognizing that they don’t have all the answers, and therefore have to maintain a strong safety culture that allows concerns to surface and be addressed (and they have to listen) so that learning and change can take place
- Being positive role models for the kind of behavior and culture they seek to promote
- Thinking systemically and in the long term rather than be driven by short term financial results

Liv Cardell, CEO and Senior Consultant, Cardell Consulting AB, Sweden

Liv Cardell has worked with all kinds of issues concerning the connection of humans and organizations for 30 years. The past 15 years, she has become increasingly interested in organizational culture and how to move a culture, and to have an impact on concepts, values, learning and continuous improvement in practice. This is often intentions that stay as harmless voluntary approaches in policy programs but rarely are lived in everyday life.

Cardell is occupied with the strengthening of the cultural and humanistic notions in the workplace and with creating conditions for the development of values, personal growth and responsibility, alongside the output for everyday life. Liv has a degree in sociology, social methods, organizational psychology and mental training. During her career she studied and trained Systemic Management in Sweden with Anders Risling, in England with Peter Lang and in Denmark at Sunderland University with Carsten Hornstrup. She was also trained in coaching at the CTI Centre, and has a UGL license for training groups and leaders.

What has made the biggest impression on Liv Cardell is that she has developed her own concepts inspired by the practical experience she has gained during thirty years of working successfully with the observations of phenomena in organizations. She has worked in an extensive amount of sectors and at all levels, including in the nuclear and energy industry.
Since it is important for Liv to always have a reflective approach and to focus on continuous improvement, these experiences have been her best schooling regarding what works and does not work in organizations.

Over the years, she has built models of structures and cultures while being inspired by research that matches her values: Peter Senge, Systemic Approach, USA; Paul Moxnes, Working Environment and Anxiety, Norway; Willy Schutz, Interpersonal Behavior, USA; David Cooperrider, Appreciative Inquiry, USA; Björn Ekelund, Diversity Icebreaker, USA; Carsten Arnfjord Thomsen, innovation, research, Denmark; Jody Hoffer Gittel, Relational Coordination, USA. They all are important for the way she works and thinks.

She has almost never observed that value driven leadership, continuous improvements and learning organizations work in practice, although the desire for these concepts has been expressed in the operations policy statements for decades. That was what got her to write a practical book on the subject of corporate culture, value management and sustainable growing.

A pillar of the book’s philosophy is to be a vitalized organization, so it is more about changing the context than to change people’s behavior. As a consultant, Liv Cardell gets very little time at her disposal to explain and implement abstract concepts such as culture and values. Therefore, she has developed simple theoretical models and tools that are easy to understand and apply in the reader’s own organizations.

An important part of cultural development is to have defined business culture concepts and a company-wide continuous scheme to develop culture.

To develop a culture is not about education but about creating structures and practice methodologies that contribute to value management, learning and continuous improvement.

Liv Cardell’s approach is appreciative, solution and future focused. Key tools and processes within the cultural evolution will equip the management by the renewal of cross large group dialogues across the company.

Liv Cardell wishes that senior managers in the nuclear community would do better at:

- **Enabling a united management team without prestige, with shared aims and a large degree of openness. This team should have a driving licence for change and cultural management.**
- **Disciplining attitudes and behaviours that are not accepted (means transparency, training, openness and having plans for how to measure and what to do when someone is under the accepted limit)**
- **Changing the meeting forms so there will be more cultivating, involving, reflecting and dialogue based meetings.**
Stanley Deetz, Professor, University of Colorado, USA

Ph.D. in an Interdisciplinary Program in Interpersonal Communication. Professor, University of Colorado. Director, Center for the Study of Conflict, Collaboration and Creative Governance. Managing Director for Institutional Change in the Center for STEM (Science, Technology, Engineering and Math) Learning. Private consultancy in both profit and not-for-profit sector on organizational change and collaborative decision-making.

Author/co-author of over 140 scholarly articles and author/editor of twelve books on collaborative interaction and organizational behaviour and change. As a consultant for several agencies and businesses he works with the interaction design for systemic change and processes of cross-functional and multi-party decision-making and continuous improvement. He has lectured and worked on projects in twenty-one countries concerning human interaction and cultural change.

Stanley Deetz wishes that senior managers in the nuclear community would do better at:

“I wish managers were better able to recognize and intervene with the cultural factors that reduce safety through greater attentiveness and understanding how the cultural system works.”

Michael D. Meier, Ph.D., Vice President, Regulatory Affairs, Southern Nuclear Operating Company

Mike Meier is Vice President of Regulatory Affairs for Southern Nuclear Operating Company, a position he assumed in October 2014. He is responsible for all licensing and interface activities with the Nuclear Regulatory Commission for the Southern Nuclear fleet including new construction of Vogtle Electric Generating Plant Units 3 and 4. Additional responsibilities include fleet performance improvement, and fleet emergency planning. He is a member of the Southern Nuclear Management Council.

Most recently, Mike served as Vice President of Corporate Services at STP Nuclear Operating Company. While there, he also served as General Manager of Corporate Services and Manager of Engineering Programs.
Before that, Mike worked at Entergy Operations’ Grand Gulf Nuclear Station, first in Mechanical and Civil Engineering, then as Manager of Site Business Services.

Mike holds a Ph.D. and a master’s degree in human and organizational systems from Fielding University, an MBA from Millsaps College, a master’s degree in mechanical engineering from Mississippi State University and a bachelor’s degree in engineering mechanics and materials from Southern Illinois University. He also has a Senior Reactor Operator certification at Grand Gulf Nuclear Station and is a registered Professional Engineer.

Mike is married and has four children.

**Mike Meier** wishes that senior managers in the nuclear community would do better at:
“I wish senior managers would learn how to increase employee engagement and foster a collaborative environment.”

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**Monica Haage, Safety Officer (Safety Culture), IAEA**

Monica Haage is a safety culture specialist at the IAEA. Her area of expertise includes Human and Organizational Factors, Leadership and Management for Safety and the systemic perspective of the interaction between Individuals, Technology and Organization (ITO). She is the scientific secretary for several new IAEA publications on safety culture and is also in charge of the new IAEA safety culture assessment methodology and its applications to the Member States.

Ms Haage has a degree in Engineering and a degree in Social Psychology. Before she joined the IAEA she worked as the international EHS manager at ISS; was a safety culture and ITO specialist at Oskarshamn Nuclear Power Plant; was responsible for the education on organizational theory at Skovde University and held various positions at the Scandinavian Airlines.

The topic of the workshop has been central throughout Ms Haage’s carrier. She has worked as a leader and has also worked with senior managers to improve companies’ safety culture. Her experience from both the aviation and nuclear industries is that leaders do not fully comprehend the role they have in influencing safety culture and especially the aspect of role modelling.

**Monica Haage** wishes that senior managers in the nuclear community would do better at: “If regulatory bodies’ and licensees’ senior managers would ensure that their organizations actively, systematically and continuously worked with improving the safety culture we would see less events and much better efficiency in the organizations. Many positive synergies...”
generate from a strong safety culture. I wish that senior managers would request and enforce this type of activities as much as they do for the technical areas, or even more as safety culture is influencing all activities in an organization.”
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**Agenda for Training Workshop on Leadership and Safety Culture for Senior Managers**

**COMPENDIUM – Training Workshop on Leadership and Safety Culture for Senior Managers**
IAEA Normative Safety Culture Framework

Note: The Characteristics and Attributes below can be found in IAEA GS-G-3.5.

Characteristic 1: Safety is a clearly recognized value

Attributes

1) The high priority given to safety is shown in documentation, communications and decision making:
   a. The safety policy should be documented and should be communicated to personnel.
   b. The rationale for significant decisions relating to safety should be communicated regularly to personnel.
   c. Decisions that affect safety should be made in a timely manner.
   d. Multiple methods should be used to communicate the importance of safety throughout the organization.
   e. Key decisions relating to safety should be periodically revisited and assumptions and conclusions should be challenged in the light of new information, operating experience or changes in circumstances.

2) Safety is a primary consideration in the allocation of resources:
   a. Resource allocation should be in line with the stated priorities and goals, strategies, plans and objectives of the organization.

3) The strategic business importance of safety is reflected in the business plan:
   a. Goals, strategies, plans and objectives relating to safety should be clearly identified and integrated into the business plan.

4) Individuals are convinced that safety and production go hand in hand:
   a. Managers should be especially sensitive to decisions that may seem to place production or other factors above safety and should take care to explain such decisions to personnel.
   b. Managers and supervisors should regularly communicate the importance of ensuring safety while meeting requirements for production and performance.

5) A proactive and long term approach to safety issues is shown in decision making:
a. In strategic and long range planning, account should be taken of known and potential safety issues.
b. The priorities of, and incentives for, senior management should not be concerned exclusively with short term goals, strategies, plans and objectives.

6) **Safety conscious behaviour is socially accepted and supported (both formally and informally):**
   a. The performance appraisal process should recognize and reward safety conscious behaviour.
b. Peers should encourage each other to engage in safety conscious behaviour.

**Characteristic 2: Leadership for safety is clear**

**Attributes:**

7) **Senior management is clearly committed to safety:**
   a. Senior managers should treat supervisors as a crucial part of the management team as they translate Safety Culture into practice and should give them their full support.
b. Senior corporate managers should periodically visit operating installations to assess at first hand the effectiveness of management.

8) **Commitment to safety is evident at all levels of management:**
   a. Managers should establish clear expectations of performance in areas that affect safety and these should be documented where appropriate.
b. Managers should adhere strictly to policies and procedures in their own conduct and should not expect or accept special treatment.
c. Managers should not tolerate or ignore substandard performance in relation to safety for any reason.
d. Managers should exhibit a sense of urgency in remedying significant weaknesses or vulnerabilities.

9) **There is visible leadership showing the involvement of management in safety related activities:**
   a. Managers should be able to recognize conditions of degraded safety (physical or organizational).
b. Managers should individually note performance and inspect conditions in the field by walking around the installation and observing and listening to individuals, and should intervene vigorously to remedy safety issues (‘walk, look, listen and fix’).
c. Managers should ensure that situations adverse to safety are remedied.
d. Supervisors should spend time observing and coaching individuals at their workplaces and should encourage and reinforce expected behaviour.
e. Supervisors should discuss safety issues frequently with their teams or work groups.
f. Managers should visit personnel at their workplaces.

10) **Leadership skills are systematically developed:**
    a. Managers and supervisors should be selected and evaluated with due consideration of their demonstrated ability to foster a strong Safety Culture.
b. Skills in change management should be taught to individuals in leadership roles.
c. A succession plan that includes aspects of Safety Culture should be put in place for developing future managers.

11) **Management ensures that there are sufficient competent individuals:**
    a. Personnel should only perform work for which they are trained and qualified.
b. A systematic approach should be taken to training and qualification.
c. Attendance at training by personnel should be given a high priority.
d. Staffing levels should be consistent with the demands of ensuring safety and reliability.

12) Management seeks the active involvement of individuals in improving safety:
   a. Managers should actively seek dissenting views and diverse perspectives and should encourage open and frank discussion to support independent thinking.
   b. Managers should encourage the raising of concerns by personnel and should take action or else explain why no action was taken.
   c. Where practicable, managers should involve personnel in decision making and activities that affect them, for example, by involving individuals in writing their own procedures and instructions.
   d. Individuals should feel that their opinion matters and should be able to cite instances of their input leading to positive change.

13) Safety implications are considered in change management processes:
   a. Processes for change management and control should be put in place so that account is taken of the possible effects on safety of changes to procedures and equipment and other managed changes.
   b. Personnel should be informed of impending changes in ways that uphold trust within the organization.

14) Management shows a continual effort to strive for openness and good communication throughout the organization:
   a. Supervisors should respond to individuals’ questions openly and honestly and should maintain good relations with personnel.
   b. Managers should ensure that open communication is valued and preserved.
   c. Managers should visit personnel at their workplaces and, where possible, should hold open meetings to explain issues and decisions in context.
   d. Managers and others who may influence the behaviour of personnel should encourage a questioning attitude.
   e. Management has the capability to resolve conflicts as necessary.
   f. When necessary, fair and impartial methods should be used to resolve conflicts and to settle disputes.

15) Relationships between managers and individuals are built on trust:
   a. Managers should carry out what they undertake to do in their communications.
   b. Personnel should adhere to the management system.
   c. Managers should be able to be trusted by personnel to act professionally when personnel raise safety concerns or report near miss events.
   d. Managers should ensure that safety consciousness prevails in the working environment throughout the organization.
   e. Managers should ensure that communication is not stifled in the organization and should take prompt action to counter any such effect.

Characteristic 3: Accountability for safety is clear

Attributes

16) An appropriate relationship with the regulatory body exists that ensures that the accountability for safety remains with the licensee:
   a. Complete and accurate information should be provided to the regulatory body.
   b. The regulatory body should be consulted to obtain any necessary clarification of, and guidance on, regulatory matters.
c. The licensee should be seen by the regulatory body to be open and timely in its reporting and interactions.

17) **Roles and responsibilities are clearly defined and understood:**
   a. The organization is required to define and to document functions and responsibilities for all aspects of safety that are under its control,
   b. Individuals should understand their functions and responsibilities for safety and how their work may affect safety.
   c. Individuals should know where to obtain help with safety related issues and should seek clarification if necessary.
   d. When contractors are engaged, their functions and their responsibilities for safety should normally be specified in contractual documents. The individuals affected in the organization and in the contractor organization should be made aware of these arrangements.

18) **There is a high level of compliance with regulations and procedures:**
   a. Personnel should adhere to regulations and procedures and instances of non-compliance should be avoided.
   b. Management’s expectations for the use of procedures (i.e. when procedures are to be in the hands of the user and are to be used) and adherence to procedures (i.e. the degree of compliance expected) should be clear and made well known to personnel.
   c. Managers and supervisors should inspect workplaces frequently to ensure that procedures are being used and being followed in accordance with expectations.
   d. Personnel should be encouraged to review procedures and instructions critically in use and to suggest improvements where appropriate.

19) **Management delegates responsibility with appropriate authority to enable clear accountabilities to be established:**
   a. Accountable behaviour should be positively reinforced by managers and peers.
   b. Individuals should help each other to fulfil their accountabilities.
   c. Accountability should be perceived positively and not negatively as a way to apportion blame.
   d. If possible, the accountability for every operational decision should be clear before its execution.
   e. The way authority is exercised should not discourage individuals from maintaining open communication or reporting concerns or unusual observations.

20) **‘Ownership’ for safety is evident at all organizational levels and for all personnel:**
   a. Individuals should have their own targets in relation to safety and should continually seek improvement.
   b. Individuals should take care of safety in their own working environment.
   c. Supervisors should promote good safety practices.

**Characteristic 4: Safety is integrated into all activities**

**Attributes:**

21) **Trust permeates the organization.**

22) **Consideration of all types of safety, including industrial safety and environmental safety, and of security is evident.**

23) **The quality of documentation and procedures is good:**
   a. Procedures should be controlled, clear, understandable and up to date and should be easy to find, use and revise.
   b. Documentation should be comprehensive, easy to understand and easily accessible.
c. Responsibilities for preparing documentation and the scope of reviews should be clearly defined and understood.

24) **The quality of processes, from planning to implementation and review, is good:**
   
   a. Work should be pre-planned (including plans for contingencies) to ensure that all safety functions are effective at all times and to ensure that safety is not compromised.
   
   b. Individuals should follow the approved plans and should seek proper approvals before deviating from the approved plans.
   
   c. Work should be planned in sufficient detail to allow personnel to work effectively and efficiently (e.g. resources should be matched to demands, and spares and tools should be available when needed).

25) **Individuals have the necessary knowledge and understanding of the work processes:**
   
   a. Individuals should have a good understanding not only of their own work processes, but also of how these processes interact with other processes.

26) **Factors affecting work motivation and job satisfaction are considered**
   
   a. Individuals and their professional capabilities, values and experience should be considered the organization’s most valuable strategic asset for safety.
   
   b. The reward system should be aligned with safety policies and should reinforce the desired behaviour and outcomes.
   
   c. Recognition should be given to individuals and teams for exemplary performance.
   
   d. Individuals should take pride in their work and should feel that their tasks and performance are important contributors to the success of the organization.
   
   e. Managers should be trained and should have appropriate knowledge of the factors influencing human performance.

27) **Good working conditions exist with regard to time pressures, workload and stress:**
   
   a. The scheduling of work on safety critical tasks at night should be avoided.
   
   b. Shift schedules should be based on up to date knowledge of best solutions with regard to human performance and capabilities.
   
   c. Records of overtime should be kept, trended and acted upon. Planned overtime should be kept within regulated limits.
   
   d. Managers should be sensitive to stress affecting individuals under their control by, for example, undertaking stress awareness training.
   
   e. The physical working environment should be conducive to high standards of safety and performance (e.g. standards of housekeeping, provision of equipment and tools, including response equipment, and guarding and signposting of hazards).
   
   f. Individuals should be consulted about the ergonomics and the effectiveness of their working environment.
   
   g. Human factor specialists should be made available to the organization.

28) **There is cross-functional and interdisciplinary cooperation and teamwork:**
   
   a. Multidisciplinary teams (drawn from different work groups and different levels) should be used when appropriate to develop solutions to problems.
   
   b. Individuals should interact with openness and trust and should routinely offer support to each other.

29) **Housekeeping and material conditions reflect commitment to excellence:**
   
   a. Managers should not accept long standing problems with items of equipment, systems or processes as ‘the way things are’. Managers should pay careful attention to resolving such problems, even if the solutions are challenging and expensive.
   
   b. There should be a process for identifying long-standing issues concerning equipment or processes. For example, each issue could have an action plan for its solution.
Characteristic 5: Safety is learning driven

Attributes:

30) **A questioning attitude prevails at all organizational levels:**
   a. Individuals should notice and should be able to question unusual signs and occurrences and should seek guidance when in doubt.
   b. Individuals at all levels should be encouraged to ask detailed questions in meetings.
   c. Management should be questioning of its own attitudes and views and should actively seek independent views.

31) **Open reporting of deviations and errors is encouraged:**
   a. The organization should have a variety of established processes to allow and encourage individuals to report abnormal conditions, concerns and events, including near misses.
   b. Recognition should be given to individuals and to teams who report abnormal conditions, concerns and events, including near misses.
   c. Individuals should be comfortable raising safety concerns without fear of retribution.
   d. Managers should ensure that matters raised are acted upon and that feedback on the outcome is given.

32) **Internal and external assessments, including self-assessments, are used:**
   a. Various oversight forums and processes, including self-assessment, should be used to review, evaluate and enhance the safety performance of the organization.
   b. The number and types of oversight mechanism should be periodically reviewed and adjusted.
   c. Oversight should be viewed positively and constructive use should be made of external or independent opinions.
   d. Periodic Safety Culture assessments should be conducted and used as the basis for improvement.
   e. Senior managers should be periodically briefed and should initiate actions on the basis of the results of oversight activities.

33) **Organizational experience and operating experience (both internal and external to the installation) are used:**
   a. Processes should be in place to obtain, review and apply available internal and external information that relates to safety, including information on experience from other industries.
   b. Reports on operating experience should be reviewed and actions should be taken to ensure that the organization learns and applies the relevant lessons.
   c. There should be no indications of an attitude of “it couldn’t happen here”.

34) **Learning is facilitated through the ability to recognize and diagnose deviations, to formulate and implement solutions and to monitor the effects of corrective actions:**
   a. Personnel should be able to have confidence in the corrective action process and should be able to point to examples of problems that they have reported and which have been solved.
   b. Checks should be made to see that corrective actions taken address the real and underlying cause(s) and solve the problem.
   c. There should be a low rate of repeat events and errors.

35) **Safety performance indicators are tracked, trended and evaluated, and acted upon:**
   a. The causes of safety significant events and adverse trends should be identified and acted upon in accordance with an established time frame.
   b. The organization should use measures and targets in order to explain, maintain and improve safety performance at all levels.
c. Results with regard to safety performance should regularly be compared with targets and the results of the comparison should be communicated to personnel.
d. Action should be taken when safety performance does not match its goals, strategies, plans and objectives.
e. The pitfalls of focusing on too narrow a set of safety performance indicators should be recognized.
f. The organization should be alert to detect and respond to possible indications of a declining safety performance.

36) **There is systematic development of individual competences:**
   a. Individual development programmes, including succession planning, should be put in place.
   b. Managers and supervisors should be selected and evaluated on the basis of their demonstrated ability to foster a strong Safety Culture.
   c. Appraisals of individual development should be carried out to determine the training needs and development needs of individuals.
The Concept of Leadership: A Short Introduction

By Johan Alvehus, Ph.D.

The concept of leadership has a long history, and is often used as a fundamental way of explaining human and organisational behaviour. In everyday parlance and in popular press, leaders are often attributed the success or mishaps of organisations. Some leaders become glorified as heroes, others as villains.

From a social science standpoint, leadership has been on the research agenda for more than a hundred years. Practitioner literature starts earlier; often Niccolò Machiavelli’s *The Prince* is highlighted as an early example. In this short text, a number of important distinctions regarding leadership and leadership research are highlighted. No fuller account of leadership theory is made.

**Trait theory**

One of the earliest leadership research directions is called trait theory. In this, researchers look for individual traits, inherited or learned, that are connected with leadership. Despite much research efforts, several researchers (e.g. Stogdill, 1974) have not been able to determine which traits re unambiguously related to leadership. The interest in charismatic leadership in the 1990's can be seen as a revitalization of trait theory. Many of the characteristics singled out as important for leadership seem, however, to be traits that are important also for being successful in other domains (e.g. professional/vocational development), which makes it difficult to see them as only being about leadership.

**Style theory**

Style theory focuses on how leaders behave. Common dimensions are task orientation vs. relationship orientation and authoritarian vs. democratic leadership. As in trait theory, research has come up with inconclusive results regarding which styles are efficient. Some researchers have emphasised the importance of leadership as being situation oriented, i.e. that efficient leadership is about being able to adapt to different situations by employing different leadership styles. Leading in a crisis differs from leading routine work, and aspects such as follower maturity and professional context influences the situation. Style theory often portrays leaders as having one style, sometimes it emphasises the importance of being able to shift between styles. These studies contrast with the studies of managerial...
work, where everyday organizational life is portrayed as more fragmented and ad hoc than the styles approach implies.

**Followership**

Some researchers have shifted the interest from leaders to followers. Instead of asking questions about who leads and why, they ask questions regarding why people follow. Here it is also noted that most leaders are themselves followers, as they are embedded in a hierarchy. As noted above, on situational leadership, followers have been taken into account in earlier approaches. Followership research has also, however, directed the interest towards how followers construct leadership. A noted by sociologist Bruno Latour (1986), the power of the leader is always in the hands of the followers, since if no one follows there will be no leadership.

**Sense-making**

In a sense-making perspective, leadership can be understood as the management of meaning, i.e. leadership occurs when someone (the leader) influences the way others (followers) make sense of the world (originally coined by Smircich & Morgan, 1982). Leadership is thus a question of framing and enacting a certain reality. In many ways this line of inquiry has opened up for research on leadership taking a more constructivist view on the topic.

**The leadership/management distinction**

Some theorists want a distinction between leadership and management. Management then refers to practices such as administration, control, rewards, and planning, while leadership refers to inspirational, motivational and visionary aspects. These can sometimes come together, but in the “new leadership” approach of the 1990’s, a common call was to focus less on the management aspects and highlight the importance of leadership. Authors such as Bass (1990) distinguished between transformational and transactional leadership, the latter more associated with traditional managerial activities while the former (more wanted) form is characterised by charisma, inspiration, intellectual stimulation and individualized consideration.

Researchers in the managerial work tradition, on the other hand, emphasise the importance of everyday managerial activities. These studies often focus on what managers actually do, and consistently emphasise the prevalence of mundane and ad hoc activities as constituting the bulk of
managerial work. (For a recent overview, see Tengblad, 2012.) This line of research is often less concerned with normative statements on what leaders/managers should do and is more concerned with what they actually do. Leadership research and managerial work research have, however, largely become to separate fields of inquiry.

*Methodological problems and the practice approach*

While leadership is often defined in terms of a process of influence between leader and follower (Yukl, 1989), the methodological underpinning of studies (especially in the anglo-american tradition) is often based on quantitative approaches using questionnaires. Bryman (2004) notes that since the 1980’s, 85 % of leadership research has been quantitative in nature, and of the qualitative research, the main bulk consists of interviews (Conger, 1998). Some authors have raised concerns about the relevance of these types of studies, since they generally do not actually study the process of influence; rather, they study various views or opinions regarding the process.

From this critique, a recent development in leadership research has been the practice approach (Carroll et al, 2008). Here, leadership is approach from the point of view that it is something that is done in organizations, activities undertaken by ‘leaders’ and ‘followers’ alike, and that the very categorization of ‘leader’, ‘follower’ etc. is problematic. This line of research is still in its youth but has led to important questioning of core concepts in the leadership field.
References


Being Transformative: How Hearts, Minds and Souls All Matter

By Stanley Deetz, Ph. D.

Abstract

This essay develops the reasons for looking at the more subjective side of culture based on the need for better conversations and develops a more organic, complicated and detailed description of culture based in “articulated” answers to basic human questions. Based on this it presents an account of cultural transformation based in active collaborative dis- and re-articulation of co-residing human rationalities. The analysis supports active direct participation by diverse stakeholders since we know of no other way to get the creativity, commitment, compliance and situated customizations necessary for safety culture innovations. It ends with a presentation of the vision-align-invent-act-adjust cycle as a way to facilitate sustainable change.

1. INTRODUCTION

Much has been written on “safety culture” over the years in the operation of atomic energy facilities. For the past several weeks I have pouring through thousands of pages of impressive, incredibly detailed and instructive documents produced both by IAEA and others on safety culture [1,2,3,4]. The amount of literature and advice is staggering. Important progress is being made.

Rather than review this, my concern here is add a dimension to further reduce the likelihood of man-made and man-contributed near misses and disasters. Certainly culture is to be blamed at times, changing culture is difficult, and many organizations do not have a lot of culture change expertise. I am not a safety expert but a culture change expert. Working across industries and countries I have found that challenges of change are often the same. Based on these comparisons, I believe that much has been done to improve the behavioral side of safety culture. But more is needed on what might be considered the subjective side of culture, those parts dealing with trust and the complexities of being human.

Let us take Kiyoshi Kurokawa’s conclusion on the Fukushima Nuclear Accident: “What must be admitted – very painfully – is that this was a disaster ‘Made in Japan.’ Its fundamental causes are to be found in the ingrained conventions of Japanese culture: our reflexive obedience; our reluctance to
question authority; our devotion to ‘sticking with the program’; our groupism; and our insularity. Had other Japanese been in the shoes of those who bear responsibility for this accident, the result may well have been the same.” [5]

As bold as this is, the Independent Investigation Commission report, like most others finally argues for mostly doing more of the same, only better: better monitoring and enforcement, clearer information exchange, stronger laws, quicker response to up-to-date practices, more consolidated chain of command. All too often we call for more of the same only better, but still offer little on addressing culture change itself. I want to add a more nuanced human face to cultural change though discussing managing hearts, minds and souls. Managing these is better thought in a collaborative conversational model rather than in interventionist presentational models.

Culture is a term often used in regard to safety since policies, instructions and behavior management alone do not seem sufficient to reach desired safety outcomes. But we continue to meet regarding “safety culture” because we have not yet reached the full potential of cultural management. At least part of the reason for this, I believe, arises from the rather mechanical way many have thought and talked about culture. A culture of how to talk about culture exists. Many of the discussions have treated culture as a “thing” that people have that can be changed. Managerial actions from this perspective are often ineffective, short-term and produce resistance to change.

Here I will first develop the reason for a look at more subjective side of culture based on the need for better conversations and develop a more organic, complicated and detailed description of culture. I will show why active collaborative interaction across organizations and organizational levels is essential to building and inculcating safety culture. I will then detail why change is so often resisted, temporary and ineffective. And finally I will sketch how to implement sustainable change. I will not spend much time with precise (and often academic) definitions of “safety culture,” rather I will focus on what using such a term is to help us achieve.

None of this is intended to minimize the importance of traditional forms of control in enhancing safety in the forms of guidelines, supervision, inspections, etc. But we need to do more than this. As is clear in a recent IAEA report: “The nuclear industry critically depends on people following rules, standards, processes and procedures. Equally important, however, is the development of thinking, engaged employees such that blind adherence to procedures does not give rise to weaknesses in the ability to recognize and respond to unusual circumstances.” [3]

Managing safety culture is to extend safety producing decisions and practices deeper into the everyday design and construction processes. Reports from several industries and military and fire-fighting indicate the endless presence of the “fog of war” and the difficulty of rationalizing complex situated
choices. A balance is always important between a knowledge-based command and control structure and an intuitive street wisdom. Safety is based on both and knowing when each matters. Clearly each of these will play out differently in different cultures; we will not have a single approach. [6] But we can build some understanding of process of change even if the products are different in different places.

“Safety culture” as a concept helps us go beyond supervision, rules and norms. Managing the hearts, minds, and souls and not just behavior is critical. Safety culture could well be considered to be: “The things that you do spontaneously for the health and well being of others when no one is watching.” And, further, this deeper cultural sense impacts the rational and explicit procedures and guidelines both in content and as interpreted in practice.

2. THE CONCEPT OF CULTURE

Managing hearts, minds, and souls—the subjective side of culture—has always been considered important. The role of leadership, and what I will develop as collaborative practice, in managing culture has been a key part of it. Examples are numerous. In Eastern cultures this was well presented early on by Lao-tza in The Way of Life:

A leader is best
When people barely know that he exists,
Not so good when people obey and acclaim him,
Worst when they despise him.
Fail to honor people,
They fail to honor you;
But of a good leader, who talks little,
When his work is done, his aim fulfilled,
They will all say, “We did this ourselves.”

The Western world’s concern with managing culture can be traced to a funeral oration by Pericles in 431 BCE. Pericles, often recognized as the father of the Athenian’s Golden age, was attempting to inspire unity in his people in their battle with Sparta. The speech effectively displayed the three central elements of establishing a strong operant culture: determine what makes the organization what it is, what it wants,
and eloquently communicate that to the organizational members. A process we now call identification. But the actual practice of this is difficult especially in the diversity work situations of today.

For some time scholars and managers have tried to get a handle on the elusive subjective side of work life. Whether the concern has been with “spirit,” “climate,” “meaning of work,” or “quality of work life,” the core issues have been the same. Human beings are more than rational creatures. They are not animated machines. How employees personally feel, think and see has a significant impact on the character and quality of their work, their relation to management, and their response to innovation and change.

3. CULTURAL CHANGE

We are together today to discuss cultural change. The concern is not foremost with what “safety culture” is but how to accomplish internalization of particular ways of thinking, feeling, and prioritizing actions, especially when indigenous national, organizational and community “cultures” are less than supportive. Rather than an abstract definition, I think “safety culture” can best be thought in personal terms as, "An attention to detail in decisions and work fostered by mindfulness that my actions and choices could harm my loved ones and the loved ones of others." An ultimately successful internalization means having all stakeholders say: “We did it ourselves.”

3.1 Conceptions of what needs changing

Allow me to stay with the Fukushima case for a moment. The independent commission report moves from an indictment of “national culture” to the difficulties of the TEPCO corporate culture: “Across the board, the Commission found ignorance and arrogance unforgivable for anyone or any organization that deals with nuclear power. We found a disregard for global trends and a disregard for public safety. We found a habit of adherence to conditions based on conventional procedures and prior practices, with a priority on avoiding risk to the organization. We found an organization-driven mindset that prioritized benefits to the organization at the expense of the public.” (p. 21) And as it goes on: “TEPCO must undergo fundamental corporate changes, including strengthening its governance, working towards building an organizational culture which prioritizes safety, changing its stance on information disclosure, and establishing a system which prioritizes the site.” (p. 22)
The question of “How to achieve national and corporate cultural changes?” is paired with the question, “Why has meaningful changes not already occurred?” Why has integrating broad societal and corporate goals with safety goals been so difficult to achieve? And, importantly here, “What is the nature of useful conversations about this?”

### 2.2 The origins of bad conversations

Looking at “accidents” across sites and industries some conclusions stand out. I will conceptualize these as bad conversations, conversations that have built into their structure the seeds of inaction.

**Origins of bad conversation 1:** Safety is often conceptualized as supplementary or competitive with other goals including economic ones hence the talk focuses on compromise and trade-off rather than mutually beneficial integration.

**Origins of bad conversation 2:** Explaining events as based on “culture” leads to faulty attributions and a kind of pacification and action frustration based on both an exaggeration of the problem (this is too big to deal with) and a trivialization of it (it’s just culture).

**Origins of bad conversation 3:** Culture is discussed in psychological terms as socialization and deep values and beliefs, hence the only change processes available tend to create resistance and tend to overlook the way culture is integrated and works.

**Origins of bad conversation 4:** Culture change is discussed as something you do to people, hence the core concern is with getting buy-in and getting people to give up bad behavior.

In contrast here “safety culture” is considered to be an integral part of a high performance organization; culture is treated as term that helps us pay attention to complex human choice making rather than an explanation of them; what has been called culture is best described as a systemic set of connections; and lasting cultural evolution and transformation is a respectful collaborative accomplishment.

### 4. THE CULTURAL SYSTEM

Culture is not a thing, a force, nor a power. It is a word we use to help us pay attention to a relatively stable set of relations in a complex system. In perhaps an overly simple way, we can say each cultural system is an answer to six basic human questions. How should I feel? Who am I? What are the social rules? What are the facts? What is good, right and beautiful? What is just? The particular answers
help each individual attend to certain features of the world and not others, think through things in a particular way, and choose actions. These are shared as a way to justify and sense-make.

One of the reason many cultural interventions fail is that they focus on the question of facts and believe that all would work better if people were more fact-based rational. The forms of rationality based in answers to the other questions are disregarded, diminished or even considered problematic. This cannot work because these are equally real and important. Whether liked or not they remain part of every choice.

4.1 The articulation of rationalities

Further, the answers to these six questions do not exist as isolated rationalities. They are “articulated” with each other and their stabilities come with the redundancy of these articulations. Allow me a moment to develop this concept of “articulation.” Articulation is a process of expressing two independent entities together. In a mathematical analogy, articulation changes an orthogonal relationship into an oblique one.

Imagine a child who conjoins “good,” “fast,” and “red” in relation to toy trains. If this child is given a yellow one, the disappointment come not just from the color but because it is not perceived as “good” and “fast.” The affect toward getting a yellow train arises from issues of speed and goodness not just color. For the child to change the affect, he or she would have to first “disarticulate” these three qualities and then rearticulate them with yellow. This can be difficult because color, speed and goodness can also be articulated with gender, community standing, propriety and so forth. Others and experience can contest the articulation, but without understanding the connections that are at stake for the child, we cannot understand the defensiveness, resistance, or mere passive acquiesce nor the child using arguments of “exceptionalism” or confirmation biases to hold on to the old articulation. These qualities are present in every aspect of the operational phase.

4.2 The complexity of change as rearticulation

Change is a complex process. Allow me to work through an example closer to safety culture. Where I live in Colorado, snowboarding is very popular but can be fairly dangerous. Wearing helmets is an important way to prevent head injuries, but snowboarders tended to avoid wearing them. Knowledge-based safety campaigns have not been very effective and, in fact, may have lead to less usage.

This makes sense if we think of the set of articulations of a snowboard community. “Danger gives me
a rush and pleasure.” “Snowboarders are free and independent and violate social rules.”
“Snowboarders are different.” “Helmets are worn by skiers, parents and older people.” “You can only be young for a while.” Snowboarders changed to wearing helmets only as the community developed outrageous and even offensive fabric covers for helmets. We could say that they made helmets “cool” or changed cultures, but explanations like this do not get us much. Understanding the set of rearticulations where nothing is lost in the other rationalities gets us much further in understanding how changes like this occur.

Obviously, rearticulating “safety culture” with company performance or even “safety culture” with concepts related to issue like masculinity and justice in a particular community can be complex. But such a concept, I believe, helps us to start attending to the right things. The concept shows why and how multiple rationalities have to be considered; it helps identify the sites of resistance in the way that changes in one rationality challenges others; and it gives specifics to concepts like “leveraging” aspects of existing cultures.

What we might call the learned capacities (their mindfulness) and incapacities (their ignorance) of communities to attend to some things and not others does not take a long unlearning and re-learning process rather it take a generative transformation. Core to this is membership and identification with different communities and the possibility of integrative and supportive co-articulations rather than competitive ones. These most often require active participation and creativity, qualities that are often lacking in cultural intervention processes.

4.3 The importance of collaboration in change

Understanding the complex system of articulations highlights why and how sustainable change only occurs with the active collaboration of the groups changing. Frequently when change is brought from the outside the consequences to other rationalities is not considered, other forms of human rationality are belittled, and/or these hinged relations remain invisible and cannot be brought to respectful discussion and openly explored. The acceptable of the rationalities that are being threatened through respecting an existing articulation is the beginning of inventing rearticulations that are neither compromises nor losses of key aspect of people and their communities.

Legitimacy and internalization comes from involvement in creation. High-performance organizations require a culture of participation where management functions differently and decisions and responsibility are diffused in the organization. [7] Wider participation in creating a culture of participation may seem obvious but is often not the case. Management direction alone of cultural change or of participation and empowerment rarely succeeds.
4.4 Moving the conversation forward

Let me bring this into the careful work IAEA has already done. Safety culture is defined as “The assembly of characteristics and attitudes in organizations and individuals which establishes that, as an overriding priority, protection and safety issues receive attention warranted by their significance” [2, p.14, italics in the original]. And culture is defined as “a dynamic concept that encompasses everything that happens in an organization. It affects what people do, what they think and how they make sense of events and information—it is a collective understanding of reality” (p. 14). These conceptions direct the intervention strategies and to some extent set up the tension between “safety culture” and presumed deficient national and organization cultural characteristics. “Safety culture enhancement requires sustained effort that should focus on leveraging strengths within the existing culture and changing aspect that inhibit safety rather than attempting to change the basic fabric of the culture…” [2, p.2]

The view I have been developing keeps the holistic intent but takes away the causal power of culture and focuses on the internal dynamics of the impact. This view argues that culture can not be understood outside of the concrete aspects of life and answers to life questions which differ greatly across regions. The detail of this cannot be reduced to national culture. And, safety cannot be transformed through knowledge rationality without evoking the sense of risk and loss in other aspects of life because other configurations are articulated with it.

Individuals can easily feel that their identity, understandings of the way the world works, and justice are challenged in even very smart revisions to monitoring and general building practices. And, individuals will often protect their identity at physical costs to themselves and others. Thus, articulatory relations must be taken seriously and reformation must be inclusive and holistic. This does not say that work practices, etc., cannot be changed, simply that the change must be worked out in articulatory relationships rather than added on or treated as one aspect.

Such an understanding moves away from a model of outside intervention to a concrete and detailed understanding of interactional designs and processes take can help overcome closure to new relational configurations as industrial needs and risks change and work openly with people and companies in specific contexts to rearticulate things like identities, emotions, and institutions in ways that are true to self-determination within the new context. This, I believe, can greatly enrich IAEA model of open spaces.
5.0 ON HERDING CATS:
THE COLLABORATIVE VISION, ALIGN, INVENT, ACT, ADJUST CYCLE

Most often cultural management is attempted because of experienced limits to managing effectively in any other way. One way to think of managing culture is through the metaphor of “herding cats.” Management in professionalized workplaces is often characterized as trying to herding cats. The popularity of the “herding cats” metaphor in professional workplaces arises from the frustration of directing professionals’ behavior because of their independence and the difficulty of surveillance of their work, characteristics shared with nuclear power plant operation.

I grew up on a dairy farm and the metaphoric characterization never made much sense to me. Cats are not hard to herd, just have milk. Cats are only hard to herd if you treat them like sheep and cows. Cats may walk by themselves, but they all quickly independently choose to walk in the same direction following the pail of milk. Culture is like the milk, it pulls people into the future rather than pushes them. When we think of it as a co-constructed enablement rather than a given constraint we begin to lead more effectively.

Here at the end, I want to briefly sketch an interaction design for “cat herding.” This provides a way for multiple stakeholders with different goals and cultural formations to produce integrated and coordinated, what I called, articulations to advance safety as a part of achieving other objectives. A full interaction design helps us decide who should be part of which conversations when and helps us stay out of bad conversations for the sake of better ones.

If we are to better manage the human side of culture and include much more direct collaborative participation of all stakeholders from policy makers and contractors to communities and workers, we need powerful designs for successful conversations, otherwise we simply have more meetings. The IAEA has catalogued many design approaches. I want to move away from these as methods and techniques and highlight the purpose they are to serve. I will briefly present a simplified form modelled on those of Conversant [8]. I propose a vision, align, invent, act, adjust cycle as one way to think about how to have better conversations.

5.1 Vision

Many meetings start with a focus on problems; in fact many are called because of perceived problems. But discussions focused on problems tend to not get very far. Many reasons exist for this and most have been carefully described by people working with Appreciative Inquiry. Collaborative interaction aims at outcome talk rather than problem talk. Every statement of a problem has a hidden positive shadow. This shadow is the hopes, dreams and desires that are not being fulfilled. These are the
group’s visions, the outcomes sought that are hidden by the talk of about problems. Groups develop in the direction of the questions they address. Many explanations and blame create threat and defensiveness. Embracing people’s hopes and dreams opens spaces for integrative rearticulations. We begin by asking where people want to go. Almost all successful models focus on the achievement of safety rather than the prevention of accidents. [8]

5.2 Align

Aligning visions into concrete choices of action requires accepting that people not only have purposes that must be accepted and made explicit but they also carry in concerns about and understandings of their specific circumstances. Focusing on the articulations helps us understand these relations. Accepting a new circumstance, policy or procedure has consequences across dimensions of human experience. For example, we might reasonable ask in any change context not just what does this circumstance ask you to do, but what does it ask you to be. No deep cultural change is possible without accounting for feelings, beauty and justice. Aligning these is not the job of the individual in their private spaces, it is the job of us all in public spaces.

5.3 Invent

Focusing on joint invention starts for a recognition that the best idea and course of action is not carried into the room but arises there. Not recognizing this often leads cultural change to be manipulation rather than invention and greatly reduces legitimacy, commitment and compliance. Invention puts creativity as the most central issue in safety discussions. The goal is develop a desirable (that it is accepted and seen as beneficial by all stakeholders), feasible (it could actually be put in place), and viable (that is it sustainable over time) path forward that rearticulates across rationalities. Good invention requires getting multiple forms of expertise in the room and respecting them. Individuals at the point of production often have low status but have understandings than cannot easily be represented by others. Good design enables all expertise to be consequential.

5.4 Act

Action is often seen as a choice put into play by leaders. I believe that it is more useful to see action as distributed and put into play by many actors. Sometimes this is treated “empowerment.” But I think such a word glosses much. Empowerment without commitment, understand the whole, and
good information is shallow. One of the forces that lead Total Quality Management to enact changes in production processes in Japan in the 50s and 60s was the ability to wed information sharing, individual responsibility, and collective identification.

5.5 Adjust

Continuous improvement requires that actions are open to constant open assessment without fear. This includes revisiting the purposes and desired outcomes that put it in place, identifying what has worked well and what not, determining the actionable lessons, and deciding what will be done differently. In each of these is an opportunity to show how safety is integrated into the process of planning and work.
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