Language is fateful

L’usage de la parole

The use of speech

Magritte, 1927-29
Queensland Urban Utilities
Learning from WAD in NZ logging crews

Response To Fatalities: Fix the failures
• Independent Forestry Review
• Increase mechanisation
• Increase regulation
• Increase certification
• Improve access to information: SafeTree

Dr. Hillary Bennett
Lessons from the Learning Teams

Emerging Themes

- Inclusive, visible and approachable leadership
- Trust, respect and confidence
- Teamwork, common goal and collaboration
- Cross functional knowledge and skills
- Work practices

Stop to assess the risk, adapt the plan and reallocate the crew, when conditions change.

Review work at the end of each day, to identify anything that needs to be dealt with to be ready for the next day.

Monitor the cut wood to ensure there is a buffer of three days’ supply of wood cut at any stage.

Anticipate when the work may get difficult and plan for it.

Anticipate when the work may get difficult and plan for it.

Anticipate when the work may get difficult and plan for it.

http://safeguard.co.nz/databases/modus/home
SAFETY-II AS A MANAGEMENT PRINCIPLE

IMPLIEDATIONS FOR MANAGING AND DEVELOPING AN ORGANIZATION

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Safety-I: without unwanted outcomes

3. DEFINITIONS
3.20 Safety. Freedom from unacceptable risk.

Negative outcomes are caused by failures and malfunctions.

Safety-I:
Analyse accidents and incidents to prevent or eliminate what can go wrong.

(M)any direction(s) will take you away from what you want to avoid ....
Safety-II: with wanted outcomes

All outcomes (positive and negative) are the result of performance variability.

Safety-II:
Support or facilitate what goes well by studying everyday performance.

... but only one direction will bring you closer to what you want to attain.
Management is like travelling

**GOALS or TARGETS:**
Where do we want to be?
When should we arrive?

**POSITION:**
Where are we now?
How well are we doing?

**MEANS or PROCESS:**
How can we change position (“speed” and “direction”)?

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Managing different processes

**DRIVING**

**Goal:** Well defined  
**Position:** Known  
**Means / Process:** Well known, transparent

**MANAGING PRODUCTION**

**Goal:** Well defined  
**Position:** Known  
**Means / Process:** Well known, transparent

**FLYING**

**Goal:** well defined  
**Position:** Known  
**Means / Process:** Well known, transparent

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Managing safety

Goal: Defined by negation (no accidents)

Position: Vaguely known or unknown

Means / Process: Partly unknown, based on tradition rather than knowledge.
Safety: What is the goal?

3. DEFINITIONS
3.20 Safety. Freedom from unacceptable risk.

Safety is the activity of ensuring that accidents are avoided.

\[ \text{Safety} = \sum_{i=1}^{n} \text{Accident}_i \]
Goal: The “zero accident” approach

OUR PURPOSE
To produce [X] safely, securely and profitably - without harm to people or the environment.

OUR BELIEFS and GUIDING PRINCIPLES

1. Safe production is our most important goal.
2. All injuries and environmental incidents are preventable.
3. Any task that can’t be done safely without harm to the environment will not be done.
4. Each person is accountable for his or her own safety, the safety of their coworkers and protecting the environment.
5. Each person is expected to identify hazards and manage risks to people and the environment.
6. Each person must have the necessary skills to work safely and protect the environment.
7. Working safely with respect for people and the environment is a condition of employment.
Most, if not all, safety measures refer to negative outcomes (accidents, etc.)
How do we know where we are?

Technological systems are designed and built. We know what the “components” are, how they should work and can therefore define meaningful measurements.

Organisations “grow” but are not built. We know little of how they actually work and it is therefore difficult to define meaningful measurements.

\[ \text{CPI} = \frac{\sum_{i=1}^{n} \text{CPI}_i \times \text{weight}_i}{\sum_{i=1}^{n} \text{weight}_i} \]

Consumer Price Index
Means: Understanding systems

Simple system (technical)

Complicated system (socio-technical)

Complex system (intractable)
How does an organisation function?

In order to manage something it is necessary to know how it functions!
Tractable systems

Simple descriptions with few details (technology, people)

Principles of functioning are known

System does not change while being described
Intractable systems

Elaborate descriptions with many details

Principles of functioning are partly unknown

System changes before description can be completed
Goals, position and means

- Legacy
  - Industry practice
  - Current trends

- Control inputs (management interventions)

- Indirect, lagging “measures”

- Tradition
  - Standards
  - Requirements

- Outcomes (products)

- Change management
  - Safety culture
  - QA / QM - Lean

- Work-as-Done, everyday practices. (mostly unknown)

- Accidents, losses
  - Performance indicators
  - Balanced Scorecards

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Based on your experiences from preparing and managing changes in how an organisation responds to safety events, please consider the following questions:

- How did you define the goal? How did you describe what you wanted to achieve?

- How did you assess or measure your “position”? How did you know where you were?

- How did you choose what to do? (Changes, interventions, improvements.) Why did you think they would work?