Codes, Cracks and a Search for Hope

Gill Kernick
Transformation Director, Arup University
Gill Kernick

Transformation Director, Arup University

Gill Kernick is the author of Catastrophe and Systemic Change: Learning from the Grenfell Tower Fire and Other Disasters. It combines her decades of experience consulting organisations in high hazard industries to build the leadership and culture to prevent catastrophic events, with a deeply personal connection to the 2017 fire.

From 2011 to 2014 Gill lived on the 21st floor of Grenfell, seven of her immediate neighbours were among the seventy-two deaths.

In April 2022 Gill joined Arup University as Transformation Director working to shape a university that enables Arup and its clients to create a sustainable world.
I want to start in the same place that I will end.
In a regular building in West London...
I steal myself as the guards guide me through the security checks.
It is the last day of the Grenfell Inquiry Hearings.
This final module sets out the individual circumstances surrounding each death.
I am here to attend the hearings of my former neighbours, the El Wahabi’s. They all
died in their home - flat 182 on the 21st Floor. Abdulaziz’s sister Hanan, lived on the 9th
floor and escaped from the tower with her husband and two children.
The conditions on floor 21 were rapidly deteriorating and changing. It is against that
backdrop that we hear about the numerous emergency calls that were made, and the
advice given to stay in their flat and wait for the fire service.
One call to a Control Room Operator lasted for 59 minutes. Beginning at 1:38 (less than
an hour after the fire started). The operator repeatedly tells the family to stay in their
flat saying that the firefighters would be coming soon and would have oxygen. As the
conditions worsen, she tells them to close windows, cover their faces and move to the
bedroom.
Just after 2:21, the control room operator was told by the family that the fire was in the
corridor of the flat and that the smoke was coming into the bedroom. She told the
family to cover their mouths and to get as close to the floor as they could.
In another call at 2:47 the family say they are now under the bed. Nur Huda says “We
are dying, and we can’t get out”. They are told the fire service is on its way. Abdulaziz
says, “I could have got out a long time ago, we could have but they said stay in the flat,
stay in the flat. We stayed in the flat; we didn’t leave.”
In the final calls with the control room the family are advised to leave but they say it is
too late as there is too much smoke and they cannot breathe.
According to the archaeological records, they all died in one of the bedrooms. They
were lying close together.

Juxtaposed with these calls, outside the tower, Hanan and other members of her family
were having desperate phone calls with the El Wahabi’s, pleading with them to ‘get
out’. They stood outside the tower, watching the horror of the spreading flames unfold,
they could see Abdulaziz and his family inside their flat at the windows.
According to protocols, Flat 182 should have been a priority for evacuation as it was
known that there were children present.
There were no firefighter crews deployed or making it to that floor.
In the words of counsel Mary Monroe: One branch of the family survived: Hanan, her
husband, her children. They did not make any emergency calls, they evacuated and
survived. They live to mourn and question why.
I struggle to reconcile the faith the El Wahabi’s placed in the control room operator’s
advice. Listening to them over their own families.
That afternoon has changed me in ways I do not yet understand.
It has made me think very differently about the burden of leadership.
About the advice we given and the decisions we take.
About the very real consequences of our failure to learn from tragic events.
This dialogue today, about learning from disasters could not be more important.
Abdulaziz (52) was the glue to the family. He kept the gears running. He was the number one guy.’ Zak, Abdulaziz’s nephew

Faouzia (42) was like a sister. She would smile and be cheerful and be kind with everyone in the family and with neighbours and friends. Amina, Abdulaziz’s sister

Yasin (20) was described as a local celebrity. To know Yasin was to love Yasin. He was like a brother. Zak, Yasin’s cousin

Nur Huda (15) was a warm and good-spirited 15-year-old. She loved playing football, and she was incredibly skilled, aggressive and agile. Nur Huda’s teachers

Mehdi (8) had an infectious laugh. He was so funny. Amazing imagination, storyteller, non-stop talking like his dad, with added imagination. Sara, Mehdi’s cousin

Grenfell Tower Inquiry Hearings, 21 July 2022
Intention

My wish is that this session sparks kernels of thoughts and ideas that, after we leave, flower and bloom in unexpected ways.

My hope is that you are left with:

- **insights** as to why we are failing globally to prevent disasters,
- an **increased awareness** of our moral obligation as leaders to influence new ways of thinking and give voice to those that are currently not heard, and
- some **new questions and thoughts** about what might be done differently.
Four questions

• Why does our **failure to learn** make sense?

• How can we explore **systemic change**?

• Will the **global response** to façade fires lead to systemic change?

• Where can we find **hope**?

...what solves problems, what moves things forward is asking the right questions.  
*Edgar Schein*
Why does our failure to learn make sense?

The primary risk therefore of a cladding system is that of providing a vehicle for assisting uncontrolled fire spread up the outer face of a building, with the strong possibility of the fire re-entering the building.

FBU Evidence, Environment Sub-committee, June 1999
Why does our failure to learn make sense?
Why does our failure to learn make sense

A failure to:

• View low probability events distinctly,

• Embrace complexity

• Differentiate between piecemeal and systemic change.

...We have to get beyond blame to the systemic, leadership and cultural issues that actually led to decisions being made’

Gill Kernick, BBC, 16th June 2017
Low Probability, High Consequence events

Grenfell Tower
14th June 2017

Piper Alpha
6th July 1988
1.17 The disaster involved the realisation of a potential major hazard in that an explosion following a hydrocarbon leak led to the failure of gas risers which added very large amounts of fuel to the fire. Although such remote but potentially hazardous events had been envisaged Occidental did not require them to be assessed systematically; nor did the offshore safety regime require this. As I set out in Chapter 17, I am satisfied that operators of installations, both fixed and mobile and both planned and existing, should be required by regulation to carry out a formal safety assessment of major hazards, the purpose of which would be to demonstrate that the potential major hazards of the installation and the risks to personnel thereon have been identified and appropriate controls provided. This is to assure the operators that their operations are safe. However it is also a legitimate expectation of the workforce and the public that
Low probability, high consequence events

Does the built environment understand the nature of (and precursors for) low probability, high consequence events?
Complexity

- Change is emergent, rather than directed or controlled, interactions are non-linear and minor changes can have major consequences.
- Complex systems are not predictable. Cause and effect are not tightly coupled, we can’t predict outcomes or retrospectively assign cause.
- They involve a large number of interacting elements with distributed control.
- They are adaptive and co-evolve.
# Piecemeal versus Systemic Change

<table>
<thead>
<tr>
<th></th>
<th>Piecemeal Change</th>
<th>Systemic Change</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Intent</strong></td>
<td>Solving a piecemeal issue</td>
<td>Shifting the conditions holding the status quo in place</td>
</tr>
<tr>
<td><strong>Question</strong></td>
<td>What’s wrong with a discrete part of the system?</td>
<td>What is the system perfectly designed for?</td>
</tr>
<tr>
<td><strong>Assumption</strong></td>
<td>Controllable, predictable world</td>
<td>Complex, emergent world</td>
</tr>
<tr>
<td><strong>Access to change</strong></td>
<td>Fix what is wrong</td>
<td>Make the Water Visible: grapple with the messy kaleidoscope</td>
</tr>
</tbody>
</table>
| **Approach to change**   | Technical Solutions  
*if I do x, y will happen* | Disrupting the status quo, experimenting  
*if I do y, what will happen?*                                     |
| **Leadership Style**     | Bureaucratic, command and control, rules based | Organic, emergent, values and principles based                    |
| **Requires**             | Traditional Expertise                      | All Stakeholders - tacit expertise  
*(validating different ways of knowing)*                          |
A fish is swimming along one day when another fish comes along and says:

**Hey, how’s the water?**

The first fish stares blankly at the second fish and then says, ‘

**What’s water?**

*John Kania Mark Kramer Peter Senge, The Water of Systems Change*
Making the Water Visible: The Grenfell Model for Systemic Change

**RELATIONAL (Interacting)**
How interactions between stakeholders contribute to catastrophic events.
E.g. regulatory capture, revolving door, speaking truth to power

**CONTEXTUAL (Thinking)**
The contextual aspects that impact our ability to prevent & learn.
E.g. culture, trust, bias, unquestioned assumptions & beliefs.

**BEHAVIOURAL (Acting)**
The mechanisms in place to prevent & respond to catastrophic events.
E.g. regulators, plan review and investigations, litigation

**FOUNDATIONAL (Structural)**
The elements in place to prevent catastrophic outcomes.
E.g. regulations, codes governance & accountabilities.
Making the Water Visible: The messy kaleidoscope

**CONTEXTUAL (Thinking)**
- The web of Competing Tensions
- Bias & Decision Making
- Trust, Deception & Dissonant Action
- Not tending to contextual elements
- The role of Measurement & the Media
- The role of grief in change.
- Not effectively changing culture
- Lack of Political Intent and Will
- Lack of safe spaces to explore deeply held beliefs

**BEHAVIOURAL (Acting)**
- Reactive Regulators
- Failure to respond to Scrutiny
- Weak Supply Chain management
- Poor procurement practices
- Inquiry recommendations not effectively implemented
- Focus on blame and blame avoidance
- Unfairly borne consequences
- Outdated product classification, testing & marketing

**RELATIONAL (Interacting)**
- Issues with Regulators (e.g., Regulatory Capture)
- Issues with Institutions (e.g., Group Think)
- Difficulty of Speaking Truth to Power
- Weak Public Consultations
- Using narratives that silence
- Insufficient attention to relational issues
- Failing to rebalance Power
- Not tapping tapping & distributed knowledge

**FOUNDATIONAL (Structural)**
- Regulatory Vulnerabilities
- Weaknesses in Governance & Accountability
- High turnover of ministers and civil servants
- Complex delivery mechanisms
- Increasingly complex Risks
- Political agendas & the role of lobbying
- Failure to distinguish low probability, high consequence risks
- Lack of Competency to deal with risk, ambiguity & complexity
Foundational
The myth that regulations guarantee safe outcomes

- Regulations are **reactive**
- **Not** all regulation / code is good!
- Dealing with **historic failings** is difficult
- **Blind compliance** can increase risk
- The **nature of risk** is changing
- Regulations are **one input** to a complex socio-technical system
- Regulatory **vulnerabilities** are increasing

Disruptive future trends mapped onto regulatory system vulnerabilities

- Complex, interdependent & trans-boundary systems
- Turbulent political contexts
- Erosion of shared values
- Economic & budget pressures
- Power imbalances
- Lack of cognitive diversity
- Long term or latent issues
- Regulatory gaps, inconsistencies or unclear accountabilities
- Institutional inertia
- Knowledge gaps and asymmetries
- Failure to learn or spot warning signs
- Data and technology
- Blending the new & the old
- Competition for knowledge

Behavioural: The myth of the perfect error free world

There is always a difference between work as imagined, prescribed, done and disclosed.

To fully understand risks, we must expand work as disclosed.
Relational:
The myth that softer relational issues aren’t important

In safe cultures all lives matter and matter equally and all voices count.

The job of those with power is to make sure the voices of those with less power are heard and make a difference.

Gill Kernick, BBC, Grenfell six month anniversary
The myth that we can create systemic change without shifting deeply held assumptions and beliefs
Contextual:
The myth that we can create systemic change without shifting deeply held assumptions and beliefs

Global Megatrends
For example,
• Growing cities
• Ageing populations
• Increasing inequality
• Continued disruption
• Political unrest
The Global Response to Façade Fires

- USA
- UK
- Australia
- Singapore
- UAE

KRESNIK: A top-down, statistical approach to understand the fire performance of building facades using standard test data Matthew Bonnera, Wojciech Wegrzynskib, Bartlomiej K. Papisz, Guillermo Reina’
The global response to façade fires

**RELATIONAL (Interacting)**
- Residents voices

**CONTEXTUAL (Thinking)**
- Safety Cases
- Remediation

**BEHAVIOURAL (Acting)**
- Increased scrutiny and oversight
- Tightening of control over materials
- Safety case and gateway paths
- A focus on competence

**FOUNDATIONAL (Structural)**
- Legislative, regulation and code changes
- Clarity on accountabilities and roles

**OPERATING FRAMEWORK**

**GOVERNING FRAMEWORK**
Four questions

• Why does our failure to learn make sense?
  • Low probability, high consequence events
  • Complexity
  • Piecemeal versus systemic change

• How can we explore systemic change?
  • Making the Water Visible
  • The Grenfell Model for Systemic Change
  • Myths

• Will the global response to façade fires lead to systemic change?
• Where can we find hope?

...what solves problems, what moves things forward is asking the right questions.

Edgar Schein
Hope and Despair
Hope: The transformative Power of Grief

How well do disaster management leaders perceive loss, suffering, compassion and trust

https://www.sciencedirect.com/science/article/pii/S2590061722000357#f0010

Characteristics that constitute the virtues of disaster management leadership.
Hope: The transformative power of grief

They didn’t treat us with respect or empathy or humanity, and if they had I wouldn’t be sitting here now.

_Eddie Daffarn, Grenfell Survivor, Campaigner and Rebel Resident, Grenfell Tower Inquiry._
Hope: The democratisation of change

‘If you want to change things then you need to let a thousand flowers bloom, some will thrive, some will not you cannot determine in advance what will work... You want a wildflower meadow, not a formal garden’

Dave Snowden

Self Destructive Tendencies, 2020
... every decision, every act, omission, interpretation, understanding, practice, policy, protocol, affects someone somewhere, someone who is unknown and unseen, but who is an adored child, a beloved sister, a respected uncle, a needed mother.

*Richard Millet QC, Counsel to the Grenfell Tower Inquiry, 21 July 2022*
www.iccSAFE.org/conference

#ICCAC22