



Just Culture and the Psychology of Failure

***Barbara Braun
The Aerospace Corporation***

January 2026

Approved for public release. OTR 2023-00009.



Just Culture

Background

Just culture is a concept related to systems thinking which emphasizes that mistakes are generally a product of faulty organizational cultures, rather than solely brought about by the person or persons directly involved. In a just culture, after an incident, the question asked is, "What went wrong?" rather than "Who caused the problem?"

from Wikipedia

- First fully articulated in *Managing the Risks of Organizational Accidents* by James Reardon in 1997
- Has been applied to industrial, aviation, and most notably, healthcare industries

Old View



- Human frailties lie behind the majority of accidents. ‘Human errors’ are the dominant cause of trouble.
- Safety rules, prescriptive procedures and management treatises are supposed to control erratic human behavior.
- But this control is undercut by unreliable, unpredictable people who still don’t do what they are supposed to do.
- Some Bad Apples have negative attitudes toward safety, which adversely affects their behavior. So not attending to safety is a personal problem, a motivational one, an issue of individual choice.
- The basically safe system, of multiple defenses carefully constructed by the organization, is undermined by erratic or unreliable people.

“It is now generally acknowledged that human frailties lie behind the majority of accidents. Although many of these have been anticipated in safety rules, prescriptive procedures and management treatises, people don’t always do what they are supposed to do. Some employees have negative attitudes to safety which adversely affect their behaviors. This undermines the system of multiple defenses that an organization constructs” to prevent injury and incidents.

Lee, T., Harrison, K. Assessing safety culture in nuclear power stations. Safety Science 2000;34(1):61–97.

Old View



- Who is responsible?
 - *Somebody did not pay enough attention*
 - *If only somebody had recognized the significance of this indication, or of that piece of data, then nothing would have happened*
 - *Somebody should have put in more effort*
 - *Somebody thought that making a shortcut was no big deal*

- How do we reduce errors?
 - *Get rid of Bad Apples*
 - *Put in more rules, procedures and compliance demands*
 - *Tell people to be more vigilant (with posters, memos, slogans)*
 - *Get technology to replace unreliable people*



New View

What is responsible?

- Success is never the only goal. Budget, schedule, and political constraints are real, too.
- People do their best to reconcile different goals simultaneously (for example, speed or innovation versus rigor).
- A system isn't automatically successful; people create success through practice at all levels of the organization. Technical success isn't the only measure of success, especially in the long term.
- The tools or technology that people work with also create error opportunities and pathways to failure.

“This is at the heart of the professional pilot’s eternal conflict,” writes Wilkinson in a comment to the November Oscar case. “Into one ear the airlines lecture, “Never break regulations. Never take a chance. Never ignore written procedures. Never compromise safety.” Yet in the other they whisper, “Don’t cost us time. Don’t waste our money. Get your passengers to their destination—don’t find reasons why you can’t.”

Wilkinson, S. The November Oscar incident. *Air & Space*, 1994: March, 80–87.

People do not come to work to do a bad job!



Hindsight Bias

- Hindsight means being able to look back, from the outside, on a sequence of events that led to an outcome that has already happened
- Hindsight allows almost unlimited access to the true nature of the situation that surrounded people at the time (where they actually were vs. where they thought they were; what state their system was in vs. what they thought it was in)
- Hindsight allows investigators to pinpoint what people missed and should not have missed; what they did not do but should have done.

Failure investigations are almost always
*retrospective, counterfactual, and
dissociative*

We confuse outcomes with decisions



Hindsight Bias

Hindsight is Retrospective, Counterfactual, Dissociative

- Retrospective:
 - *We know the outcome now and can create a story that is more linear and plausible, and less messy and complex, than actual events.*
 - *We can cherry-pick and re-group evidence to construct a linear sequence of events.*
- Counterfactual:
 - *When we already know the outcome, we can easily see where people should have done something but didn't.*
 - *We create an alternative narrative of what could have happened if certain utopian conditions had been met.*
 - *They can be fruitful for prevention, but do not explain why people did what they did.*
 - *Rarely are decisions binary events where the outcome is clear.*
- Dissociative
 - *There is a dissociation between data availability and data observability, and between procedures and actual practice*
 - *In retrospect, it's easy to identify what the "critical" data was amid the "fog of war"*
 - *Inconsistencies between existing procedures and actual behavior are easy to expose when procedures are excavated after the fact*



Risk and Failure Management

“This problem could have been caught XXX months ago if we had reviewed the data / if the contractor had provided us the data / if we had the right expert look at it...”

- Retrospective, counterfactual, dissociative
- We didn't know the outcome XXX months ago
- We are cherry-picking the details now
- The decision was made (or not made) in a larger context
- Many other problems were found and taken care of
- Success at any cost is never the goal

Just culture is essential to culture change

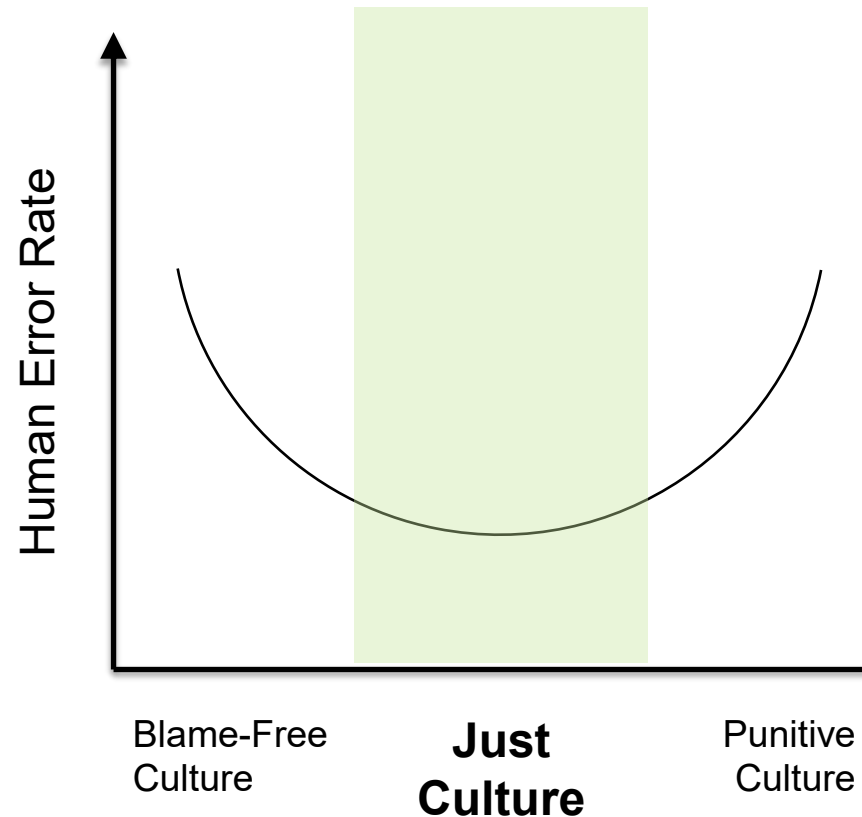


Just Culture

Finding the Balance

- Finding a balance between the extremes of punishment and blamelessness is the goal of developing a just culture.

Remember that the shortcuts and adaptations people have introduced into their work often do not serve their own goals, but yours or those of your organization





How to Implement Just Culture

What does this look like in daily life?

- Don't ask who is responsible, ask what is responsible
 - *Ask the “five why’s” from an organizational and system perspective*
 - *Recognize the importance of context and storytelling*
- Link knowledge of the messy details with the creation of justice and the sharing of information
 - *Failures are always the result of a complex and messy system / sequence of events*
 - *Only someone who knows the messiness of the system first-hand can adequately assess what went wrong*
 - *Checklist-style fixes ignore the context*
- Explore the potential for restorative justice – or more simply, fix the problem
 - *Instead of focusing on what went wrong, focus on what we can do now*
 - *This should be a part of any response to accountability questions*
- Go from backward to forward-looking accountability.
 - *Punishment vs. system changes*
 - *People are not a problem to control, but a solution to harness*
- Put second victim support in place.
 - *The person or organization “responsible” for the error needs support too*
 - *The lived experience represents a trove of information*