

What Defines Quality Software?

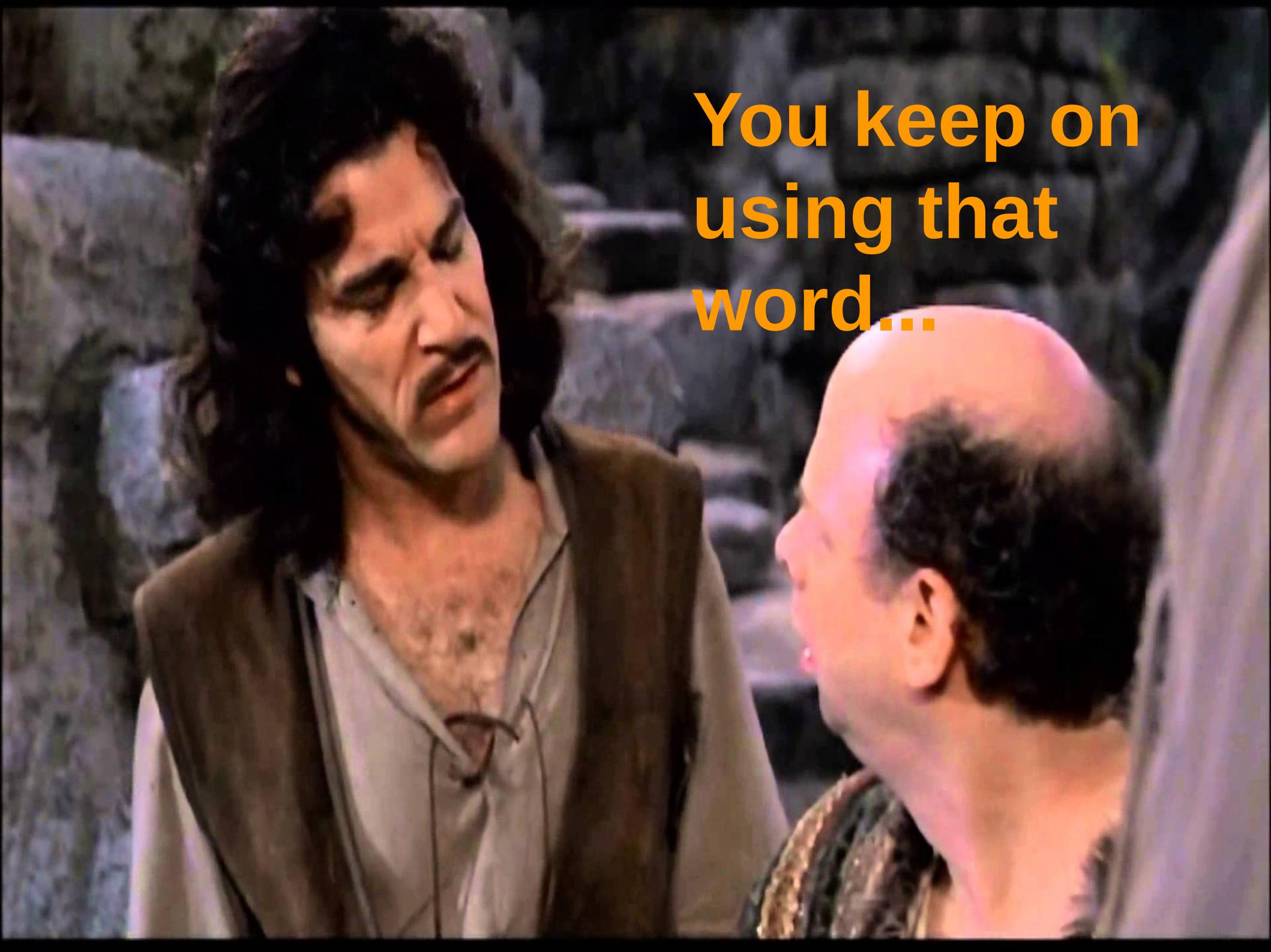
@rorymckinley

“quality really matters”

“write high-quality code”

“production-quality code”

“ship high quality code”

A scene from the movie Pulp Fiction. Vincent Vega (John Travolta) is on the left, wearing a light-colored zip-up hoodie, looking slightly upwards and to his right with a neutral expression. Jules Winnfield (Samuel L. Jackson) is on the right, seen from the side and back, wearing a camouflage jacket, looking towards Vincent. The background is dark and textured.

You keep on
using that
word...

A narrow
view of
quality...



A white hatchback car is parked in a snowy driveway. The rear hatchback is open, revealing the cargo area. The car is positioned in front of a dark wooden fence. In the background, there are snow-covered trees and a large snowdrift on the right side.

... and
then
things
changed

A photograph of a construction worker in a blue hard hat and safety harness, welding a joint between two large steel beams. He is positioned on a horizontal beam, with vertical and diagonal beams forming a complex structural framework around him. The sky is a clear, pale blue.

Quality

==

Structural
Quality

A photograph showing a construction worker in a blue hard hat and safety harness working on a large steel truss structure. He is positioned on one of the upper beams, holding a welding torch and focused on his task. The steel beams are dark grey, and the sky is clear blue. The perspective is from below, looking up at the worker.

Reliability
Efficiency
Security
Maintainability
Size

**“... reducing internal quality
slows us down”**

Martin Fowler

**“...delivering function at the
expense of structure is a
fool’s errand”**

Robert Martin

Software Craftsmanship Movement



**Opinions
differ...**



“...test as little as possible to reach a given level of confidence.”

“If I don't typically make a kind of mistake ... I don't test for it”

Kent Beck

**“Unit tests provide as close
to 100% coverage as is
practical.”**

Robert Martin

**“To me legacy code is code
without tests.”**

Michael Feathers



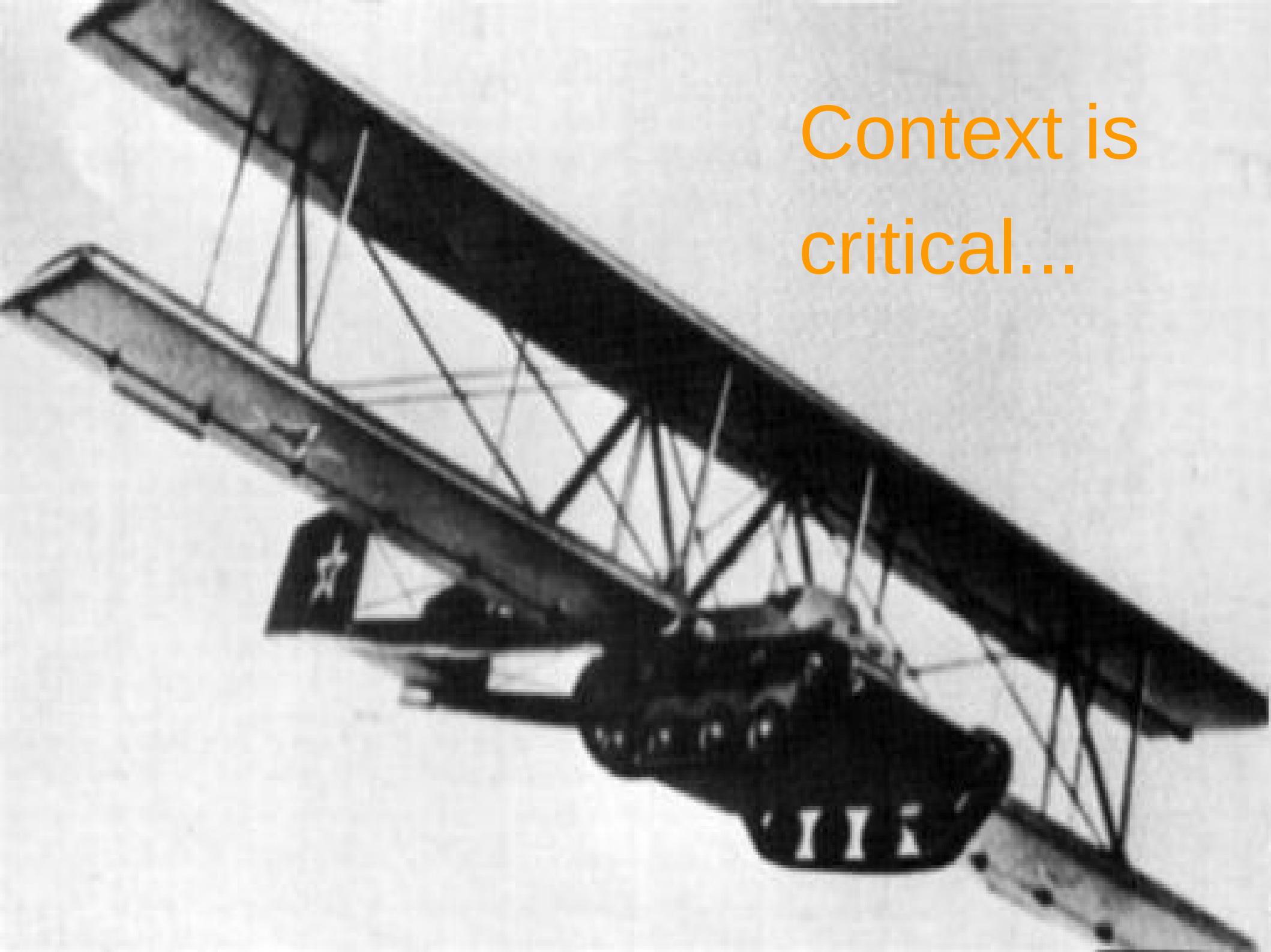
...and then the
• fight started.



David Heinemeier Hansson
@dhh



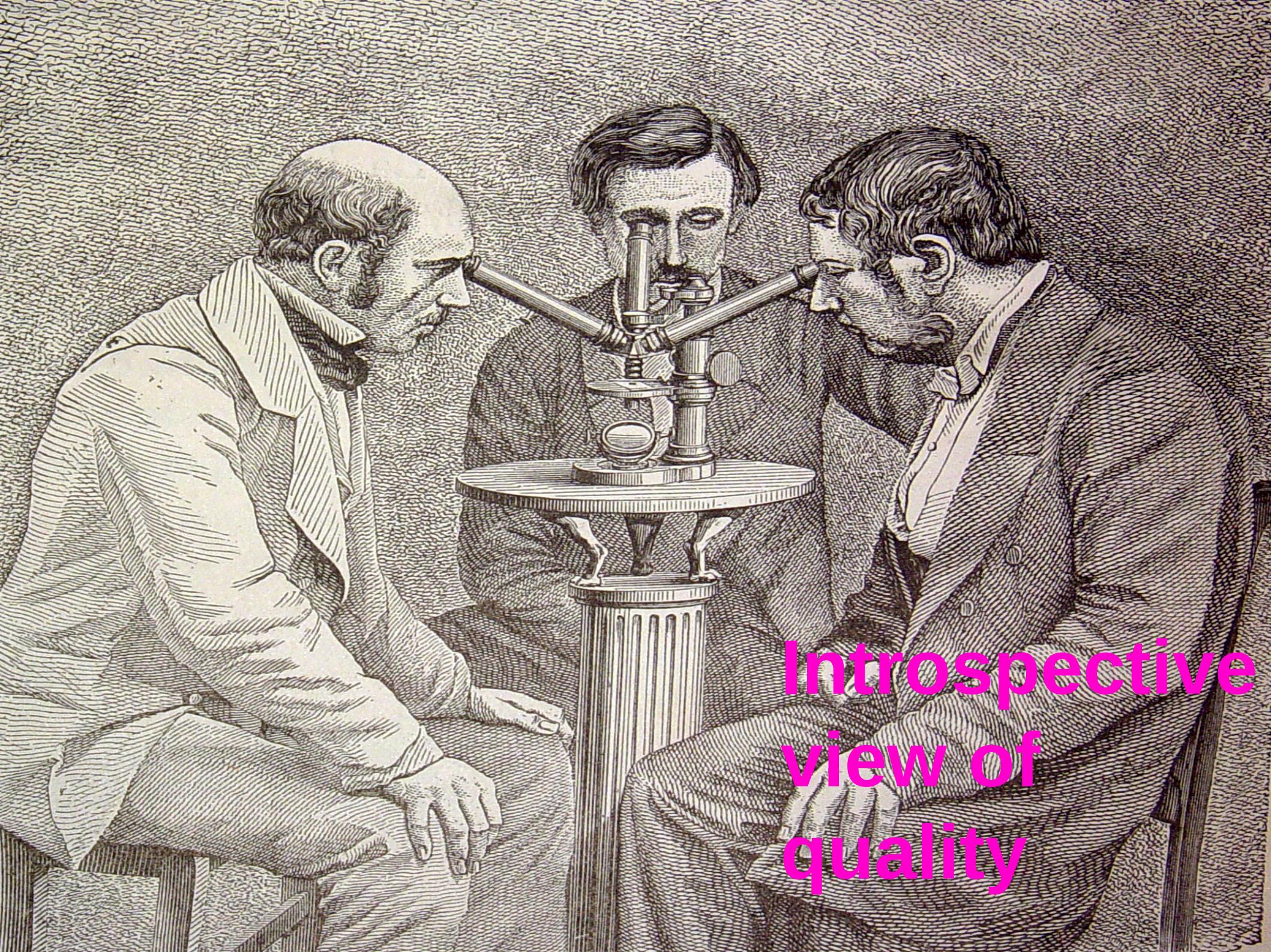
David



Context is
critical...

- ... but must be made visible.





Introspective
view of
quality

A construction worker wearing a blue hard hat and safety harness is welding a joint between two large steel beams. He is positioned on a horizontal beam, with a vertical support column visible to his left. The background shows a clear blue sky and other structural elements of a building under construction.

Structural
quality is
critical

... perhaps
it is not
always
appropriate



“apply the appropriate amount of rigour, discipline and excellence.”

Dan North

**“No professional developer
should ever follow a discipline
when that discipline does more
harm than good.”**

Robert Martin

quality(n): an essential or distinctive characteristic, property, or attribute.

Dictionary.com

Optimise the appropriate qualities

Look outward



A photograph of a single railway track curving through a green field. The track is made of dark metal rails and light-colored wooden sleepers, set into a bed of dark gravel. The field is a mix of bright green grass and patches of yellowish-green vegetation. In the distance, a dense line of mature trees stands behind a low wall of red flowers. The sky is overcast and grey.

Reduce
opportunity
cost



Deployed is not done

High-learning projects





**Spike and
Stabilize**

A young girl with blonde hair, wearing a pink t-shirt and white shorts, is riding a black bicycle with training wheels on a paved sidewalk. She is seen from behind, pedaling away from the camera. The sidewalk is lined with green grass and trees. The background shows a residential area with houses and more greenery.

Stabilizing
lowers
the cost of
change

**“the skill to stabilize
later...often more important
than the skill to keep the cost
of change low up-front.”**

Liz Keogh

A dynamic photograph of three male marathon runners in mid-stride on a city street. The runner on the left wears a dark blue singlet with 'KIRUI' and 'adidas' logos, and black shorts. The middle runner wears a dark singlet with 'L...' and 'adidas' logos, and black shorts. The runner on the right wears an orange singlet with 'KIPSANG' and 'adidas' logos, and black shorts. They are running on a paved road with a yellow double line, with a crowd of spectators behind a barrier in the background.

Lean
Startup

“take full advantage of our options, even if they feel dirty or riddled with technical debt.”

Eric Ries



**Some debts
never need
to be repaid**

THE CAVE OF TIME

CHOOSE YOUR OWN ADVENTURE.

NARRATIVE MAP

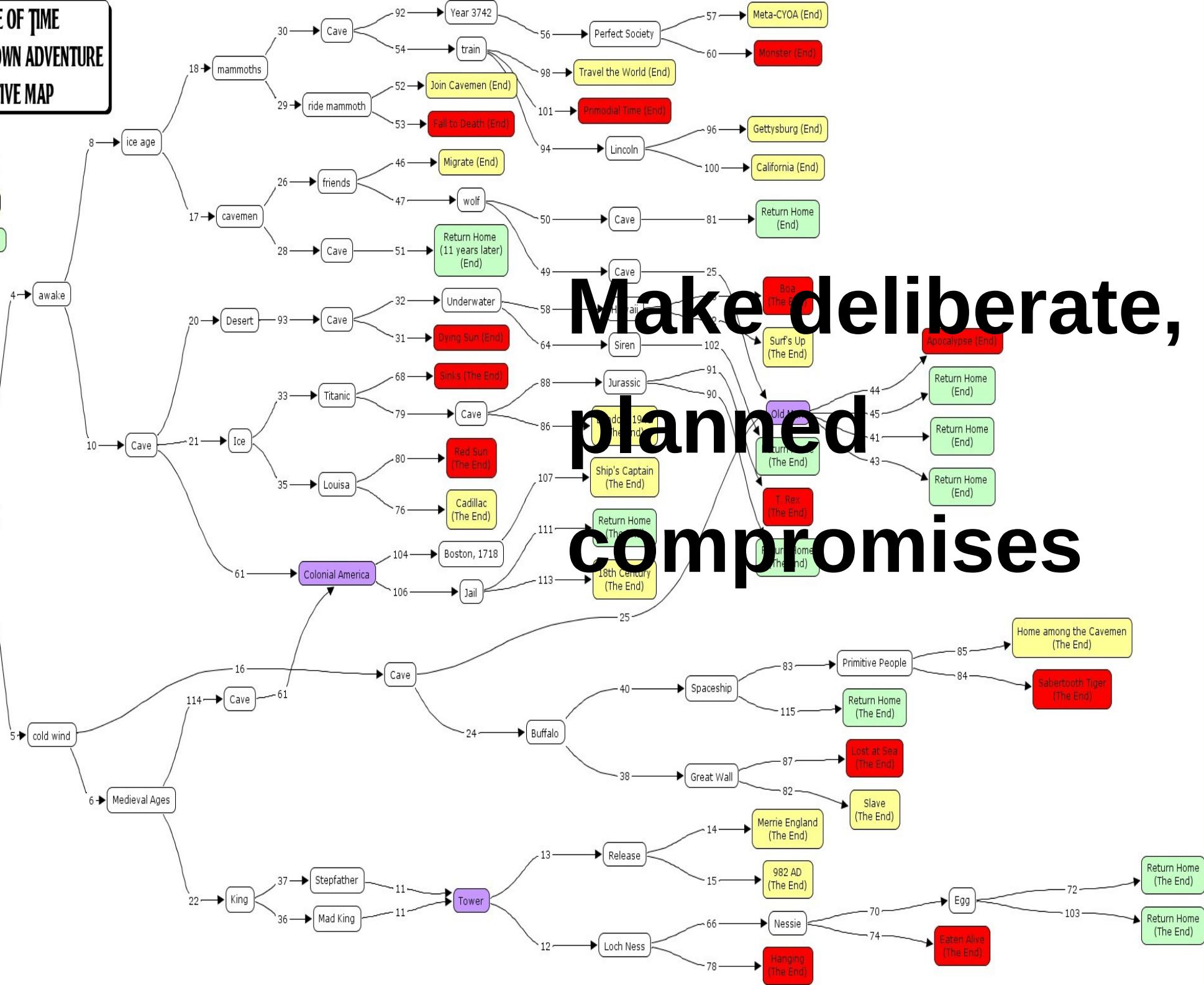
LAVENDER = NOD

YELLOW = NEW LIFE

GREEN = RETURN HOME

RED = DEAD

Asleep in the cave (1-3)



The diagram illustrates a complex network of connections between different movie endings. Nodes are represented by colored boxes, and edges by lines with numerical weights. The nodes include:

- Cave (25)
- Hawai (2)
- Siren (102)
- Jurassic (91)
- Old Man (44)
- Surf's Up (The End) (90)
- Boa (The End) (red box)
- T. Rex (The End) (red box)
- Return Home (End) (green box)
- Apocalypse (End) (red box)
- Return Home (End) (green box)
- Return Home (End) (green box)
- Return Home (End) (green box)
- Return Home (The End) (green box)
- 18th Century (The End) (yellow box)

Connections and their weights:

- Cave → Surf's Up (The End) (25)
- Hawai → Surf's Up (The End) (2)
- Siren → Surf's Up (The End) (102)
- Jurassic → Surf's Up (The End) (91)
- Jurassic → Old Man (90)
- Old Man → Return Home (End) (44)
- Old Man → T. Rex (The End) (45)
- Surf's Up (The End) → Boa (The End) (1)
- Boa (The End) → Apocalypse (End) (1)
- Boa (The End) → Return Home (End) (41)
- Boa (The End) → Return Home (End) (43)
- T. Rex (The End) → Return Home (End) (41)
- T. Rex (The End) → Return Home (End) (43)
- Return Home (The End) → Return Home (End) (1)
- 18th Century (The End) → Return Home (The End) (3)

More collaboration



Require
a
common
language...

...and trust.





Say “context”
one more time...

**“any decent answer to an
interesting question begins,
‘it depends...’ ”**

Kent Beck

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