



BIGGER, FASTER MORE SECURE

LAURA BELL

FOUNDER AND CEO: SAFESTACK

@lady_nerd laura@safestack.io

<https://safestack.io>

In this talk

Fear and loathing

Examining the root of fear and it's effects

Fear-based architecture and antipatterns

Fear leads to anger, anger leads to hatred....

Fearless security patterns and approaches

Deconstructing the scared and building the secure

Fear and loathing





Rowena ©19

Words Matter

Threat Intelligence

Kill Chain

Advanced Persistent Threat

Cyber War

Zero-day

Threat actor

Firewall

Brute-force

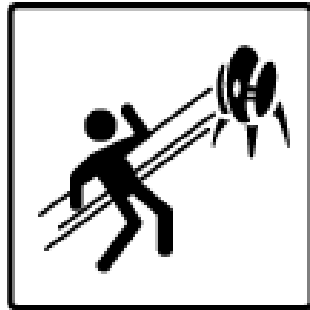
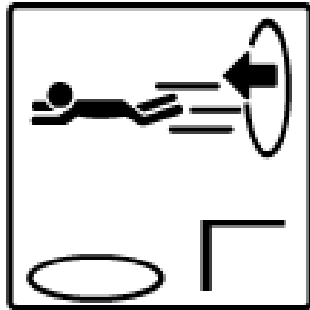
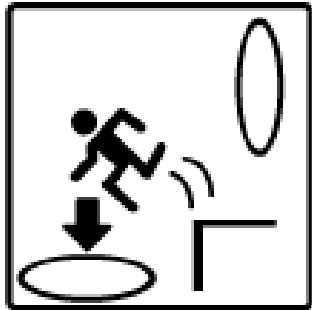
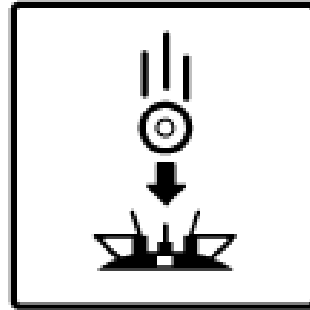
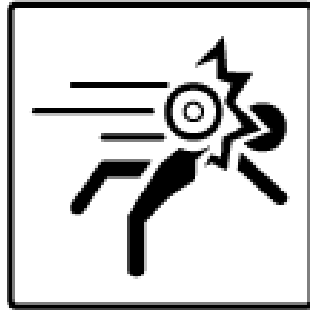
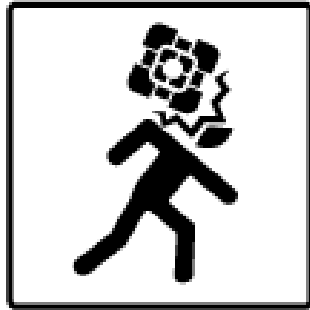
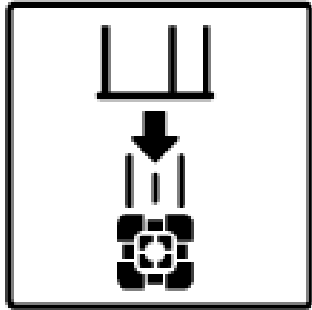
Weaponized content

The more scared we are

The more scared we get

In a nationally representative sample of Americans (fear increased risk estimates and plans for precautionary measures;

EFFECTS OF FEAR AND ANGER ON PERCEIVED RISKS OF TERRORISM A National Field Experiment
Jennifer S. Lerner, Roxana M. Gonzalez, Deborah A. Small, and Baruch Fischhoff



Fight
Flight
Freeze

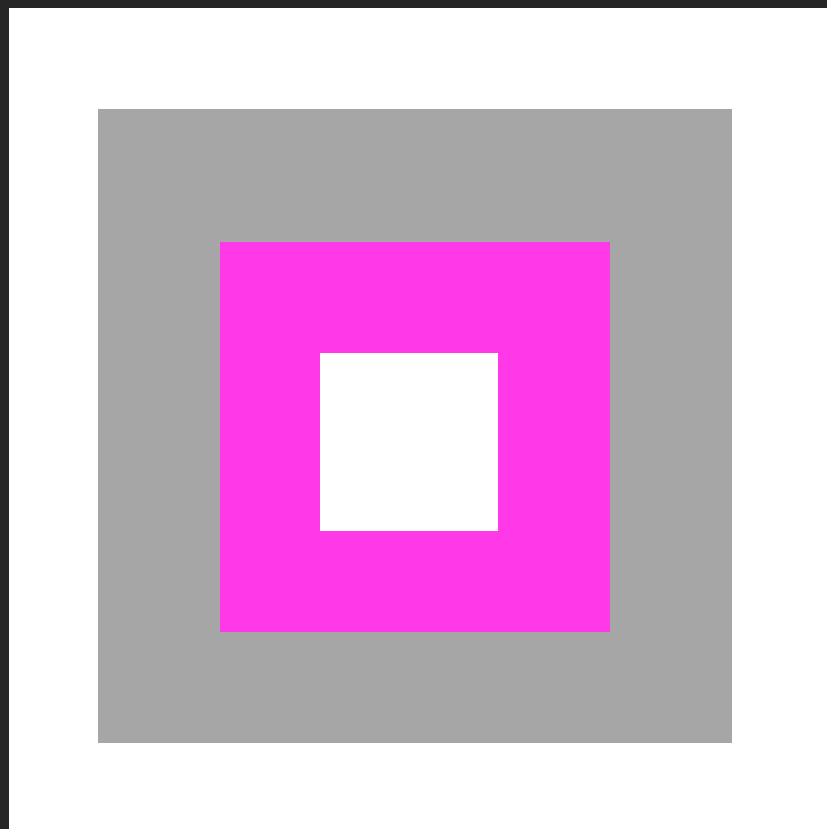
Later, the sights, sounds, and other contextual details of the event can become stimuli themselves and trigger fear. They may bring back the memory of the fearful event, or they may cause us to feel afraid without consciously knowing why.

Because these cues were associated with previous danger, the brain may see them as a predictor of threat.

Fear-based architecture and antipatterns



Castles



Layered defences create an expectation of safety, managed by someone or something else.

Defences can be challenged by
Deployment
Integrations
Deconstruction
Distribution

Gatekeepers

PLEASE REMOVE SHOES & UNDERWEAR



49 CFR
Part 1542
AIRPORT SECURITY

Revised as of December 26, 2009



Gatekeepers place the responsibility on the user to prove that they are not malicious

Innocent people try hard to be
honest and incriminate themselves

Malicious people follow the rules,
don't draw attention

Require Captcha

Security Check

Please enter the text below



Can't read the text above?

Try another text or an [audio CAPTCHA](#)

Text in the box:

[What's this?](#)

By proceeding, you agree to the [Facebook Platform policies](#)

[Continue](#)

[Cancel](#)

Scar Tissue

! WARNING

**OUR FOOD
MAY CONTAIN
PEANUT OR OTHER
NUT PRODUCTS.**



Scar tissue is a defence that forms where we have previously been hurt

Password Rules

All items below must have green checks before "Retype Password" box is no longer grayed out!

- ✔ The password must differ from passwords you have used before.
- ✔ It must be between 8 and 16 characters.
- ✘ It cannot contain a word or acronym found in password dictionary.
- ✔ It cannot contain your NetID.
- ✔ Use at least one lowercase letter (abcdefghijklmnopqrstuvwxyz)
- ✔ Use at least one uppercase letter (ABCDEFGHIJKLMNOPQRSTUVWXYZ)
- ✔ Use at least one number (1234567890)
- ✔ Use at least one non-alphanumeric character from this list:
` ! # \$ % & * () - _ = \ | [] ' ; : / ? . ,

Signs that your defence might be scar tissue

Not-measurable

Acute

Useless

Specific

Exclusionary

Arbitrary

Fearless security patterns and approaches

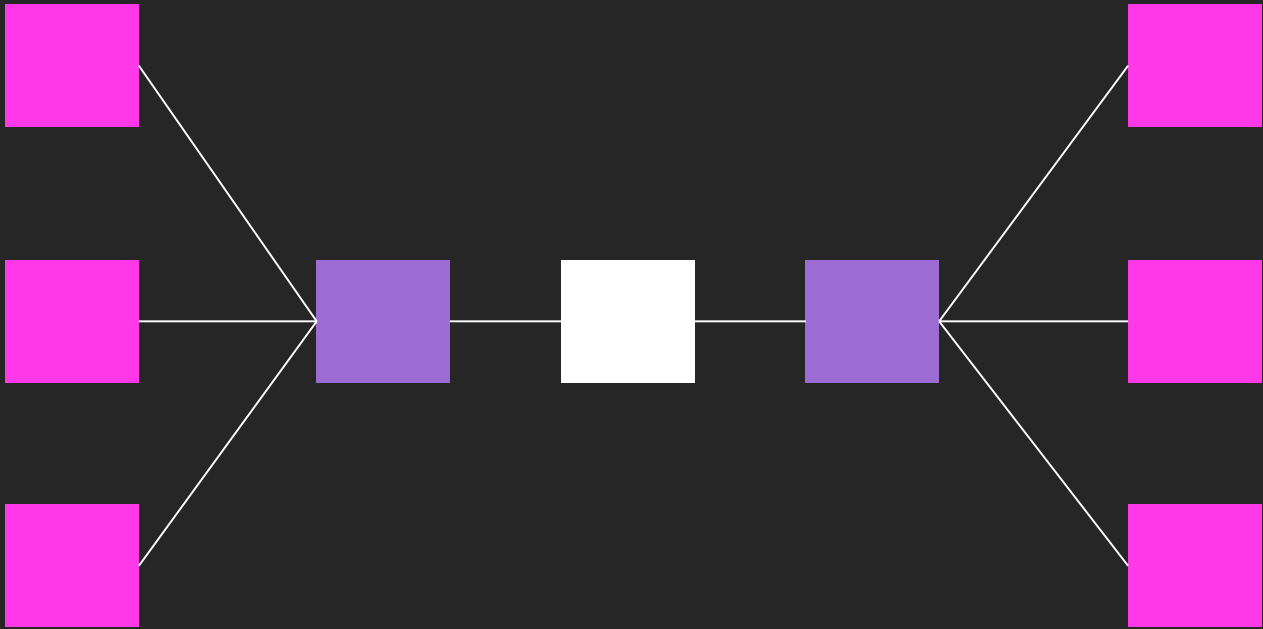


~~Castles~~

Tiny Houses



Small, simple and focused on functionality



Small

Frequently deployed

Independent

Monitored

Consistent

Assume failure

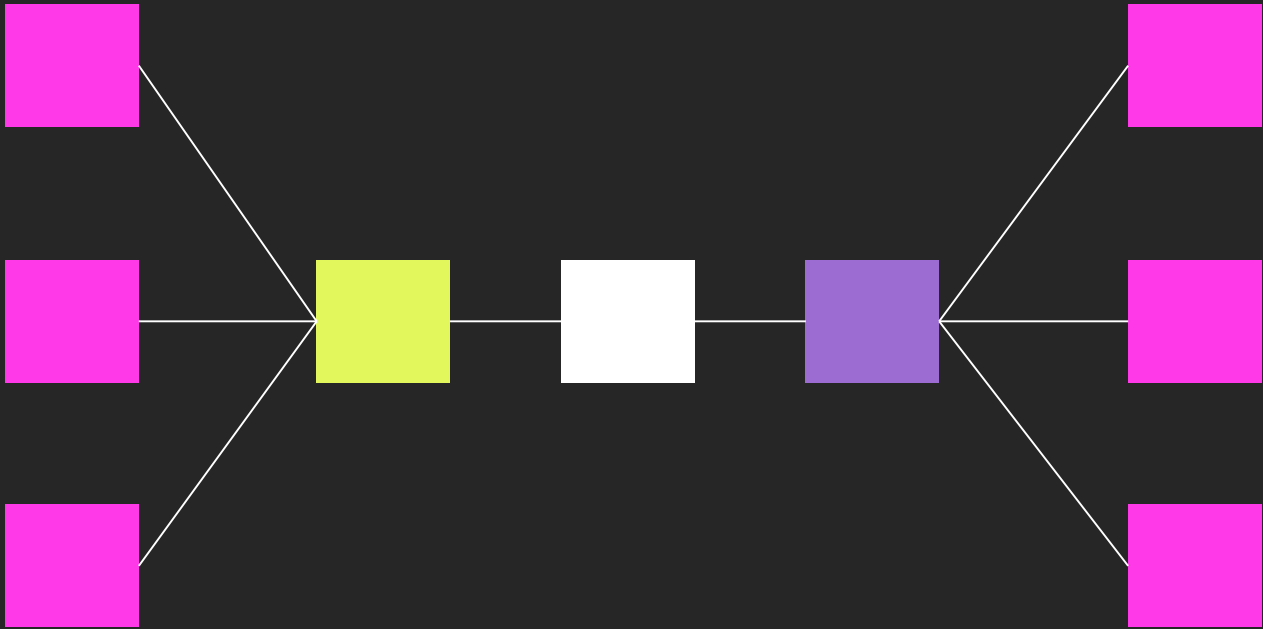
Evaluated and updated

Gatekeepers

Guardians



Guardians monitor and respond



Honey pit:

An intentional vulnerability in an application that traps an attacker

Bermudez

Honey pot:

An intentionally vulnerable host in a network that alerts when attacked

<https://canary.tools>

~~Scar Tissue~~

Intelligent Defences



Be aware and challenge your own bubble

Build defences that

Focus on usability and accessibility

Allow for monitoring and response

Subject to regular evaluation

How secure is your password?

Tip: It's often better to have longer passwords than shorter, more complex ones

Show password:

●●●●●●●●●●●●●●

Very Strong

14 characters containing:

✓ Lower case

✓ Upper case

✗ Numbers

✗ Symbols

Time to crack your password:

25 years

Review: Fantastic, using that password makes you as secure as Fort Knox.

TL;DR

Fear and loathing

Examining the root of fear and it's effects

Fear-based architecture and antipatterns

Fear leads to anger, anger leads to hatred....

Fearless security patterns and approaches

Deconstructing the scared and building the secure

QUESTIONS

LAURA BELL

FOUNDER AND CEO: SAFESTACK

@lady_nerd laura@safestack.io

<https://safestack.io>

