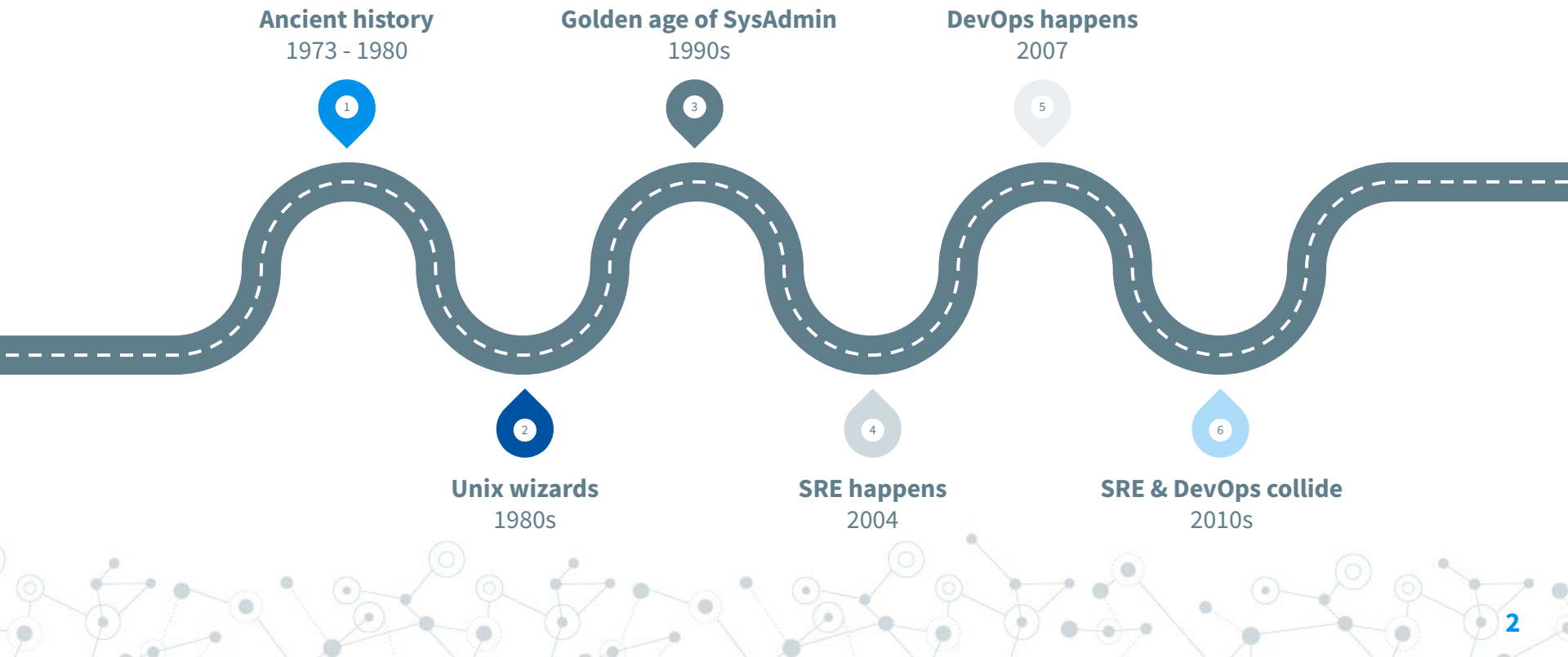




The biases confronting SREs

My road to today (bias-baseline)





Who is this quote about?

‘A person with much more power than you and who is bitter enough to use it in ways that please him/her’

Source: Urban Dictionary, SysAdmin

Cognitive bias



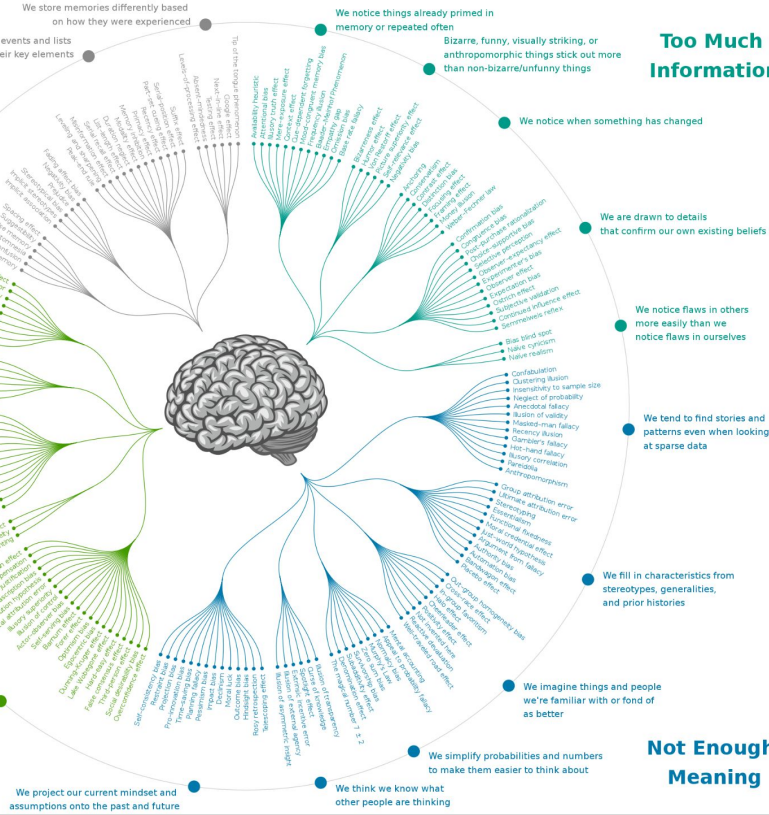
Trusting perceptions rather than objective reality when processing information and making decisions

THE COGNITIVE BIAS CODEX

What Should We Remember?

- We store memories differently based on how they were experienced
- We reduce events and lists to their key elements
- We discard specifics to form generalities
- We edit and reinforce some memories after the fact
- We favor simple-looking options and complete information over complex, ambiguous options
- To avoid mistakes, we aim to preserve autonomy and group status, and avoid irreversible decisions
- To get things done, we tend to complete things we've invested time and energy in
- To stay focused, we favor the immediate, reliable thing in front of us
- To act, we must be confident we can make an impact and feel what we do is important

Need To Act Fast



Too Much Information

<https://creativecommons.org/licenses/by-sa/4.0/>
 This image is licensed under a **Creative Commons Attribution-ShareAlike 4.0 International License**.

Common examples

- Confirmation bias
- Occam's razor
- Anchoring
- Planning fallacy
- Conway's Law
- Negativity/pessimism bias
- Sunk cost fallacy
- Exponential growth bias
- Maslow's hammer
- Déformation professionnelle

Tech industry stereotypes

- ◎ Sysadmins are grumpy and jaded
- ◎ Operations people resist change
- ◎ Brilliant jerk
- ◎ Devs don't want to support the services they build
- ◎ Devs can do anything ops can do



“

*SRE is what happens when you
ask a software engineer to design
an operations team*

Ben Treynor Sloss, Google, circa 2003
<https://sre.google/sre-book/introduction>

What is SRE?

A role combining software development, reliability engineering, and operations disciplines

- ⦿ Monitoring
- ⦿ Collaborations with product engineering teams
- ⦿ Change management & CI/CD
- ⦿ Emergency response, incident management, and blameless root cause process
- ⦿ System availability (reliability, scalability) & performance (latency, error rate)
- ⦿ Automation
- ⦿ Toil measurement and management
- ⦿ Service level indicators (SLI), objectives (SLO), and agreements (SLA)
- ⦿ Error budgets

Often a generic category for
“run the business” work
whether or not it is strictly SRE

On-call /
production
support

Collaborate
with product
eng.

SRE tools &
automation
projects

SRE origination bias?

Google has a complex fabric of supporting services

Software and automation have limitations

SRE concepts break down without high performance

We coin the term “origination bias” to refer to the practice of viewing findings from a single, original study as being almost sacred.

-Paul D. Bliese & Mo Wang

Is SRE an instance of class DevOps?

SRE

Goal: Increase reliability

Method: Use software for operations

Remit: performance and change management, automation code, monitoring & on-call

DevOps

Goal: Increase velocity

Method: Collaborate to reduce silos

Remit: design, develop, test, release, and support product code

DevOps team topologies

Matthew Skelton & Manuel Pais @devopstopologies.com

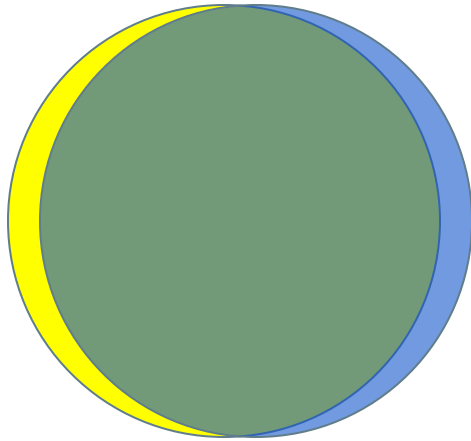
How Different Team Topologies Influence DevOps Culture



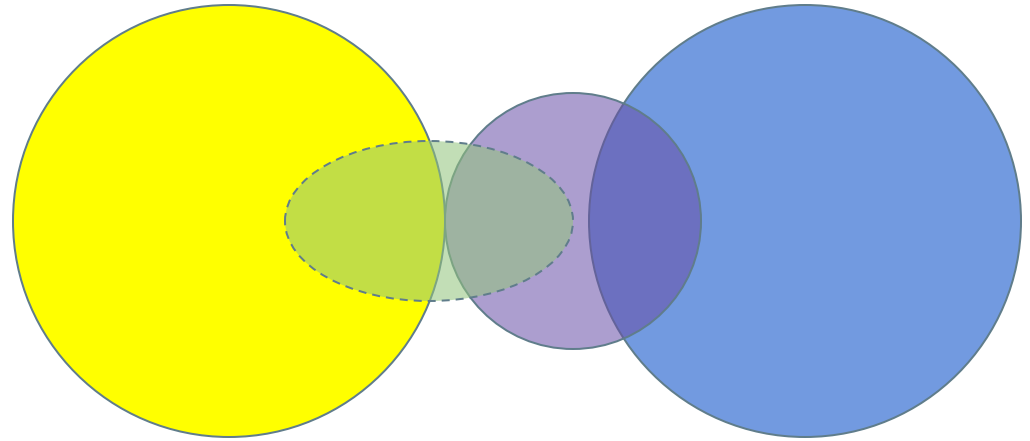
<https://creativecommons.org/licenses/by-sa/4.0/>

The DevOps Topologies collection of patterns (diagrams and descriptions) by **Matthew Skelton and Manuel Pais** is licensed under a **Creative Commons Attribution-ShareAlike 4.0 International License**.

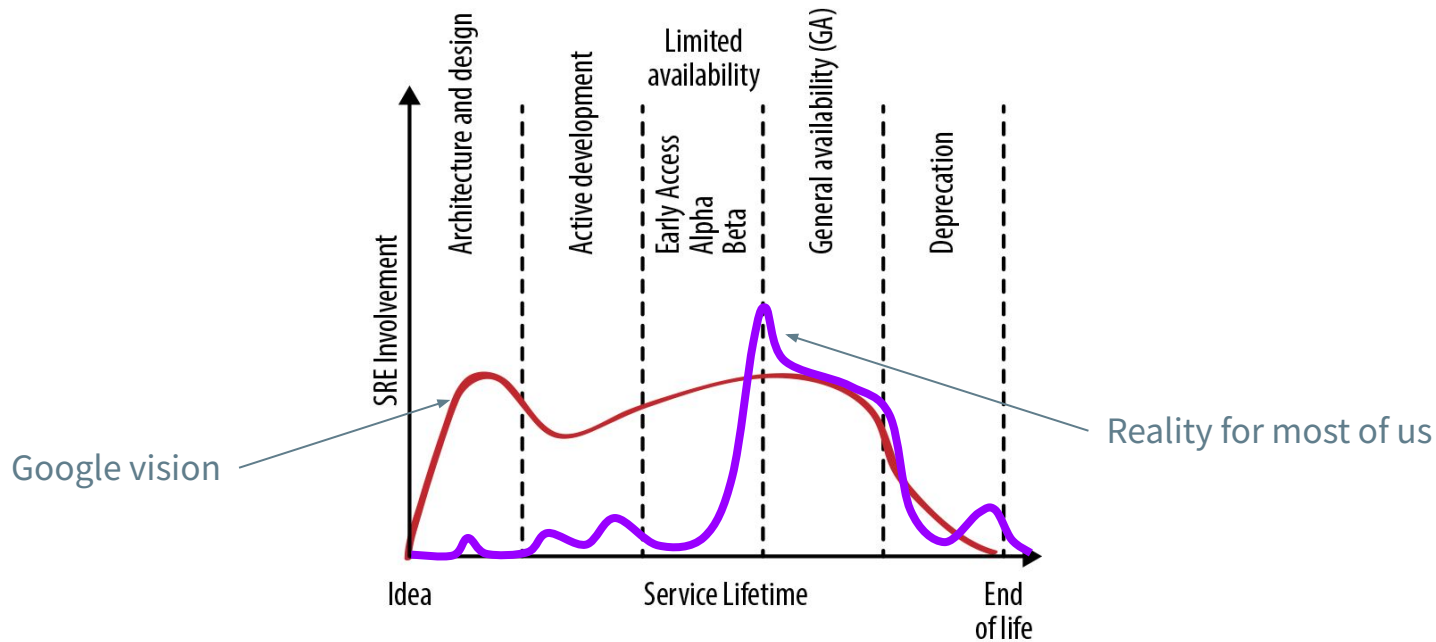
Type-2 Fully Embedded



Type-7 SRE Team (Google)



Is SRE rebranded tech-ops?



Source: Google (<https://sre.google/workbook/engagement-model>)

Ingredients of workplace equity



Opportunity


Are there opportunities for me to grow, contribute more, and advance in my career?

Equality

Am I being treated the same as everyone else, and are any differences equitable?

Diversity

Is the organization diverse? Are different people, opinions, and motivators accepted and respected?



Finding organizational bias



Source: [Three Approaches To Help You Identify Organizational Biases](#), Paolo Gaudiano, Forbes

Thanks!

Any questions?

You can find me on social media:

LinkedIn: [@daveowczarek](#)

Medium: [@daveowczarek](#)

Twitter: [@thatdaveo](#)