

DevOps is a Foreign Language

(or why there are no Junior SREs)

Josh Lee, Open Source Developer Advocate @
Altinity

"It's raining cats and dogs"

What is a language?

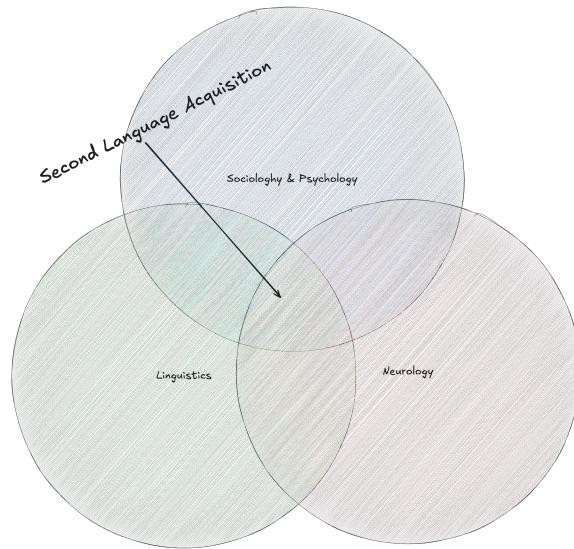
A language is a structured system of communication that combines syntax, grammar, and vocabulary with the cultural, historical, and social contexts in which it is used. It is not merely a set of rules or symbols but a living, evolving tool that shapes and is shaped by the people who use it. Language encodes cultural knowledge, values, and worldview, serving as a medium for expressing identity, fostering community, and transmitting traditions across generations.

Human Brains

Amazing at learning languages...

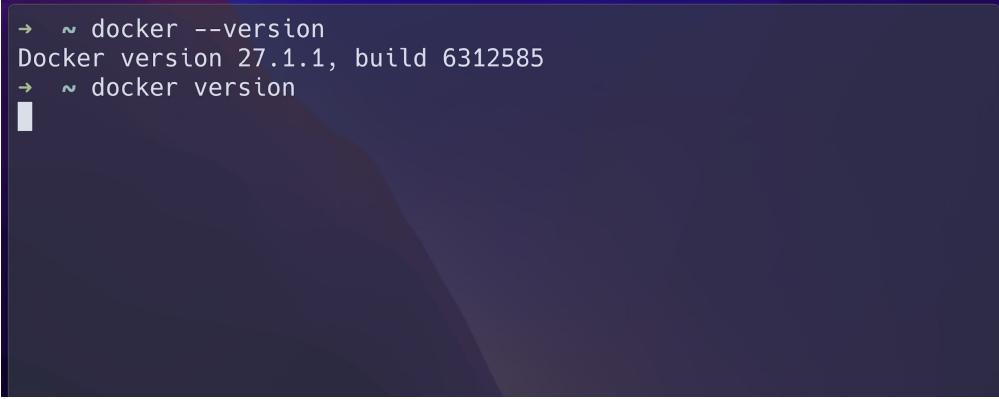
... until puberty

What is Second Language Acquisition?



How is this relevant to the SDLC?

**What command do I use to see
which version of docker is
installed?**



```
→ ~ docker --version  
Docker version 27.1.1, build 6312585  
→ ~ docker version
```

How do we know this?

Also, does a bootcamp grad know how to Ctrl-C?

How we learn



How we learn DevOps

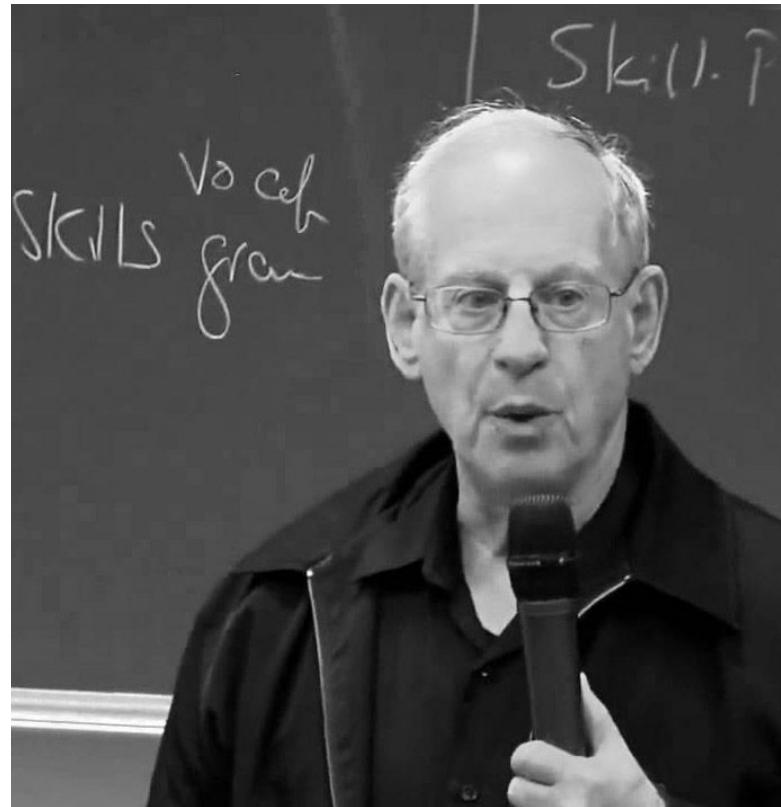


My Hypothesis

Successful software practitioners require an abundance of implicit (cultural) knowledge — which may not even be acknowledged in the learning journey.

Stephen Krashen

*Principles and Practice in
Second Language
Acquisition (1982)*



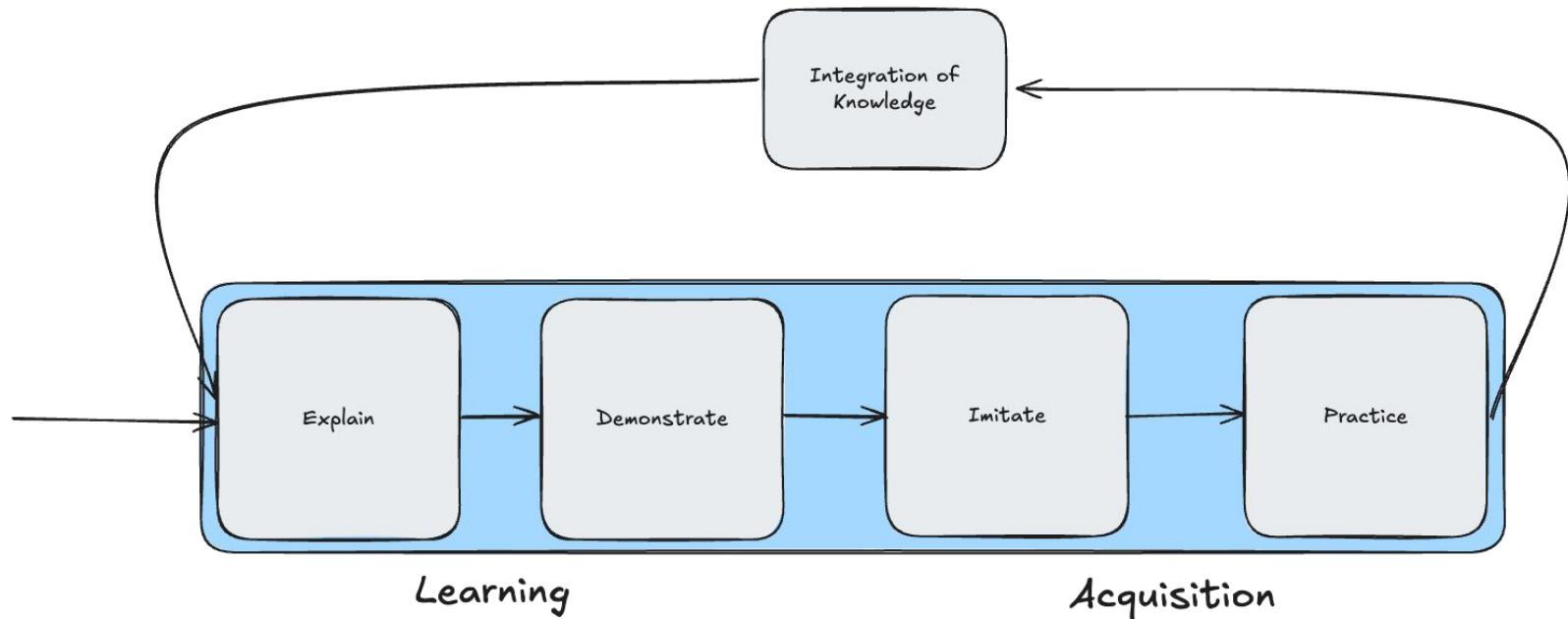
Krashen's Theory

1. Acquisition & Learning Hypothesis
2. Comprehensible Input Hypothesis
3. Natural Order Hypothesis
4. Monitor Hypothesis
5. Affective Filter Hypothesis

Acquisition / Learning Hypothesis

**Humans learn best by combining theoretical
learning with real-world knowledge
acquisition**

Acquisition / Learning



Comprehensible Input Hypothesis

Humans learn best when exposed to new inputs of size $i+1$, where i represents already familiar concepts.

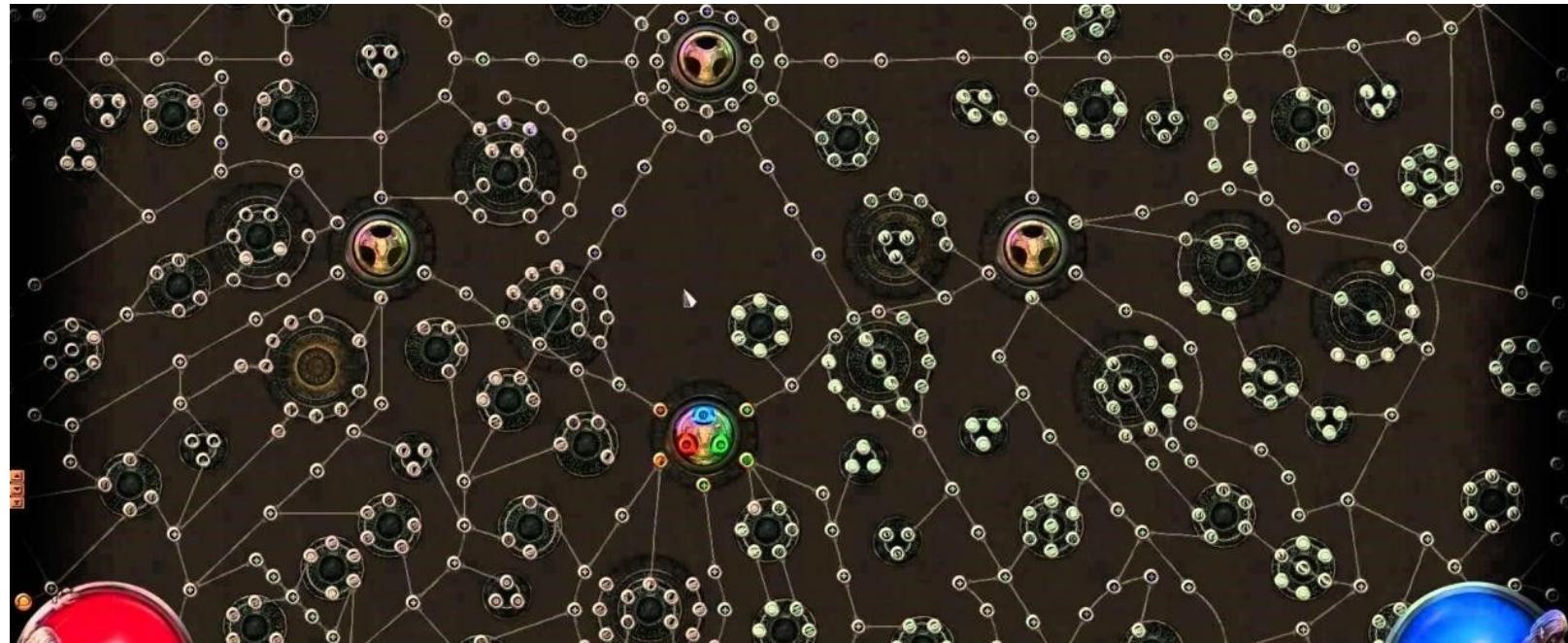
**El pintor coloca el lienzo sobre
el caballete en el estudio.**

**The painter places the canvas
on the caballete in the studio.**

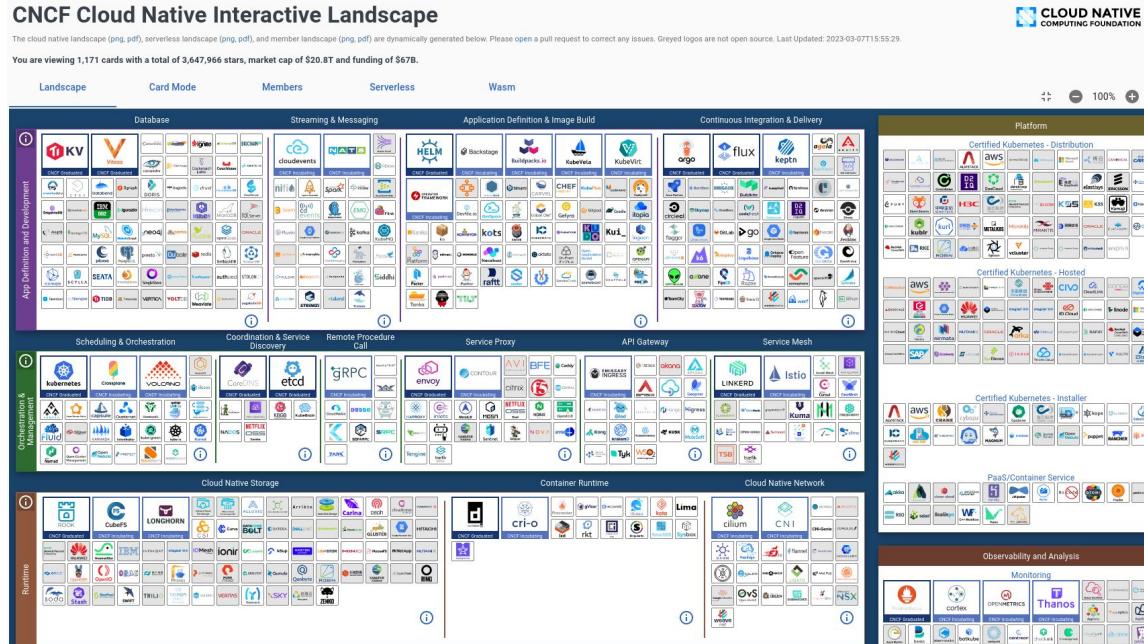
Natural Order Hypothesis

There is a natural progression for learning complex systems like languages.

Natural Order Hypothesis



Natural Order Hypothesis



Natural Order Hypothesis



Monitor Hypothesis

Learners will self-correct, but when feedback is too frequent or too strict, it hinders progress.

Affective Filter Hypothesis

Motivation and mood are the strongest filters on our ability to learn.

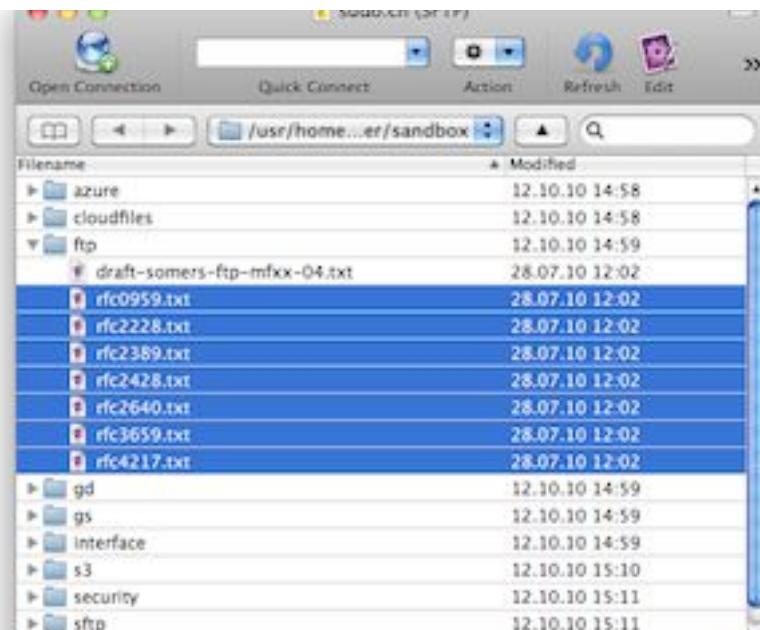
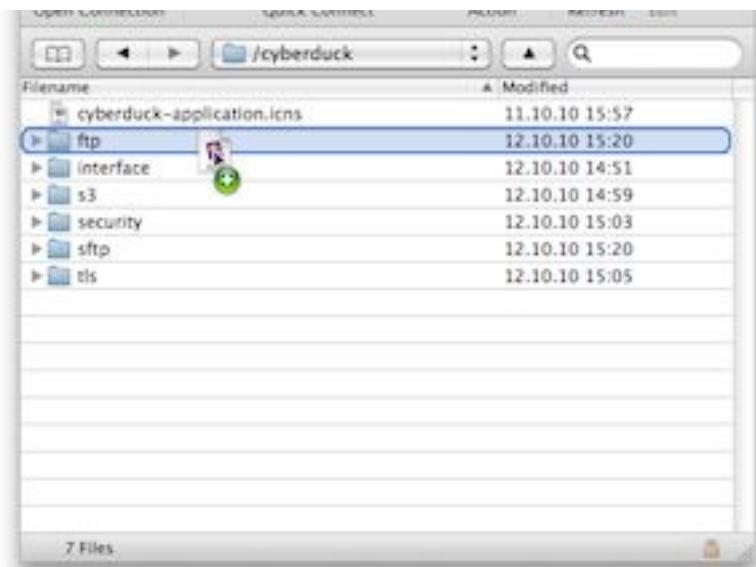
**"Platform Engineering
reduces the depth of the
stack for developers"**

**We already had this figured out
before**

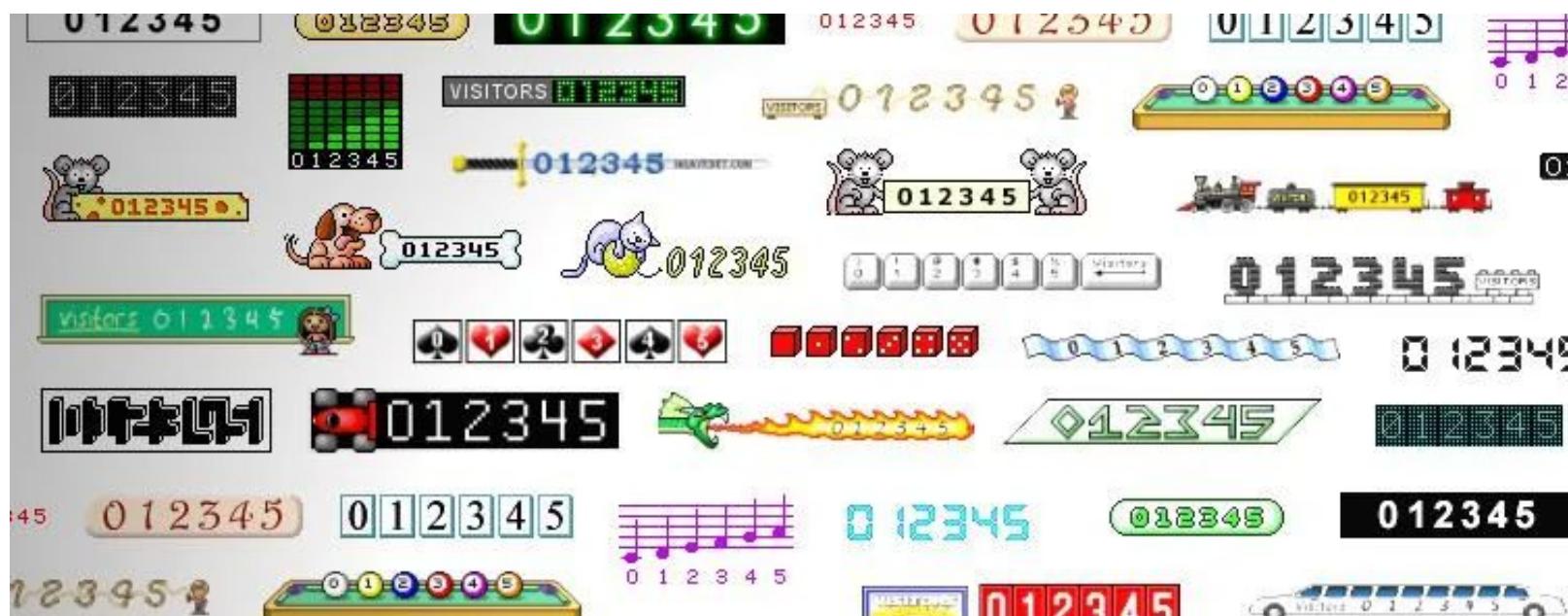
My first platform:



CI/CD:



Observability:



Let's make this fun again.

Thank you!

Connect with me

