

# Through Our Pain, We Will Grow

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Notes on Implementing an Emergent Architecture

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Pivotal

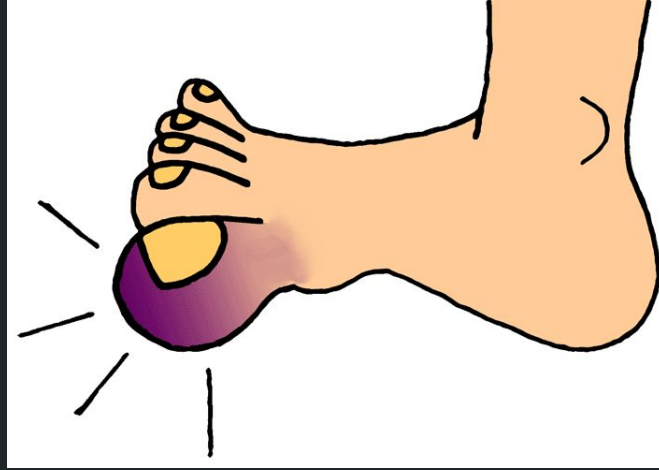
But what do you mean  
by *architecture*?

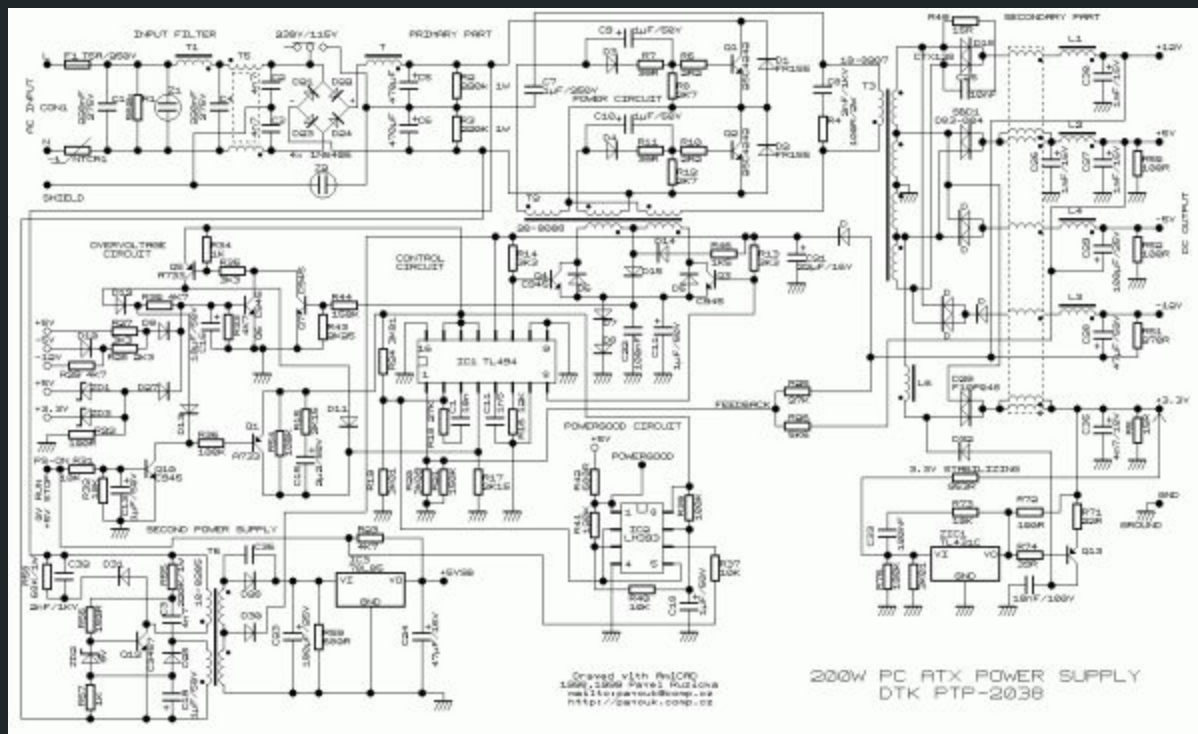
*Architecture* - a set of  
decisions that are  
expensive to reverse  
once acted upon

# Emergent Architecture

# “Just in Time” Architecture

# Pain









“Your pain  
is the breaking of the shell  
that encloses your  
understanding.”

- Al Mustafa, *The Prophet*

Pain is a teacher

Pain shows us our  
designs don't  
accomplish all our  
goals

Pain shows us big  
design up front doesn't  
work well

Pain sucks

We want to apply  
what've we learned to  
avoid pain

*However*



Pain is unavoidable

***However***

It's valuable to feel  
similar pain again

# 3 reasons

Experiencing the same  
pain again can teach us  
new things

The more pain we  
experience, the better  
we get at sensing when  
it's about to happen

As we experience pain  
again, we'll learn even  
more patterns

# So what?



When we pre-select  
patterns, we prevent  
ourselves from learning  
new things

We benefit when we  
prevent past pain from  
coloring our current  
experiences

# Example 1: Muter, Swift mutation testing tool

# Deferring Decision Making

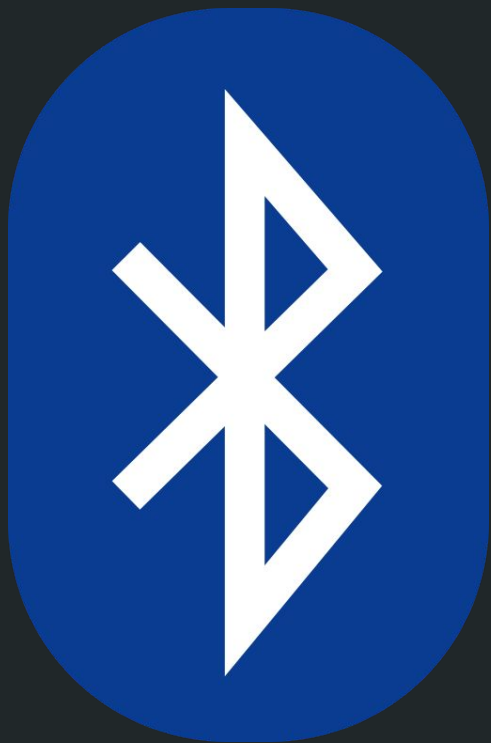


# Example 2: IoT Hydroponic Garden

# Why is BDUF bad?

When is it irresponsible  
to defer an  
architectural decision?





“Much of **your pain is self-chosen.**

It is the bitter potion by which the physician within you heals your sick self.

Therefore trust the physician, and drink their remedy in silence and tranquility.”

- Al Mustafa, *The Prophet*

# Thank you!

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