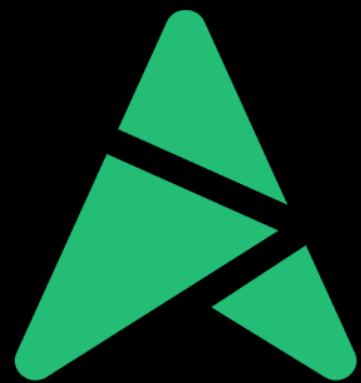


A dark, atmospheric illustration of two zombies meeting in a city street at night. One zombie on the left wears a blue suit and green-tinted sunglasses, while the other on the right has long, messy hair and red-tinted sunglasses. They are shaking hands over a small, glowing white object. The background features a brick wall with graffiti, including the words 'TRAINING' and 'DIEGO'. Neon signs in the distance read 'ROSS', 'SCHWEITZER', 'OBJEG', and 'DIEGO'.

A MEETING OF ZOMBIES

EINAR W. HØST

ME



Norkart

AGILE VS ARCHITECTURE



STRIKING A BALANCE

HOW MUCH ARCHITECTURE?

HOW MUCH AGILITY?

HOW MUCH AUTONOMY?

“ JUST ENOUGH “



THE GOLDILOCKS PRINCIPLE

WHY?

WHY ARCHITECTURE?

WHY AGILE?

WHY DO ANYTHING?

**WE SHOULD NEVER DO ANYTHING
JUST BECAUSE WE ARE DOING IT**

**IF ARCHITECTURE IS THE ANSWER
WHAT IS THE PROBLEM?**

**IF AGILE IS THE ANSWER
WHAT IS THE PROBLEM?**

IS IT THE SAME PROBLEM?

THE SOFTWARE CRISIS

THE MAJOR CAUSE OF THE SOFTWARE CRISIS IS THAT THE MACHINES HAVE BECOME SEVERAL ORDERS OF MAGNITUDE MORE POWERFUL! TO PUT IT QUITE BLUNTLY: AS LONG AS THERE WERE NO MACHINES, PROGRAMMING WAS NO PROBLEM AT ALL; WHEN WE HAD A FEW WEAK COMPUTERS, PROGRAMMING BECAME A MILD PROBLEM, AND NOW WE HAVE GIGANTIC COMPUTERS, PROGRAMMING HAS BECOME AN EQUALLY GIGANTIC PROBLEM.

THE MAJOR CAUSE OF THE SOFTWARE CRISIS IS
THAT THE MACHINES HAVE BECOME SEVERAL

OPPONENTS OF MACHINES ARE MORE AND MORE: BUT IT

QUIT

MACH

ALL;

PROG

WE HAVE GIGANTIC COMPUTERS, PROGRAMMING
HAS BECOME AN EQUIALLY GIGANTIC PROBLEM.

1972

**WE CAN TRUST THE CRISIS
TO REMAIN WITH US**

AMBITIONS WILL CONTINUE TO RISE

EVER MORE UBIQUITOUS

EVER MORE SOPHISTICATED

MORE FOR LESS

HOW TO TACKLE THE CRISIS?

STRUCTURE

MODULAR DESIGN

COMPONENTS

REUSE

**THE 1990S WILL BE
THE DECADE OF
SOFTWARE ARCHITECTURE**



WHAT IS ARCHITECTURE?

IT'S WHAT ARCHITECTS DO

WHAT DOES AN ARCHITECT DO?

TENDS TO THE ARCHITECTURE!

THE ARCHITECTURE OF A SOFTWARE SYSTEM IS ITS ORGANIZATION OR STRUCTURE OF SIGNIFICANT COMPONENTS INTERACTING THROUGH INTERFACES, THOSE COMPONENTS BEING COMPOSED OF SUCCESSIVELY SMALLER COMPONENTS AND INTERFACES.

THE ARCHITECTURE OF SOFTWARE SYSTEM IS ITS
ORGANIZATION, THE STRUCTURE OF WHICH IS DETERMINED BY THE
COMPONENTS AND THEIR INTERFACES,
THOSE COMPONENTS WHICH ARE GROUPED
SUCCESSFULLY SHOULD BE SMALL AND
INTERFACES.

RUP

RATIONAL UNIFIED PROCESS

UNIFIED MODELLING LANGUAGE

4+1 VIEW MODEL

PATTERNS MOVEMENT

BIG BALL OF MUD

<http://www.laputan.org/mud/>

ARCHITECTURE SCOPE CREEP

ARCHITECTURE FOR SYSTEM PROPERTIES

ARCHITECTURE REPRESENTS THE SIGNIFICANT DESIGN DECISIONS THAT SHAPE THE FORM AND FUNCTION OF A SYSTEM, WHERE SIGNIFICANT IS MEASURED BY THE COST OF CHANGE.

BOOKS

HOW DID IT GO?

A dark, atmospheric illustration featuring a silhouetted figure standing in a field of fire under a large, luminous full moon. The scene is set against a backdrop of dark, leafless trees and a city skyline visible through the branches. The ground is covered in glowing embers and sparks, suggesting a recent or ongoing conflict. The overall mood is mysterious and dramatic.

AGILE THE ASSASSIN

WHY?

UNCOMFORTABLE

IRRELEVANCE AND HARM

**MANY DEVELOPERS NEVER
EXPERIENCED WORKING WITH
AN ARCHITECT THAT DID
MORE GOOD THAN HARM**

WHY?

ARCHITECTURE SOUNDS GOOD

WHY AN ARCHITECT?

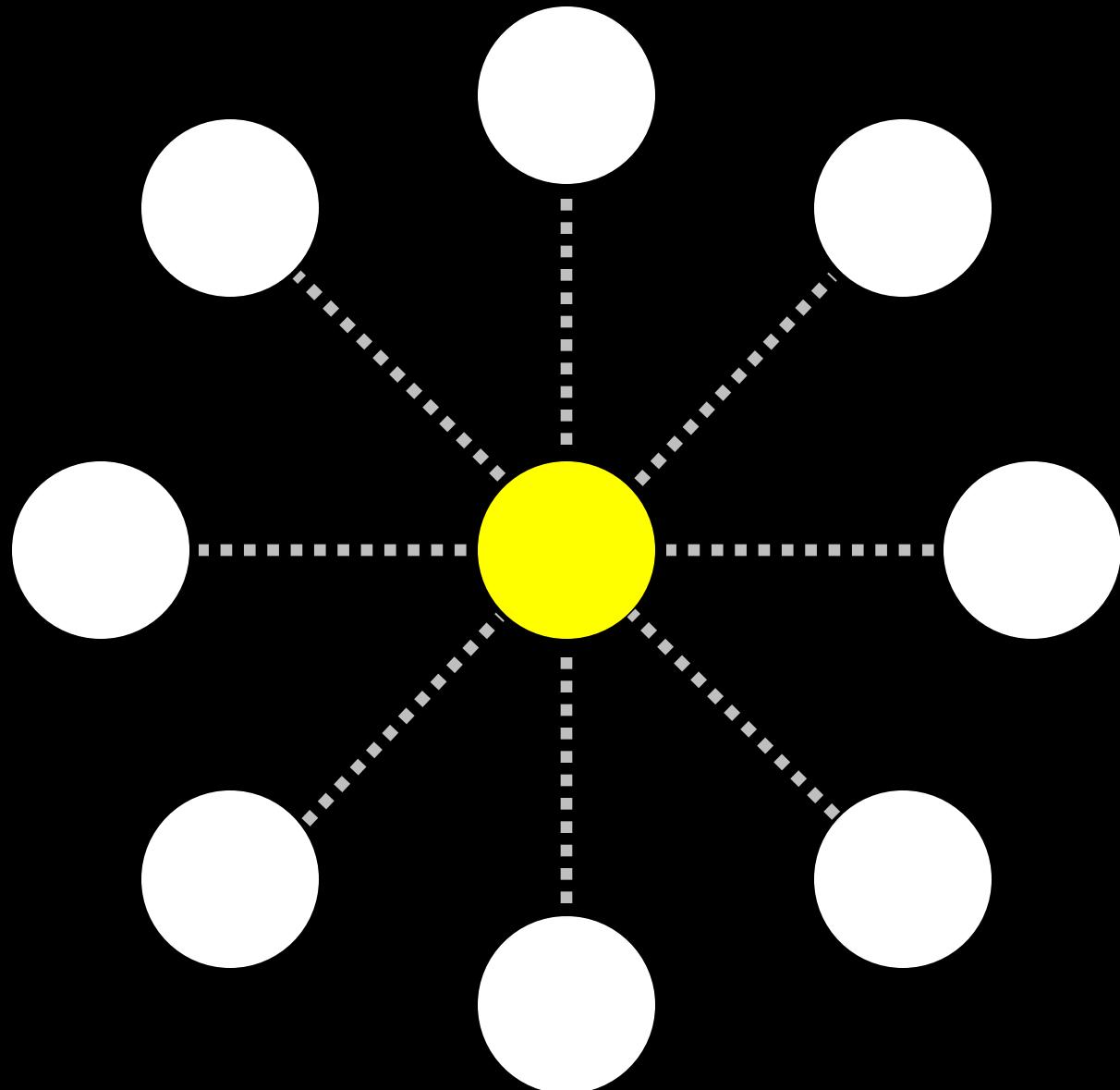
CONCEPTUAL INTEGRITY

MASTER BUILDER

ECONOMY?

SKILL COST

ARCHITECT AS ANTI-PATTERN



ARCHITECT AS BOTTLENECK

ARCHITECT AS BOTTLENECK

ASYNCHRONOUS

ARCHITECT AS BOTTLENECK

SLOW

ARCHITECT AS BOTTLENECK

DETACHED

ARCHITECT AS BOTTLENECK

POOR DECISIONS

ARCHITECT AS BOTTLENECK

LOSS OF TRUST

CONFLICTS OF INTEREST

TEAM

ARCHITECT

TEAM

ARCHITECT

LOCAL

SPECIFIC

INTERNALLEGIBLE

TEAM

ARCHITECT

LOCAL

GLOBAL

SPECIFIC

GENERIC

INTERNALLEGIBLE

EXTERNALLEGIBLE

TEAM

ARCHITECTURE

LOCAL

SPECIFIC

INTERNALITY

GLOBAL

EXTERNALLY LEGIBLE

NOT A RECIPE FOR SUCCESS!

SYSTEMIC PROBLEMS



THE AGILE REVOLUTION

**INDIVIDUALS AND INTERACTIONS
OVER PROCESSES AND TOOLS
WORKING SOFTWARE
OVER COMPREHENSIVE DOCUMENTATION
CUSTOMER COLLABORATION
OVER CONTRACT NEGOTIATION
RESPONDING TO CHANGE
OVER FOLLOWING A PLAN**

INDIVIDUALS AND INTERACTIONS
OVER ~~PROCESSES AND TOOLS~~
WORKING SOFTWARE
OVER ~~COMPREHENSIVE DOCUMENTATION~~
CUSTOMER COLLABORATION
OVER ~~CONTRACT NEGOTIATION~~
RESPONDING TO CHANGE
OVER ~~FOLLOWING A PLAN~~



SCRUM + JIRA



A PROCESS AND A TOOL?

INDIVIDUALS AND INTERACTIONS
OVER ~~PROCESSES AND TOOLS~~
WORKING SOFTWARE
OVER ~~COMPREHENSIVE DOCUMENTATION~~
CUSTOMER COLLABORATION
OVER ~~CONTRACT NEGOTIATION~~
RESPONDING TO CHANGE
OVER ~~FOLLOWING A PLAN~~

OH WELL

SCRUM



still chaotic-good
@TotherAlistair

...

Scrum struck a magnificent bargain in hostile territory:

Mgmt got 12 times/yr (1ce /mo) to change direction in any way they wanted;

Team got 1 mo of total quiet time w no interruptions or changes of direction to do heavy thinking/working.

No execs ever got a better deal.

7/

9:50 PM · Jun 16, 2021



THE SCRUM PACT

A dark, atmospheric illustration featuring a man with pale skin and red eyes, sitting at a desk and signing a document with a pen. A skeletal hand reaches out from the right side of the frame to hold the pen. A large, bright moon is visible in the background, and a skull sits on the desk next to a mug. The scene is set in a dimly lit room with a painting on the wall.

THE TERRARIUM MODEL OF SOFTWARE DEVELOPMENT

11/18/2025

WILL PRODUCE
FEATURES
~~SILK~~ FOR
PROTECTION

**WILL PRODUCE
FEATURES
~~SILK~~ FOR
PROTECTION**

**WILL OFFER
PROTECTION
FEATURES*
FOR ~~SILK~~**

THAT WAS 20 YEARS AGO

AND THEN... NOTHING?

NOT QUITE

AGILE SCOPE CREEP

AGILE SOFTWARE DEVELOPMENT

AGILE SOFTWARE DEVELOPMENT



AGILE PRODUCT DEVELOPMENT

AGILE SOFTWARE DEVELOPMENT



AGILE PRODUCT DEVELOPMENT



AGILE ORGANIZATIONS

AGILE SOFTWARE DEVELOPMENT



AGILE PRODUCT DEVELOPMENT



AGILE ORGANIZATIONS



AGILE BUSINESS

**AN ENDLESS STREAM OF
SILICON VALLEY SELF-HELP BOOKS
PUSHING THE AGILE FRONTIER**



RADICAL PIXIE DUST



HAS IT WORKED?

WE'VE TRIED

**EVERYTHING IS A SUCCESS
UNTIL IT IS ABANDONED**

VERY LITTLE STICKS

THINGS HAVE GOTTEN WEIRD

THE IDEALS HAVE EVOLVED

THE IDEALS HAVE EVOLVED

“ BRIDGING THE GAP ”

THE IDEALS HAVE EVOLVED

“ CUSTOMER OBSESSION ”

THE IDEALS HAVE EVOLVED

“ SEAT AT THE TABLE ”

REALITY IS LARGELY THE SAME

A dark, atmospheric illustration depicting a scene of a zombie apocalypse. In the center, a zombie with a missing eye and a jagged mouth is shown from behind, looking out through a window at another zombie. The window is framed by shards of broken glass. The room is filled with debris, including a chair and a table. In the foreground, two more zombies are visible, one on the left and one on the right, both with missing eyes and exposed flesh. The lighting is dim, with red highlights on the zombies' faces and hands, creating a sense of horror and decay.

THE DEVELOPMENT TERRARIUM



COMMUNICATION THROUGH MEDIUMS



UNCOMFORTABLE TRUTHS



**DON'T USE THAT FOREIGN WORD IDEALS
WE HAVE THE EXCELLENT NATIVE WORD LIES**

ARCHITECTURE IS DEAD

AGILE ISN'T AGILE

NOW WHAT?

WHAT IS THE PROBLEM?



THE PASSING OF TIME



THINGS HAPPEN

**SOME OF THOSE THINGS
AFFECT THE SYSTEMS WE MAKE**

**THE SYSTEMS MUST CHANGE
TO REFLECT THE NEW REALITY**

PROBLEM
THE CODE IS DEAD

**WE MUST MAKE IT
APPEAR TO BE ALIVE**





CODE



PROGRAMMER





PROGRAMMER

CODE

THIS IS THE SOFTWARE SYSTEM



SOFTWARE IS A CYBORG

**CHANGES MUST BE
RESPONDED TO BY PEOPLE**

CHANGE

“ CHANGE IS CONSTANT “

CHANGE

WHAT ABOUT THE AMOUNT OF CHANGE?

CHANGE

WHERE DO CHANGES COME FROM?

CHANGE

WHAT KINDS OF CHANGES?

CHANGE

HOW OFTEN?

CHANGE

SOURCES OF CHANGE

CHANGE

EXPOSURE TO CHANGE

CHANGE

CHANGE SURFACE

NECESSARY VS ACCIDENTAL

CAPACITY FOR CHANGE

CHANGES THAT AFFECT THE CODE

CHANGES THAT AFFECT THE CODE

REQUIREMENTS

CHANGES THAT AFFECT THE CODE

BUSINESS DOMAIN

CHANGES THAT AFFECT THE CODE

TECHNOLOGY

CHANGES THAT AFFECT THE CODE

★ TECHNOLOGY ★



ICEBERG APPLICATIONS

**EVERY DEPENDENCY IS
A SUBSCRIPTION TO
A STREAM OF CHANGES**

**ALL CHANGES TO DEPENDENCIES
ARE ACCIDENTAL**

**WHAT'S THE PERCENTAGE OF TIME
SPENT ON ESSENTIAL CHANGES?**

REDUCE EXPOSURE TO ACCIDENTAL CHANGES

**PROTECT OUR
CAPACITY FOR CHANGE**

SUSTAINABLE CYBORGS

HUMAN VICES ARE CONSTANT

SOLUTIONS MUST BE SYSTEMIC

ORGANIZATION LEVEL

BEYOND THE TERRARIUM

BEYOND THE TERRARIUM

SELF-SUSTAINING TEAMS

BEYOND THE TERRARIUM

TEAMS AS TINY ORGANIZATIONS

BEYOND THE TERRARIUM

LARGER ORGANIZATION AS LOOSELY COUPLED ALLIANCE

ACTUAL AUTONOMY

ACTUAL AUTONOMY

MOVE THE MONEY INSIDE

ACTUAL AUTONOMY

PUT NON-TECHIES INSIDE

ACTUAL AUTONOMY

PUT THE DECISIONS INSIDE

DIRECT COMMUNICATION

DIRECT COMMUNICATION

WITH STAKEHOLDERS

DIRECT COMMUNICATION

WITH CUSTOMERS / USERS

**WITHOUT DIRECT COMMUNICATION
FEEDBACK IS A BLUFF**

TEAM LEVEL

INDEPENDENCE

INDEPENDENCE

MINIMIZE DEPENDENCIES

INDEPENDENCE

WRITE SIMPLE THINGS YOURSELF

INDEPENDENCE

PROTECT INTERNALS

RETAIN AND REBUILD KNOWLEDGE

RETAIN AND REBUILD KNOWLEDGE

WORK IN GROUPS

ARCHITECTURE LEVEL

TEAM ORIENTED

TEAM ORIENTED

**ARCHITECTURE IS TOO IMPORTANT
TO BE LEFT TO ARCHITECTS ALONE**

TEAM ORIENTED

LOCAL

TEAM ORIENTED

SPECIFIC

TEAM ORIENTED

INTERNALLEGIBILE

CONSTRAINTS

CONSTRAINTS

COMMUNICATION

CONSTRAINTS

NEGOTIATION

CONSTRAINTS

REVIEW

OBSERVABILITY-DRIVEN

OBSERVABILITY-DRIVEN

**YOUR SOFTWARE DOESN'T HAVE
ANY QUALITY ATTRIBUTES THAT HAVE NOT BEEN
RECENTLY VALIDATED IN PRODUCTION**

OBSERVABILITY-DRIVEN

BROADCAST THE STATE OF YOUR SYSTEM

OBSERVABILITY-DRIVEN

EXTERNALLY LEGIBLE

SIMPLICITY

(BUT FOR REAL)

SIMPLICITY

MINIMIZE MOVING PARTS

SIMPLICITY

AVOID SOPHISTICATION

SIMPLICITY

GO BRUTALIST

REDUCE CHANGE SURFACE

REDUCE CHANGE SURFACE

SHRINK THE ICEBERG

SUMMARY

IT'S NOT A BALANCE
ARCHITECTURE BELONGS IN TEAMS
SMASH THE TERRARIUM
SHRINK THE ICEBERG
BUILD SUSTAINABLE CYBORGS

SUMMARY

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