

# **THE SOCIO-TECHNICAL DEVELOPER**

**@EINARWH**

# **SUSTAINABLE SOCIO-TECHNICAL SYSTEMS**

# WHO AM I?



# **SOFTWARE IS** **SOCIO-** **TECHNICAL**

**WHAT DOES  
THAT MEAN?**

**SO WHAT?**

# **WHAT ARE SOCIO- TECHNICAL SYSTEMS?**





# CONWAY'S LAW

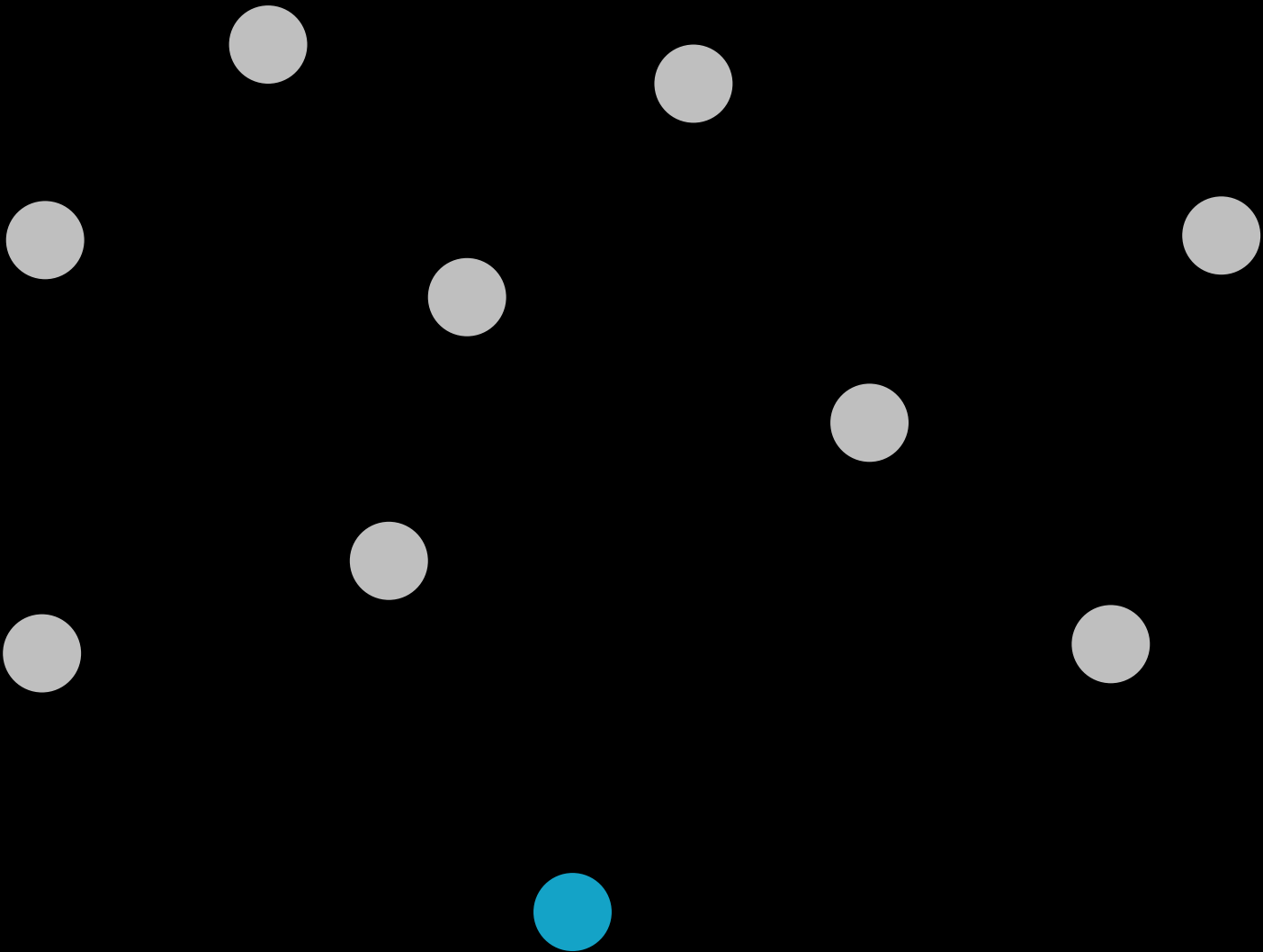
**EXISTING  
STRUCTURES  
INFLUENCE  
NEW  
STRUCTURES**

**NEW**  
**STRUCTURES**  
**REINFORCE**  
**EXISTING**  
**STRUCTURES**

# **STRUCTURES & FORCES**

**WHAT ARE THE  
IMPLICATIONS?**

# **STARTING A NEW JOB**





**HOW WILL IT  
PLAY OUT?**

**IT DEPENDS**

**WHO ARE YOU?**

**WHO ARE THEY?**

**MULTI-FACETED**

**SYSTEMIC**

# **CONTEXT**

**INTERTWINGLED**

**INVISIBLE**

**WHY ARE YOU  
THERE?**

**WHAT IS YOUR  
ROLE?**

# JUNIOR DEV



# **SENIOR DEV**

# TECH LEAD

# ARCHITECT

**SOMETHING  
ELSE?**

**WHAT IS  
EXPECTED  
FROM YOU?**

**1337 DEV**

**FASTEST**  
**JIRA TICKET**  
**PROCESSING**  
**MACHINE**  
**IN THE NORTH**

# **MOVE TOWARDS A BETTER ARCHITECTURE**



# **COACH A TEAM OF DEVELOPERS**

**HELP BUILD  
A BETTER  
TEAM CULTURE**

**WHAT ARE  
YOUR GOALS?**

**PROVIDE VALUE**  
**FOR THE**  
**CUSTOMER**

**PROVIDE INCOME**  
**FOR YOUR**  
**EMPLOYER**

**EARN A DECENT  
PAYCHECK**

# **CREATE AN AWESOME PRODUCT**

# **BUILD A CAREER**



**CREATE A NAME  
FOR YOURSELF**

# **WORK WITH EXCELLENT PEOPLE**

**HAVE FUN**

**WHAT IS YOUR  
TIME FRAME?**

# LIMITED

# LONG RANGE

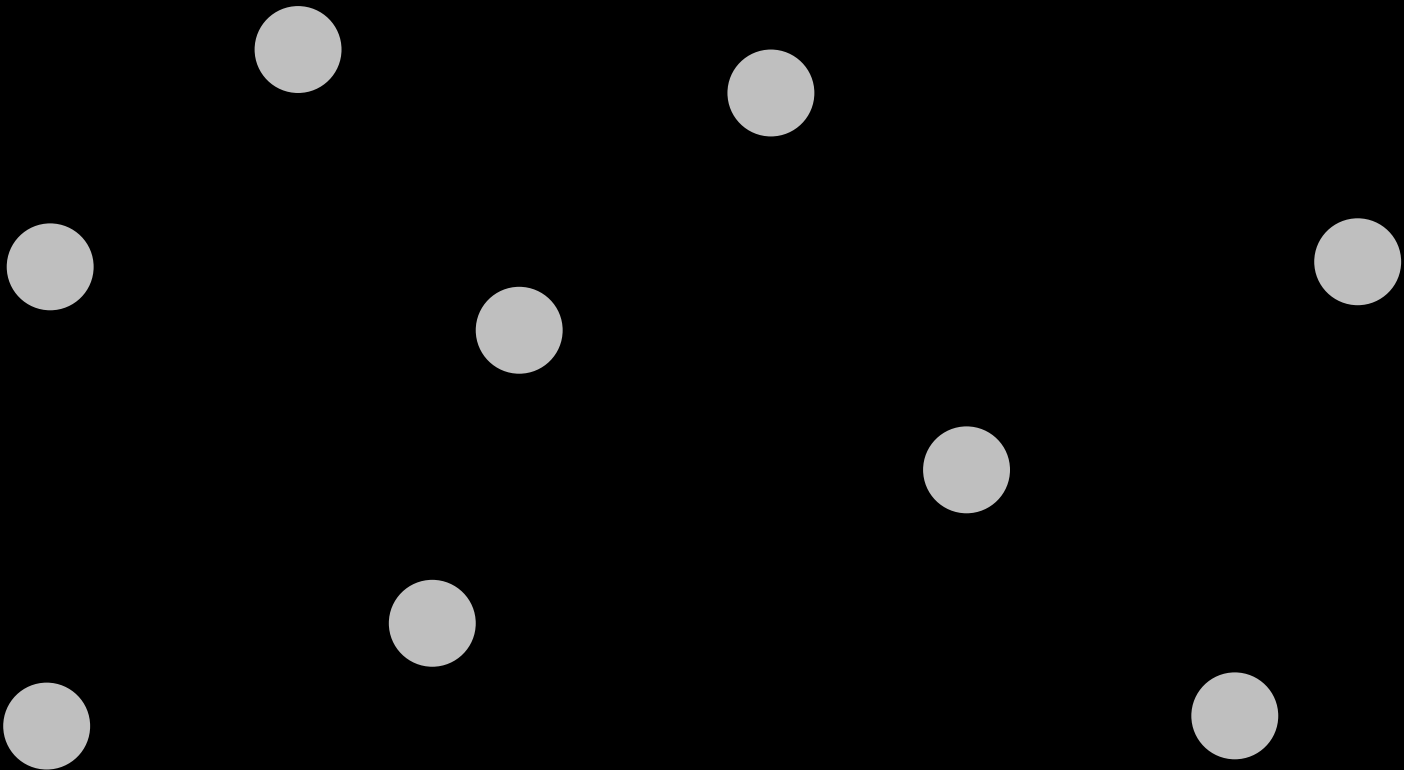
# ASSUMPTION

**YOU WANT**  
**IMPACT**



# AN EXAMPLE

**ME**



**I COME WITH  
OPINIONS**

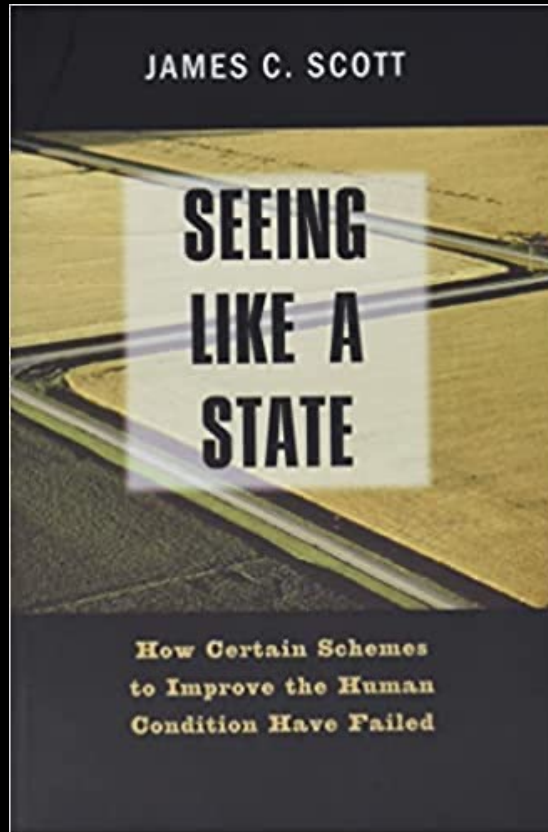
# **I BELIEVE IN DOMAIN-DRIVEN DESIGN**

**I AM SKEPTICAL  
OF PROCESS  
THEATRE**

**I BELIEVE IN  
THE NEED FOR  
LEADERSHIP**

**I AM SKEPTICAL  
OF TOP-DOWN  
LEADERSHIP**





**I BELIEVE IN**  
**INCREMENTAL**  
**IMPROVEMENTS**

**I AM SKEPTICAL  
OF GRAND  
REWRITES**

**I BELIEVE IN  
EMPOWERED  
AUTONOMOUS  
TEAMS**

**I AM SKEPTICAL  
OF INDIVIDUAL  
PROGRAMMER  
HEROICS**

**BUT THESE ARE**  
**JUST EXAMPLES**

**I AM HUMAN**

**I AM COMPLEX**



# **KNOWLEDGE & EXPERIENCE**

# **STRENGTHS & WEAKNESSES**

# **HOPES & FEARS**

# **CONFIDENCE & INSECURITY**

# **PET PEEVES**

# **LIMITED RATIONALITY**

# **DRIVEN BY EMOTIONS**

# **COGNITIVE BIASES**

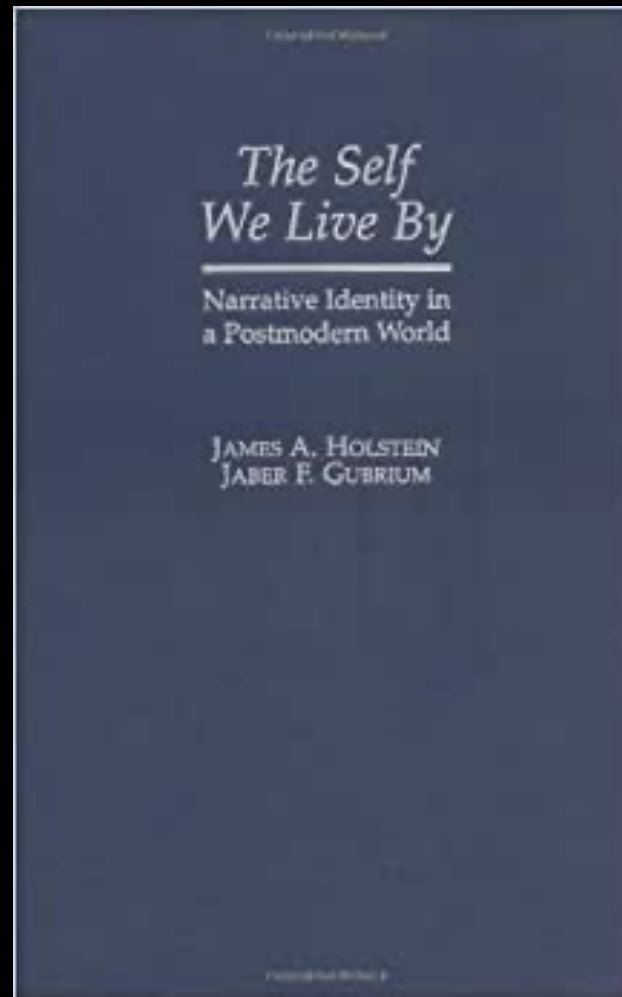


# BLIND SPOTS

**I AM MADE OF  
NARRATIVES**

**I HAVE A  
SELF-IMAGE**

**I HAVE  
SELF-IMAGES**



# **WHAT ARE MY NARRATIVES?**

**I AM A GOOD  
PERSON**

**I AM A GOOD  
DEVELOPER**



**I DO MY BEST**

**I DESERVE**  
**MY PAY CHECK**

# CHALLENGES & THREATS

# **I EXPERIENCE COGNITIVE DISSONANCE**

**I NEED**  
**COGNITIVE**  
**CLOSURE**

**I HAVE  
SELF-DEFENSE  
MECHANISMS  
IN PLACE**

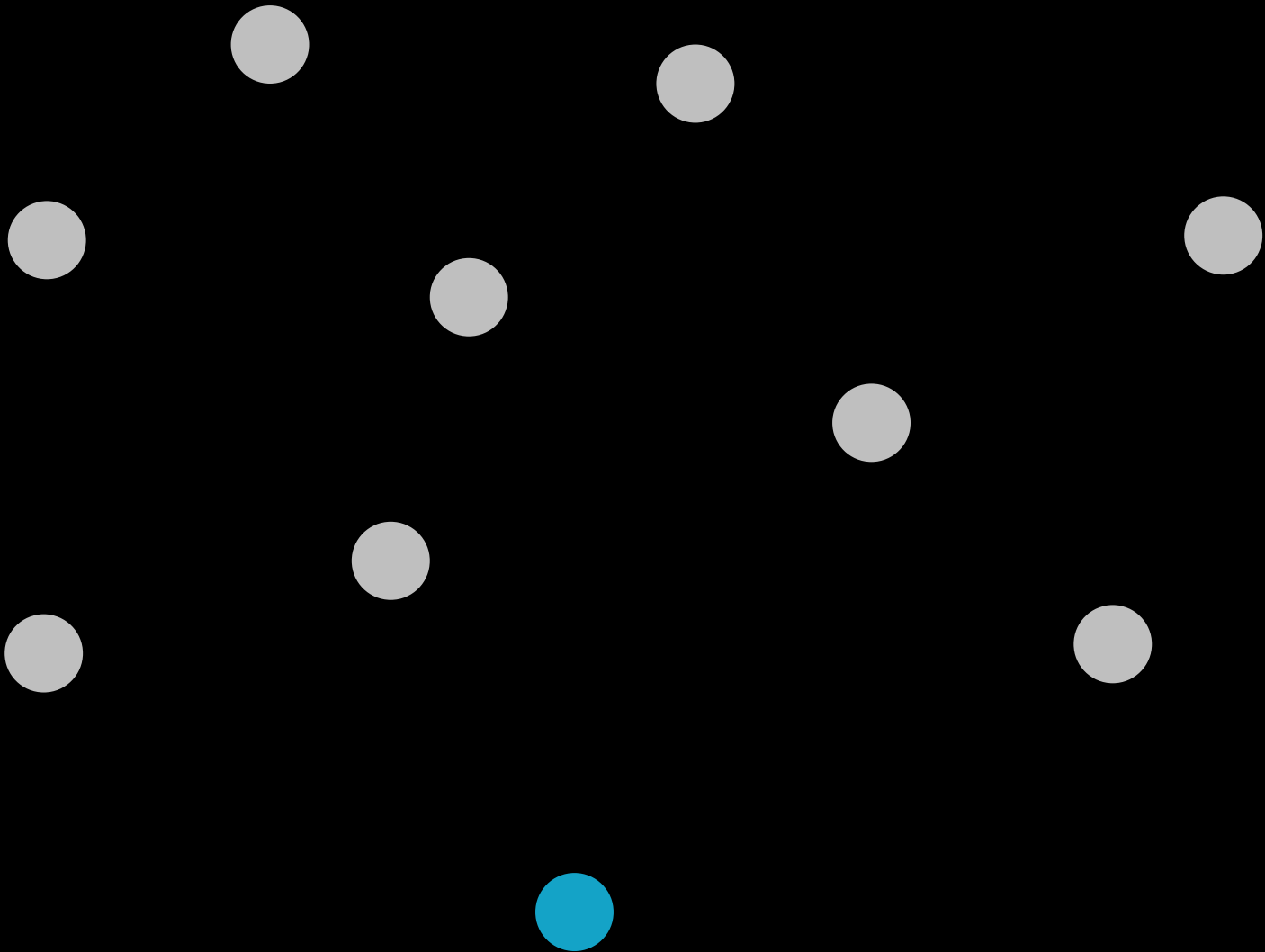
**NOT JUST ME**

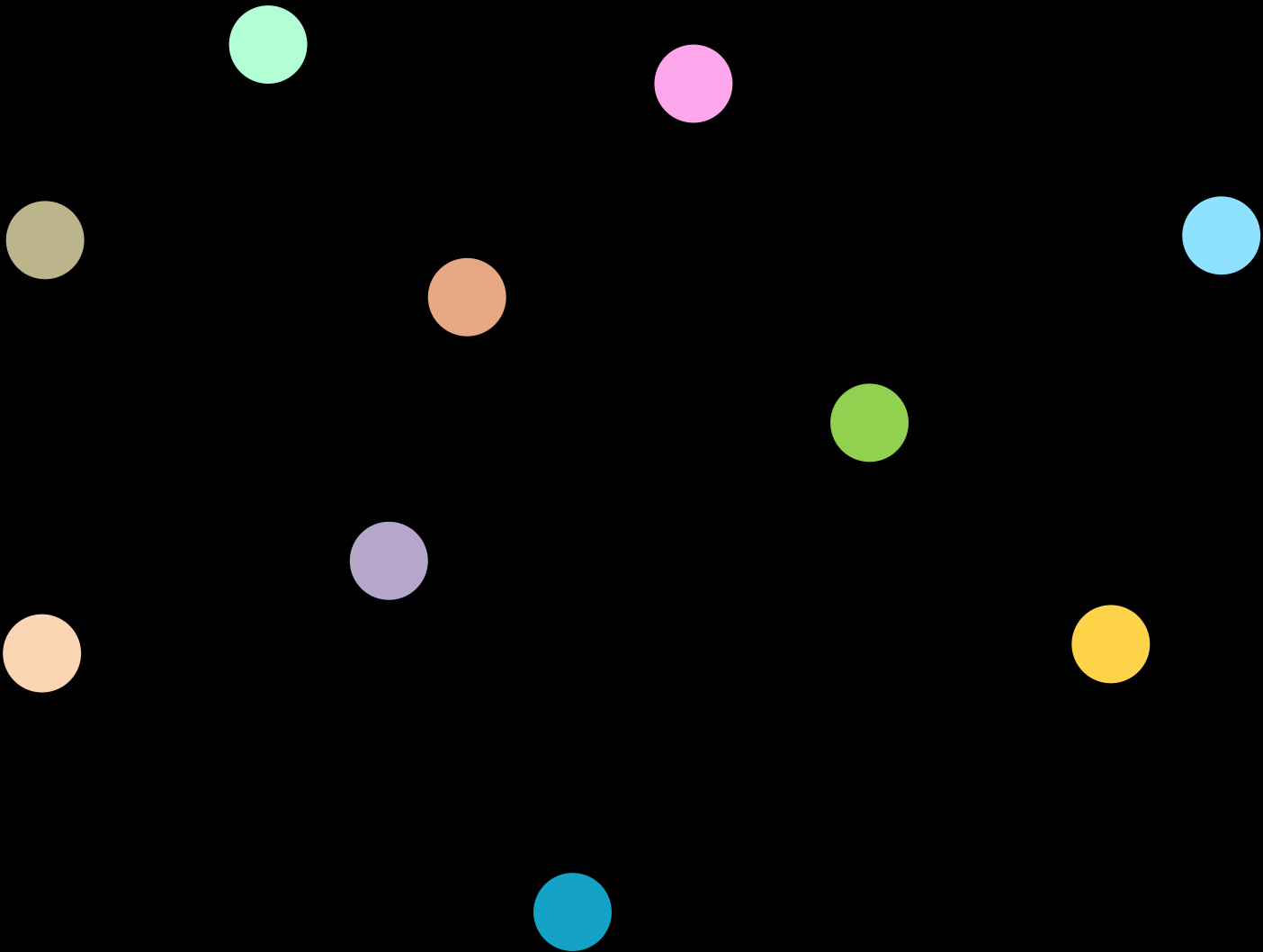
**EVERYONE IS  
LIKE THIS**

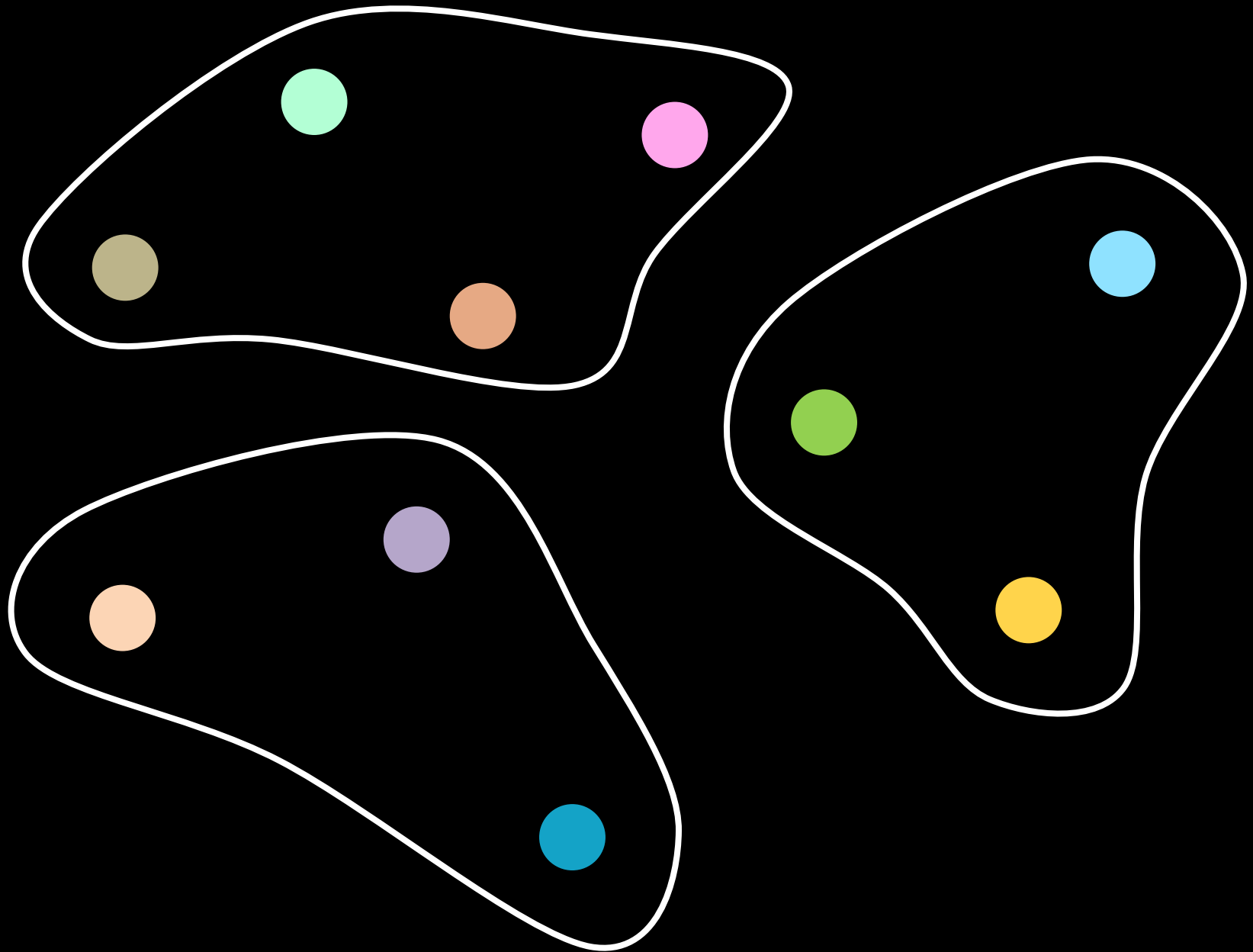


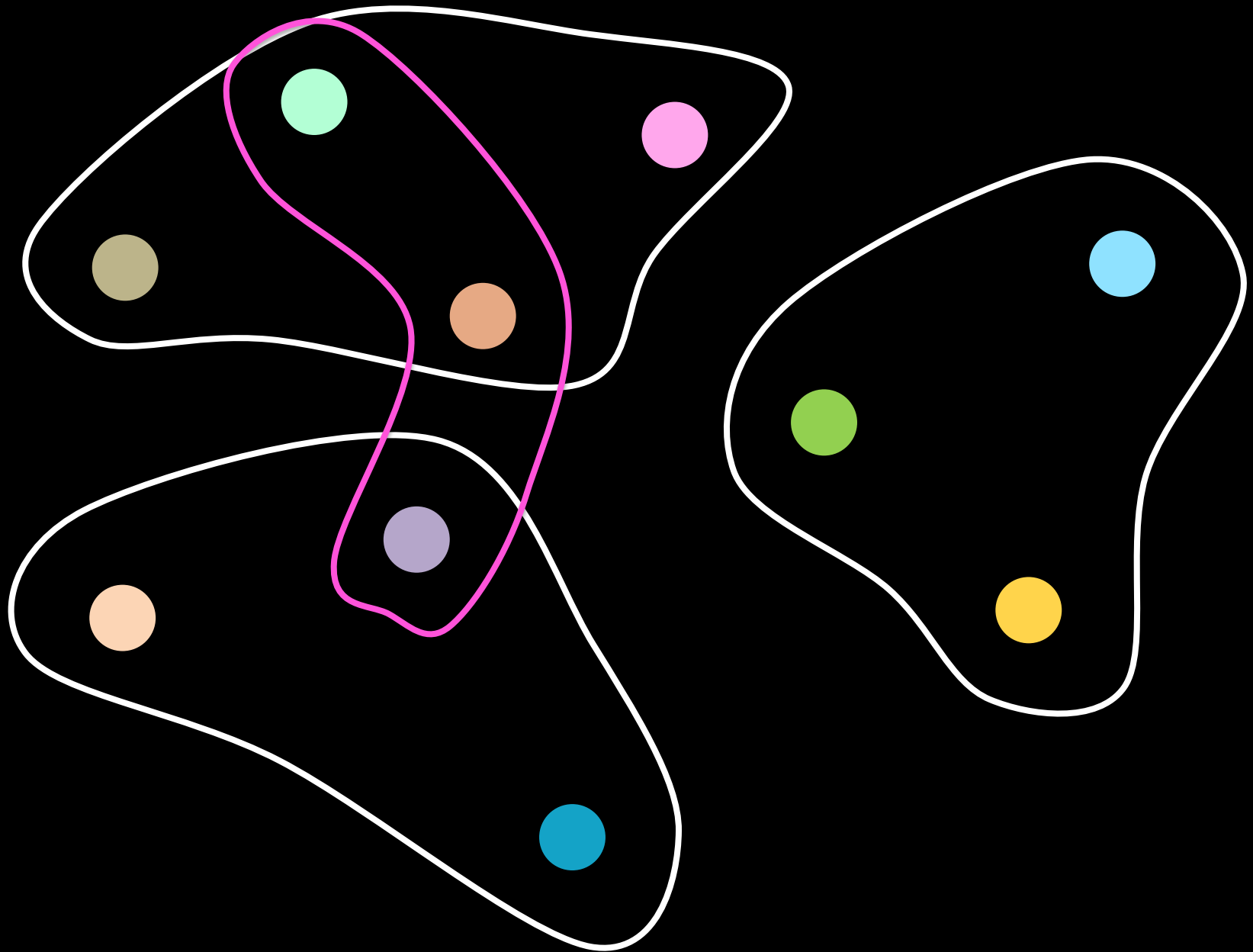
**OUR SELF-  
DEFENSE  
MECHANISMS  
ARE EASILY  
TRIGGERED**

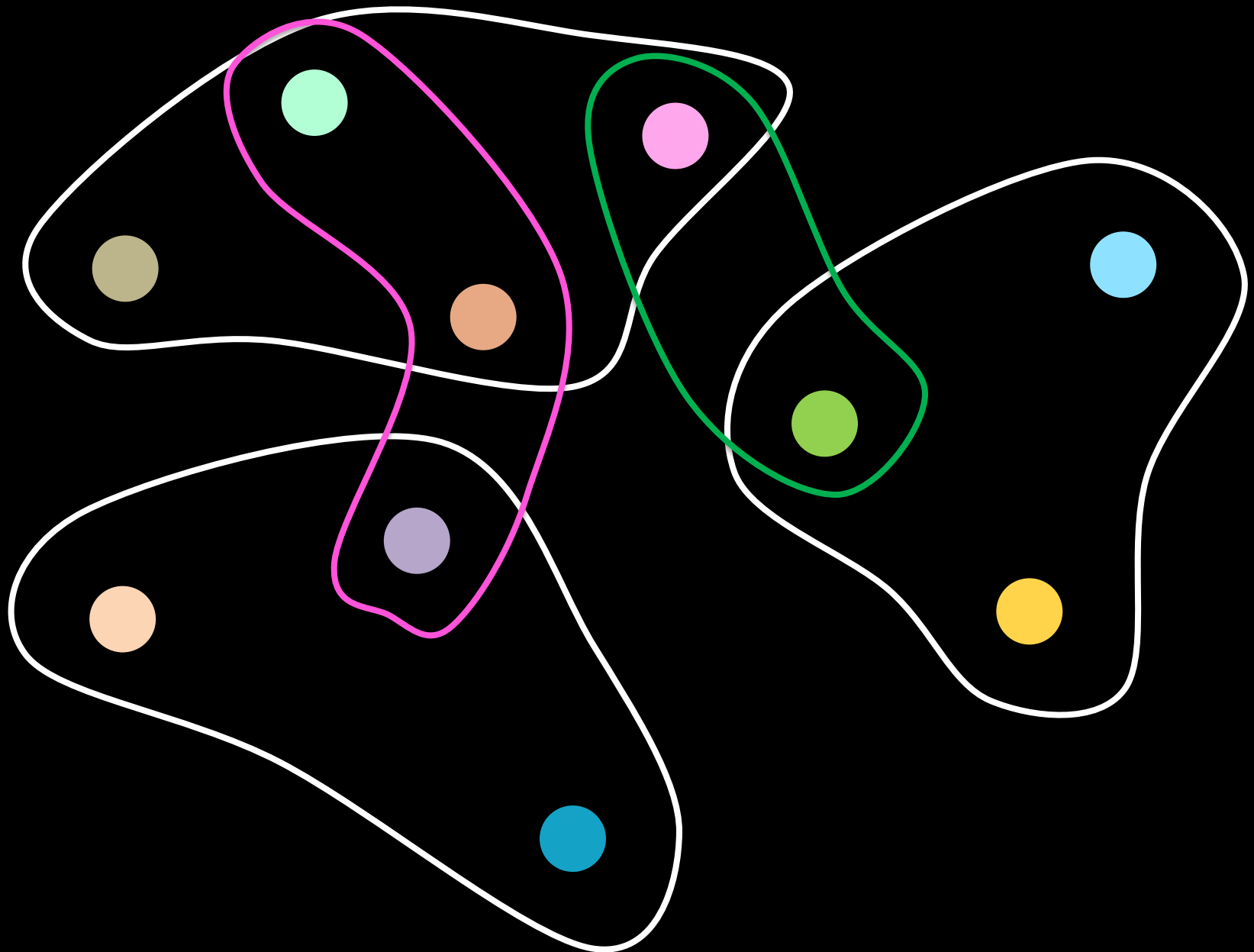
**JUST USING  
DIFFERENT  
TECHNOLOGY  
IS AN IMPLICIT  
ACCUSATION!**

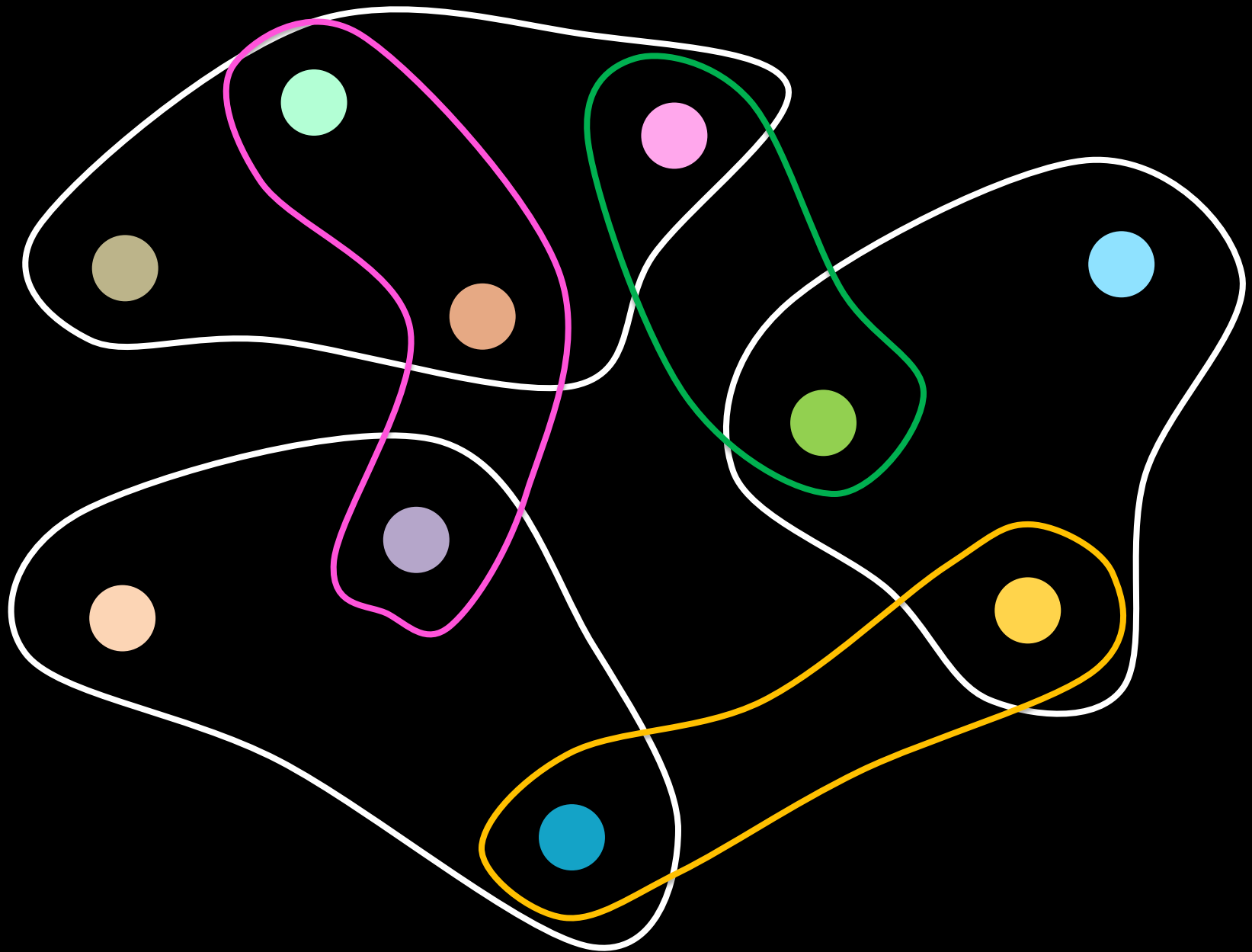














**GROUPS OF  
WE'S ON TOP OF  
THE ME'S**

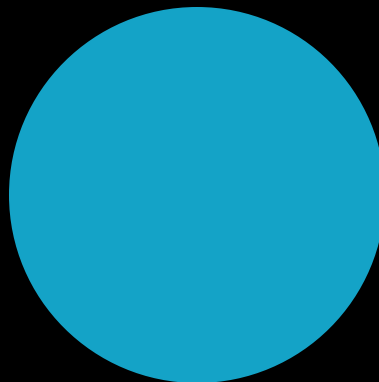
# **GROUP IDENTITY AS WELL AS INDIVIDUAL IDENTITY**

**GROUP  
PSYCHOLOGY  
AS WELL AS  
INDIVIDUAL  
PSYCHOLOGY**

**ME IS JUST THE  
SMALLEST WE**

# **HOW TO WORK WELL TOGETHER?**

# **RELUCTANCE TO TALK**



# AMBIGUITY



# THE DESK FORCE

# **THE LAND OF UNKNOWN TRUST**

**THEY TOO MIGHT  
BE RELUCTANT  
TO TALK**

# **ARTICULATE YOUR PROBLEM**

**WHAT IF YOU  
DON'T LIKE THE  
ANSWER?**

# **DISCUSSIONS & NEGOTIATIONS**

# **POSSIBILITY OF CONFLICT**

**WHY IS THERE  
AN AMBIGUITY?**



**MAYBE THEY'RE  
BAD AT  
EXPRESSING  
THEMSELVES**

**MAYBE THERE'S  
INDECISION AND  
CONFLICT  
HIDDEN THERE**

**DO I WANT TO  
TRIGGER THAT?**

# **SELF-DEFENSE MECHANISMS**

**THEY'RE  
PROBABLY BUSY**

**I CAN'T BOTHER  
THEM WITH THIS**

**NO-ONE ELSE  
ASKS THESE  
QUESTIONS**

**CAN I SOLVE IT  
BY MAKING AN  
ASSUMPTION?**



# **ASSUMPTION**

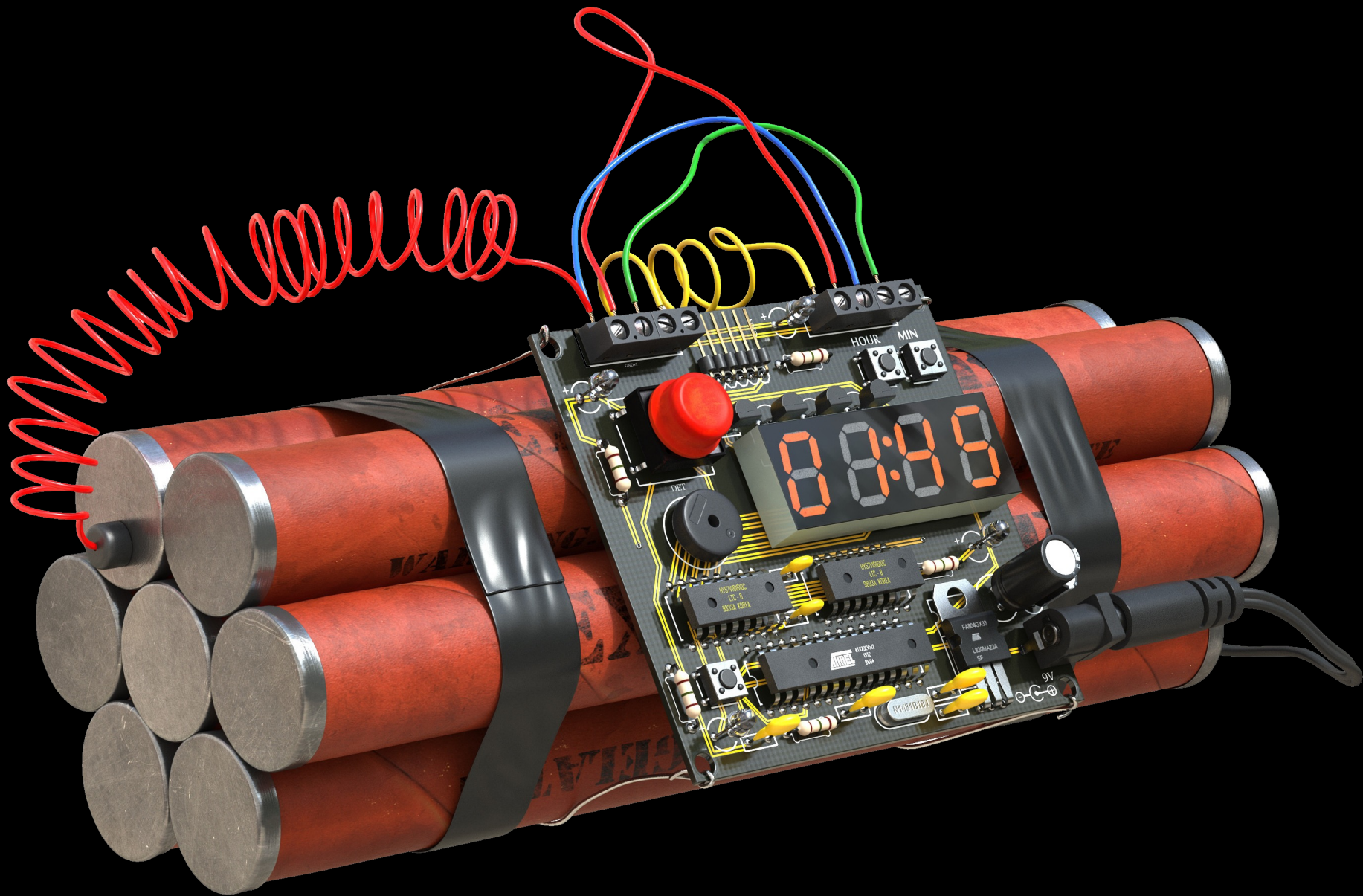
# GUESS

**MAKING S\*\*\*T UP**

# PROXY PERSON



**ASSUMPTIONS  
ARE BETS  
AGAINST THE  
FUTURE**

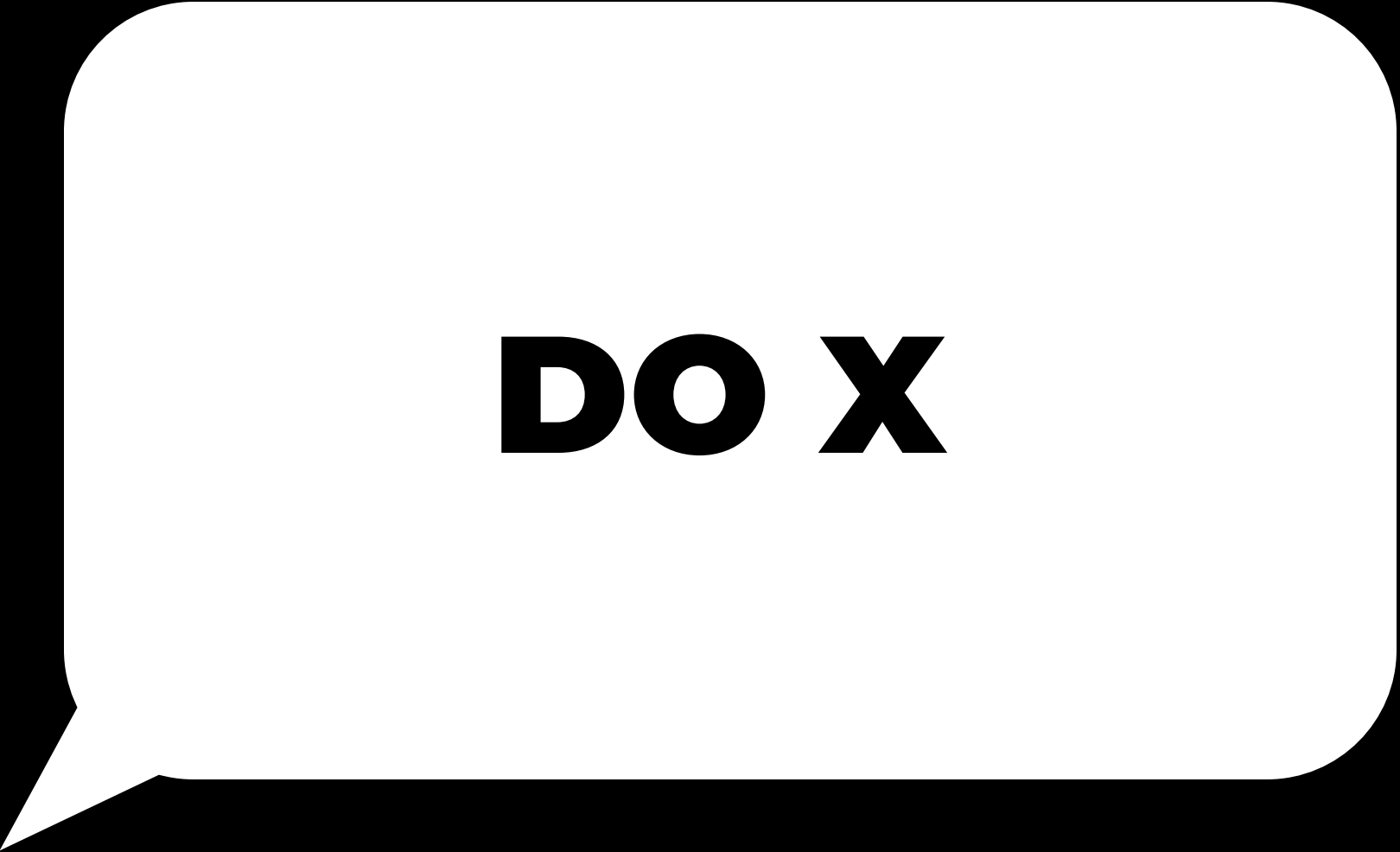


**IT WOULD BE  
NICE IF WE  
WOULD TALK**



# HOW TO TALK

# **RHETORIC AS DEVELOPER SELF-DEFENSE**



**DO X**

**YAGNI**



**BEST  
PRACTICE**

# **GOLD PLATING**



**IT'S A  
PATTERN**



**MY UNCLE  
SAYS**





**MY AUNT  
SAYS**



**WE NEED  
TO DO BETTER**

**YOU CAN'T WIN  
BY FIGHTING  
PEOPLE'S  
NARRATIVES**

**WHY DON'T  
I WANT TO  
DO X?**

**MAYBE I THINK**  
**X IS A BAD IDEA**  
**IN GENERAL**

**MAYBE I THINK  
X IS A GOOD IDEA  
IN THE RIGHT  
CONTEXT BUT NOT  
IN THIS ONE**

**MAYBE I WOULD  
LIKE TO DO X  
BUT DON'T  
KNOW HOW**



**MAYBE I DON'T  
FEEL CONFIDENT  
I CAN DO X  
ON MY OWN**

**MAYBE I DON'T  
UNDERSTAND  
WHAT X MEANS**

**WHY DON'T  
I SAY SO?**

# TRUST

# HOW TO BUILD TRUST?

# CURIOSITY

# EMPATHY

# HUMILITY



# LISTEN

**BE PREPARED  
TO CHANGE  
YOUR MIND**

**SHOW THAT**  
**YOU CAN AND**  
**DO CHANGE**  
**YOUR MIND**

# **PRACTICAL TECHNIQUES**

# COACHING

**YOU CAN'T MAKE  
PEOPLE CHANGE  
THEIR MIND**

**YOU CAN'T  
FORCE PEOPLE  
TO AGREE**

**HELP OTHERS  
BE SUCCESSFUL**



**SHOW PEOPLE**  
**HOW TO BE**  
**SUCCESSFUL**  
**WITH X**

**WORK WITH  
OTHERS ON  
THEIR PROBLEMS**

# ENSEMBLE PROGRAMMING

**ENSEMBLES ARE  
A COUNTERFORCE  
TO THE DESK FORCE**

**ENSEMBLES ARE  
HARDER TO FOOL  
THAN YOURSELF**

**ENSEMBLES ARE  
BETTER AT  
FIGURING OUT  
WHO TO TALK TO**

# **ENSEMBLES OVERCOME THE SOCIAL AWKWARDNESS**

**ENSEMBLES ARE**  
**ALREADY A**  
**CONVERSATION**



# AUTONOMY

# **WHAT IS AUTONOMY?**

# **FREEDOM?**

# **FREEDOM TO?**

# **FREEDOM FROM?**

# **FRIHET UNDER ANSVAR**

# ACCOUNTABILITY

# BEING ADULTS



# **CLAIMING RESPONSIBILITY FOR OUTCOMES**

# **AUTONOMY AS A FUNCTION OF RESPONSIBILITY**

# **AUTONOMY TO DO WHAT?**

# **SIGNIFICANCE**

# **BROADEN THE ENGAGEMENT**

# **PLANES OF EXISTENCE**

**CAN DEVELOPERS  
BE TRUSTED  
WITH MONEY?**

**ARE DEVELOPERS  
WILLING TO  
DISCUSS MONEY?**



# **ENGAGE WITH THE WHOLE SOCIO-TECHNICAL CONTEXT**

# SUMMARY

# **SOFTWARE IS** **SOCIO-** **TECHNICAL**

**WE ARE HUMAN**

# TRUST

**EVERYONE CAN  
LEAD AND  
HAVE IMPACT**

# **SUSTAINABLE SOCIO-TECHNICAL SYSTEMS**