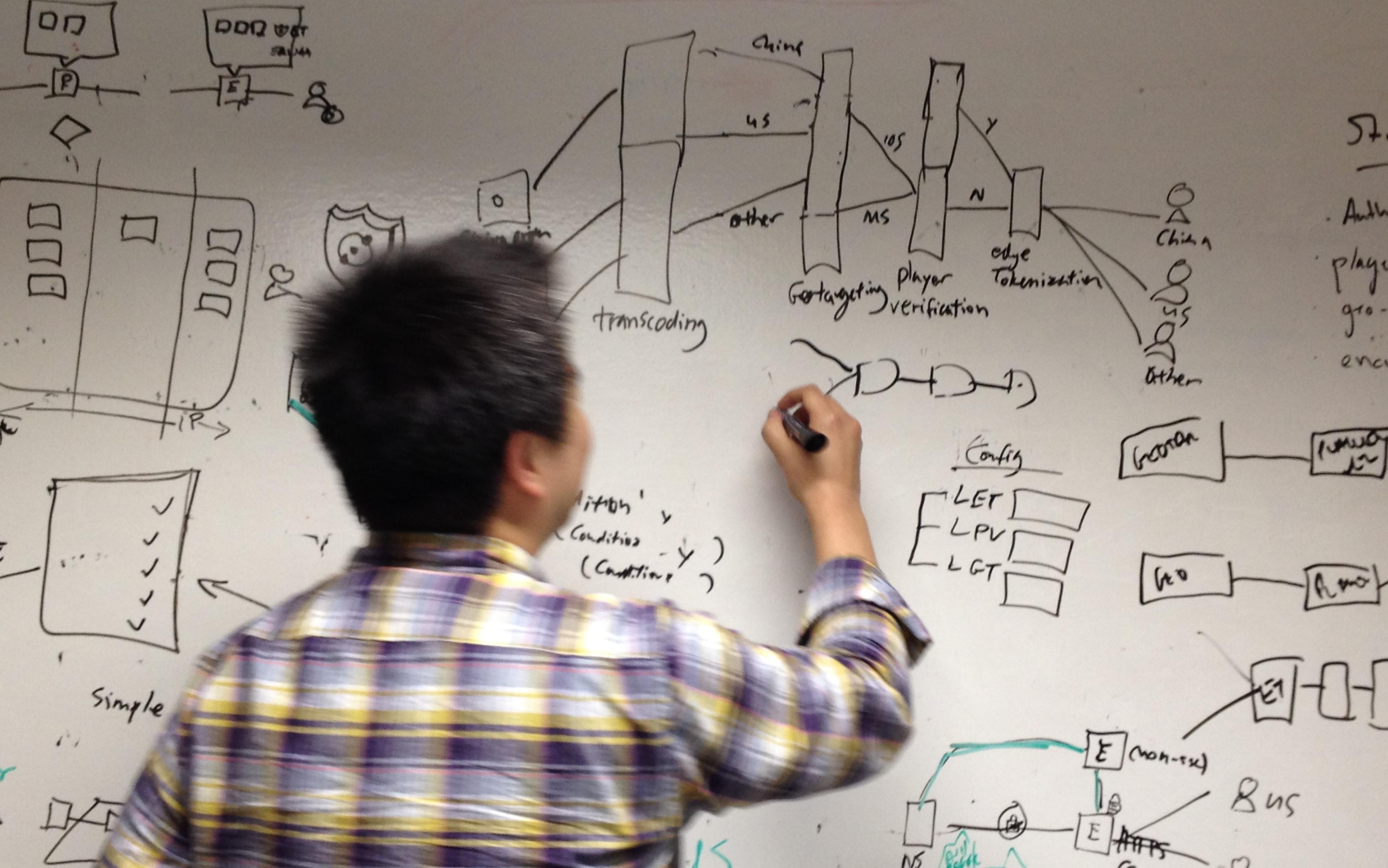


IxD210 Systems

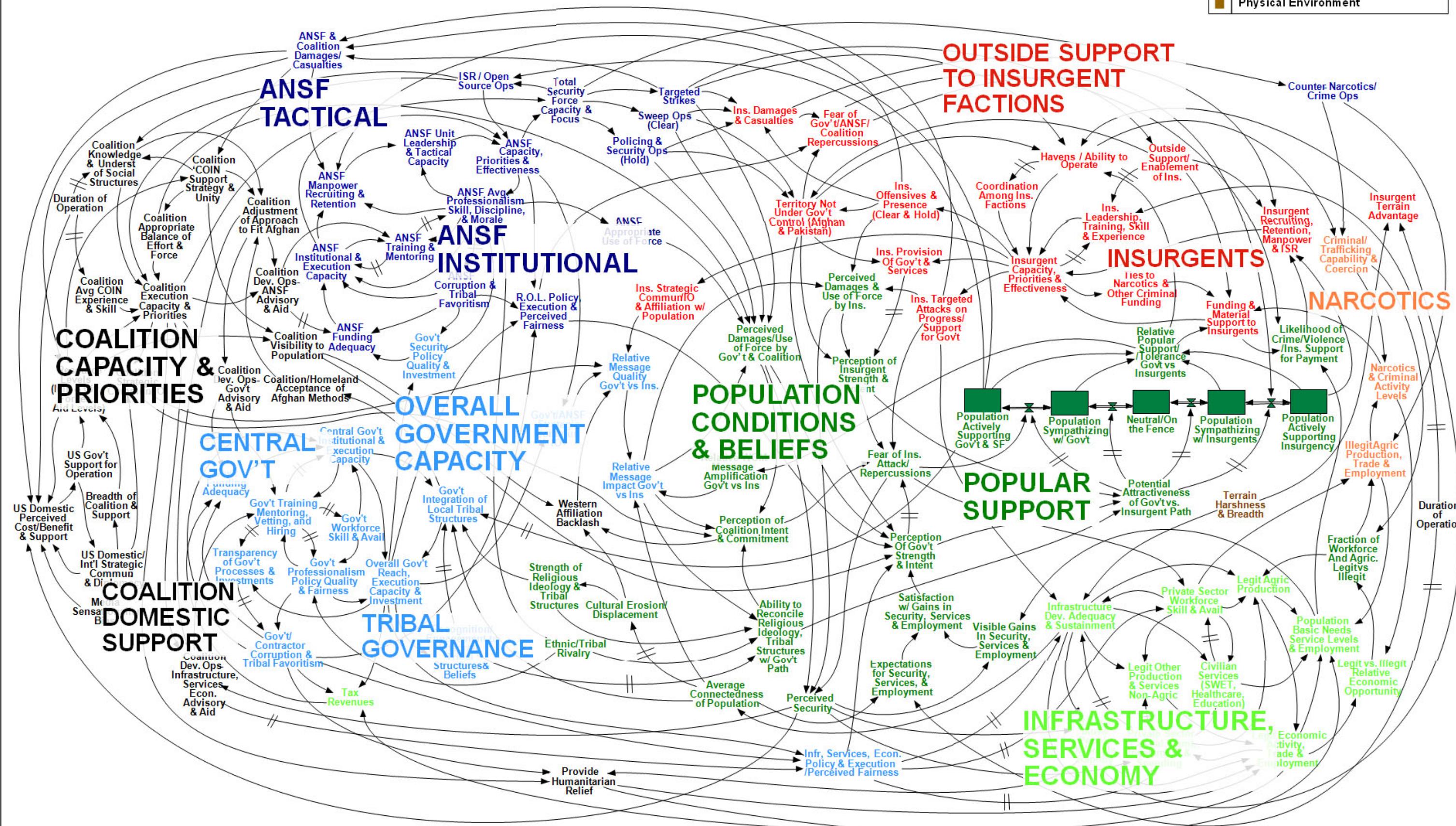
Making Rich Pictures



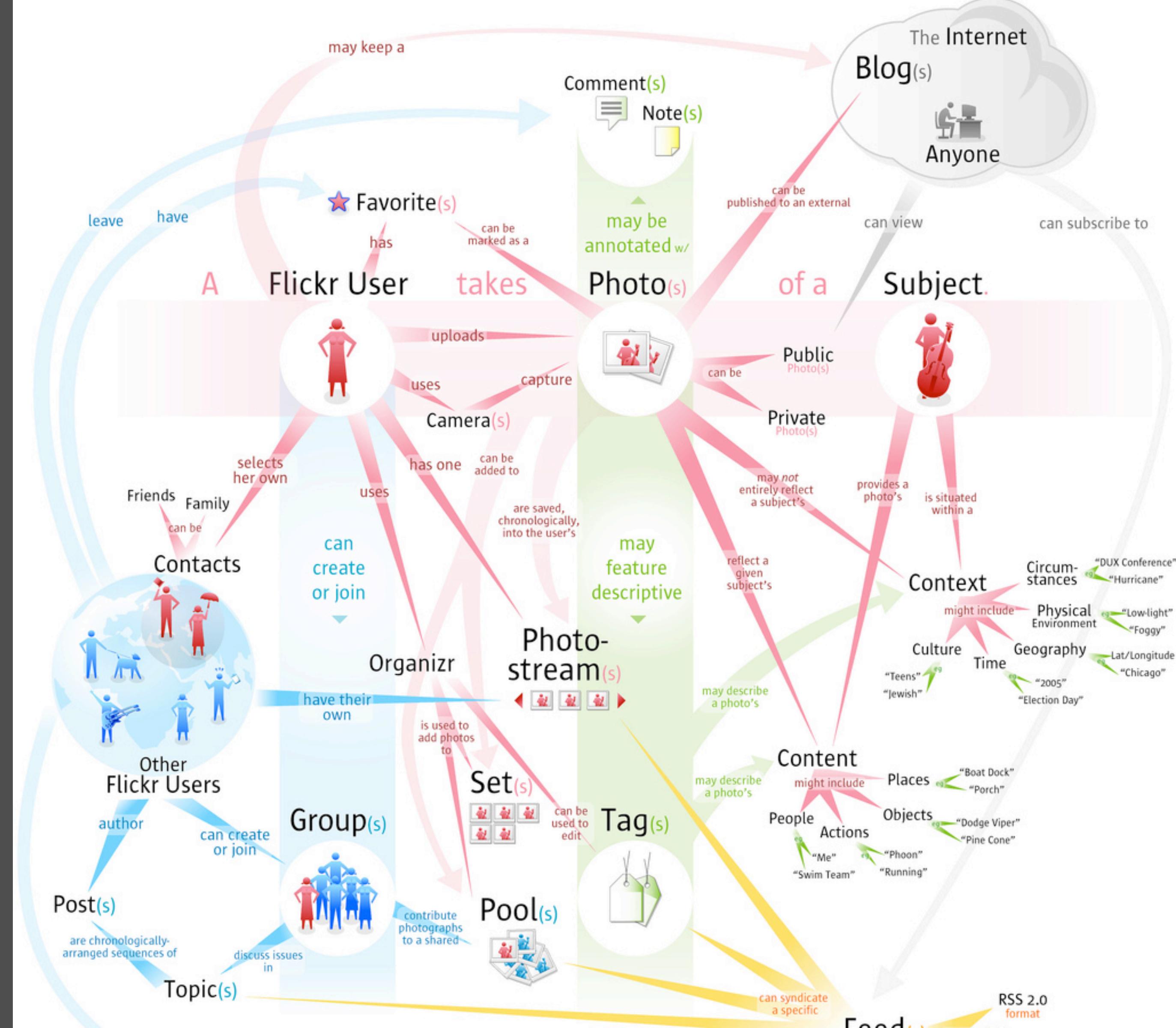
Afghanistan Stability / COIN Dynamics

 = Significant Delay

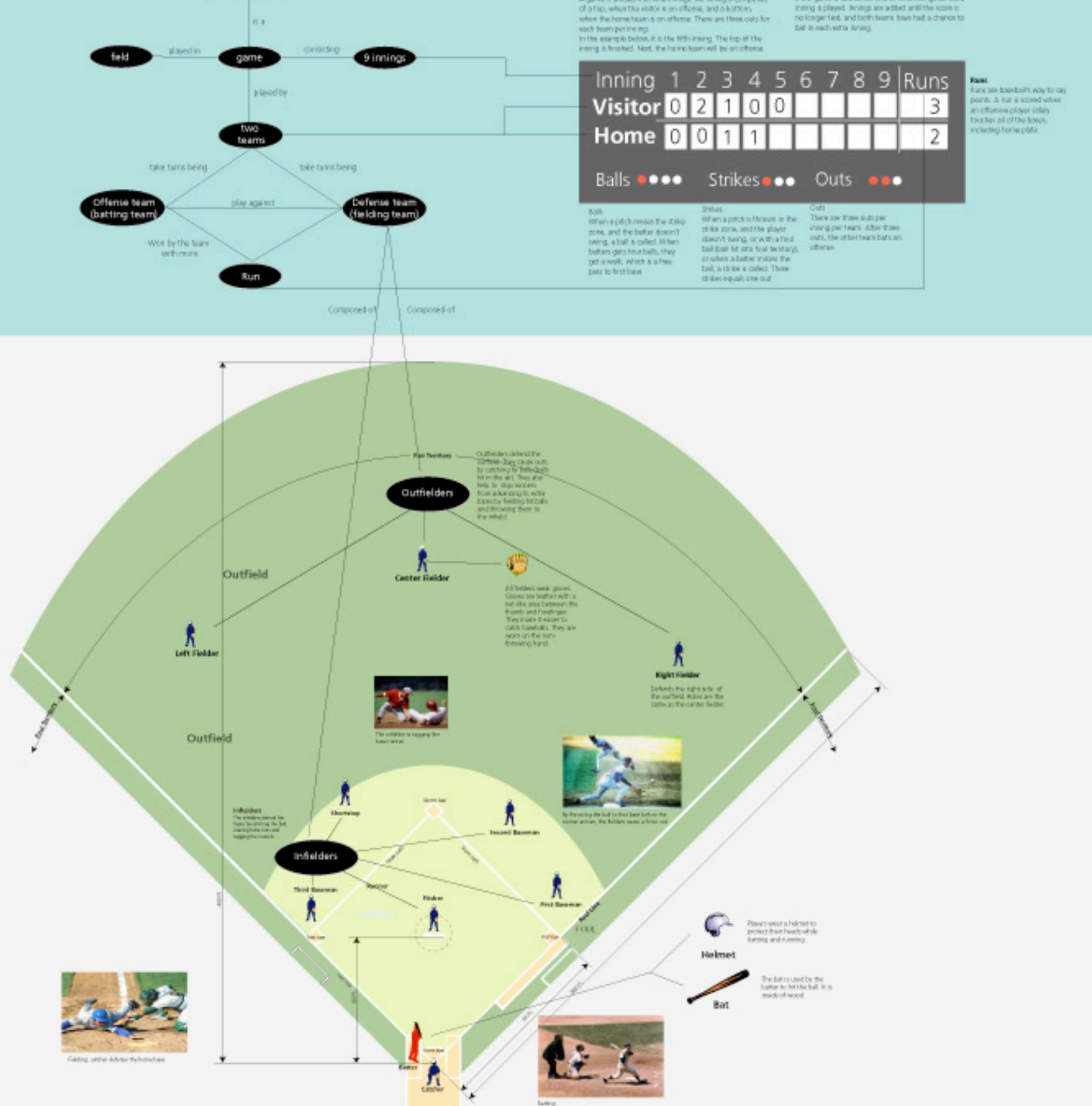
- Population/Popular Support
- Infrastructure, Economy, & Services
- Government
- Afghanistan Security Forces
- Insurgents
- Crime and Narcotics
- Coalition Forces & Actions
- Physical Environment



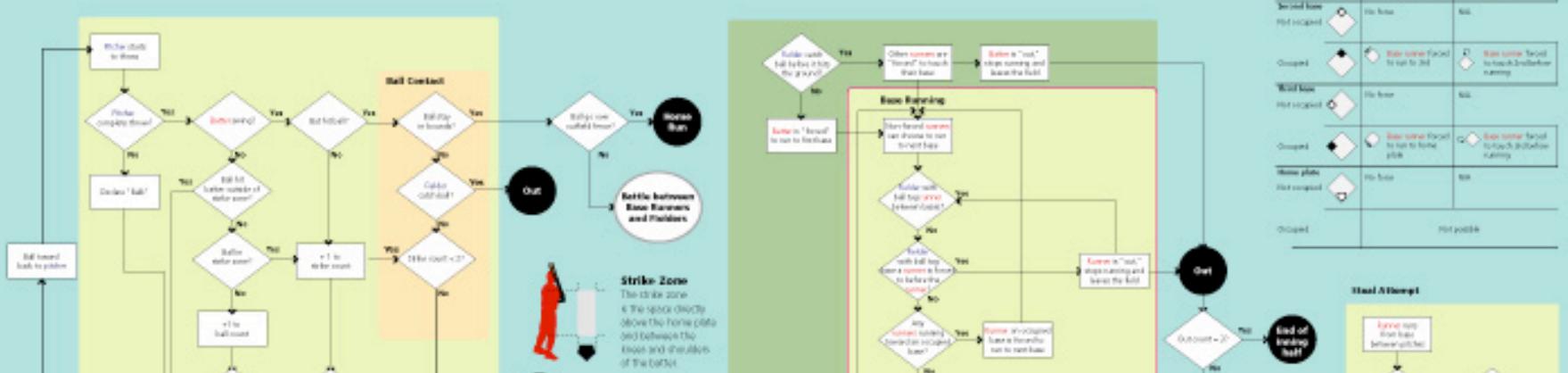
WORKING DRAFT – V3



Field of Play



Action



How to play...

is a **game** played
Baseball on a field called a **diamond**
by **two teams** that alternate between...

the game

is composed of 9

innings

which are made of 2 sides

consisting of

plays

batting

offense and defense

sends a batter to the plate

who tries to



and

offense and defense

takes the field

and starts the play



pitching

and **run**



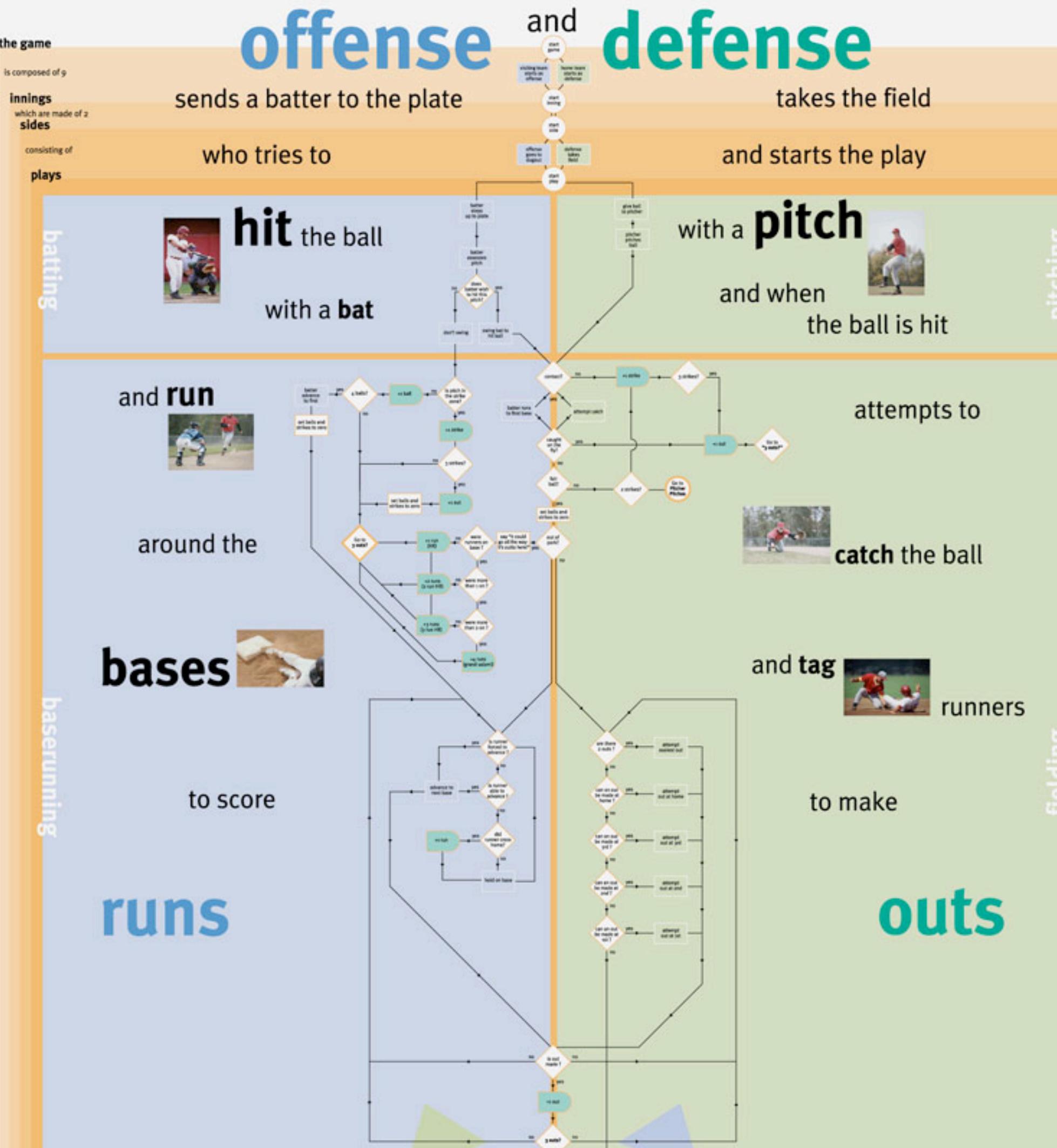
bases



to score

runs

baserunning



Ok Ok, but what's the expectation

Rich Picture (SSM)

aka Concept Map (Design Method)

“A visualization of present understanding of a system [...] the mental model [...] see the “forest and the trees” [...] generally links nouns and verbs”

-Jon Kolko, Thoughts on Interaction Design

Your Diagram Should Contain

- System Boundary - purpose (AKA RD in SSM)
- Objects
- Relations/Activities

Your Diagram Might Also Contain

- Environmental constraints
- Representations of Time
- Anything else that sheds light on the system

SYSTEM BOUNDARY (PURPOSE)

Examples:

- The role of Wolves in Regulating the Yellowstone Ecosystem
- From Farm to Table
- From Kitchen to Table
- How CCA Library answers student questions
- How questions get answered at the CCA library
- How Teachers and Students Communicate in CCA IxD program
- Etc.

TYPICAL OBJECTS

- People (roles!)
- Flora, fauna and geologic materials
- Machines (hardware and software)
- Subsystems and ecosystems (companies, departments, software routine, herds, ponds, oceans, etc...)

SAMPLE RELATIONS

- Wolves *regulate the grazing habits* of elk
- Trucking company *delivers Food* to restaurant
- Waiter *brings food* to table
- customer *orders from* waiter
- Students *borrow* books
- Students *swipe* library card *to borrow* book

SAMPLE ENVIRONMENTAL CONSTRAINTS

- How fast wolves can reproduce vs. elk
- Number of poplars required to support beavers
- How many waiters a restaurant has
- How many seats a restaurant has
- Restaurant hours of operation
- A company's vision
- The limits of a division's purpose + power
- Which customers a company wants to support

TIME

- Straightforward Chronological Time
- Story Timeframe and Chronology (e.g. a Play)
- Duration and Pacing of Event (e.g. a Baseball Game)
- Geological Time
- Project Timeframe
- Time to Erosion
- Time to Reach Limits
- Time to Complete Task
- Etc

PUTTING IT ALL TOGETHER

Describe Boundaries/Purpose/RD

The **What** is accomplished **How** and for **Why**

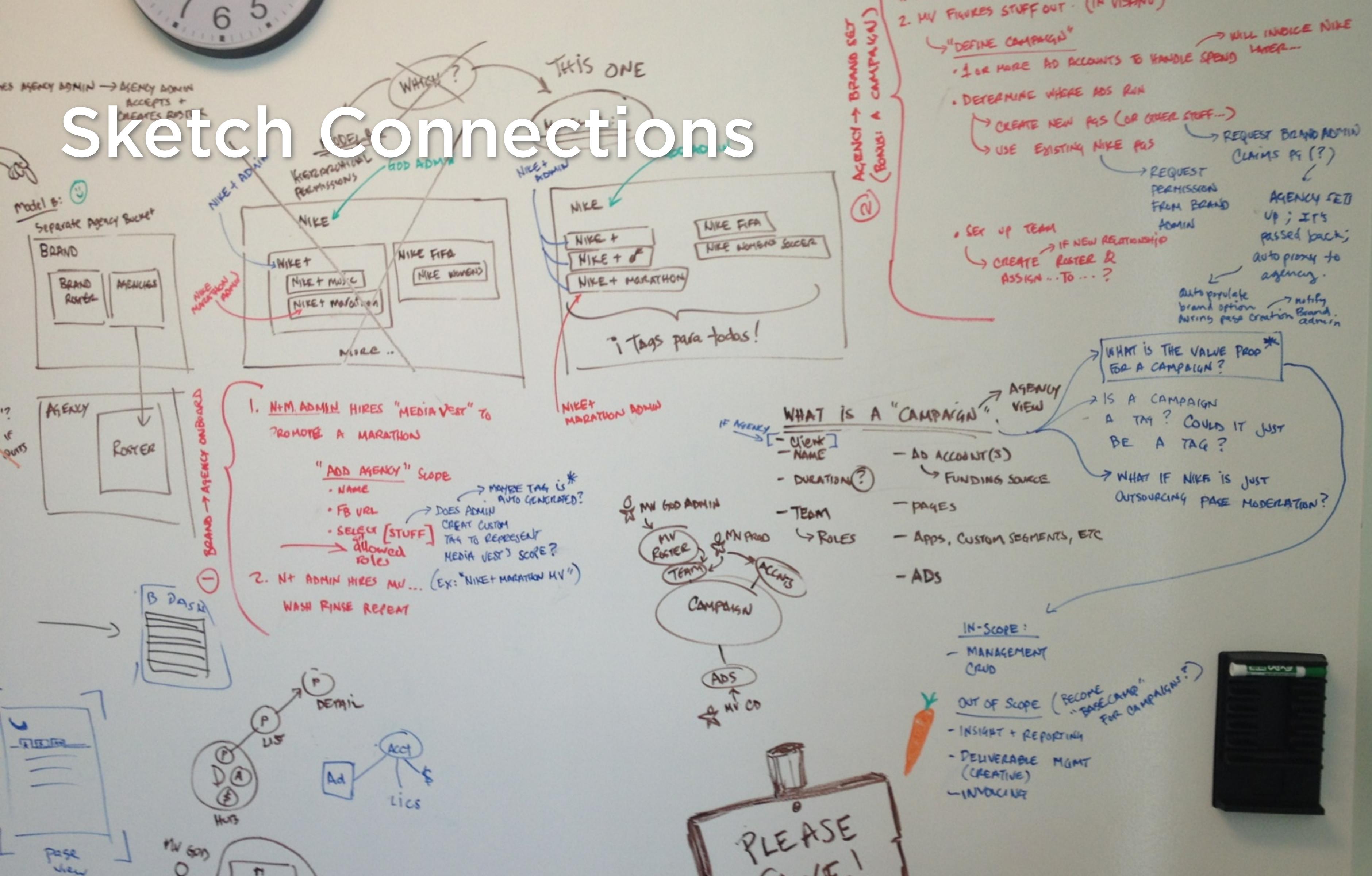
(What? How? Why? → see PQR from SSM reading p. 38-39)

Note: you can (and usually will) revise this later

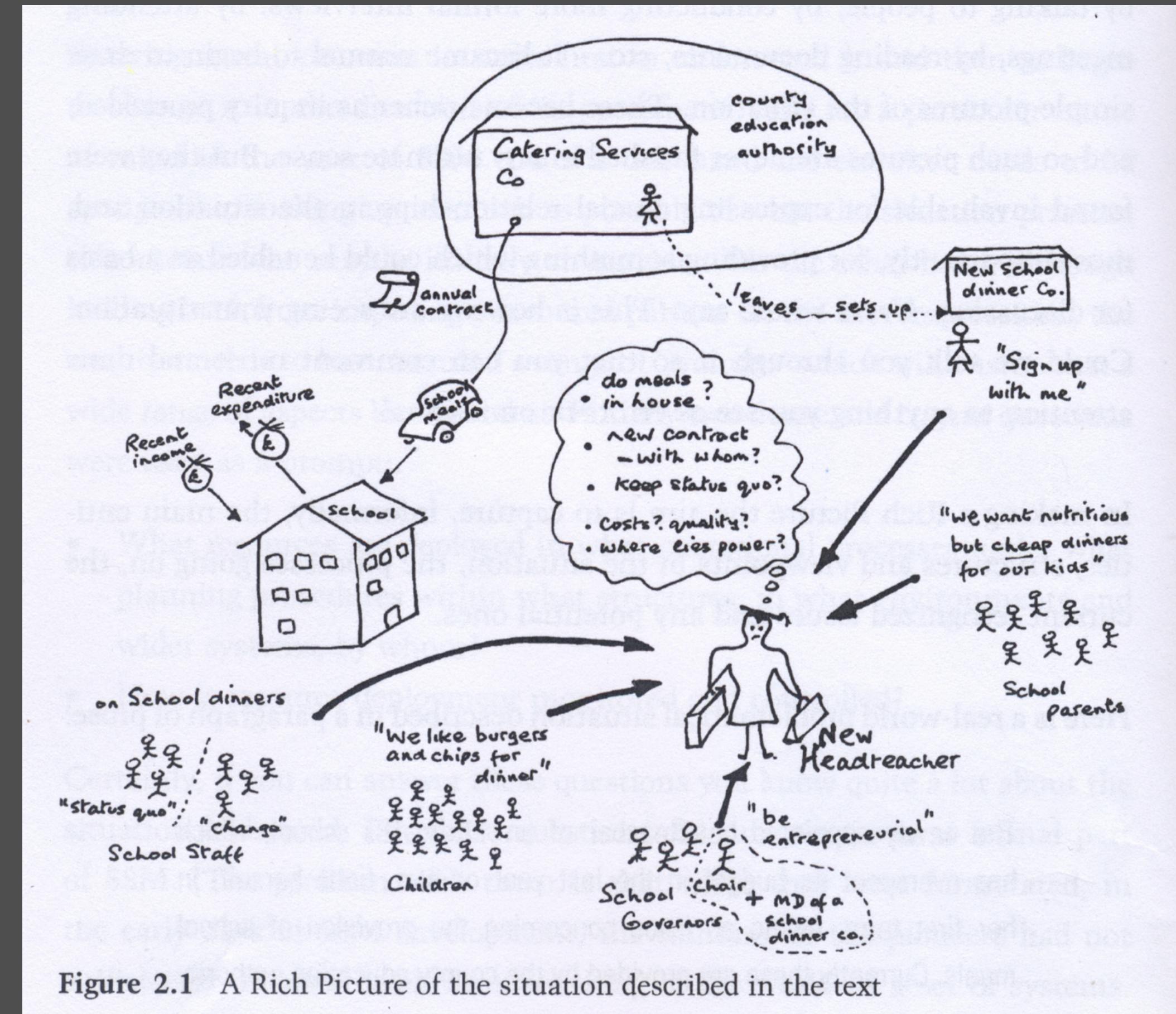
Write everything down and sort



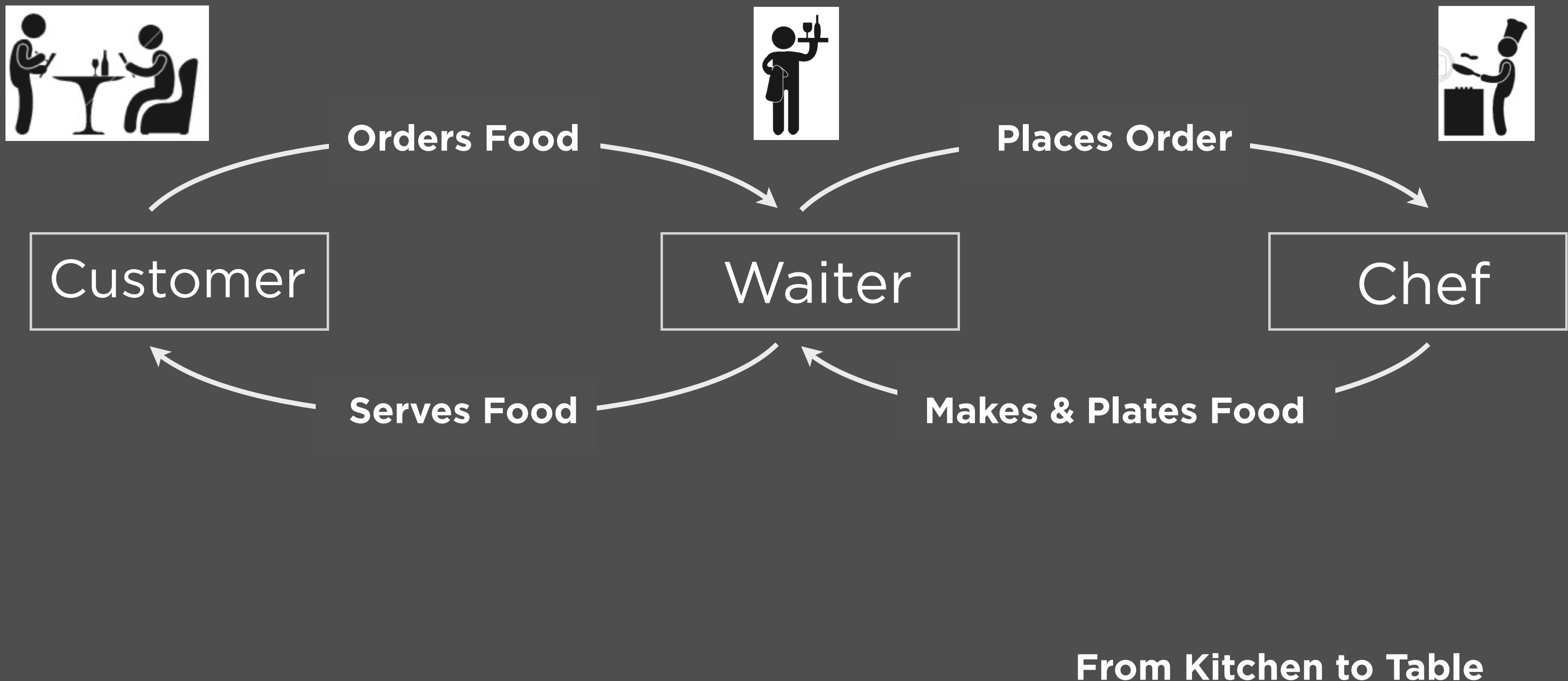
Sketch Connections



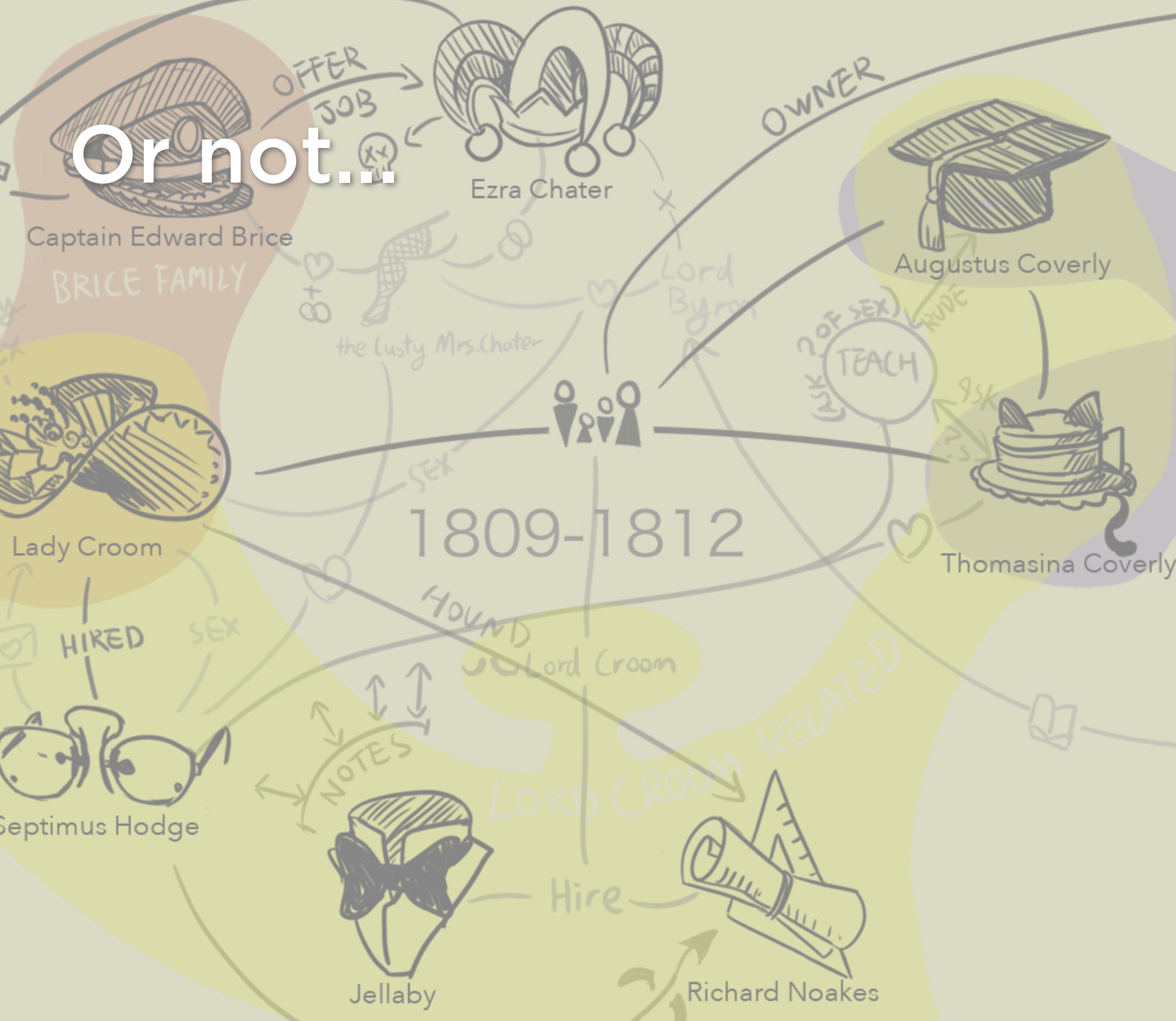
Keep Sketching



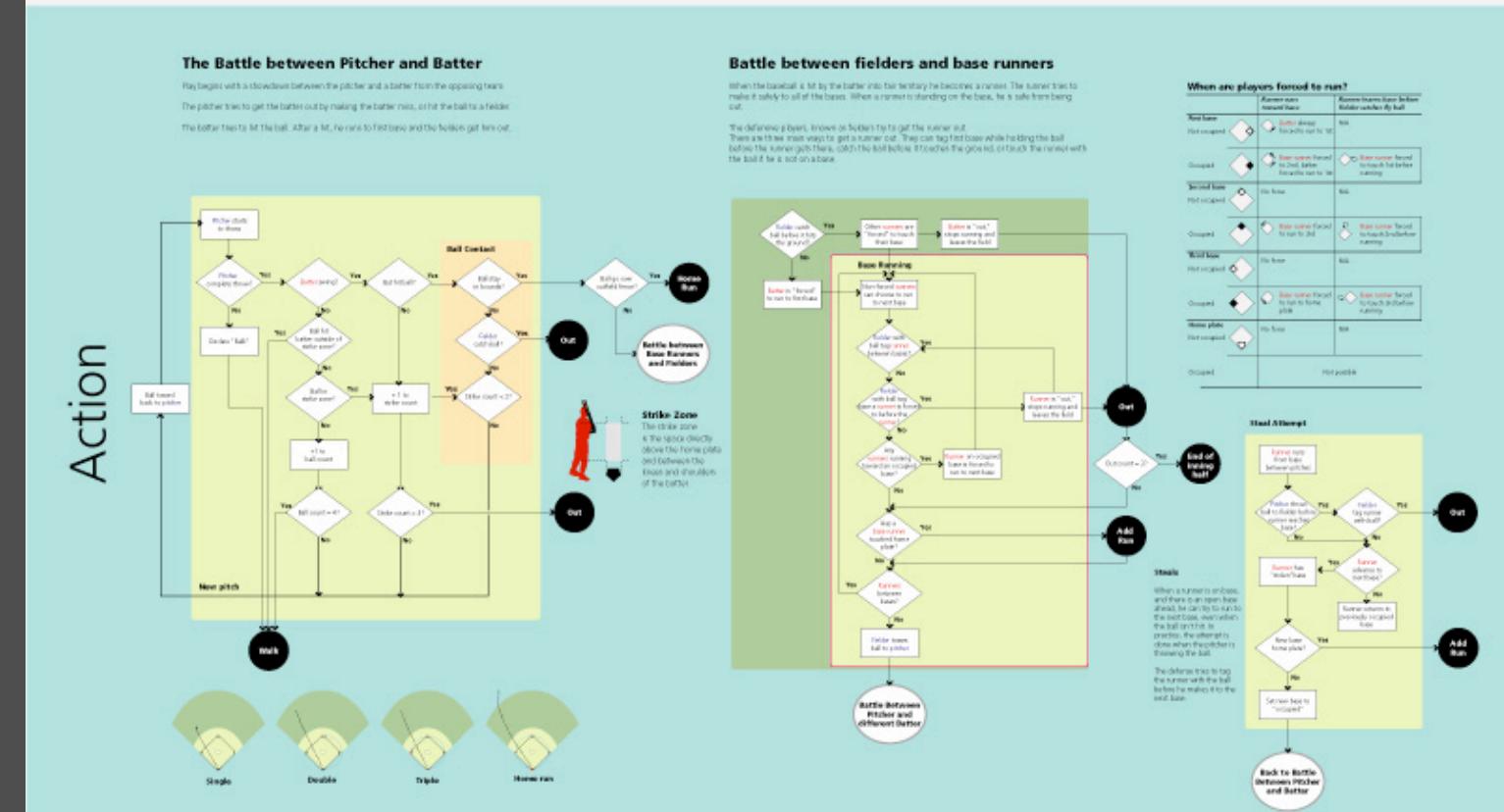
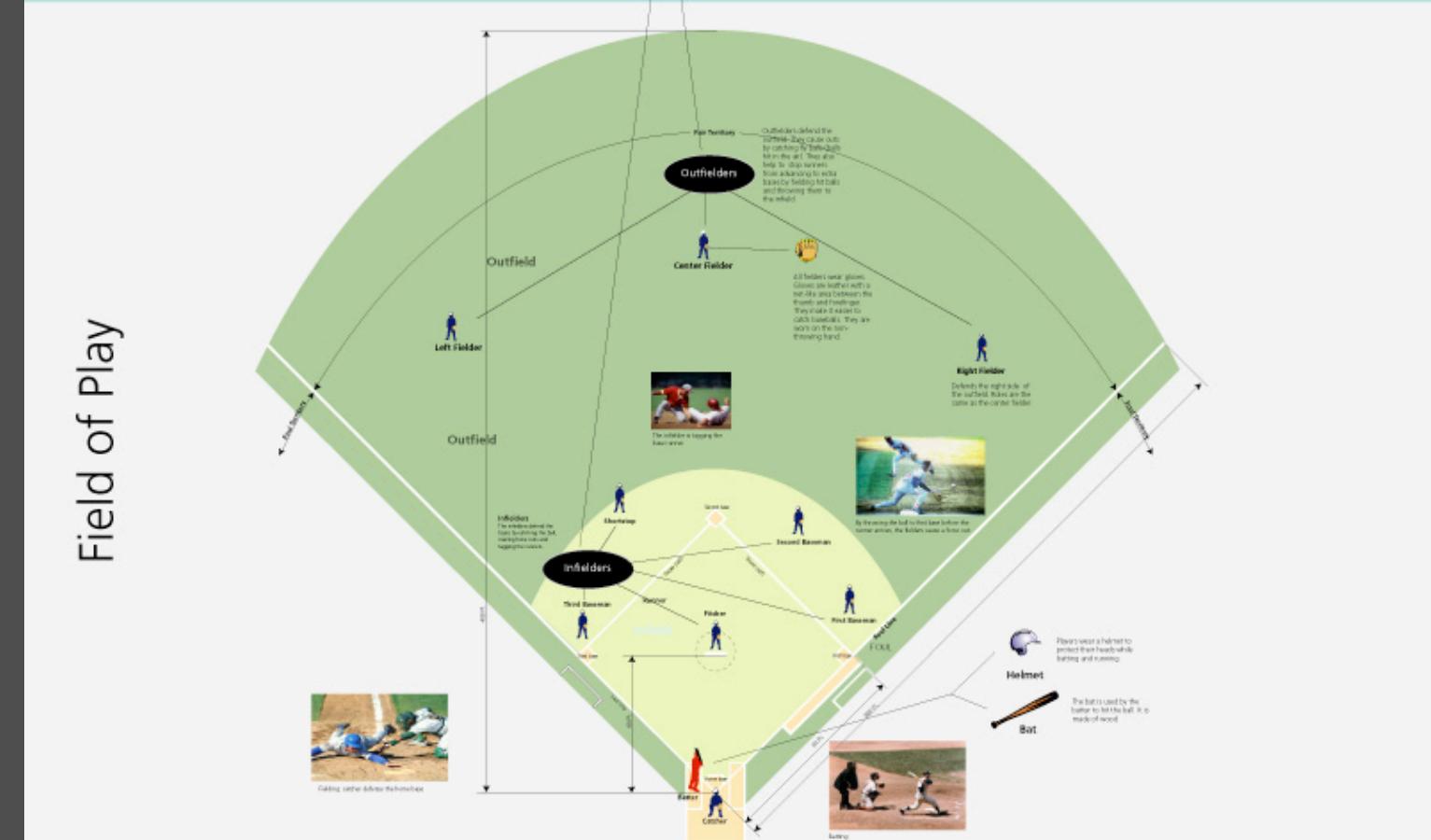
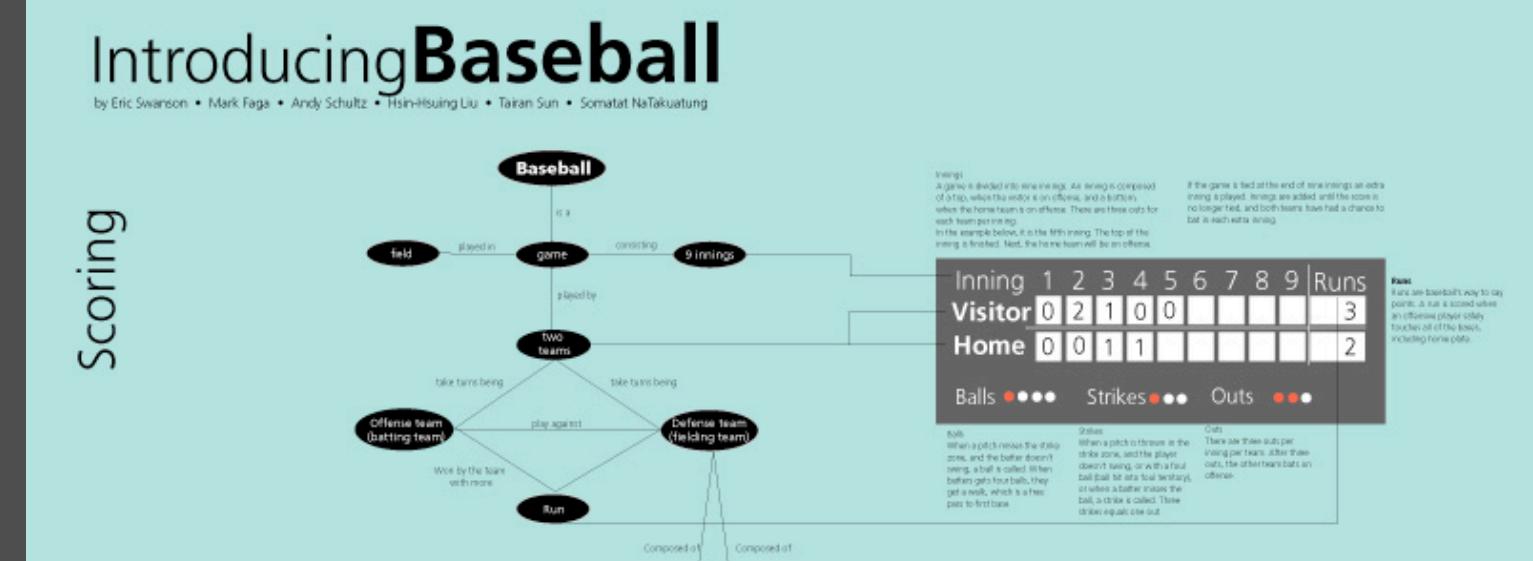
At some point, switch to digital



Or not...



Refine further
and aim high!



End