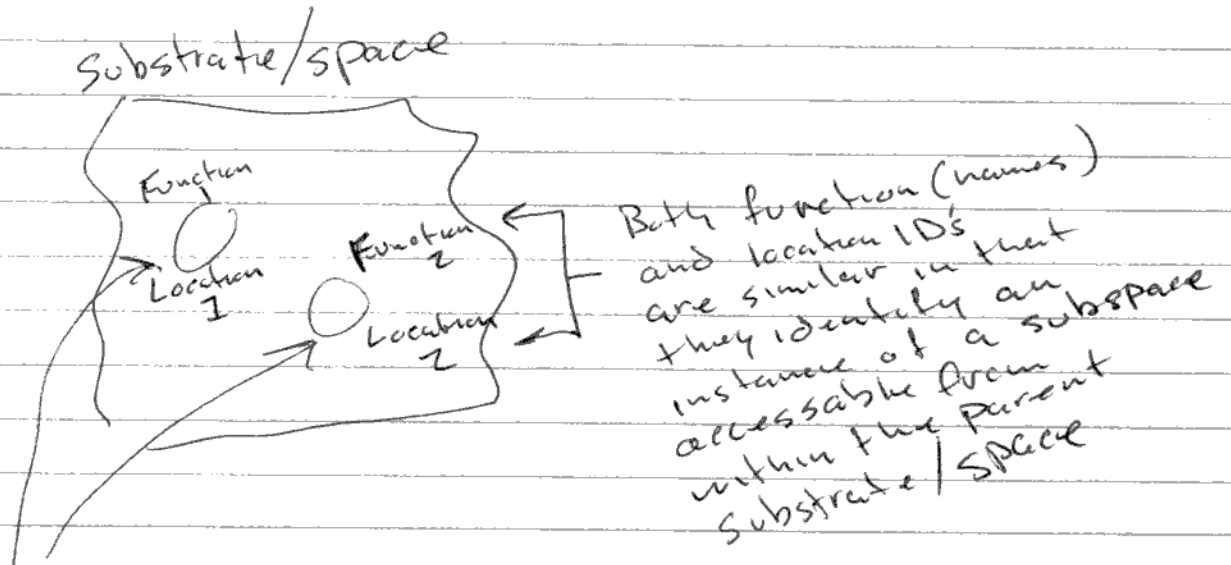
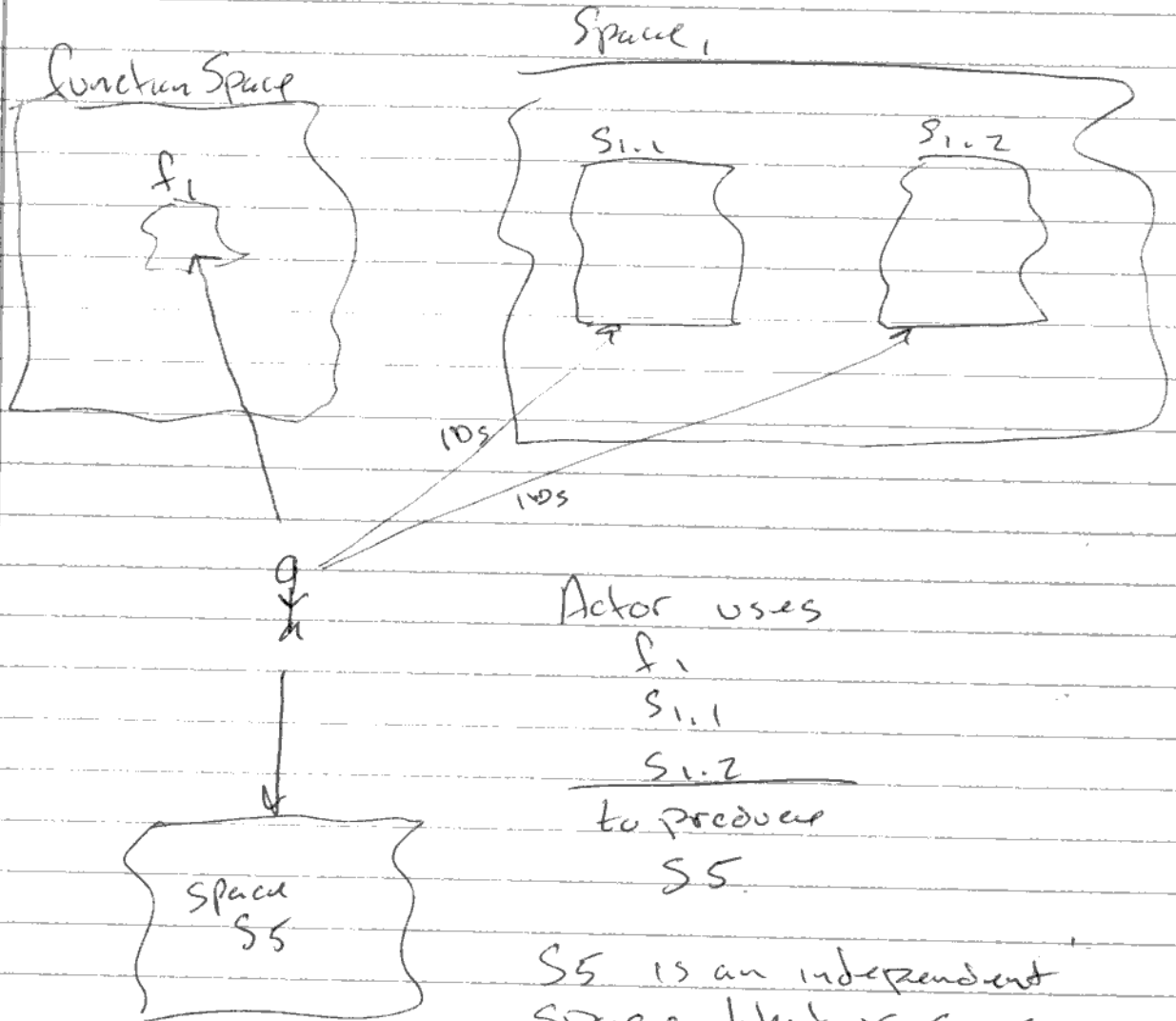


Multiple Connected Concepts



These subspaces

Can be pre-existing (more likely when identified by fixed location)
 or synthesized on access (more likely as output of function)

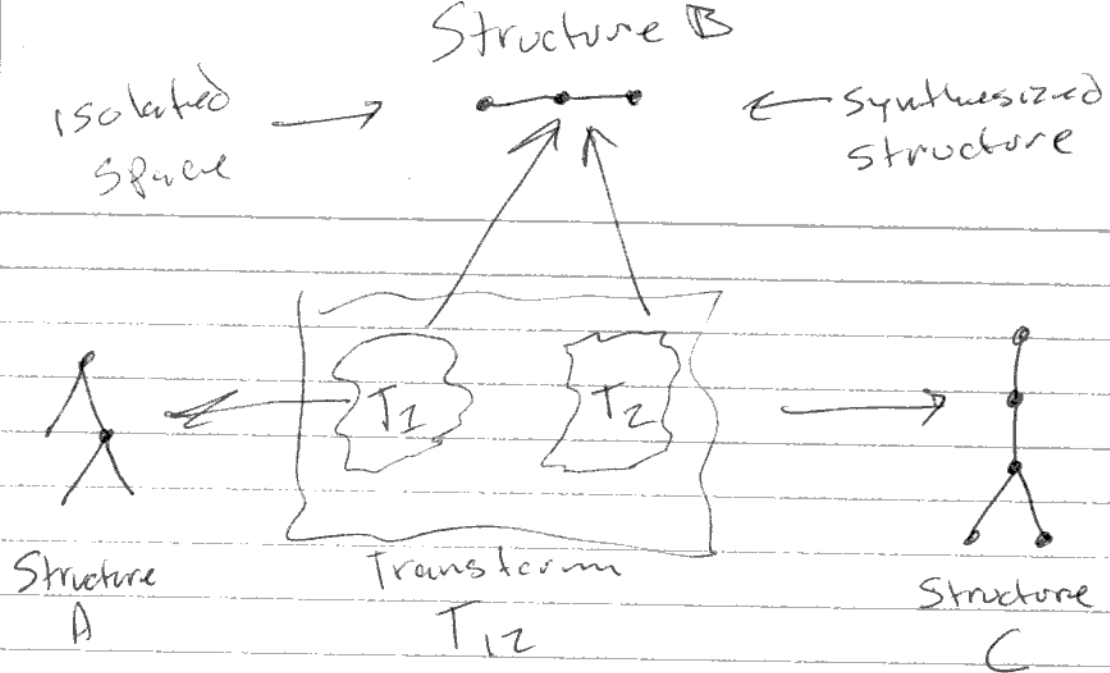


$S5$ is an independent space that is some computed view into projections from $S_{1.1}, S_{1.2}$

Integration Problem

One object
w/ integrity
w/ seeking behavior
represents symbol
can be tracked
can be valuable

many objects
w/ interactions
w/ error components
integration errors



The ability to create structure B in its own isolated space as part of the transform from $A \rightarrow C$ is significant

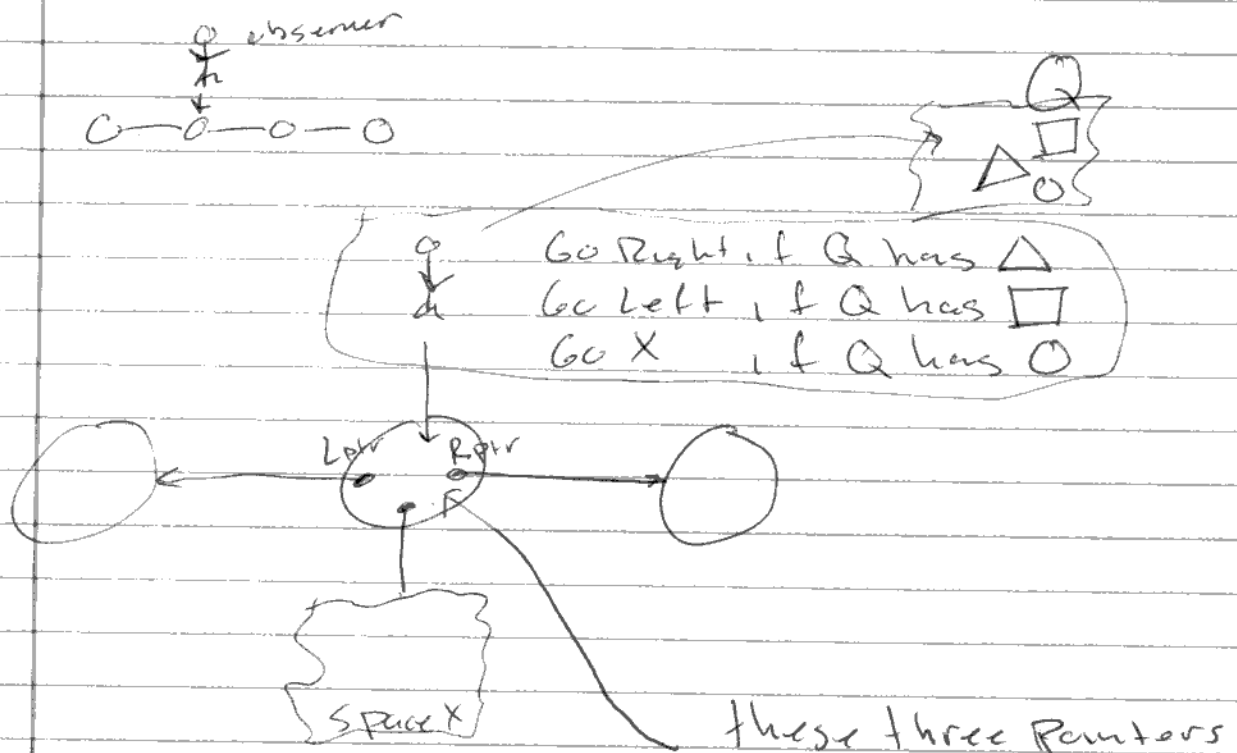
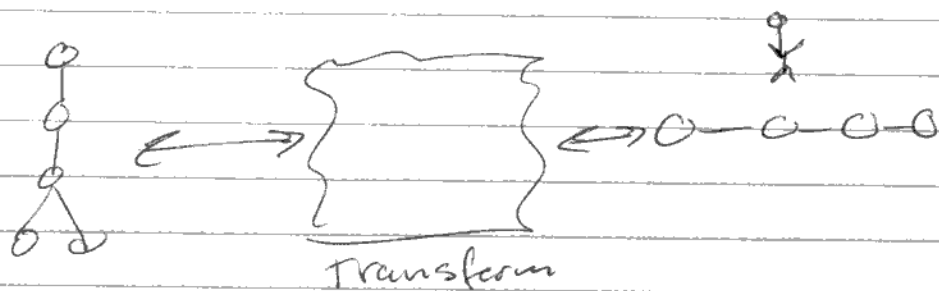
Why is significant?

① Structure B = information = mass + energy

The transform requires energy

② ~~The~~ Structure B is isolated and decoupled. Decoupling is hard.

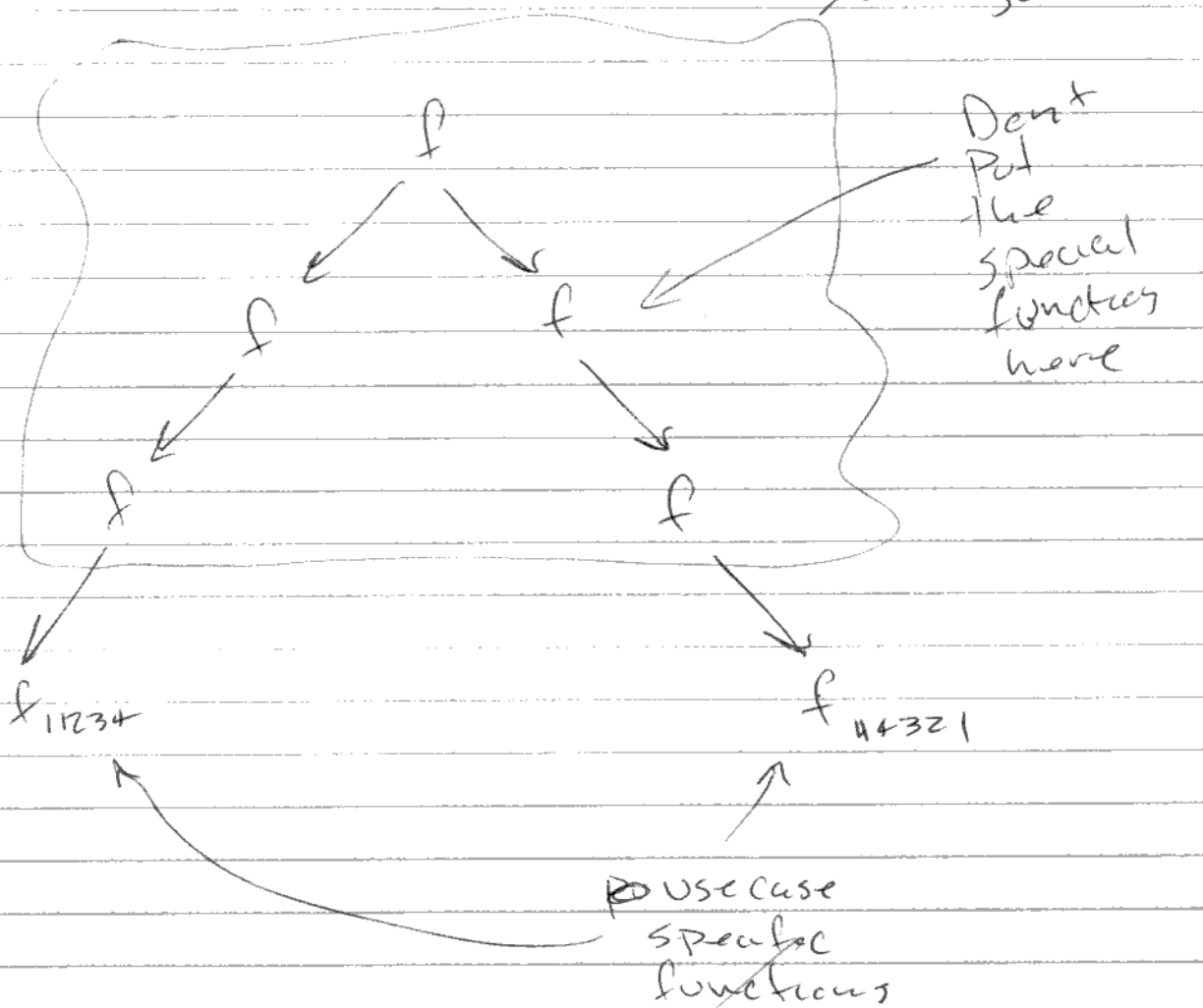
Q) what if we push from the structure concepts to a representation of locked functions?



In this example we have made the actor & based on blocked functions but there is another sublayer of locked functions manifesting as pointers resembling, in practice sense, fixed data structure

these three pointers are still locked information within a node space

Core value add of functional Programming



Any transform ultimately invokes functions that are narrow in scope and specific to a ^{unique} space or limited space

Core idea of functional programming is to push the specialized functions as far to the edges as possible

A structure is a hierarchy of functions or transforming

ultimately the structure/hierarchy must rely on function locks that are more static in nature.

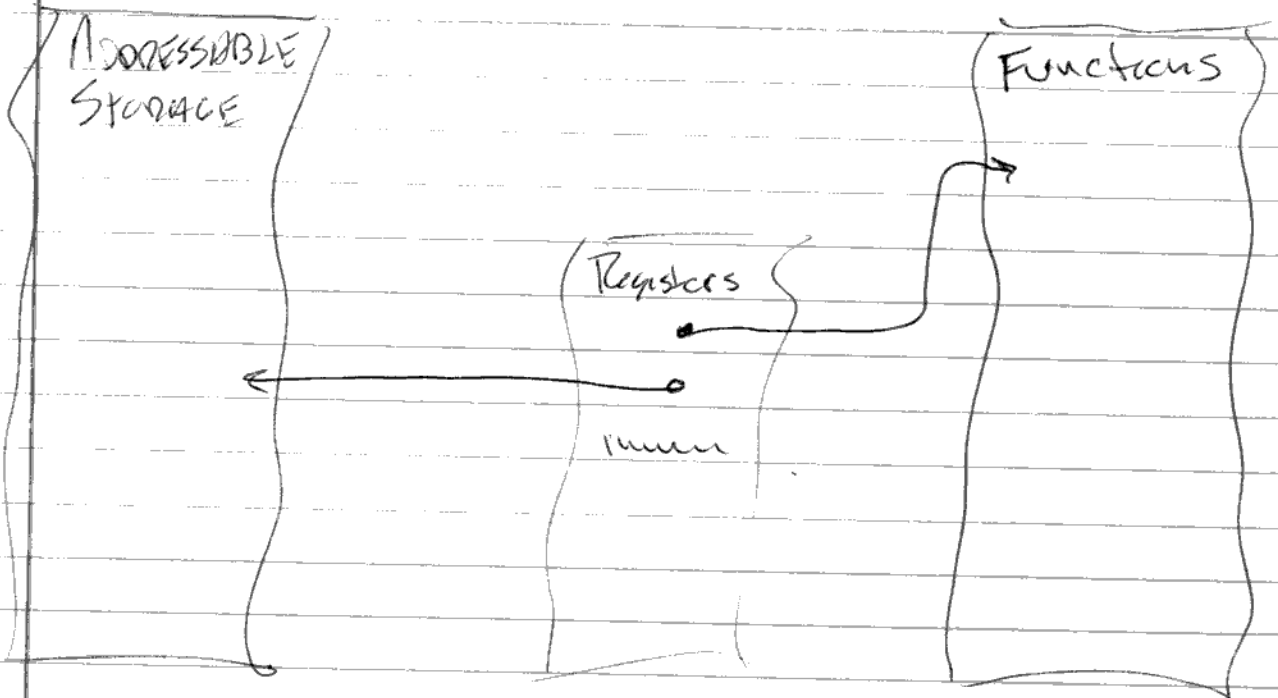
Static in the sense that the locking mechanisms are decoupled from the structure and under the influence and control of outside actors.

For example, think of pointers to next elements in a structure.

the pointers are stored in memory ~~that is not modified by the functions acting on the store~~

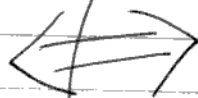
the pointers are stable and not modified randomly

there are strong constraints on what functions can change the pointers that define the function



Functions are a tree of manipulations
 to perform on bit spaces in registers
 + operation to read/write from register to memory
 + operations to jump to nodes in function tree

Any
Structure



Any
Structure

Fundamental
Traversal
+ Algorithms

Fundamental

Equivalence of Structures

ANY
STRUCTURE



Translation
Function

• ANY
STRUCTURE

nodes
and
limited
edge types

nodes
and
limited
edge types

Turing

Everything decomposable to a binary
path change in a function tree

3

Parallel Actors

Simultaneous evaluation

Simultaneous action

How granular?

Classifiers / Manipulators

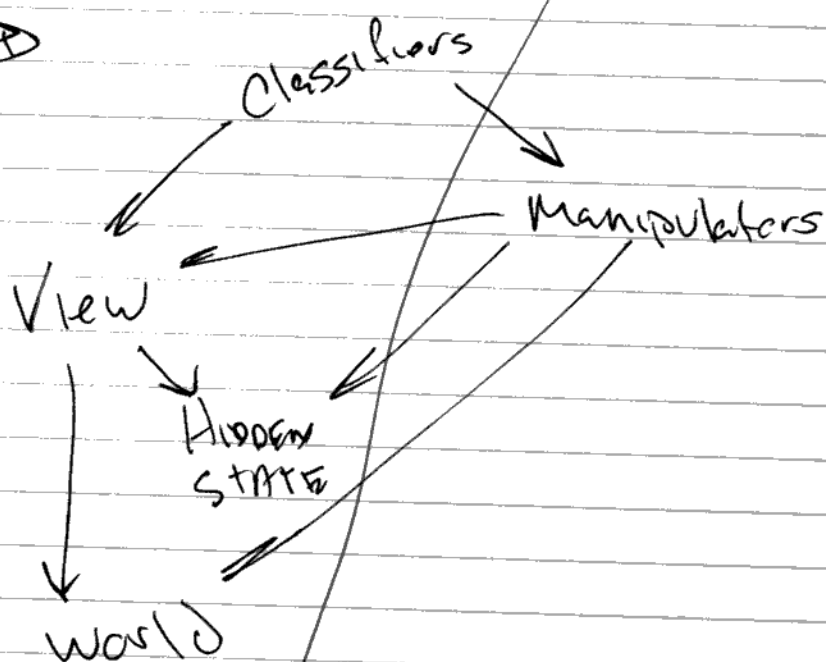
more 3D

Speak

Change

Perspective

~~Class~~



Classifiers consolidate information into symbols / signals

Manipulators are triggered to change something in world or hidden state

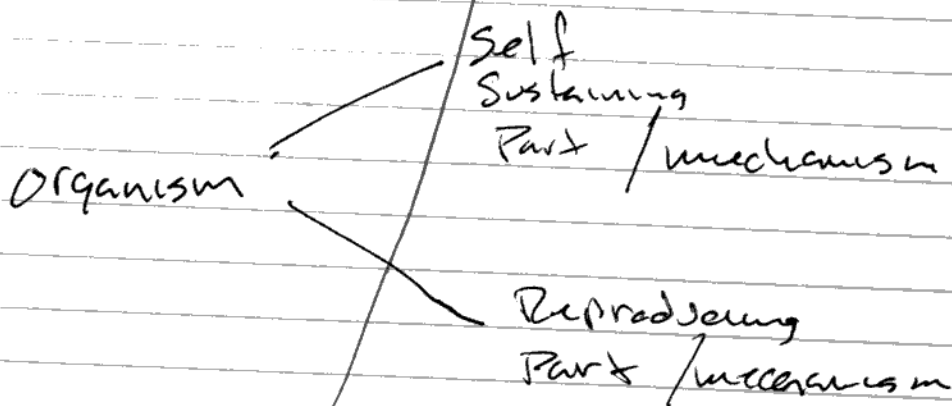
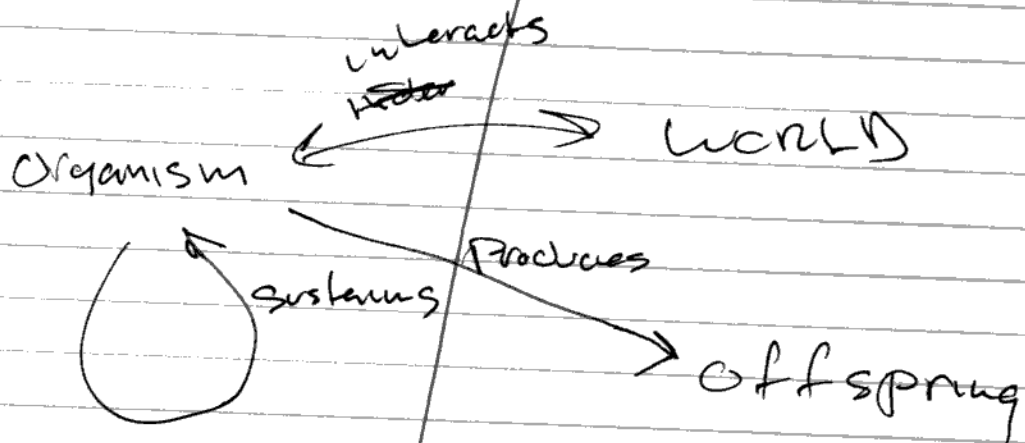
Q) How well can classification and hidden states be constructed if there is no direct manipulation of physical space

T) Theory AI actors can render audio/visual scene via monitor and this can be done by multiple AI actors in parallel, and human user can give effective feedback

+ Large monitor is a much richer view into an intelligence than normal animal/animal interactions

- The establishment of mechanisms or actors may be too close to noise floor to be detected and amplified

mechanism
Coincident ✓ coupling
* key *



Success @ self sustaining
is input into success @ reproducing

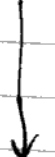
Organism



organism



organism



organism

Reproductive
mechanism



Prer

Different mechanisms
Different time frames
Co-dependence

