Lots of Black Swans Coming

Detachment of Productivity and Compensation

Massive Decrease in Job Creation (Robots, Internet, Fab Labs, Casualization, etc.)

Information Technology Lowers Labor's Share of Income

Casino Capitalism (No Tie to Production, Just High-Risk Bets Using "Other People's Money")

Massive Redistribution of Wealth Upward (95% of Income Gains 2009-2012 Taken By the Wealthiest 1%) and they own more than all others combined)

Soaring Inequality

Status Syndrome (When People Don't Count = Bad Health)

Low Social Mobility

Declining Middle Class

College Graduates Unemployed, Underemployedm and in Debt

Job Market Polarization (Bad Jobs and High Ones that Require High Skill, No Middle)

Global Climate Change

Massive Flows of Immigration

The Internet of Things and Hacking (Too Connected, Too Easy to Bring Down)

The Dark Web (Much Bigger than the Light Web)

Too Late for Sustainability, Now Need Resilence

Lots of Black Swans Coming

The vast majority of Americans know no science or mathematics worth mentioning, despite lots of spending on STEM

Our policies, problems, and politics shows a total lack of commitment to reason, let alone science

Humans Learn From Experience, Sort Of

Well Designed Experiences for Learning

1. Action/Problem
2. Expectation/Hypothesis
3. Care/Affect
4. Way to Assess Outcome of Expectation/Hypothesis (Appreciative System)
5. Managed Attention

6. Language: System Meaning
7. Language: Situational Meaning

System: A language variety (a vernacular or specialist variety) articulates this experience (cuts it at its joints)

Situation: Humans give words and phrases situational meaning from and in experience

Situational Meaning

1. The coffee spilled, go get a mop
2. The coffee spilled, go get a broom
3. The coffee spilled, stack it again
4. Big Coffee is as bad as Big Oil

System vs. Situation

Language as System: Democracy, Republic, Oligarchy, Plutocracy,
                           Monarchy, Socialism, Dictatorship …

Language as Situation:

… yet I believe [Milton] Friedman is right that thoroughgoing restrictions on economic freedom would turn out to be inconsistent with **democracy** (Retrieved 1/4/2015 from http://www.becker-posner-blog.com/2006/11/on-milton-friedmans-ideas--becker.html)
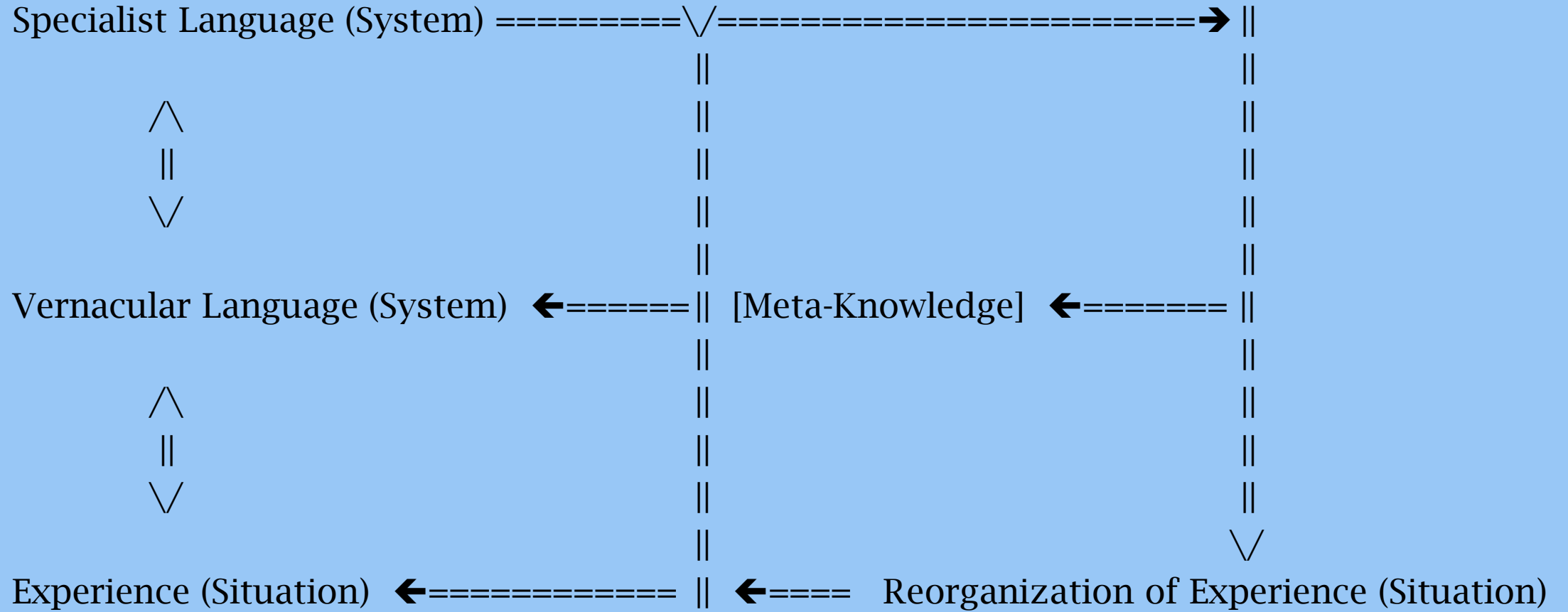
Game Manual

Your internal nano-processors keep a very detailed record of your condition, equipment and recent history. You can access this data at any time during play by hitting F1 to get to the Inventory screen or F2 to get to the Goals/Notes screen. Once you have accessed your information screens, you can move between the screens by clicking on the tabs at the top of the screen. You can map other information screens to hotkeys using Settings, Keyboard/Mouse (p. 5). (Ion Storm, 2000, p. 5).
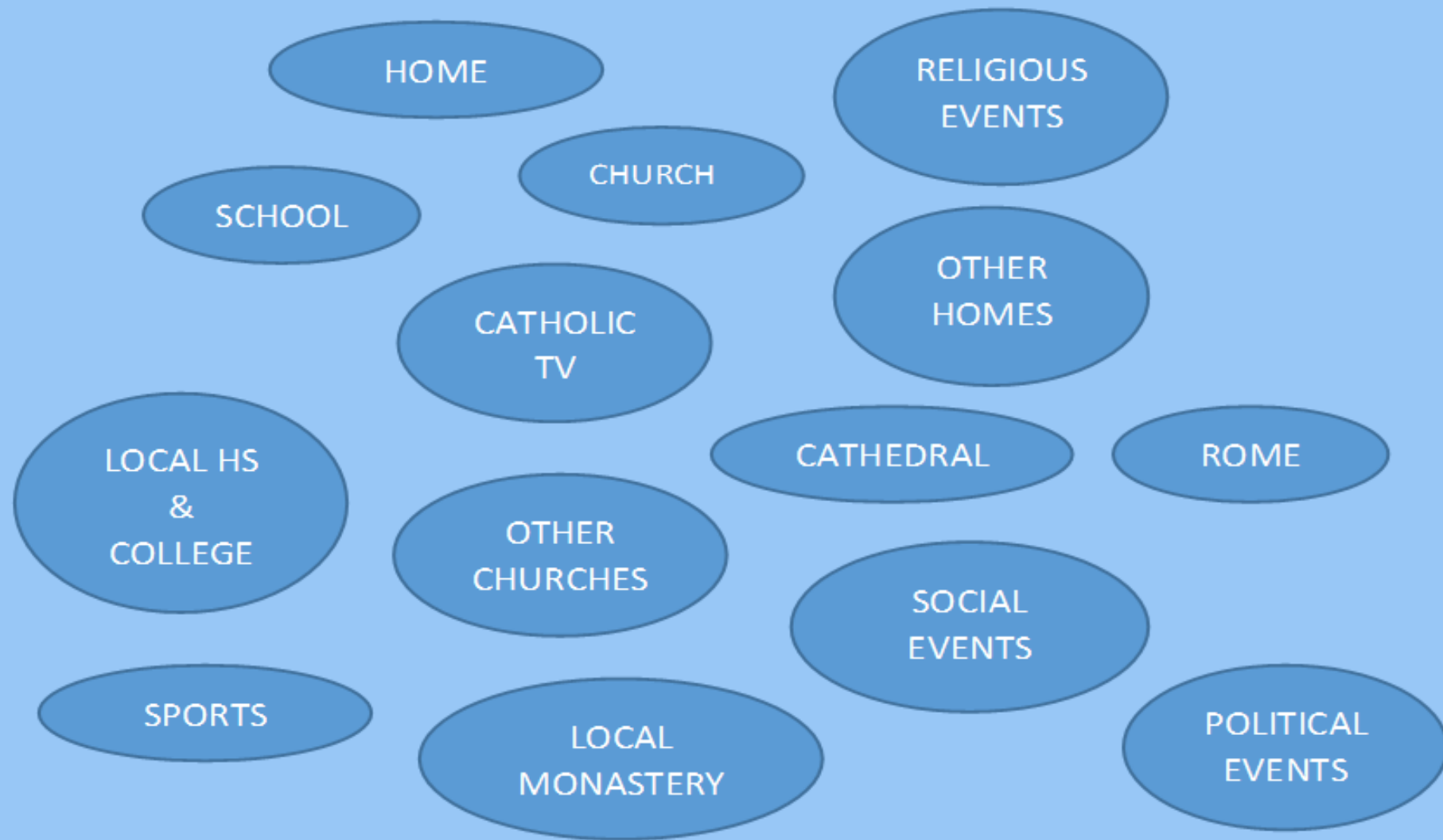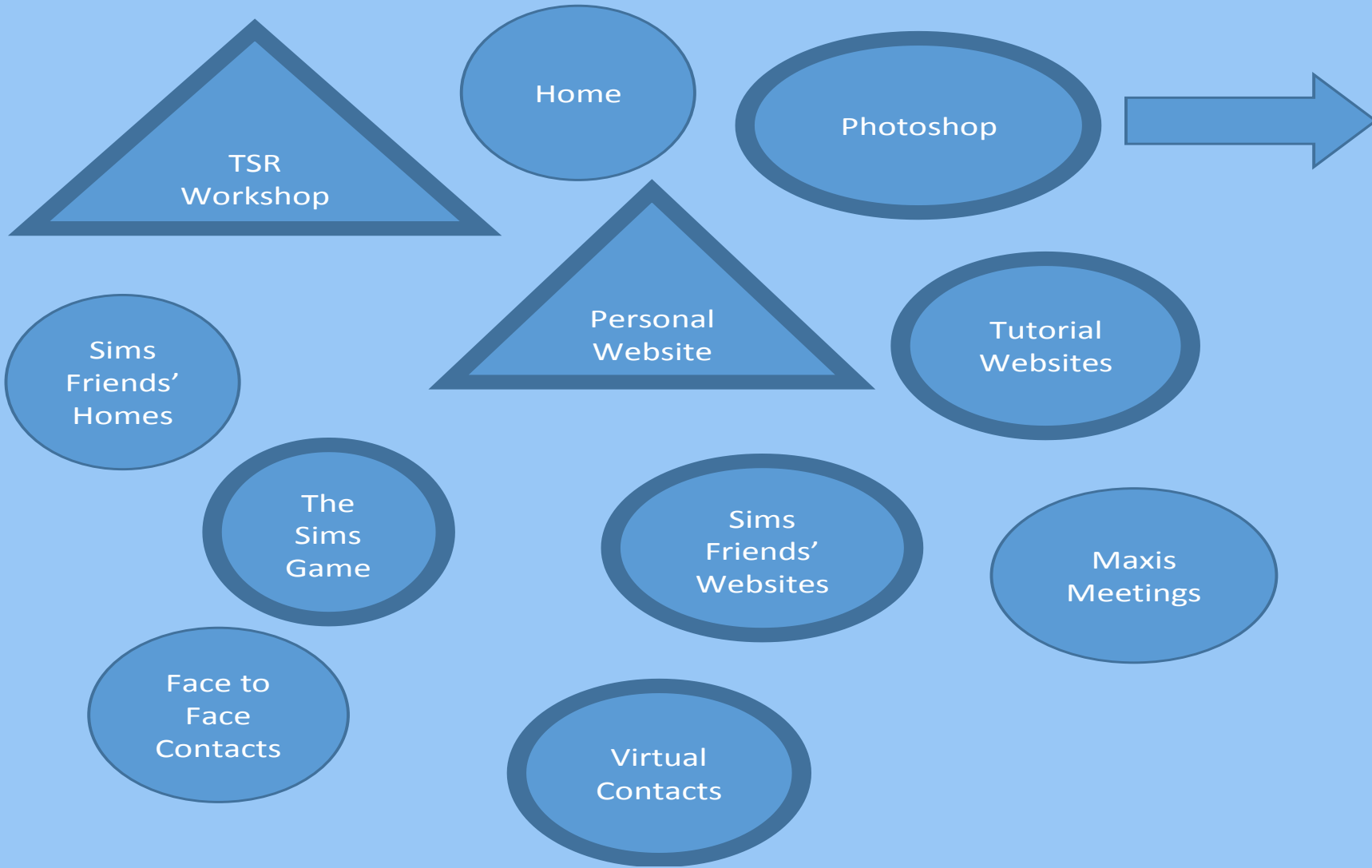
Science

The destruction of a land surface by the combined effects of abrasion and removal of weathered material by transporting agents is called erosion. … The production of rock waste by mechanical processes and chemical changes is called weathering.
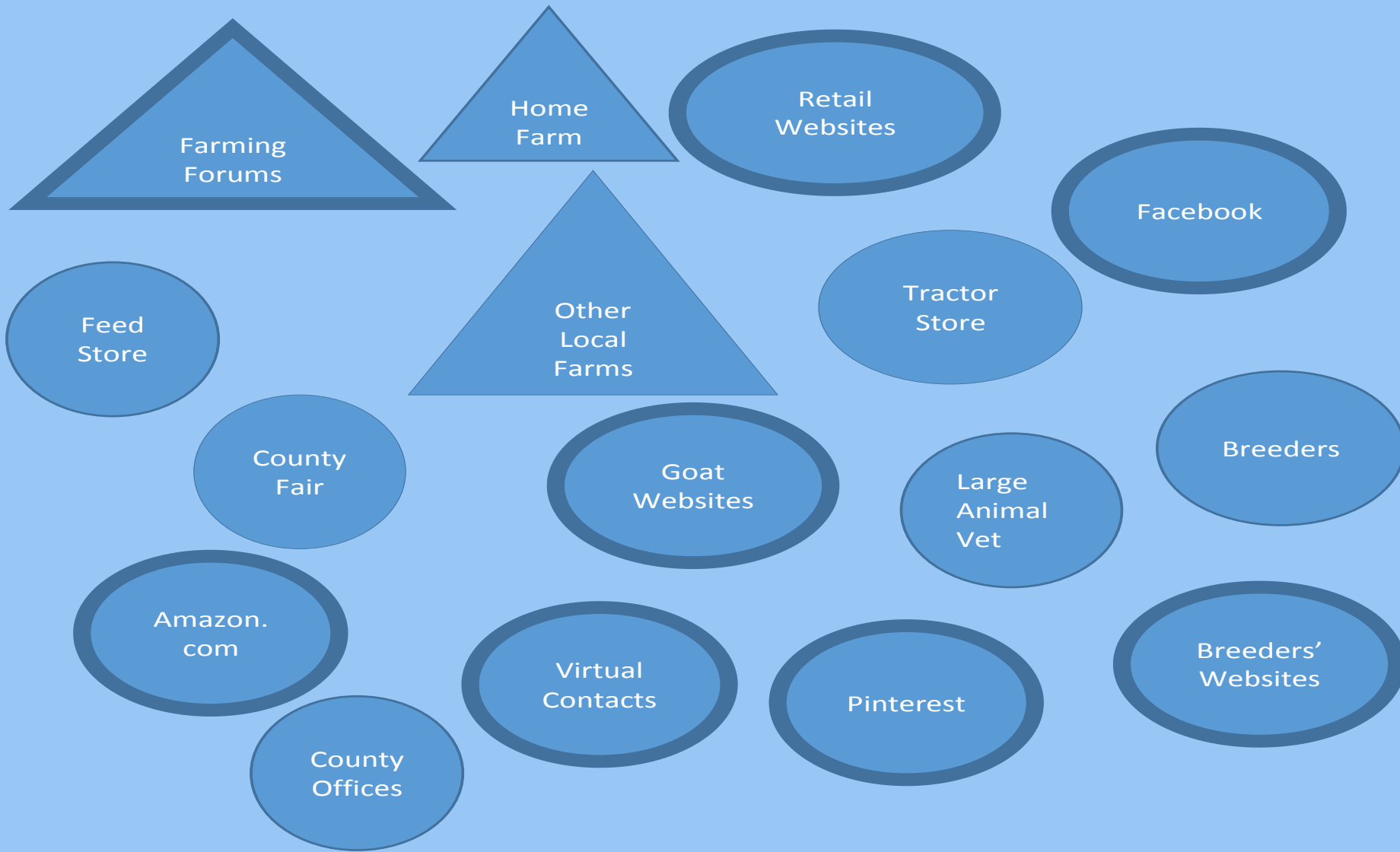
Vygotsky

Specialist Language (System) =========∨========================➔ ||

∧ || ||
|| || ||
∨ || ||

Vernacular Language (System) ⬅====== || [Meta-Knowledge] ⬅====== ||

∧ || ||
|| || ||
∨ || ∨

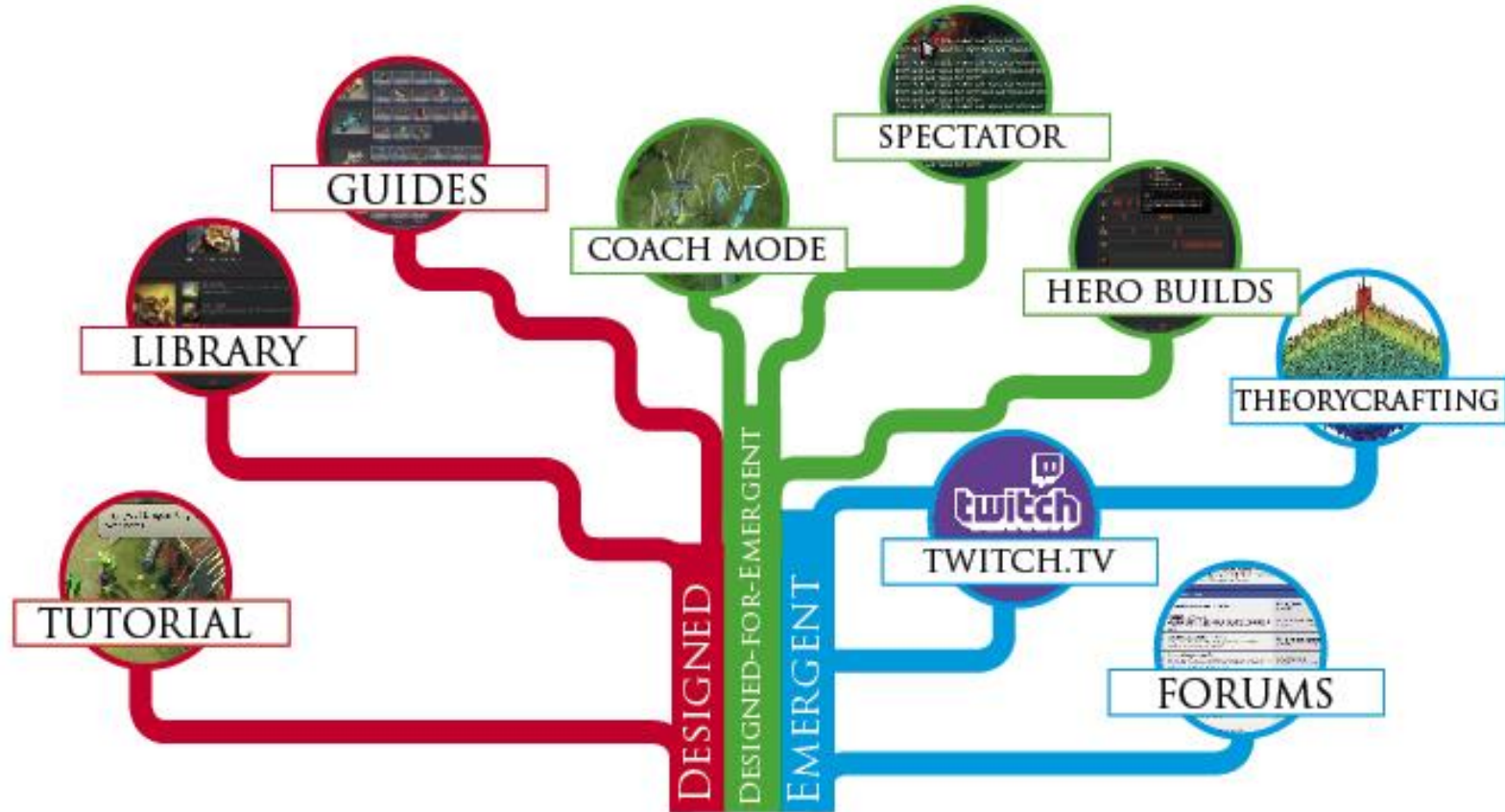Experience (Situation) ⬅=========== || ⬅=== Reorganization of Experience (Situation)

Affinity Spaces

DISTRIBUTED TEACHING SYSTEMS

HOLMES, J. (2015). VIDEOGAMES, INFORMAL TEACHING, AND THE RHETORIC OF DESIGN. (DISSERTATION)

Frameworks

Video games are good for learning

Only good games are good for learning

Good game = Good fit between game mechanics + interesting & challenging problems

Good game design is a form of teaching

Good = incorporate good learning principles

Learning principles = from recent research in the learning sciences

Good = when integrated in a learning system, not stand alone

Learning = situated/sociocultural approach

Learning = mentored problem solving

Learning = problem solving

Learning requires teaching

Teaching = well designed experiences

Teaching = people, tools, design

Abdolkarim Soroush

We can have two visions of reason: reason as destination and reason as path. The first sees reason as the source and repository of truths. The second sees it as a critical, dynamic, yet forbearing force that meticulously seeks the truth by negotiating tortuous paths of trial and error. …