Beneath the surface

Structure and behaviour of games

Kars Alfrink at Oslo UXnet meetup, 16 Jan 2008

http://flickr.com/photos/csant/239046465/

N70
NOKIA
play
Yoo

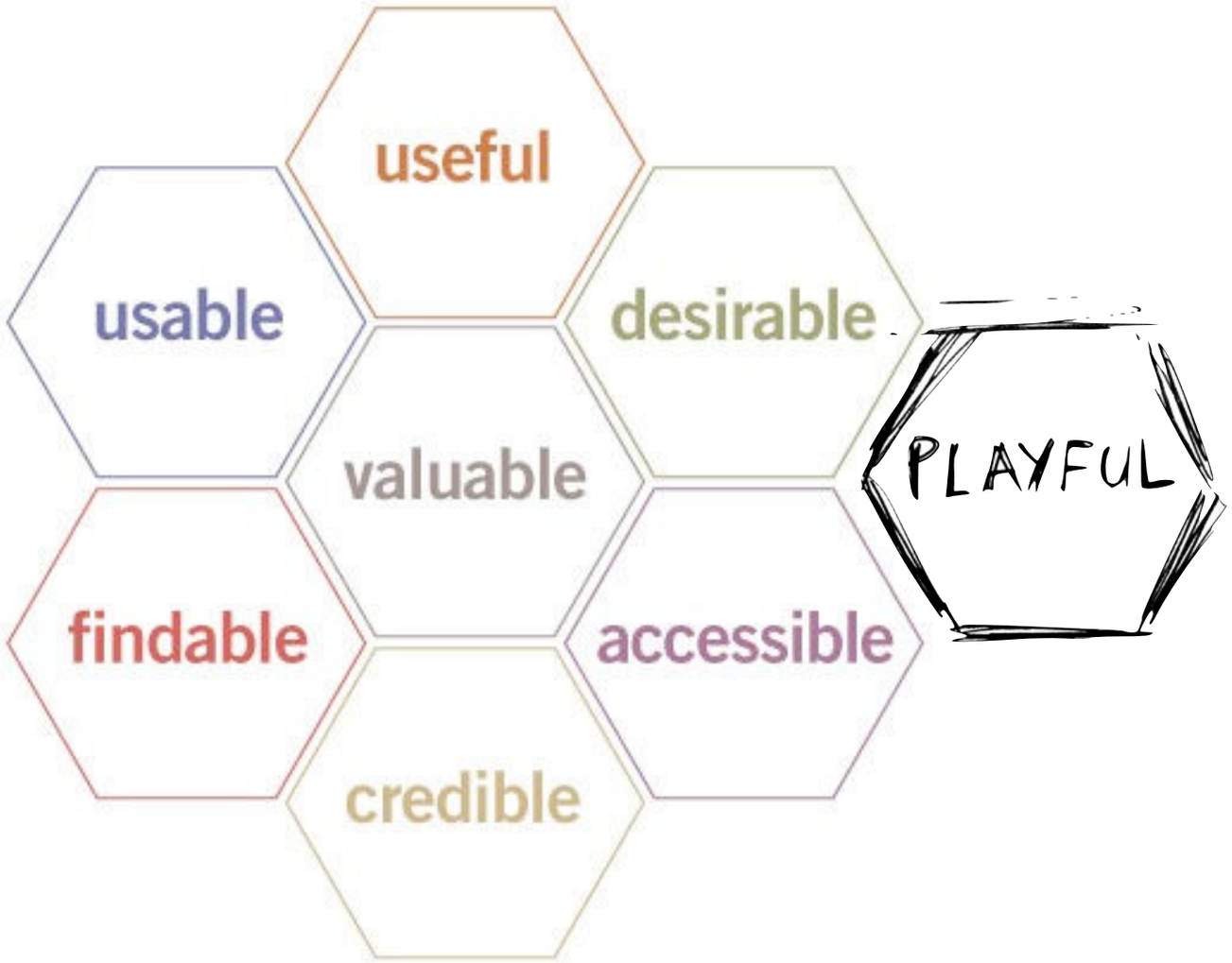
3 messages

1. There is place for play in the user experience
2. Game players are motivated by needs
3. Game play is about activities;
   they can be modelled and tested

Level 1:

Play

http://semanticstudios.com/publications/semantics/000029.php



http://semanticstudios.com/publications/semantics/000029.php

GAME PLAY

LUDIC ACTIVITIES

BEING PLAYFUL

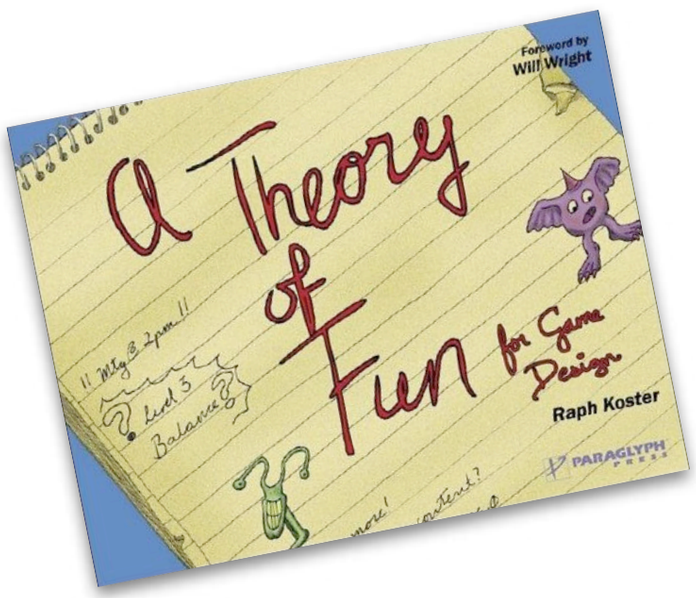
“Play is free movement within a more rigid structure.”

There is place for play in the user experience

Level 2:

Fun?

“With games, learning is the drug.”



PENS:

The Player Experience of Need Satisfaction

Competence

http://flickr.com/photos/trishabrunner/446869102/

Autonomy

http://flickr.com/photos/dpicker/331101373/

Relatedness

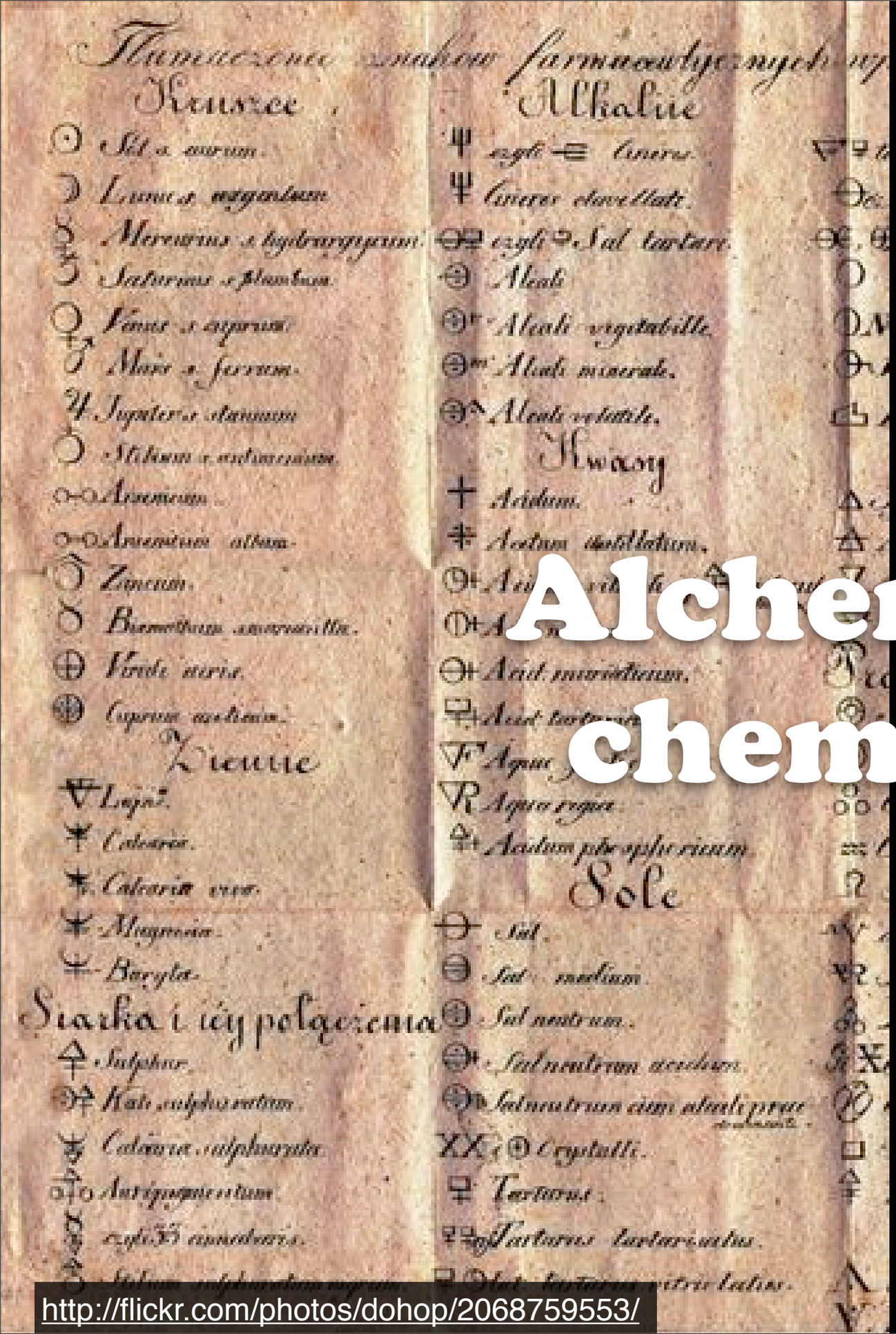
http://flickr.com/photos/christajoy42/385233507/

Game players are motivated by needs

Level 3:

Mechanics

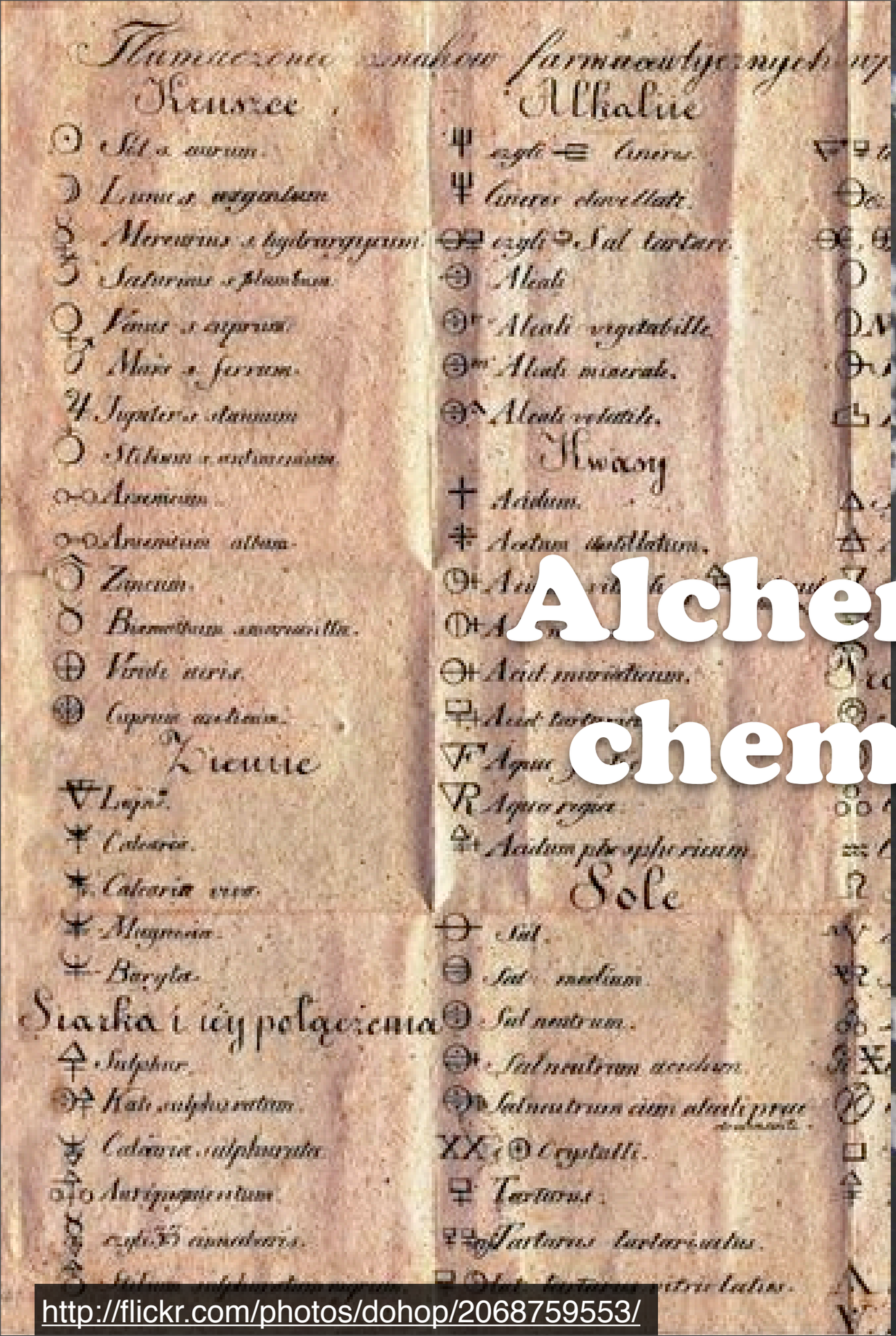
Alchemy vs. chemistry



Alchemy vs. chemistry

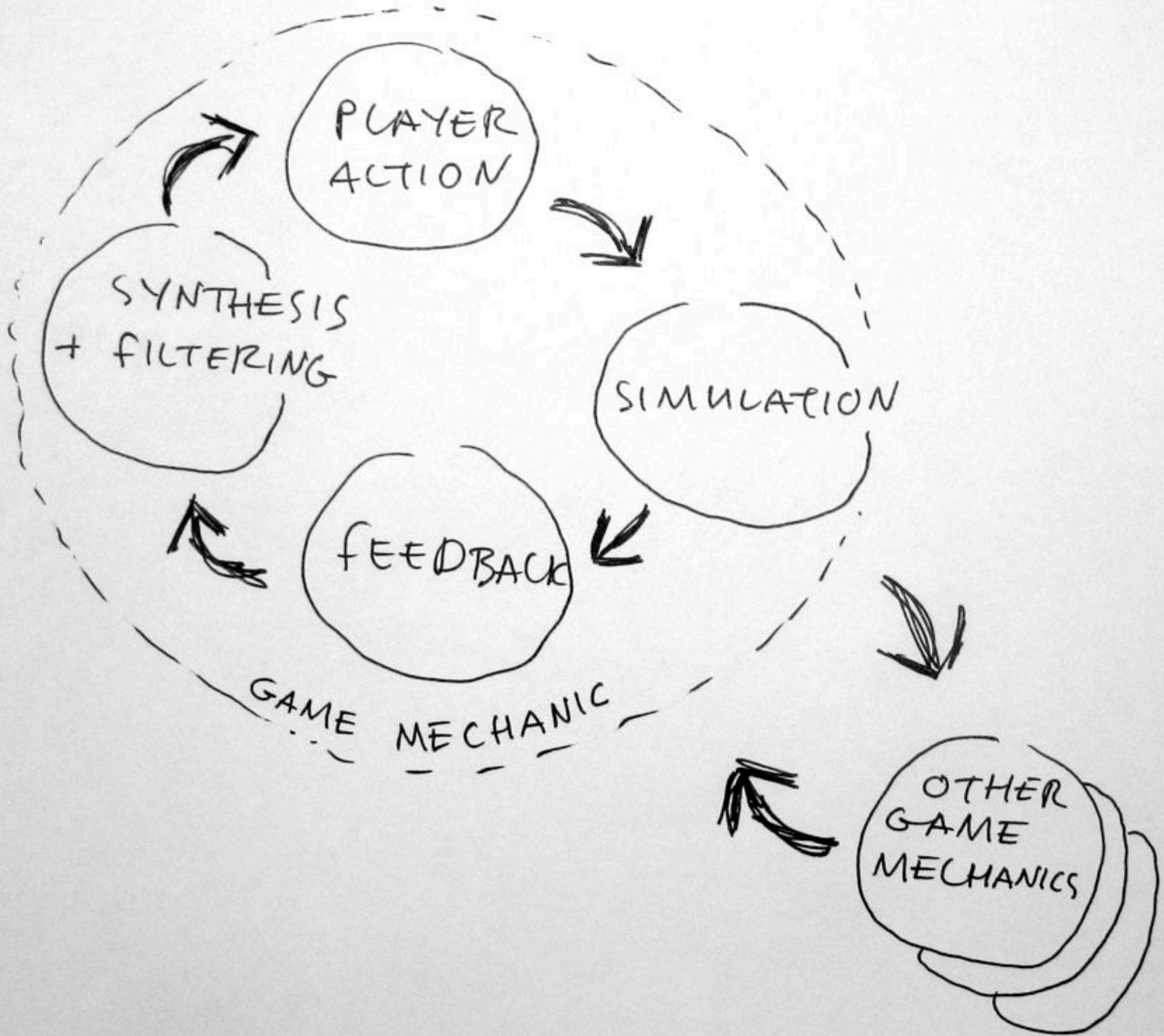
http://flickr.com/photos/dohop/2068759553/

Alchemy vs. chemistry



http://flickr.com/photos/dohop/2068759553/

http://flickr.com/photos/dirtymouse/152107928/


PLAYER ACTION
SIMULATION
FEEDBACK
SYNTHESIS + FILTERING
GAME MECHANIC
OTHER GAME MECHANICS

http://flickr.com/photos/odrakir/2043124375/

Status & testing

Tetris: Skill Chain Diagram

"I can click on buttons with the mouse"

Help
- Press the help button
- Display screen with exit
- Help description

"I should use the arrow keys"

"Watch the screen will provide clues"

Blocks Falling
- Watch the screen
- Blocks of different shapes appear at the top of the screen and fall towards the bottom. They pile up when they collide.
- Player observes the visuals

"Blocks pile up!"

"Losing is bad"

Failing a level
- Watching blocks stack up
- Blocks stack to the top of the screen
- When the screen is full, the player gets a big screen that says "Game Over"

"I shouldn't let blocks reach the top"

Rotating
- Press the up and down arrow keys
- The active piece rotates clockwise or counterclockwise.
- Player observes the visuals

"I can move the blocks around."

Move left and right
- Press the left and right arrow keys
- The active piece moves left or right one space, bounded by the edges of the screen.
- Player observes the visuals

"I can move the blocks around."

Stack efficiently
- Stack blocks with minimum spaces
- Detect the line and remove it
- Show the player less space is being consumed.

"Stacking efficiently slows my ascent"

"Points are good"

Removing a line - Score
- Stack blocks efficientto form a line
- Detect the line and remove it
- Give the player points and show the block being removed.

"When I remove a line, I get points"

Removing multi line - Score
- Stack blocks to form several lines
- Detect the lines and remove them
- Give the player mega points and show the blocks being removed.

"When I remove a line, I get more points!"

Removing a line - Space
- Stack blocks to form a line
- Detect the line and remove it
- Show the block being removed.

"When I remove a line, I can free up space so I don't reach the top"

Removing multi line - Space
- Stack blocks to form several lines
- Detect the lines and remove them
- Show the blocks being removed.

"Remove multiple lines frees up more space so I don't reach the top"

Faster slot recognition
- Fit tetromino into foundation under great time pressure
- Standard collision detection
- Show the blocks fitting nicely

"I can place blocks quickly and with a low rate of error"

T-spin skills*
- Rotate a T tetr… blocked space…
- Standard coll…
- Show the blo…

"I can …

New Level
- Clear X lines
- When X is cleared, wipe the board and increase the speed that the blocks falll
- Display end of level graphic and show blocks falling faster

"Mastery leading to a chance to get a better score"

High score
- Earn points. Fail a level.
- Compare the score against existing scores
- Display the player's name relative to high scores

Feedback

Newly learned skill

Pre-existing skill

*For the sake of clarity, I've le… some of the more advanced sk… as Zangi-move, Twist, Slide, … and Soft drop.

http://www.gamasutra.com/view/feature/1524/the_chemistry_of_game_design.php

Game play is about activities; they can be modelled and tested

Thanks! Questions?

More: leapfrog.nl/blog or kars@leapfrog.nl

References

- User Experience Design by Morville, P.
- Rules of Play by Salen, K. & Zimmerman, E.
- A Theory of Fun by Koster, R.
- Rethinking Carrots by Rigby, S. & Ryan, R.
- The Chemistry of Game Design by Cook, D.