

MAGIC LESSONS:

Designing & Balancing Game Objects



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Overview

- ▶ Setting the Stage
- ▶ Wizards' Game Development Process
- ▶ Costing Tips & Tricks



Relevant Games

- ▶ Games with:
 - 2+ players
 - Many objects
 - Player choice among objects
(e.g. *Magic*, *Starcraft*, *WoW*)
- ▶ Why look at paper games
 - Similar gameplay
 - Large game design community



Why We Cost

- ▶ Designers want a varied game, players want to win
- ▶ Good costing preserves game variety



What is a Cost?

- ▶ It's what players must pay to get an object
- ▶ Some costs are hidden



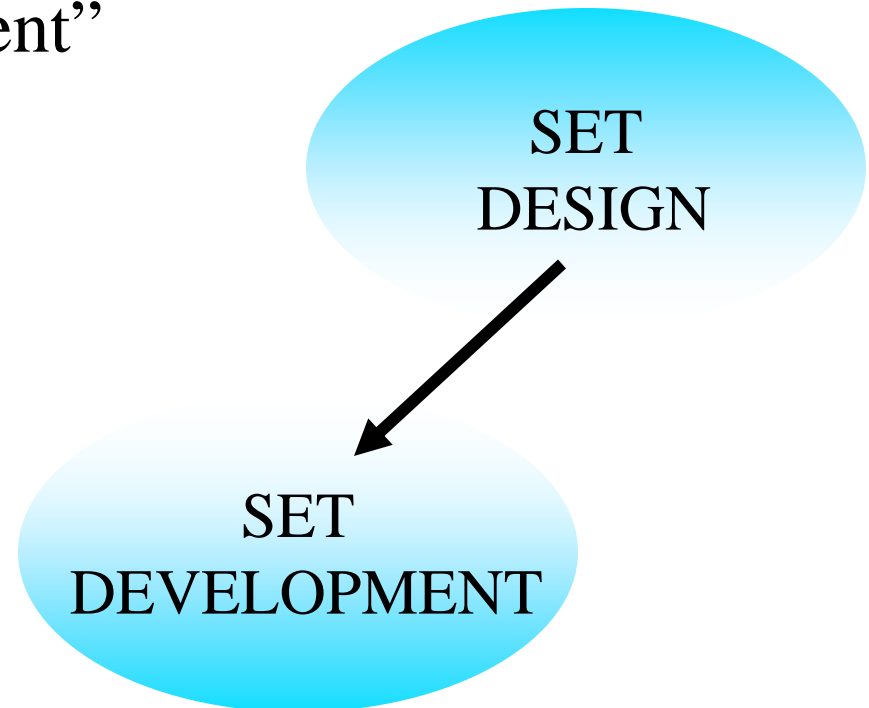
Electronic vs. Paper

- ▶ Ease of prototyping
- ▶ Code vs. English
- ▶ Patching
- ▶ % effort on game design

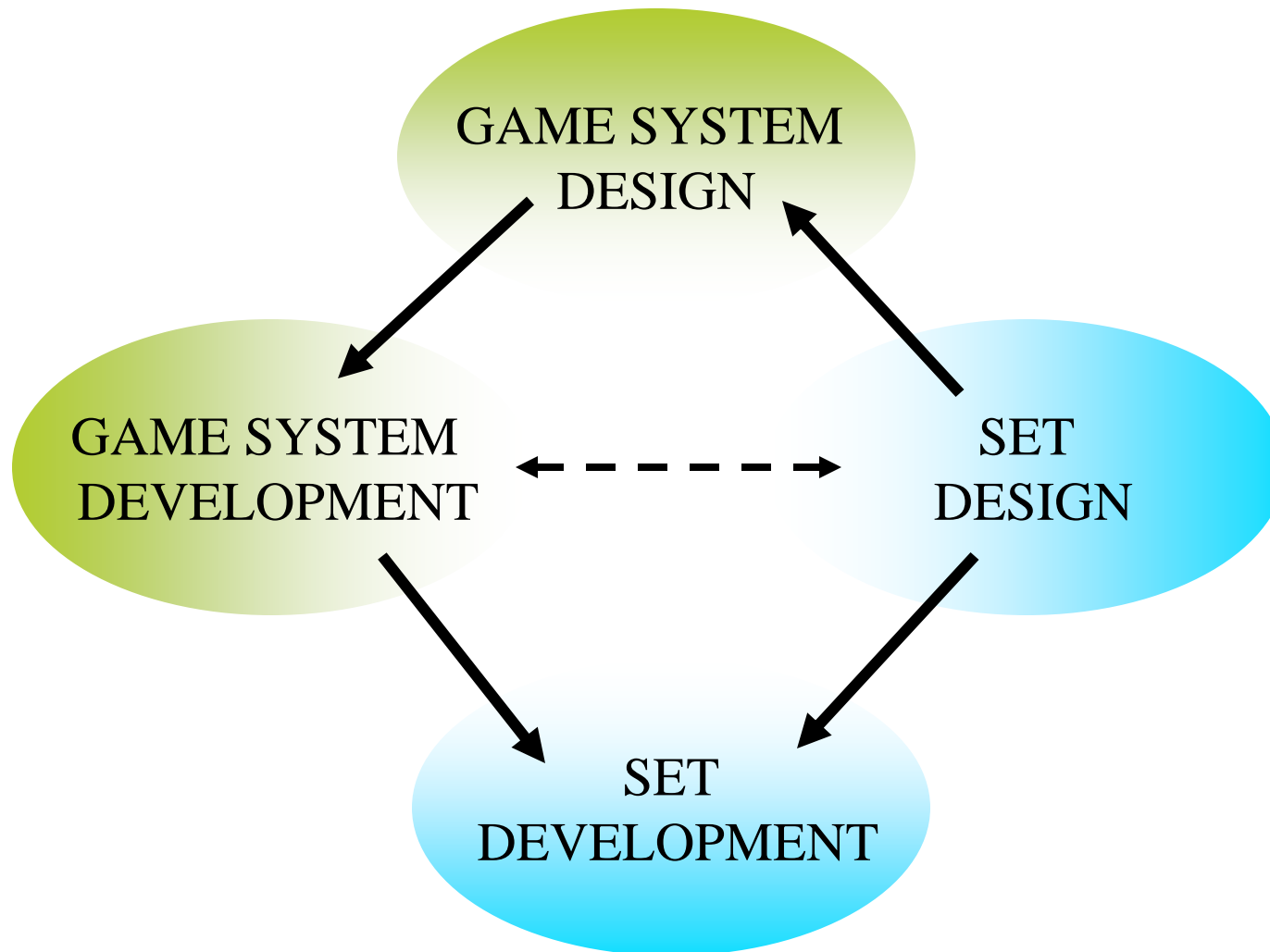


Game Design: 2 Stages

- ▶ Terminology:
“Design” and “Development”
in the paper world
- ▶ Metaphor:
Architects and Engineers



New Game Design: 4 Stages



Costing Tips



Some things we've picked up along the way...

Adjust costs, not effects



*If an object is unbalanced, change its cost
before changing its effects.*

Use a single costing dial



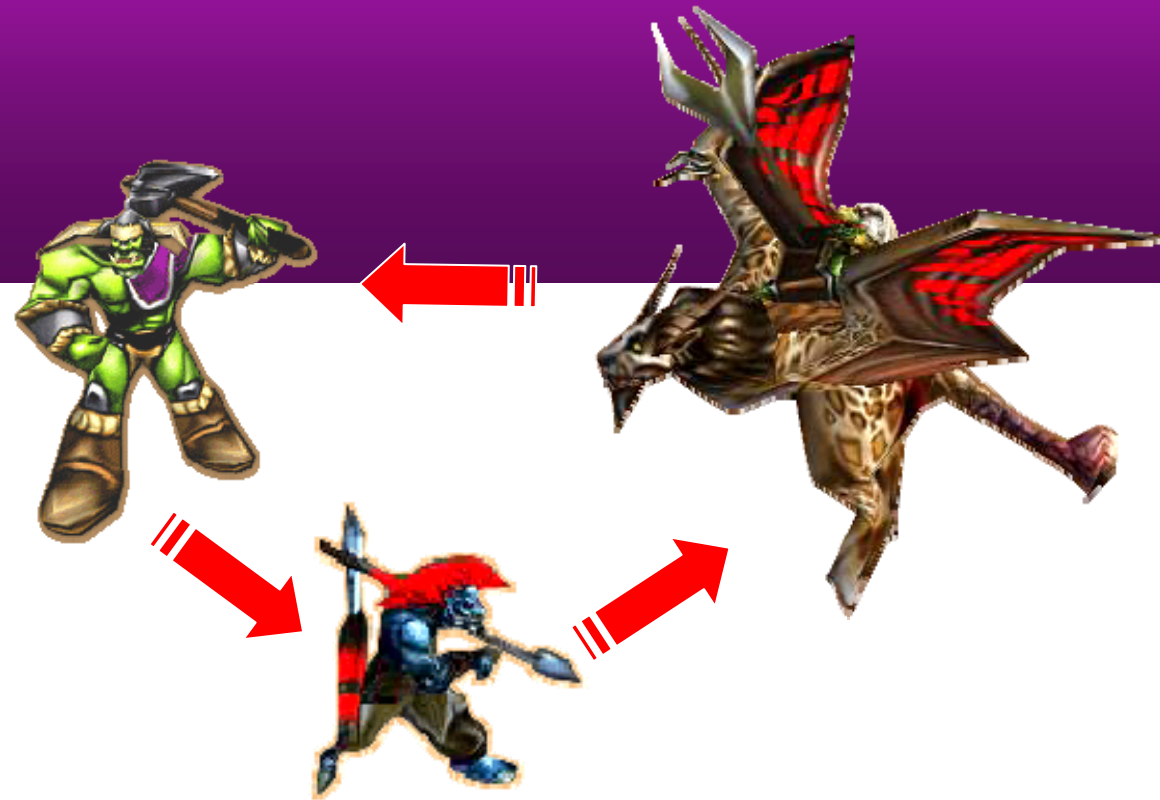
*Find a single number to represent your costs,
not several numbers.*

Color wheels



*Color wheels are everywhere you look.
They can help you create gameplay variety.*

Rock-paper-scissors

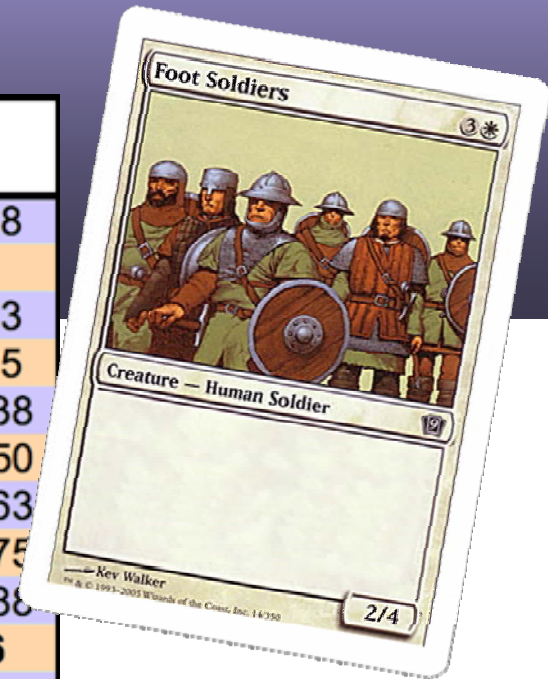


Building on (possibly hidden) rock-paper-scissors subsystems helps make your game balance more stable.

Vanilla curves

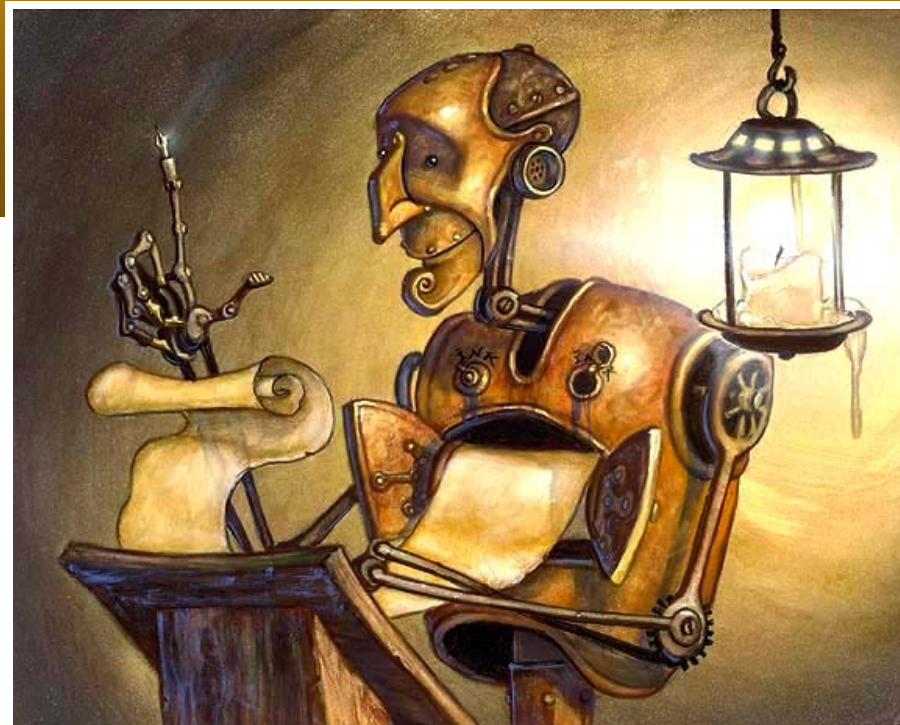


Raw Curves				
	C	A	D	L
2	1.50	2.50	5.88	
3	2	3	7	
4	2.50	3.50	8.13	
5	3.00	4.00	9.25	
6	3.50	4.50	10.38	
7	4.00	5.00	11.50	
8	4.50	5.50	12.63	
9	5.00	6.00	13.75	
10	5.50	6.50	14.88	
11	6	7	16	
12	7.00	8.00	17.00	
13	8	10	19	
Δ	0.50	0.50	1.13	



*Costing curves of vanilla objects are vital.
Get them right in system development.*

Watchlists



Create watchlists to guide your testing.

Multiple environments



*What's balanced in one environment
might not be in another.*

The Black Lotus effect



*Sometimes an overpowered object
is a good thing. Or is it?*

Non-scalable effects



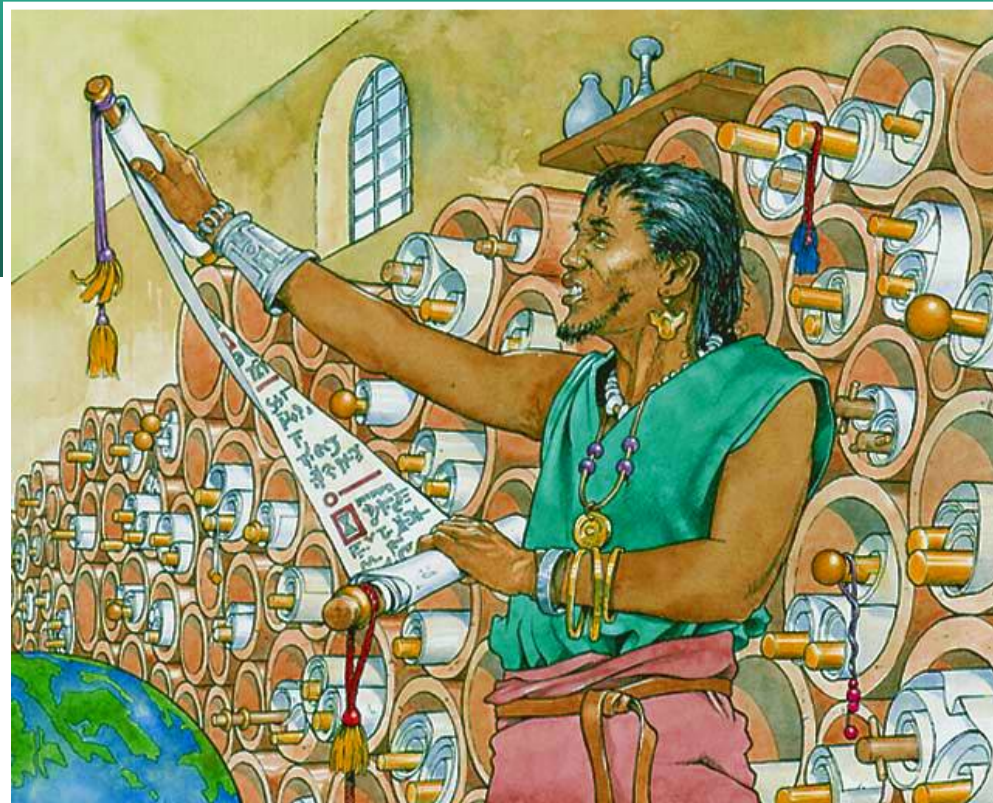
*Some effects don't scale well.
You can cost them, but you might regret it later.*

Late or rare effects



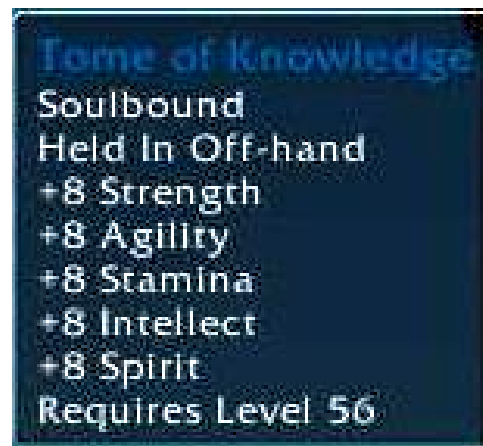
*Objects that show up late or rarely are hard to cost.
It's easy to overcharge for them.*

Simple databases



Simple databases, with fields for discussion, can help you manage your object balance.

Don't charge too much for flexibility



*Objects that do one thing well need to cost more
than objects that do several things adequately.*

Aim on the opposite side



If you keep missing with a cost, overcompensate.

Playtesting vs. Theorizing



*A little theorizing can sometimes save you
a lot of playtesting.*

Questions?



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