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Design, Constraints and Integrity

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What is design?
What is design?

CONCLUSION:

Design is the management of constraints.
Definitions ought to be useful.

I use this definition all the time...

- It allows to be describe what I do as a designer.
- It allows me to teach the principles of design.
- It allows me to explain the process to a customer.
But even if you do not agree… yet…

*Please humour me for the time being* <3
If the process of design is simply the management of constraints, what is a constraint exactly, and what kinds of constraint are there?

**A suggested definition will come later, but first... let's look at the types.**
What is the difference between negotiable and non-negotiable constraints?
In the beginning....

IT'S ALL NEGOTIABLE!

But this means that you have *infinite possibilities*, but *zero identity*.

This is typically the case before a project starts.
So first of all... the designer must start identifying and selecting non-negotiable constraints...
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NEGOTIABLE!

NON-NEGOTIABLE!

TIME

BUDGET

SPECIFICATION
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We start to reduce possibilities and increase identity.
Now, a long time ago I made a football game for the ATARI ST. It was a big success, and I wondered what I had done to cause that success. I shall use this as a little test case.... if you don't mind going back in time. These principles are universal.
At this point, the designer (me) had identified the key requirements (constraints) as specified by the customer.

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But clearly this is not enough. Next I must choose my own non-negotiable constraints...
But clearly this is not enough. Next I must choose my own non-negotiable constraints...

... increasing the identity of the design while reducing the possibilities.

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KEY NON-NEGOTIABLE CONSTRAINTS FOR KICKOFF CHOSEN BY THE DESIGNER

- 50 FPS
- Correct scale football pitch
- sprites not too small
- Air Friction
- No “glue foot”
- No cheating the shots
It is the constraints that give form to a design.

This is universally true
The quality of a design thus depends on how well chosen the constraints are.
How do we know when something is good?
“You know a good design when you want to lick it”
- Steve Jobs
“You know a good person when you want to like them”
- Dino Dini

;)
Human beings are very good at detecting whether something has integrity.
Because we like things that have a strong identity and that requires a strong integrity.

Without integrity, things lose their identity and become less desirable.
All successful designs demonstrate a strong identity.

Integrity does not guarantee success, but lack of it ensures failure.
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Definitions: Work in progress

**Concept:**
Something which is to be made or achieved

**Design:**
A collection of decisions that create a set of constraints which give a concept its identity.

**Concept Identity:**
The true nature of a concept which may or may not match the intentions of its designer
Constraint:
A rule that reduces the possible outcomes of the concept and contributes to its identity

Non-negotiable constraint:
A constraint which, if broken, would cause a significant change to the identity of the design.

Negotiable constraint:
A constraint which maybe applied or not depending on circumstances, but which is not crucial to the identity of the concept.
Definitions: Work in progress

**Integrity:**
How well something maintains its identity
(maintains its form)
**Integrity:**
How well something maintains its identity (maintains its form)

... and we have seen how successful designs always have integrity ...

... because lack of integrity results in loss of identity. And a strong identity is essential...
A recipe for not guaranteeing failure

1) Choose your non negotiable constraints well
2) Stick to them
3) If you find you need to change non negotiable constraints, do so with full consideration of how that will effect the identity of your design.
A recipe for not guaranteeing failure

Constraints are your ally.

They give form to what you do.

Choose them wisely, and stick to them.

This applies as much to your own life as it does to video games.

What defines who you are?
What defines who you are as person are the constraints you live by...

which is why integrity is so important because without it...

...you are nothing

And without integrity your game design will be nothing too....
“The only thing an anarchist can be is an anarchist”

Choose the constraints you design by wisely

Stick to these constraints and change them not for the sake of convenience but with careful though as to how it will effect the identity of the thing you are trying to make...

Whether that is a video game, a company, a code base, a chair, or your life.

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Thank you.