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The Avenues of Change Why people Change and How to Manage the Process

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Topics

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- **Ethics**
- **The Spot**
- **Criteria**
- **Avenues**
- **Tools and avenues**
- **Call to action**



Levels of Ethics

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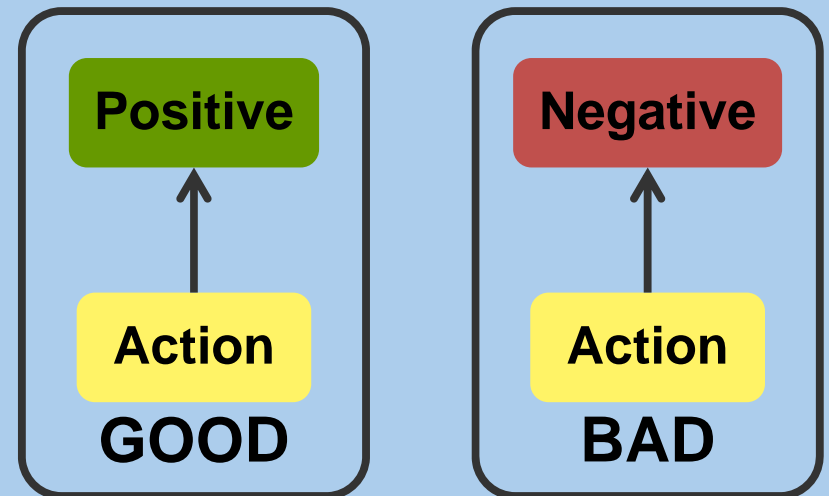
1. Differentiate

- First use of cause and effect in ethics
- Separate GOOD From BAD:

2. Act on

- Do GOOD things
- Don't do BAD things

3. Anything else?



Interlude: Simon says...

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- **Alexander Herbert Simon**
 - 1916 – 2001
 - Turing (75), Nobel (78) and von Neumann (88) awards!
- **Bounded Rationality: we are limited, namely in:**
 - Storage capacity
 - Processing capacity
 - Input capacity
- **Therefore:**
People are SATISFICERS (opposed to optimizers, killing the *homo economicus*)
- **And what about ethics?**



“They’ re all good plates...”

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Three Levels of Ethics

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1. Differentiate

- Separate GOOD From BAD
- First use of cause and effect in ethics

2. Act on

- Do GOOD things
- Don't do BAD things

3. Act on Selected things

- Do chosen GOOD things
- And NOTHING else! (even if it's good)
- Which things?

Remember: TOC is...

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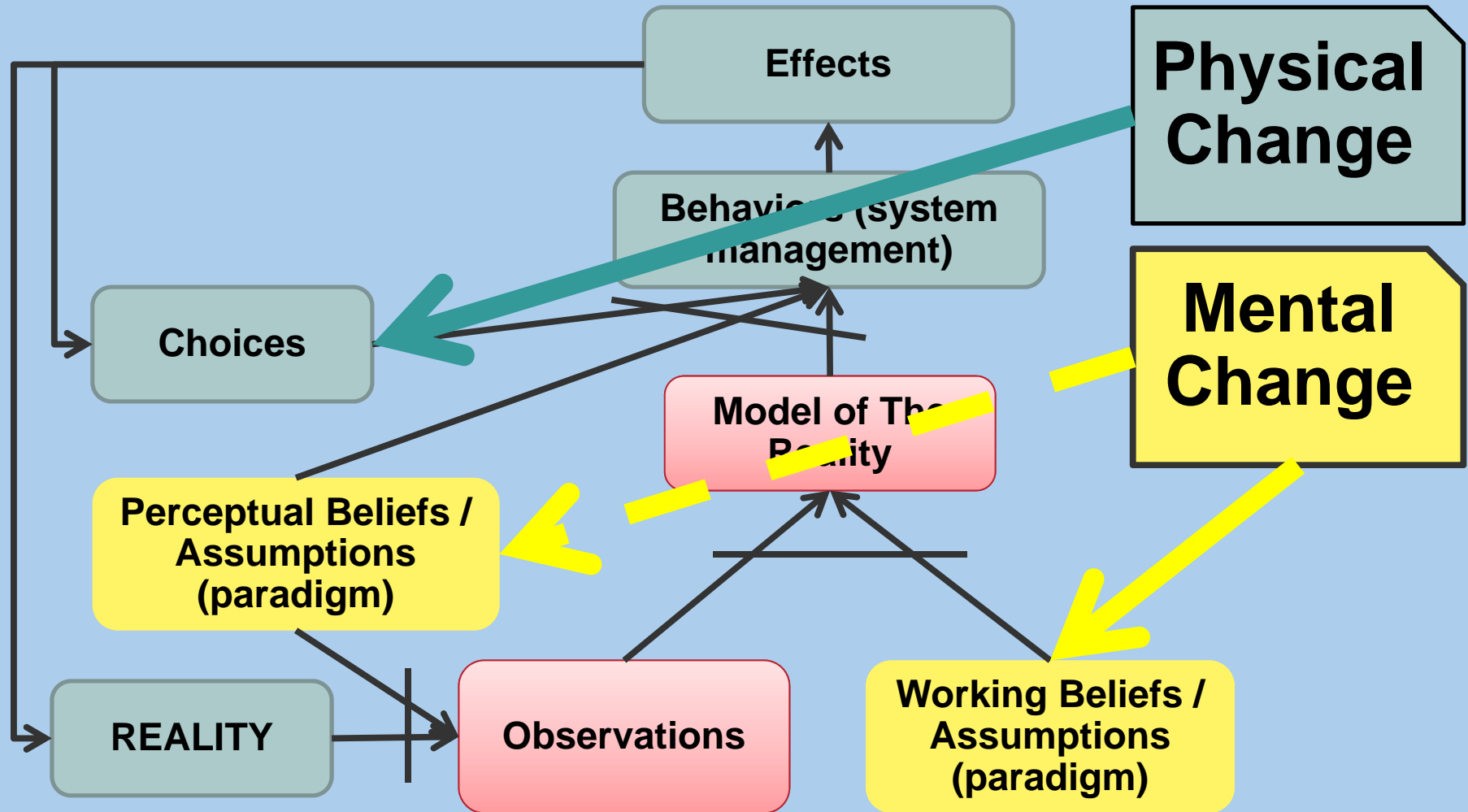
FOCUS

Doing what **should** be done

Not doing what **should not** be done
(even many positive/good things)

Choosing the Spot (What to Change?)

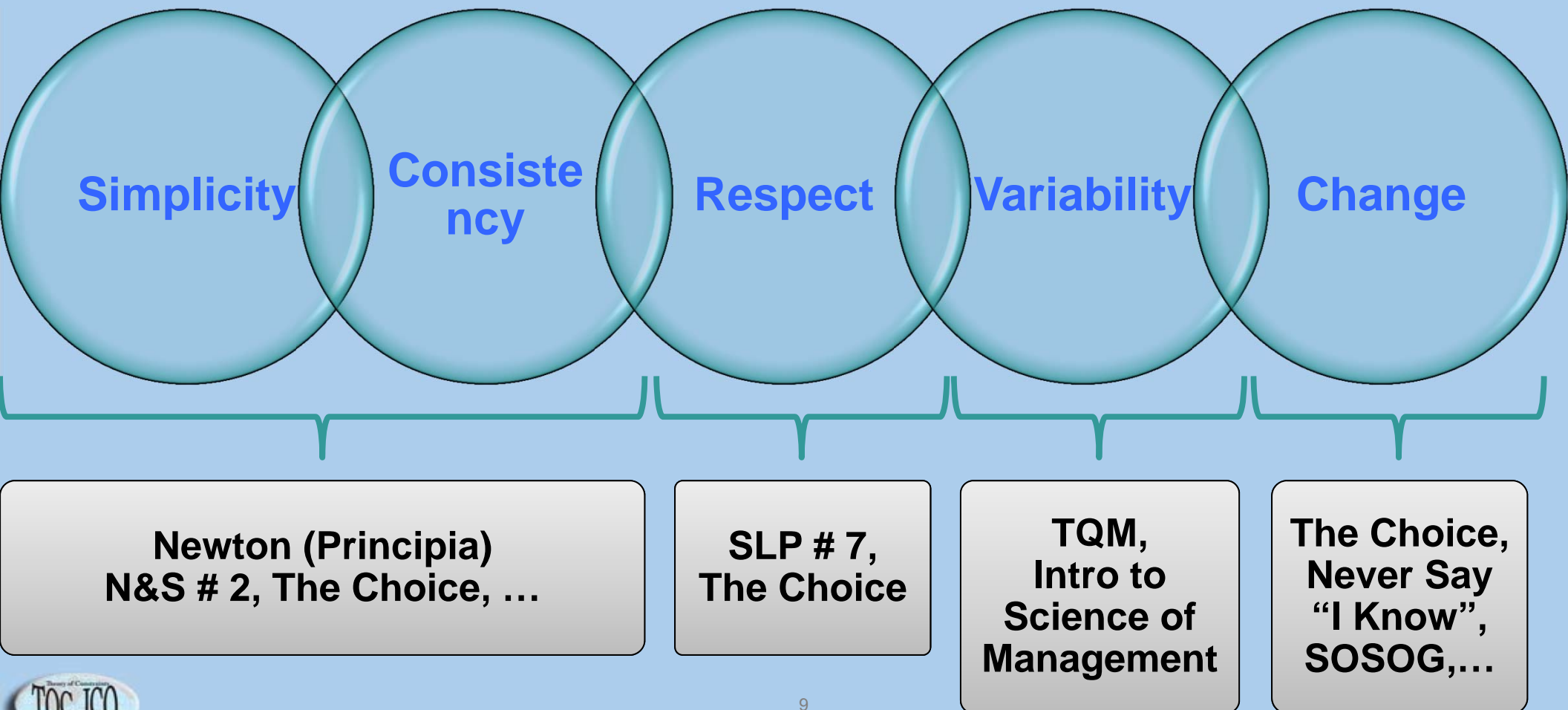
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What to Change to?

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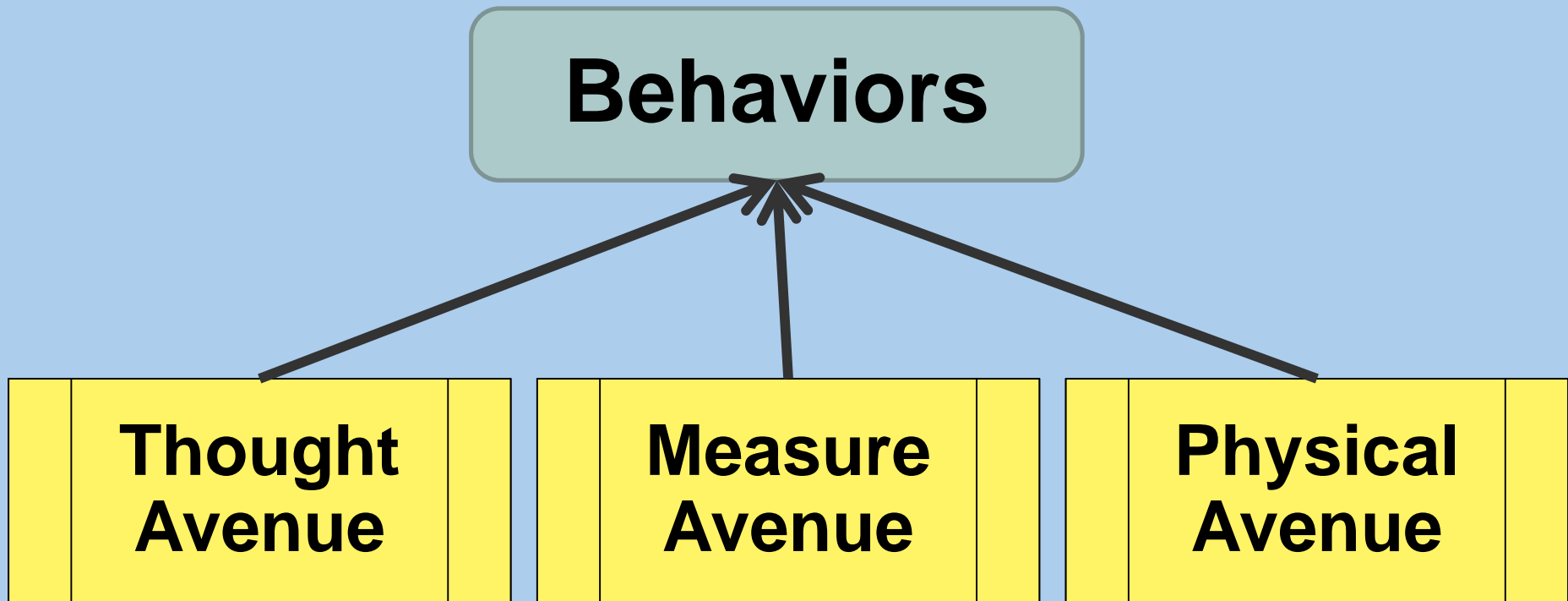
- TOC offers a Criteria for solution: the 5 principles!



How to Cause the Change

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- Now the fun reaches another level...
- Expected effect of the change:



Thought Avenue (1/2)

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- **Challenging (invalidating) assumptions and replacing them with new (and better) ones**
- **May be logical, but not necessarily rational**
- **Drive new behaviors when faced with the same reality**
- **Usually a person by person process (at least in TOC / TP)**
- **Highly effective (when assumptions are close to the root cause(s))**

Thought Avenue (2/2)

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Attention Points

- **Significant effort in analysis and even more in communication**
- **Clashes with engrained habits (or vices) sometimes**
 - **Reflex behaviors do not subordinate easily to new ideas**
 - **Depend on frequent and quick feedback from reality to form new habits**
- **Inconsistency: why movements like Nazism, Religious Fanatics are so scalable and effective being examples of the Thought Avenue?**

Measure Avenue

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- **“Tell me how you measure me...”**
- **Measures drive behaviors even when not associated with immediate consequences (rewards/penalties)**
- **Very effective and scalable**
- **Suitable for quantifiable phenomena**
- **Hybrid between physical and thought avenues**
- **Vulnerable to:**
 - **Inconsistent (clashing) measures**
 - **Attachment with penalties/rewards (see Freakonomics Chapter 1)**
 - **“Out of reach” consequences (i.e. ‘I cannot influence this measure’)**

Physical Avenue

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- **Change of physical environment changing available choices**
- **Forces people to evaluate and enact different behaviors**
- **Clashes with habits/vices but is usually stronger**
- **Cause and effect is the least clear (must be “discovered”)**
- **Highly scalable**
- **Stable (as much as the physical changes remain)**
- **When the feedback is present and active forms new assumptions and models of reality.**

TOC Tools and the Avenues

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- Quick Comparison**

Tool \ Avenue	Thought	Measures	Physical
DBR	Eventually with ★ POOGI *	BM ★	Super (rope) ★ ★ ★
CCPM	Eventually with ★ POOGI *	BM ★	Good(freeze) ★ ★
Distribution	??	BM / DBM ★	Target ★ ★ Replenishment
TP	★ ★ ★ Super	-	-
TOC Finance	★ ★ ★ Maybe with 5 steps (little) *	Strong ★ ★ ★	-

* Some dynamics/games may achieve this on some injections, but are they part of the tool?

Call for action

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- **On our projects**
- **Reinforce the change through the use of the 3 avenues on each and every major step!**

Example: DBR + Measures

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- What would be a measure set that is really relevant and reinforces/deepens the paradigm change of DBR?

The measures:

- **T/Lead Time**: The more the better, the primary measure and driver of rewards. Notice that while T is usually out of the control (and may be argued influence) of production, Lead Time is strongly influenced/controlled by production
- **Locally Available Capacity***: More is better, measured in how much time available for receiving more orders (proxy for free time), subordinated to the primary measure
- And maybe a POOGI speed measure...

* Can effectively implement the roadrunner ethics



Thank You

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- **Comments, questions?**



About Humberto

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- **Husband and father changing the world one person at a time**
- **Scientist seeking to apply science to people's endeavors**
- **Hunter of hidden assumptions**
- **Teacher, student and colleague of students**
- **Strong believer of values over tools**
- **Practicing atheist and skeptic**



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