Theoretical.



On methods for computational creativity A Communication of the Intractable Studies Institute

Patrick M. Rael, Director, IntractableStudiesInstitute.org



VCA - Variables, Constants, and Assumptions.

#!/bin/think

for each Variable, Constant, Assumption in a model ; do

- 1. Identify the V, C, A or give it a name.
- 2. Change the V, C, A across it's domain and exceed limits.
- 3. Add or subtract V, C, A from the model.
- 4. Apply other useful techniques below, re-model, repeat.

done

A generalized model of models.

- Models contain Things, Variables, Constants, Assumptions, Definitions, Hypothesii, conJectures, choicE, dOmain, and Utopia. Operators are Generalize, Instantiate, and Scale.
- 2. Definition: thing any thing, event, process, noun, verb, \ldots .
- 3. Generalize a thing one or more levels. (**G**). Generalizing can turn constants into variables.
- 4. Instantiate a thing one or more levels. (I) Instantiating can turn variables into constants.
- 5. Re-apply VCA at G, GI, GG, GGI, GGII, etc.
- 6. Domain-Analysis Analyze the legal and illegal domains of VCA.
- 7. Utopian/Idealism Decouple what from how.
- 8. Scale Scale a known solution to fit the size of the problem (\mathbf{S}).
- State some truth, then change along boolean domain (true, false).
 10.Choosing techniques:
 - a) Does the choice have to be correct?
 - b) Does a wrong choice exist?
 - c) Is this a defining choice?
 - d) Is any choice okay?
 - e) Is there a set or range to choose from?

MR - Modeling Rules

Modeling Rule 1: Initial state is nothing. Modeling Rule 2: No undeclared thing. Modeling Rule 3: Assumptions allowed if declared. Modeling Rule 4: Minimize assumptions, but no limit. Modeling Rule 5: Definitions can be used if declared. (**D**) Definition 1- **A**xiom is an assumption. Modeling Rule 6: Hypothesis is allowed if declared. (**H**) Modeling Rule 7: Conjectures allowed if declared. (**J**) Modeling Rule 8: Opinions allowed but have no value.

Some models are meant to model reality, some aren't, and some are generalized to be repeatedly applied differently.

Model of models

