### Theory Building in Variable-Oriented Versus Case-Oriented Research

If the effects of two variables are additive, then the highest average level or probability of the outcome should occur when both causes are present, while the lowest should occur when both causes are absent.

#### A. Before X<sub>2</sub>

	X <sub>1</sub> absent	X <sub>1</sub> present
Outcome Present	9 (41%)	12 (63%)
Outcome Absent	13 (59%)	7 (37%)

N = 41

#### B. After X<sub>2</sub>

	Neither X <sub>1</sub> nor X <sub>2</sub> present	Only one of the two (X <sub>1</sub> or X <sub>2</sub> ) present	Both X <sub>1</sub> and X <sub>2</sub> present
Outcome Present	5 (33%)	8 (53%)	8 (73%)
Outcome Absent	10 (67%)	7 (47%)	3 (27%)

## Sufficiency-centered strategy #1: adding to the recipe

Panel A. Initial results

	Elites unified	Elites fractionalized
Unstable democracy	Cell 1:	Cell 2:
	16 (40%)	14 (70%)
Stable democracy	Cell 3:	Cell 4:
	24 (60%)	6 (30%)

N = 60

Panel B. Resolution: a more elaborate combinatorial argument

	Elites unified <i>or</i> two- party system	Elites fractionalized and multiparty system
Unstable democracy	Cell 1:	Cell 2:
	22 (42%)	8 (100%)
Stable democracy	Cell 3:	Cell 4:
	30 (58%)	0 (0%)

#### Sufficiency-centered strategy #2: narrowing the scope condition

Panel A. Initial definition of relevant cases (all democracies)

	Elites unified	Elites fractionalized
Unstable democracy	Cell 1:	Cell 2:
	16 (40%)	14 (70%)
Stable democracy	Cell 3:	Cell 4:
	24 (60%)	6 (30%)

N = 60

Panel B. Final definition of relevant cases (young democracies)

	Elites unified	Elites fractionalized
Unstable democracy	Cell 1:	Cell 2:
	15 (43%)	10 (100%)
Stable democracy	Cell 3:	Cell 4:
	20 (57%)	0 (0%)

#### Sufficiency-centered strategy #3: making the outcome more inclusive

Panel A. Initial conceptualization of the outcome

	Elites unified	Elites fractionalized
Unstable democracy	Cell 1:	Cell 2:
	16 (40%)	14 (70%)
Stable democracy	Cell 3:	Cell 4:
	24 (60%)	6 (30%)

N = 60

Panel B. Reconceptualized outcome (more inclusive)

	Elites unified	Elites fractionalized
Widespread distrust of	Cell 1:	Cell 2:
government	20 (50%)	20 (100%)
Acceptance of status quo	Cell 3:	Cell 4:
	20 (50%)	0 (0%)

### **Necessity-centered strategy #1: identifying a substitutable condition**

Panel A. Initial results

	Elites unified	Elites fractionalized
Unstable democracy	Cell 1:	Cell 2:
	5 (25%)	25 (62.5%)
Stable democracy	Cell 3:	Cell 4:
	15 (75%)	15 (37.5%)

N = 60

Panel B. Resolution: a more inclusive argument

	Elites unified and no dominant ethnic minority	Elites fractionalized or dominant ethnic minority
Unstable democracy	Cell 1:	Cell 2:
	0 (0%)	30 (62.5%)
Stable democracy	Cell 3:	Cell 4:
	12 (100%)	18 (37.5%)

### **Necessity-centered strategy #2: narrowing the scope condition**

Panel A. Initial definition of relevant cases (all democracies)

	Elites unified	Elites fractionalized
Unstable democracy	Cell 1:	Cell 2:
	5 (25%)	25 (62.5%)
Stable democracy	Cell 3:	Cell 4:
	15 (75%)	15 (37.5%)

N = 60

Panel B. Final definition of relevant cases (parliamentary democracies)

	Elites unified	Elites fractionalized
Unstable democracy	Cell 1:	Cell 2:
	0 (0%)	22 (63%)
Stable democracy	Cell 3:	Cell 4:
	10 (100%)	13 (37%)

## **Necessity-centered strategy #3: making the outcome less inclusive**

Panel A. Initial conceptualization of outcome

	Elites unified	Elites fractionalized
Unstable democracy	Cell 1:	Cell 2:
	5 (25%)	25 (62.5%)
Stable democracy	Cell 3:	Cell 4:
	15 (75%)	15 (37.5%)

N = 60

Panel B. Reconceptualized outcome (less inclusive)

	Elites unified	Elites fractionalized
Constitutional crisis	Cell 1:	Cell 2:
	0 (0%)	20 (50%)
No constitutional crisis	Cell 3:	Cell 4:
	20 (100%)	20 (50%)

# **Summary**

# Conventional variable-oriented theory building:

- (1) gives a major role to cases in the "null-null" cell (cases that display neither the cause nor the outcome), treating them as important theory-confirming cases;
- (2) typically focuses on identifying causal variables that independently increase the probability of the outcome, net of the effects of other causal conditions; and
- (3) is based on an assessment of the distribution of cases across all cells, which usually involves the calculation a summary statistic assessing the impact of a newly included variable on the fit of the model as a whole.

## **Case-oriented theory building, by contrast:**

- (1) has very little interest in cases residing in the "null-null" cell (i.e., cell 3 of Table 3);
- (2) has relatively little use for summary statistics describing whole tables;
- (3) focuses on strategies that empty either cell 1 or cell 4 of cases, treating these as analytically distinct tasks, with the first focused on establishing necessity and the second focused on establishing sufficiency;
- (4) may culminate in tabular patterns that from the viewpoint of variable-oriented research represent little or no gain in the fit of the model as a whole. From a set-theoretic viewpoint, however, the gain may be decisive.