

Performativity and its implications for philosophy of science

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Part 1: Understanding performativity

- Self-fulfilling prophecies
- Outcomes, types, and the process of performativity
- CSP–CFP theories as an illustration

Part 2: Implications for philosophy of science

- If theories “perform” reality, can reality still constrain us?
- If theories “perform” reality, can theories still make predictions?

Part 1: Understanding performativity

The beginning: Self-fulfilling prophecies

- Robert K. Merton (1948) first discussed the possibility of self-fulfilling prophecies
 - “false definition of the situation evoking a new behavior which makes the originally false conception come true”



Systematizing self-fulfilling prophecies

- Historical analysis of Black–Scholes option pricing model
 - Developed by Black & Scholes (1973) and Merton (1973)
 - Nobel prize for Merton and Scholes in 1997
- MacKenzie & Millo (2003) found that poor fit between actual options prices and predictions of model prior to 1973
 - After 1973: Increasingly better fit *because traders started to use model...* almost perfect fit in 1980s
- Some social science theories do not merely describe, but also shape social reality
 - Researchers have dubbed this phenomenon *performativity*



Donald
MacKenzie

Outcomes of performativity

- Ferraro et al 2005: Theories can reshape...
 - ...institutional designs
 - ...social norms
 - ...language
- Why theories can have this influence
 - Because institutional designs, social norms, and language are to some degree conventions that may change as some actors start believing in new theories

Types of performativity

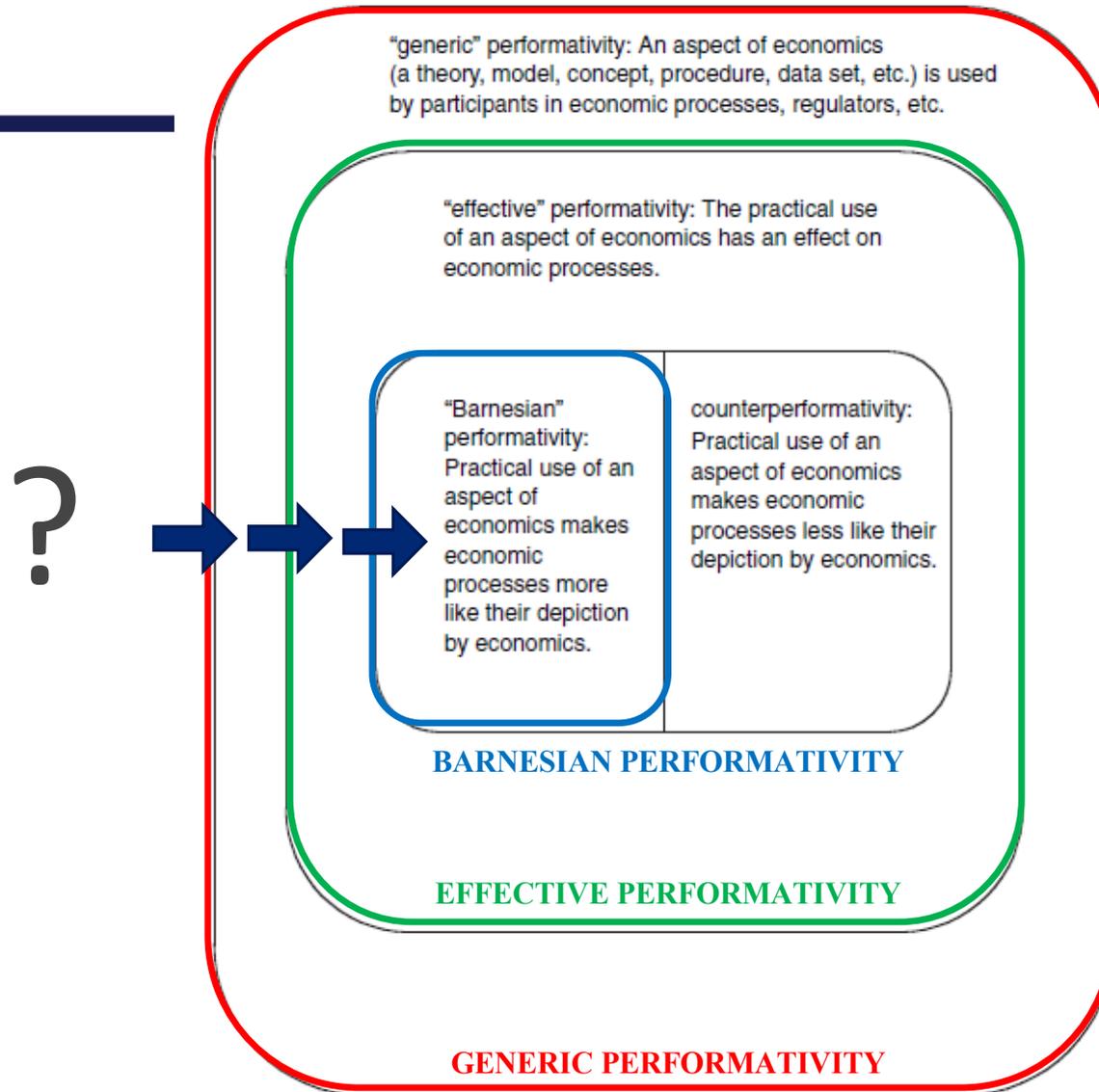
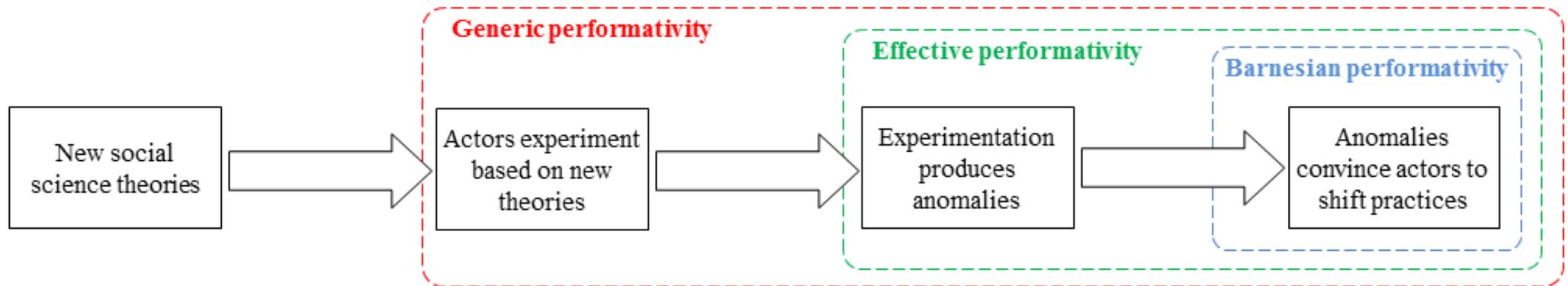


Figure from:
MacKenzie 2006, p. 17

Process of performativity



Part of a figure from:
Marti & Gond 2018

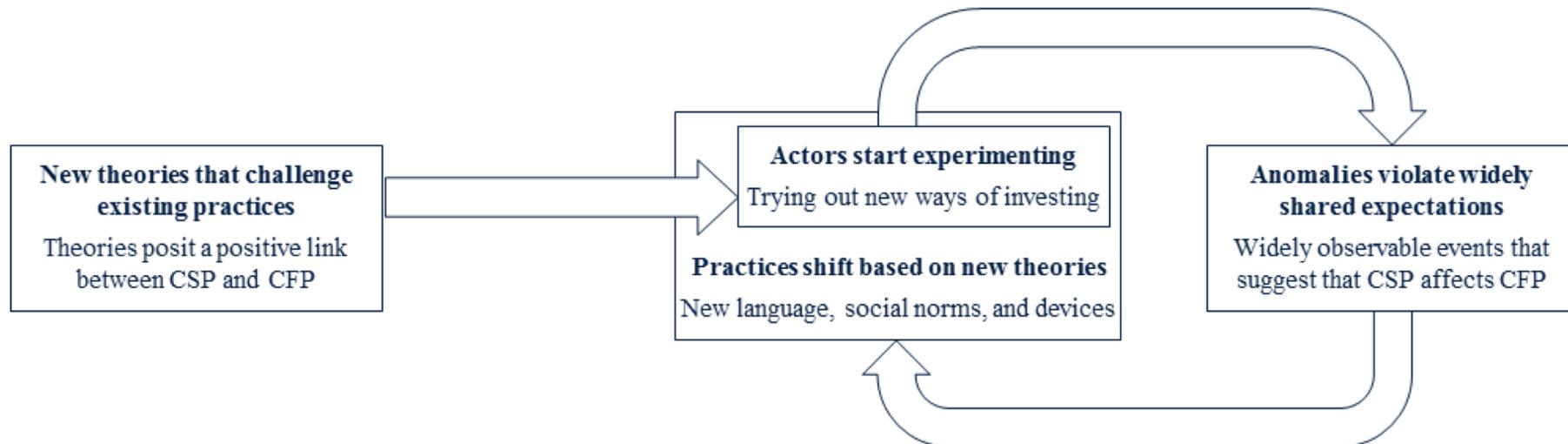
Key argument: Theories will only become self-fulfilling if (1) new theories motivate **experimentation**, if (2) experimentation produces **anomalies**, and if (3) anomalies lead to a **practice shift**

Illustrative case: CSP–CFP theories (1/2)

- Linking corporate social performance (CSP) to corporate financial performance (CFP) as “holy grail” of business & society research
 - More than 200 large sample studies since 1970s (e.g., Orlitzky et al. 2003)
 - In addition, case studies such as “creating shared value” (Porter & Kramer 2011) or “base of the pyramid” (London & Hart 2004)
- We argue that CSP–CFP theories are not merely descriptive
 - They may influence investors, toward socially responsible investing, and thereby reshape the impact of CSP on CFP
 - Theories may trigger shift in the rules of the game for companies

Illustrative case: CSP–CFP theories (2/2)

- We explore the possibility that theories on the CSP–CFP link can contribute to a shift toward a more sustainable economy in which investors will take for granted that CSP matters for the success of companies



Part 2: Implications for philosophy of science

Performativity as a threat for science?

- Felin & Foss (2009: 655): performativity “threaten[s] the fundamental definition of science and theory as an attempt to understand and predict objective reality”
 - ...and undermines such “traditional scientific notions as explanation, prediction, description, understanding, and control”
- Form two groups and take 10 minutes to prepare a 3-minutes presentation that addresses one of the following questions:
 1. If theories “perform” reality, can reality still constrains us?
 2. If theories “perform” reality, can theories still make predictions?

My take on performativity and “reality”

- Actors experience reality through the problems they face
 - Habermas (2003: 27): “reality . . . makes itself known to us . . . in the constraints to which our problem-solving activities and learning processes are subject”
 - “while reality never speaks to us, it can make our actions fail and thereby motivate us to reconsider how we speak about reality” (Marti & Gond, 2019)
- Actors care about whether theories actually “work”—a working theory is a theory that helps actors succeed in their activities (Scherer & Steinmann, 1999).
 - Anomalies are a sign that something is not “working” as it should and can thus be seen as constraints that reality puts on actors

My take on performativity and “predictions”

- If theories reshape social reality, the problems that actors face may shift over time
 - Researchers may need to develop new explanations and predictions
 - However, explanations and predictions remain crucial even if theories reshape social reality
- Performativity undermines description and explanation if we assume that they capture “essence” of an unchanging reality
 - By contrast, descriptions and predictions remain possible if we understand them as “tools” that help humans deal with a changing social reality
 - “simply because predictions and explanations may not capture ‘objective’ reality does not mean that scholars and practitioners should not be interested in predicting and explaining social phenomena” (Marti & Gond 2019)

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