## METHODS OF CAUSAL INFERENCE AND

## SCIENTIFIC REPRESENTATION (MCISR) SEMINAR

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## SEMINARIO SOBRE MÉTODOS DE INFERENCIA CAUSAL Y REPRESENTACIÓN CIENTÍFICA (MICRC)

THURSDAY 2 FEBRUARY 2017

JUEVES 2 DE FEBRERO DE 2017

Seminar Room B-011 / Seminario B-011

Department of Logic and Philosophy of Science / Departmento de Lógica y Filosofía de la Ciencia

Faculty of Philosophy, Complutense University/ Facultad de Filosofía (UCM)

11:30 – 13:30 María Jiménez Buedo (UNED): "**Reactivity through an** interventionist lense: Why many experiments in the Social Science may not be causal"

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## RESUMEN: Reactivity through an interventionist lense: Why many experiments in the Social Science may not be causal

María Jiménez Buedo (UNED)

The upsurge in social science experimentation of the last two decades is based on the idea that experiments have a privileged access to causal identification and inference. In the case of laboratory experiments with humans, though, a pervasive potential threat to the intelligibility of results for inferential purposes comes in the form reactivity, defined as the phenomenon by which subjects tend to modify their behavior in virtue of their being studied upon. While reactivity is often cited as one of the main difficulties for social science experimenters, the notion has been defined only vaguely.

In this paper we use an interventionist framework (Woodward 2003) in order to analyse the challenges that reactivity can pose to causal inference in experiments with humans. This framework allows us to define the notion unambiguously. Further, it allows for the distinction between malign and benign forms of reactivity, in terms of their effects on the validity of causal inferences drawn from experimental results. We finally argue that malign forms of reactivity do not render the data from a given experiment devoid of interest, but they do render it causally uninterpretable.