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Towards Consistency and the Scientific in Economics Robin Pope^{*}, University of Bonn^{**}

Neoclassical economics rests on 1) maximising something; 2) the something maximised is the expectation of the NM (von Neumann Morgenstern) utility function; and 3) avoiding asking people how they choose, but inferring everything of relevance from their actual choices. This article outlines why we need to ditch these three features in order to edge economics towards being a science.

First, it is here shown that nearly every mainstream economist younger than 80 years old repudiates the NM utility function as both implausible and irrational. These younger than 80-year old mainstreamers call what they do expected utility theory only because they are ignorant, and unwittingly contradict what von Neumann and Morgenstern, Paul Samuelson and others said in the 1920s to early 1950s in explaining the constraints that this NM function imposes on how outcomes map into utilities. To begin to be a science, economics cannot have in its core such flagrant contradictions between what current mainstreamers *imagine* is the utility function that they employ in their theoretical and empirical work and what that utility function *actually permits*. What that NM utility mapping excludes needs to get recognised. Until that is done, there is no scope for a modern economist – even if he allows for context, framing and individual differences effects – to assess whether expected utility theory has empirical or prescriptive or normative support.

Second, it is here shown that the maximising concept is fraught with inconsistencies when not empirically vacuous. When the maximising is with respect to expected profits or expected utility, it is empirically vacuous, since no economist can specify the maximum, and hence lacks a base from which to start considering evidence of whether a given firm or household attains it. The maximising concept needs to be replaced by a set of concepts that can be connected to real world events. The more modest notion of an *improvement* needs to replace the grandiose notion of a *maximum*.

Third it is shown that there is an un-noticed problem in modern mainstream economists' admirable efforts to be scientific by inferring people's utility decision procedures *exclusively* from their choices is too restrictive. The exclusion derives from a belief that the introspection of lay people is too unreliable to have any relevance. Indeed as mainstream economics recognises, lay people, being humans, are fallible. The un-noticed problem is that this leaves a gap. Whose testimony is infallible? By implication, it is the mainstream economist who writes out the maximising equations detailing that people maximise their expected utility. Filling the gap with such divine unquestionable authority is unsatisfactory. A reasonable position has to admit fallibilities from bias and ignorance in the mainstream economist's introspections, not merely in the introspection of others, and use normal scientific procedures for dealing with likely mistakes and biasses in data – not wholesale discard of some data, and unquestioning acceptance of other data.

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