Review of Peter E. Earl (2014) "Anchoring in economics: On Frey and Gallus on the aggregation of behavioural anomalies"

Frey and Gallus (2014) (FG) makes a fundamentally correct and vitally important point, viz that the focus of research on behavioural anomalies needs to shift from the micro- to the macro-level, and that we need to consider the relation between macro-level outcomes and individual behaviour – including individual behaviour which is anomalous from a neoclassical perspective. However, the authors' interpretation of this task, and the argument throughout the paper, are vitiated in my opinion by a significant weakness, and this weakness is, alas, not addressed by Earl (2014) (PE).

Having stated correctly right at the outset that "the next crucial step consists in shifting the focus to the macro-level", FG immediately follows this with an assertion of the need to examine "the process through which behavioral anomalies are aggregated to a societal outcome" (p 0, Abstract). The notion that we can **aggregate** from individual behaviour to obtain social outcomes is in my view doomed. Aggregation is a core tenet of the methodologically individualist neoclassical paradigm. FG completely accepts this stance, and PE fails to challenge it. Keynesian macro-level malfunction is consistent with a variety of micro substrates – including optimising agents with rational expectations and satisficing agents subject to bounded rationality – just as traffic jams are consistent in principle with horse-drawn vehicles as well as internal combustion engines. To seek the causes of macro outcomes in micro behaviour, like looking for the cause of the traffic jam under the bonnets of the individual vehicles, is to miss the point that "the essence of macroeconomics is that the whole is different from the sum of its parts" (Victoria Chick, personal communication). So you cannot take individual behaviour and aggregate to find unemployment, capital, civil services, markets, traffic jams, feudalism, etc. These are all emergent at higher levels. Higher level outcomes have indeed to be **consistent** with the micro-level substrate – you cannot have deficient aggregate demand with a substrate of cats, or a traffic jam of pieces of wood (see Dennett (1995) on substrate neutrality). It is certainly of interest to explore the network of social relations (Hayek, 1979: 58-9), within which individuals are embedded, to see how the micro and the macro fit together. But the macro cannot be *determined* by the characteristics of the micro. At the start of section 2 of FE is a list of things that aggregate economic outcomes depend upon, but the nature of the network of social relationships, the mutual expectations of each other that agents hold, is not mentioned.

In this context it is worth noting that there is a good reason that behavioural economics is accepted by the mainstream, and is not excluded in the way that Austrian or Post Keynesian thought is – that is, it is not *heterodox* – even though it is in some ways non-neoclassical. That is because it can be used reductionistically: crises are inexplicable on the basis of neoclassical microeconomics, but behavioural economics allows us to blame them on individual inadequacies, not on systemic, structural factors, on the network of social relations.

PE is in many ways the opposite of FG. It is extremely rich with many allusions to a host of interesting and important points and arguments. However, the overall effect is tantalising, because the logic is not spelled out clearly enough. A prime example concerns the "infinite regress problem". I am interested in the logic and have used the infinite regress argument in context of the beauty contest argument that Keynes makes in the *General Theory* (Keynes, 1973: 156). But in PE it needs a much more detailed and rigorous exposition. Any literate neoclassical economist reading this could dismiss it as saying that it simply reiterates the long exploded Zeno paradox, that the arrow cannot hit the target as it has to go half way, then half of the remainder, then half of what's left, etc, to infinity. So I would like PE to say fewer things, but in more detail – this is just an example. I am not sure whether the argument that FG instantiates anchoring is a further example of the same thing, or is just a rather weak aside which should be dropped. It should only be included if it is or can be made to be genuinely enlightening.

Perhaps a small point: I note that PE refers to agents "actually *having* well-defined preference systems on which they have been basing their choices" as if this constitutes the neoclassical view. Binmore (1994: 105), for example, argues that agents do not do what they do because of their utility functions, but we ascribe utility functions to them because of what they do. I'm not sure he's right, but I do think he is right that (neoclassical) economists think that.

Finally, I note that there are a number of confusing passages which may impound typos, it's difficult to tell. For example:

> "the question of what might turn up as barriers to the barriers so far identified" and

> "economic agents might be able to *construct* preference systems if mainstream economic agents set out to elicit such systems from them".

Even correcting probable typos, I still don't know what either of these statements say. Again, these are examples – the text should be checked for clarity throughout.

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<u>References</u>

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