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Emergent Effects in Astrology

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Creative Commons License 4.0. CC-BY-NC. Attribution required. No commercial use. McRitchie (2022) presents a review of research designs in astrology with examples of each design to identify those most likely to yield useful results. He suggests that the complexity of a birth chart brings "emergent properties" not possessed by the individual parts and concludes that science is now finding "more accurate astrological descriptions of potential and emergent worlds than is humanly possible" (p. 714).

But this conclusion is premature. Astrology is based on Greek mythology and ancient imaginings rather than empirical observations. It is seriously flawed both philosophically (Kelly & Saklofske, 2023) and scientifically (Dean *et al.*, 2022), well beyond the levels popularly recognized by critics and routinely dismissed by astrologers.

Against this, McRitchie claims, "recent astrological research and a meta-analysis ... is tackling problems and improving results." But, his "meta-analysis" (p. 711) is not a valid meta-analysis (one that includes all relevant studies, positive or negative, together with a secondary statistical analysis to assess the outcome). Instead, it is just ten studies cherry-picked from the hundreds available (Dean *et al.*, 2022). The history of science tells us that reliable conclusions are not going to arise from this kind of thing, which now includes McRitchie's claim that an emergent super-human revolution is happening.

His claim also conflicts with the actual practice of astrologers, where the idea of emergence never arises, just as it never arises in similar symbolic systems such as the Tarot. Why? Because there is always enough symbolism to meet any demand for a fit. In any case, the supposed emergent properties would require a compelling theoretical rationale quite different from those found in philosophy and science, where emergent properties arise only via physical processes, as when hydrogen and oxygen react to form water. Until this is provided, it is unclear whether McRitchie's "emergent effects" can mean anything (Kelly & Saklofske, 2023, p. 66).

His claim faces two further problems. The first is that astrologers who unwittingly use wrong birth data (off by hours, weeks, years, it makes no difference) invariably find that the *birth chart still accurately fits the client* (Dean *et al.*, 2022, pp. 856-859). The same is true of charts where individual meanings have been reversed (pp. 304-309). It means that accurate birth charts are not needed for well-received readings. Nor can they be a reliable guide to reality. So, how is it possible for controlled tests to report positive effect sizes? Ironically, an answer is provided by the second problem, which involves controls.

Present methods of control work by shuffling birth data between subjects while keeping everything else unchanged. But, they do not discriminate between effects due to astrology and effects due to prior knowledge of astrology. If the owner of a birth chart containing X behaves in an X-related way, is it because her chart contains X (hooray for astrology) or because she *knows* her chart contains X (hooray for role-playing)? The pos-

itive effect of role-playing in astrology was demonstrated nearly fifty years ago (Delaney & Woodyard, 1974) and since then has been amply confirmed (for a review, see Dean *et al.*, 2022, pp. 214-215, pp. 768-770). It is a problem because shuffling birth data randomizes the astrology indicated by birth charts but not the prior knowledge held by subjects, which independently creates astrology-like effects and the false impression that astrology is directly responsible. Shuffling is not an effective control.

Furthermore, astrology is sufficiently popular to make prior knowledge of astrology a potential confound in every human population used to test it (Kelly & Saklofske, 2023, p. 41). Especially as people don't need to be aware of their prior knowledge because it can still operate subconsciously to cue their behavior (Bargh, 2017). Indeed, since "astrology is supremely flexible and there is no brand of human thought or belief with which it is incompatible" (Campion, 1987, p. 9), and "there is no area of human existence to which astrology cannot be applied" (Parker and Parker, 1975, p. 81), we might expect prior knowledge of astrology to give positive effect sizes (rather than zero effect sizes) in all areas of human life.

Similarly, given that astrology has no known physical explanation (gravity, magnetism, radiation, quantum effects), the observed small positive effect sizes are more plausibly explained by prior knowledge than by some mysterious unknown-to-science property of astrology (Dean *et al.*, 2022, pp. 712, 736).

In other words, until the examples quoted by McRitchie are independently replicated with research designs known to rigorously exclude prior knowledge, discussion of their relative merits and of supposed emergent effects will be premature. It doesn't help that critics tend to underestimate the strength of the case against astrology, while astrologers focus on symbolism, looking for what fits, and ignoring the rest.

REFERENCES

- Bargh, J. (2017). Before You Know It: The unconscious reasons we do what we do. New York: Touchstone. The result of more than thirty years of research,
- Campion, N. (1987). *The Practical Astrologer*. London: Hamlyn, 9. Campion currently heads the Sophia Centre for the Study of Cosmology in Culture at the University of Wales Trinity Saint David.
- Dean, G., A. Mather, D. Nias and R. Smit (2022). Understanding Astrology: A critical review of a thousand empirical studies 1900-2020. Amsterdam: AinO Publications, 948 pp, over 4000 references. Open Access, downloadable for free as four pdf files from www. astrology-and-science.com/U-aino2.htm. Hardcover copies are available but only from the publisher.
- Delaney, J.D. and H.D. Woodyard (1974). Effects of reading an astrological description on responding to a personality inventory. *Psychological Reports* 34, 1214.
- Kelly, I.W. and D.H. Saklofske (2023). A Philosophical Critique of Contemporary Western Astrology. 129 pages, nearly 500 references, downloadable for free as a docx file from ResearchGate, July 2023.
- McRitchie, K. (2022). How to think about the astrology research program: An essay considering emergent effects. *Journal of Scientific Exploration* 36(4), 706-716. https://doi.org/10.31275/20222641
- Parker, J. and D. Parker (1975). *The Compleat Astrologer*. London: Mitchell Beazley, 81. A classic best-selling textbook.