

THE UNIVERSITY OF NORTH CAROLINA AT CHAPEL HILL

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August 28, 2017

Dear Ms. Connor,

I would like to begin by thanking you for accepting – and immediately publishing – my submission "Correlation between Dwarf-Planet Astrometry and Mood: Preliminary Null Results" to the MedCrave Group's "Physics & Astronomy International Journal".

However, I regret to inform you that I am unable to accept your offer at this time. Not because I do not have the \$668 payment that you requested (I do), but because I found rather serious problems with the MedCrave Group's peer-review process.

Specifically, your reviewer's only comment of substance was that a couple of my sentences were too long. I refused to rewrite them hoping that you, the editor, would take a more careful look at my submission, which, as will become clear below, I surmise that you did not.

In short, I believe that both your reviewer, and you, as the editor, missed some very serious – and very obvious – flaws in my paper.

As such, *I have reviewed my own paper*, and present this review to you below, both for your consideration, and, just perhaps, for your explanation as well.

But short of the latter, I am forced to conclude that the MedCrave Group is, at the very least, not a serious scientific endeavor, and at the very most...well...I will leave that up to the readers of my now published paper, and my attached review of it.

Best wishes to you in your future endeavors,

Dr. Daniel E. Reichart

Director of the Skynet Robotic Telescope Network Director of PROMPT and Morehead Observatory

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Professor of Physics and Astronomy

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Review of: http://medcraveonline.com/PAIJ/PAIJ-01-00006.pdf

(also located here, in case replaced: https://users.physics.unc.edu/~reichart/PAIJ-01-00006.pdf)

General

1. First and foremost, this is a paper on *astrology*, not astronomy. The latter is a serious scientific endeavor. The former, by construction, is not. However, perhaps this should not be held against the author, since in your email of May 17th, you solicited the author for a paper on the topic of *astrology*.

Title

2. "Null Results" implies that the author found no "Correlation between Dwarf-Planet Astrometry and Mood". Since no such correlation was ever anticipated, by anyone, ever, this is not a significant result, and consequently not worthy of publication. Furthermore, "*Preliminary* Null Results" then implies only foolish optimism.

Abstract

- 3. The author claims that he will continue to monitor the mood of a test subject for a period that, if one does the obvious math, exceeds 3000 years (10 years / 0.3% = 10 years / 0.003 = 3333 years).
- 4. The author also claims that he will then publish "final results" in your journal at that time. I am hard pressed to guess which is more unlikely: the author (and test subject) lasting that long, or your journal.

Section 1: Introduction

5. "Prior to Herschel's discovery of Uranus in 1781, the field of astrology had grown stagnant, with the motions of the five naked-eye planets having been fully exploited. However, with the discovery of new planets, new possibilities for exploitation arose."

This is clearly a (deserved) jab at the exploitative nature of astrology. But simultaneously, it is subversive to the premise of the paper.

6. "In combination with the discoveries of Neptune in 1846 and Pluto in 1930, serious astrological research began anew, literally for the first time in recorded history (D. R. S'Dog, private communication)."

Three problems with this. The first is that "serious" and "astrological research" are oxymoronic.

The second is that "began anew" and "literally for the first time in recorded history" are contradictory.

The third is that the author, whose initials are D. R., is clearly citing his dog. I found the following picture of "D. R. S'Dog" on Facebook:



You have literally made D. R.'s dog a cited author.

7. "many viewed Pluto's 2006 reclassification from "planet" to "dwarf planet" (IAU Resolution B5) as a major setback for the field of astrology."

To the best of my knowledge, no one has ever thought this, ever.

8. "we instead argue that this represents a golden opportunity."

Again, exploitative overtones.

9. "Clearly, Pluto has lost none of its predictive powers over the past 11 years."

This is, technically, a true statement. But only because something cannot lose that which it never had.

10. "It then stands to reason that other worlds that the IAU classifies as dwarf planets are no less astrologically useful."

Also technically true. But again, only because objects without said use cannot become less useful at said thing.

11. "This increases the number of astrologically useful worlds by 50%!"

Sigh... Also technically true. But only because 50% of zero is still zero.

12. "Given the recent spacecraft exploration of Pluto and Ceres, clearly astrological research is well underway for these worlds [1,2]."

Here the author cites the leaders of NASA's "New Horizons" and "Dawn" spacecraft missions. I am certain that they would find the characterization of their years, nay, decades, of hard work as "astrological research" with abhorrence.

13. "Of the remaining dwarf planets, Eris is the most massive, but also the farthest away and consequently the least likely to impact our day-to-day lives (given the inverse-square law)."

The inverse-square law refers to Newton's Law of Universal Gravitation. Even astrologers would not claim that astrology is mediated by the gravitational force.

14. "Consequently, we have decided to instead focus our attention on the remaining two, and least famous, dwarf planets, Haumea and Makemake."

What does the "fame" of these dwarf planets have to do with anything? How is that even measured?

Section 2.1: Dwarf-Planet Astrometry

- 15. The astrometric data that the author presents...is actually legitimate. Over the past decade, over 5,000 undergraduates, at approximately a dozen institutions, have taken over 10,000 pictures of these two dwarf planets, using fully automated, or robotic, "Skynet" telescopes that the author has helped to deploy around the world. They did this as a small part of a much larger, NSF-funded introductory astronomy laboratory curriculum that the author has developed.
- 16. "we have accumulated 5,462 images of Haumea and 5,702 images of Makemake, and for each a student has visually confirmed that the dwarf planet was exactly where its ephemeris predicted it to be."

This, however, is a non-result. As these ephemeri are based on Newtonian mechanics, which is overwhelmingly established in this low-speed, low-gravity regime, there is no possibility that they could be wrong.

17. "It is almost as if this could be completely explained by Newtonian mechanics."

Indeed...

Section 2.2: Mood

18. "To explore the possibility of a correlation between dwarf-planet astrometry and these worlds' psychological impact on human beings,"

Again, this is not a scientifically acceptable premise, but again, you did solicit a paper on astrology.

19. "we recruited a test subject, who we will refer to by his initials, DR, to protect his identity."

The test subject's initials are the same as the author's, which is unlikely to be a coincidence (especially given that the author has already played a similar game with his initials in the citation of his dog). As such, I am forced to conclude that the test subject and the author are one and the same.

This begs a number of side questions. Did the author get IRB permission before conducting this experiment, which clearly involves a human subject? However, does one even need IRB permission if the human subject is himself? IRB permissions aside, can one conduct an experiment on oneself in an unbiased way? Is it ethical to do so? Is it ethical to do so and not explicitly acknowledge it? Is it stupid to do so?

20. "DR is a Capricorn."

This is true. I looked it up.

21. "For this experiment, DR recorded his daily mood on a binary scale. Clearly, some days were better than others."

Alright, that one was funny.

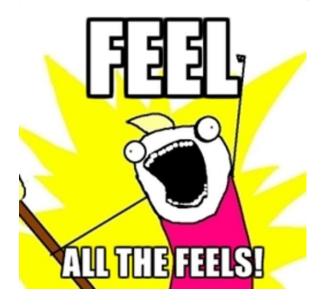
22. "For greater resolution, we averaged these data over 1-month intervals. Currently, DR appears to be feeling "fine"."

Yeah, and that one too.

Section 3: Figure 1

The author plots the mood of the test subject vs. the dwarf planets' (similar) position in the sky. Where to begin...

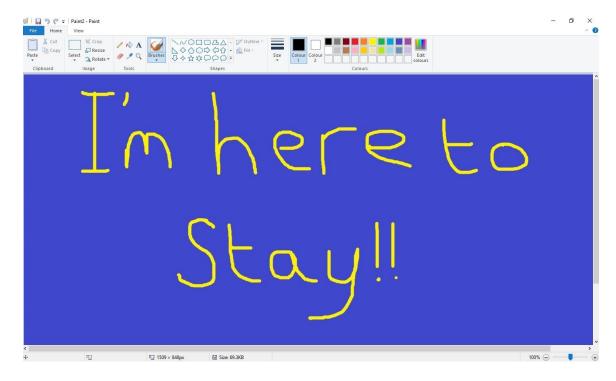
23. The mood axis is labeled "All the Feels", after an internet meme:



24. The mood axis runs from "Bogus" to "Most Excellent", which clearly references not just one, but both "Bill and Ted" cult classic movies from the late 1980s and early 1990s:



- 25. The mood data are clearly randomly generated numbers, from a uniform distribution, between two limits. (This probably absolves the author from the above IRB questions, but at the same time, creates new ethics questions.)
- 26. The plotted curves are textbook examples of wild extrapolation.
- 27. The author considers only two functional forms, both of which already assume the author's hypothesis (that the test subject's mood and the dwarf planets' position in the sky are strongly, and cyclically, correlated).
- 28. The author credits the 32-year old, and also cult classic, software program "Microsoft Paint":



Even if a scientist did use MS Paint to make a figure for a paper, they would have too much pride to admit to it.

Section 3: Results

29. "Although we have not yet collected enough data"

Anything following such a statement should be ignored as a matter of principle.

30. "Furthermore, given Haumea and Makemake's slightly different astral speeds, over the next five cycles they will separate from one another, adopting opposing positions in the sky. Then over the next five cycles, they will come back into alignment. It is not clear if they are currently reinforcing each other, or perhaps counteracting each other."

Or if they are having any effect at all.

31. "As such, DR will continue to provide us with mood data for the duration of these cycles. As a Capricorn, he is determined."

Given that these cycles last, roughly, 300 and 3000 years, respectively, he better be determined.

32. In Footnote 3, the author provides a link to a questionnaire, purportedly for the recruitment of other test subjects. The questionnaire has only two questions:

"What's your name?"

"What's you sign?"

It also has a phone number for inquiries. When I called this number, *I got a live person at the White House switchboard*.

Section 4: Conclusions

33. "Although we have not yet collected sufficient information"

Again, anything following this should be ignored on principle.

34. Footnote 4 states: "the repeated verbalization of "Makemake" appears to lighten everyone's mood. Haumea does not have the same effect."

Really? Even my dog would have caught this one.

35. "this need not get in our way of blindly accepting the hypothesis's validity, and of moving on to the cost-recovery phase of this research. Plans are already underway for the production of trans-Neptunian dwarf-planet horoscopes, to better pin down life's longer-term mood cycles."

Overtly exploitative.

36. Last sentence of the paper: "In particular, early drafts extol the importance of integrity for the maintenance of one's long-term professional reputation."

Whoa...see what the author did there? He turned that whole exploitation thing around, and now I think he's implying something about your journal.

Acknowledgements

37. "The author wishes to thank the ApJ and the MNRAS, for years of excellence, or at least the pursuit thereof."

The author is actually thanking other, reputable journals of astronomy (ApJ = the Astrophysical Journal, and MNRAS = the Monthly Notices of the Royal Astronomical Society).

38. "The author also wishes to thank the MedCrave Group, the post-fact era, and the concept of moral relativism."

Damn! I don't think anyone has ever thanked moral relativism before. Like, ever.

In conclusion, my recommendation is for you to reject this paper. In fact, accepting it, and publishing it on your website, even temporarily, would be a terrible mistake. The damage to the MedCrave Group's professional reputation would likely be irreversible. No self-respecting scientist would ever consider submitting to the MedCrave Group again.

Then again, self-respecting scientists may not be your business model...