A SHORT LINGUISTIC META-ANALYSIS OF QANON AUTHORSHIP: CONFIRMING RON WATKINS AS THE MOST LIKELY AUTHOR

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Swiss company OrphAnalytics and French researchers Florian Cafiero and Jean-Baptiste Camps, from the École des Chartes (Paris, France), have developed two distinct machine learning-based approaches to decipher text authorship. OrphAnalytics' method has been used in several legal affairs in France and Switzerland. Florian Cafiero and Jean-Baptiste Camps have applied their method to gain new insights into literary debates, including a century-old one around the authorship of the work attributed to French playwright Molière.

Both approaches were applied to the entirety of QAnon messages and compared to the writing style of a list of individuals¹ often designated as potential authors in several investigations lead in American media. The comparison relied on a corpus of texts unambiguously attributed to the suspects.

OrphAnalytics' authorship analysis² approach relies on a method of distance to text cluster grouped by styles inspired by methods applied in computational genomics. Florian Cafiero and Jean-Baptiste Camps' analysis³ relied on methods broadly used in computational linguistics to build up an entirely different system, where artificial intelligence is trained to recognize an individual writing style by repeated exposure.

Quite remarkably, and while these two identification methods rely on widely different concepts, they give broadly similar results:

- In the first QAnon period (Q1) published from October 28 to December first, 2017 on 4chan forum, the analysis points for the most part to Ron Watkins and Paul Furber. It suggests a possible co-authorship of QAnon seminal messages by these two individuals.
- The second QAnon period (Q2) published from Dec.1 2017 to Nov. 13, 2020 on 8chan
 forum, unambiguously points to a single signature, namely Ron Watkins. The change of
 signature is remarkable, not only because both methods unambiguously point to one
 author, but also because the change takes place when QAnon posts migrated to 8chan, a
 forum then administered by Ron Watkins himself and owned by his father Jim Watkins.

Individual methods and results

1) Florian Cafiero & Jean-Baptiste Camps

We trained machine learning algorithms to detect the styles of individuals that were considered plausible (co-)authors of the « Q drops ». This includes social media personalities cited by the press, as well as personalities sometimes evoked by QAnon supporters. For our main analysis, our artificial intelligence achieved an average precision of 99% and average recall of 98%.

¹ Both analysis included at least as potential authors: Paul Furber, Tracy Diaz, Coleman Rogers, Cristina Urso, Jim Watkins and Ron Watkins.

² Jover A., Zehnder M., Pousaz L., Roten C-A, <u>Stylometric analyses reveal who in QAnon's publication</u> management group writes with a personal style closest to QAnon's Socratic style, 2022

³ Cafiero F., Camps J-B, Who could be behind QAnon? Authorship attribution with supervised machine-learning, 2022

Ron Watkins is the most plausible author for at least a vast majority of the Q drops. In the first period (Q), Paul Furber ranks first most of the time, Ron Watkins being closer and closer, which could indicate punctual co-authorship or collaboration. Afterward, Ron W. signal ranks most of the time at the top. A few short peaks by other authors could indicate that other suspects wrote a few lines, but could most likely be glitches.

2) OrphAnalytics: Claude-Alain Roten et al.

Published in late 2020, OrphAnalytics' first QAnon analysis showed a clear change of authorship between the periods Q1 and Q2. The next step was to determine the authorship: we compared Q1 and Q2 sequences to a reference corpus of six potential authors. The analysis of pattern frequencies relied on OrphAnalytics' algorithm generating a Voronoi tessellation. Similarities were assessed by measuring the existing distance between each sequence and the average properties of the reference groups. Without any training, this approach obtains a precision and recall of 93 to 98 % for the 6 suspects.

Ron Watkins' style is matching the Q2 period, which represents the vast majority of QAnon posts published on 8chan, where he was the IT manager. In contrast, the signal of Q1 posts on 4chan is more ambiguous. It points to Ron Watkins, Cristina Urso, and Paul Furber, the latter appearing prominently in the numerous interrogative sentences characteristic from this early period. The equivocal signal in the Qdrops from the Q1 period is likely a clue to co-authorship.

These results are supported by the comparison of the text complexity which reveals that Ron Watkins' reference texts are closer to Q2, while Q1 messages are related not only to Ron Watkins but also to Paul Furber and Cristina Urso. As a side note, we can add that Ron Watkins and Paul Furber's corpus, which are among the most question-rich of our reference texts, are overall the closest to the Socratic style messages of QAnon marked by strong use of interrogative sentences (53% and 30%).

3) Common conclusion

Among plausible suspects, Ron Watkins is the most likely author for an overwhelming part of Qdrops. Ron Watkins' signature becomes however clearer as time passes. In the first few months of QAnon (Q1 period), a willing or unwilling collaboration with at least one other author seems likely. Both analyses would then point to Paul Furber as a potential co-author.

Divergence? The case of Cristina Urso

Whereas both analyses point to the same directions for most of the Q-drops, one minor divergence remains: OrphAnalytics also points to Cristina Urso as a plausible co-author during the first few months of the existence of QAnon (Q1 period).

Cristina Urso is the co-founder of a major QAnon friendly media. Her partner, Coleman Rogers, was caught on video accessing Q drops before they were made publicly available. She is thus a credible potential suspect. Yet, it could also be a combination effect: the mixed signature of Furber and Watkins could accidentally resemble Urso's.