Detecting Hybrid Social Identities:
A Computational Analysis of Influence & Resilience in Online (RWE) Communities

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INTRODUCTION

Hybrid identities, defined as the fusion of two group memberships and their belief systems, have become an increasing feature of online communities, including right-wing extremist online communities. A hybrid identity may allow those that hold it to gain acceptance in each of the two communities that make up the hybrid identity, thereby providing a platform for social influence where beliefs of one community can be introduced to the other community. For example, the hybrid aspects of an eco-fascist identity might be used by right-wing community members to shift the balance from more mainstream ecological opinions towards more extreme right-wing positions. This kind of influence necessitates a better understanding of the psychosocial processes that drive the social influence of hybrid identities.

The present research aimed to investigate whether and how hybrid identities can be used by online communities to extend their reach into other online communities. To do so, we used the eco-fascist identity as a case study. The eco-fascist community is a prominent group with a hybrid identity (Thomas & Gosink, 2021). Given that eco-fascist ideas have been used to justify recent terrorist attacks, such as the Christchurch attack in 2019 and Buffalo supermarket attack in 2022 (Farrell-Molloy & Macklin, 2022), and ecological movements are growing substantially in response to the climate emergency, eco-fascism has been suggested as the most imminent threat of hybrid communities (Macklin, 2022).

To assess the influence dynamics of this kind of hybrid identity, we explored the way individuals wrote posts in publicly available online forums that bridged the eco-fascist divide. These included two ecology forums, two far-right forums, and three forums that were identified to include eco-fascist contents. Specifically, we examined three major mechanisms of influence:

- the hybrid identity, which could utilise shared aspects of a moderate identity to build a bridge to a radical identity;

- the topics that could frame scientific evidence or suggest interventions that are aligned with far-right ideological positions (e.g., anti-immigration);

- how norms are coordinated through language to influence the acceptability of views and behaviours.

To do so, we applied an automated natural language analysis and combined it with qualitative analysis. These methods were theoretically informed by key principles of the Social Identity Approach (SIA, Spears, 2021). SIA suggests that influence operates in a group based on appeals to people's shared group membership. When a shared group membership becomes situationally relevant (salient), group members' behaviour tends to align with the group's norms (Reicher et al., 2010). This theoretical basis allowed us to study i) the influence mechanisms of hybrid identities, and ii) how they can serve resilience in online settings.

By combining natural language processing techniques and machine learning techniques with social psychological theory:

- We trained and validated an automated social identity assessment (ASIA) tool (Koschate et al., 2021) that detects which identity (e.g., eco or fascist) is situationally salient based on writing style, and then we examined the active use of the hybrid identity to gain influence in online communities (Study 1).

- We identified the topics of influence that online ecological movements tend to dive into and are likely to be used by the hybrid community to spread their ideology (Study 2).

- We examined how norms are constructed and coordinated through language within these communities to mobilise actions (Study 3).

Our main findings can be summarised as:

- The theory-informed natural language processing techniques employed in this project showed a good ability to distinguish eco-, far right and hybrid eco-fascist identities.

- Our topic analysis techniques were able to identify coherent narratives linked to change that have been framed in line with far right ideological positions.

- Our exploratory techniques on norms showed similarities and differences in the way that norms are constructed and coordinated between eco and hybrid communities. Limitations included sample representativeness. As data were collected from different forums of the same online platform our sample may be biased in ways consistent with its user base. Models can be improved by testing data from different online platforms and by employing methods to control for contextual, demographic and other individual differences.

- Hybrid eco-fascist identities included stylistic features of both far right and eco identities. Depending on the social context (e.g., the topic of a forum thread), individuals with a hybrid identity can activate that part of their hybrid identity (eco or fascist) that is most relevant. This adaptive capacity of the hybrid eco-fascist identity means that it is likely to be a resilient identity (e.g., Farrell-Molloy & Macklin, 2022) and thus difficult to challenge.

- In exploring topics of influence within the hybrid and eco forums, our analysis found that environmental dilemmas or threats constitute a major topic of discussion for both communities, albeit different in the ways these dilemmas are approached. In social psychological terms, these kinds of threats are likely to drive adaptive behavioural change (Goodwin et al., 2005). Discussions about the threats of human actions on endangered species, existential threats associated with the use of nuclear power, and overpopulation are likely to open up new opportunities to hybrid eco-fascist groups to introduce their ideas in eco movements. The principal mechanism of influence seems to be sharing links of relevant contents (eco and far right) to justify their positions.

- On the other hand, our analysis suggested that eco communities might be calling out these attempts as shown by labelling certain ideas or people as

fascist or nazi. Thus, the analysis provided some preliminary evidence for potential resistance to hybrid influence.

- In terms of norm construction and use, we investigated four types of norms: descriptive, injunctive, trending, and moral norms that have been found to influence behaviour. The degree of similarity/conformity in how the eco community constructed descriptive, moral, and trending norms was not statistically different from the degree of conformity in how the hybrid community constructed the same type of norms. However, the eco community showed more conformity in injustice norms compared to the hybrid community.

- Regarding the psychosocial underpinnings of norm construction, the hybrid community showed a consistent pattern of using more power and culture-related linguistic features in their writing style than the eco community when constructing all four types of norms. Given that these linguistic categories encompass political, national, ethnic, racial and anti-technology features (Boyd et al., 2022) that are consistent with eco-fascist narratives, communicating norms using these features can be seen as a way to strengthen the hybrid identity.

We conclude that similarities and differences in norm coordination through language between the eco and the hybrid community and the consistency in the communicative features that the eco-fascist community uses to construct and communicate norms are likely to add into the adaptive capacity of the hybrid identity.

CONCLUSIONS AND FUTURE DIRECTIONS

This project is a proof of concept for the function of hybrid identities in online settings. We found initial evidence that the adaptive capacity of a hybrid identity can make it hard to be challenged online. This adaptiveness is shown by (i) making a specific identity more salient than the other depending on context demands, (ii) creating coherent narratives linked to change in line with common discussion topics, (iii) consistency in norm coordination through language. Future work needs to combine natural language processing techniques with experimental and qualitative work to further explore the mechanisms and directionality of the potential influence of hybrid identities in online communities. Key questions for future research may include:

1. How can hybrid group members use stylistic features to become accepted rather than being rejected? Can interactions with moderate communities initiate de-radicalisation in hybrid members?

2. Which linguistic strategies are most effective in re-shaping the community and exerting extremist influence?

ABOUT THIS PROJECT

This Executive Summary comes from the full report produced from the Detecting Hybrid Social Identities project. The project aims to provide evidence-based guidelines on the identity dynamics and types of norms that are effective in building influence within hybrid Right-Wing Extremist online communities as well as the dynamics that weaken influence. You can find all the outputs from this project at:

www.crestresearch.ac.uk/projects/detecting-hybrid-social-identities/