Conciliation and meta-contrast are important for understanding how people assign group memberships during conflict situations

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Conflict of interest

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Abstract

Pietraszewski (2021) misrepresents both the nature of behaviour in conflict and the ability of psychology to theorise the relational properties of group designation. At the behavioural level, he focusses exclusively on "attack," when consolation/care in conflict is equally present and important. At the theoretical level, he ignores existing psychological work on how group perception is shaped by the meta-contrast principle.

Pietraszewski (2021) argues for a computational approach to deriving how humans assign membership of social groups – and does so using "behaviour in conflict" as the context in which the principles of a computational theory of social groups can be established. Key to the approach is the importance of third-party involvement in conflict ("triads not dyads") which, in turn, provides the foundation for four "cognitive primitives." These cognitive primitives are presented as the building blocks of the computational approach. Each cognitive primitive is structured around the possible combinations for any of the three parties to attack each other in turn. Pietraszewski argues that the way in which people interpret these attacking moves then structures how group memberships are assigned.

The major challenge for any computational model is its relationship to a "ground truth." Thus, Pietrazewski's approach needs to be measured against what we know about the nature of human behaviour in real-life conflict. There is now a significant literature which examines conflict between humans captured on public CCTV cameras. For example, early work by Levine, Taylor, and Best (2011) used CCTV footage to explore the role of third parties in the escalation and de-escalation of aggression and violence in public space. More recently, work by Liebst, Philpot, and colleagues (Liebst, Philpot, Levine, & Lindegaard, 2021; Philpot, Liebst, Levine, Bernasco, & Lindegaard, 2020a) has explored the behaviours of third parties to public violence, and the likelihood and consequences of such intervention. This work confirms the importance of the triadic approach, but tells an importantly different story about the nature of human behaviour in conflict. Although Pietraszewski focusses exclusively on the propensity for agents to attack each other, systematic behavioural analysis shows that conflict behaviours are a mix of escalation and de-escalation (Ejbye-Ernst, Lindegaard, & Bernasco, 2020; Liebst *et al*., 2019). Moreover, it's clear from the literature that third parties are much more likely to contribute the latter than the former (Levine *et al*.,

2011; Philpot, 2017). It seems, therefore, that Pietrazewski's exclusive focus on "attack" as the key communicative act in these triadic relationships ignores the richness of human behaviour in conflict. He is in danger of ignoring the "equally old heritage of countermeasures that protect co-operative arrangements against the undermining effects of competition" (de Waal, 2000, p. 590). Behaviours which are aimed at conflict reduction are equally as "primitive" as those that seek power and dominance. In fact, there are good grounds to argue that behaviours which indicate conciliation and care are likely to be as diagnostic (if not more diagnostic) of group relationships in conflicts (Liebst *et al*., 2019; Philpot, 2017; Philpot, Liebst, Lindegaard, Verbeek, & Levine, 2020b). People watching others in conflict – and people engaging in conflict themselves – are exposed to a more complex sequence of aggressive and conciliatory acts from the antagonists and third parties to conflict than Pietraszewski allows. In short, the model's claim to have isolated a defined set of "cognitive primitives" is undermined by this overemphasis on "attack, attack, attack."

In addition to this misrecognition of the nature of behaviour in conflict, we also argue that Pietraszewski (2021) fails to adequately acknowledge where theoretical work in social psychology can contribute to his project. More specifically, we take issue with the claim that traditional social psychology approaches to the group are conceptually or practically blind to the relational property of group membership (e.g., p. 29). For example, the social identity approach (SIA) (Haslam, 2004; Reicher, 2004) draws extensively on the idea of the "meta-contrast principle" (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) – which is explicitly relational. The meta-contrast principle states that a collection of individuals tend to be categorised as a group to the degree *inter alia* that the perceived differences between them are less than the perceived differences between them and other people (outgroups) in the comparative context (Haslam, Reicher, & Levine, 2012; Smith & Hogg, 2008). As part of the work on self-categorisation theory, Turner and colleagues have adapted the classic work of

Bruner (1957) on the importance of categorisation for the way an individual makes sense of perceptual stimuli in the world. They show that decisions on when individuals are perceived as groups can be subject to the same kinds of relational categorisation processes. It is true there have been few attempts to build this dynamic group formation idea into computational approaches to modelling group processes (but see Philpot, 2017; Salzarulo, 2004, 2006 for work that provides an entry point for theoretical integration). A computational approach to the perceptual mechanics of group formation would be better served by constructively engaging with rather than ignoring or misrepresenting relevant work in social psychology.

In conclusion, the strength of the approach proposed in this paper is that it seeks to model relationality across triadic rather than dyadic relationships. However, at a behavioural level, the approach needs to recognise the central (and equally "primitive") role of conciliation and care as an indicator of group belongingness in the context of conflict. This would facilitate a more veridical mapping of what actually happens in conflict. It would also assist Pietraszewski stated aim of making this kind of computational approach to group designation generalisable to contexts other than conflict. The paper would also benefit by engaging constructively with the theoretical work in social psychology on relationality in how group membership is derived. An examination of the meta-contrast principle might be useful in modelling how aggressive and conciliatory acts across triadic sequences can result in the emergence of group properties.

References

Bruner, J. S. (1957). On perceptual readiness. *Psychological Review*, 64(2), 123–152. https://doi.org/10.1037/h0043805

de Waal, F. B. (2000). Primates – A natural heritage of conflict resolution. *Science*, 289(5479), 586–590. https://doi.org/10.1126/science.289.5479.586

Ejbye-Ernst, P., Lindegaard, M. R., & Bernasco, W. (2020). A CCTV-based analysis of target selection by guardians intervening in interpersonal conflicts. *European Journal of Criminology*, 1–20. https://doi.org/doi.org/10.1177%2F1477370820960338

Haslam, S. A. (2004). *Psychology in organizations*. Sage.

Haslam, S. A., Reicher, S. D., & Levine, M. (2012). When other people are heaven, when other people are hell: How social identity determines the nature and impact of social support. In J. Jetten, C. Haslam & S. A. Haslam (Eds.), *The social cure: Identity, health, and well being* (pp. 157–174). Psychology Press.

Levine, M., Taylor, P. J., & Best, R. (2011). Third parties, violence, and conflict resolution: The role of group size and collective action in the microregulation of violence. *Psychological Science*, 22(3), 406–412. https://doi.org/10.1177/0956797611398495

Liebst, L. S., Philpot, R., Bernasco, W., Dausel, K. L., Ejbye-Ernst, P., Nicolaisen, M. H., & Lindegaard, M. R. (2019). Social relations and presence of others predict bystander intervention: Evidence from violent incidents captured on CCTV. *Aggressive Behavior*, 45(6), 598–609. https://doi.org/10.1002/ab.21853

Liebst, L. S., Philpot, R., Levine, M., & Lindegaard, M. R. (2021). Cross-national CCTV footage shows low victimization risk for bystander interveners in public conflicts. *Psychology of Violence*, 11(1), 11–18. https://doi.org/10.1037/vio0000299

Philpot, R. (2017). Beyond the dyad: The role of groups and third-parties in the trajectory of violence. Open Research Exeter, University of Exeter.

Philpot, R., Liebst, L. S., Levine, M., Bernasco, W., & Lindegaard, M. R. (2020a). Would I be helped? Cross-national CCTV footage shows that intervention is the norm in public conflicts. *American Psychologist*, 75(1), 66–75. https://doi.org/10.1037/amp0000469

Philpot, R., Liebst, L. S., Lindegaard, M. R., Verbeek, P., & Levine, M. (2020b). Reconciliation in human adults: A video-assisted naturalistic observational study of post conflict conciliatory behaviour in interpersonal aggression. *PsyArXiv*. https://doi.org/10.31234/osf.io/9e4rf

Reicher, S. (2004). The context of social identity: Domination, resistance, and change. *Political Psychology*, 25(6), 921–945. https://doi.org/10.1111/j.1467-9221.2004.00403.x

Salzarulo, L. (2004). Formalizing self-categorization theory to simulate the formation of social groups. In C. Hernández, A. López-Paredes, J. Pajares, & J. M. Galán (Eds.), *Proceedings of the 2nd International Conference of European Social Simulation Association*. University of Valladolid.

Salzarulo, L. (2006). A continuous opinion dynamics model based on the principle of meta-contrast. *Journal of Artificial Societies and Social Simulation*, 9(1), 1–13.

Smith, J. R., & Hogg, M. A. (2008). Social identity and attitudes. In W. D. Crano & R. Prislin (Eds.), *Attitudes and attitude change* (pp. 337–360). Psychology Press.

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory* (pp. x, 239). Basil Blackwell.