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Social groups include social relationships

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doi:10.1017/S0140525X25101155, e49

Abstract

In this commentary, we express enthusiasm for Thomas's article and research efforts, but question her proposed division between social groups and social relationships. Joining other social scientists, we view relationships as fundamental to – and sometimes synonymous with – social groups. Further, empirical studies focused on infants and young children highlight the tight link between social groups and relationships.

In her thought-provoking commentary, Thomas draws a line between social relationships and social groups. We appreciate Thomas's efforts to characterize how infants initially represent the social world, but we question whether separating relationships and groups is necessary or correct. Indeed, in looking broadly across literatures in the social sciences to define what a social group entails, sociologists and social psychologists often center – or at least reference – social relationships. For example, Forsyth (2019) defines a group as "two or more individuals who are connected to one another by and within social relationships." Sociologists have also traditionally classified groups into types that vary according to features such as degree of intimacy and longevity (e.g., "primary groups" such as families vs. "secondary groups" such as work colleagues; Cooley, 1909). And, social scientists from many subdisciplines recognize that groups often have hierarchical structures (e.g., Heck, Shutts, & Kinzler, 2022). Thus, it is not clear that there should, in principle, be a hard line between relationships and groups; a more parsimonious account may view social relationships as embedded within social groups.

More proximate to the psychology of infants and young children, empirical studies suggest that young children's developing representations of social groups include social relationships as a central component. Rhodes (2013) argues that categorizing humans into groups invites inferences related to 1) natural kinds and 2) social obligations. Another way to frame this distinction may be that a "social group" licenses two different downstream consequences: inferences about common attributes and inferences about social relationships (Liberman, Kinzler, & Woodward, 2017a). Indeed, existing evidence with infants suggests that (at least rudimentary) aspects of both kinds of social-group inferences are observable. Infants' reactions to speakers of the same versus different languages provide a useful example. These studies suggest that infants both infer positive social relationships between same-language speakers (Liberman et al., 2017b) and make inductive inferences about such individuals' common attributes (e.g., that two speakers of the same language will share food preferences; Liberman et al., 2016). These two classes of inferences (i.e., "relationships" and "attributes") may also inform one another: for instance, infants predict that people who share similar food preferences are also more likely to affiliate (Liberman et al., 2014; Liberman et al., 2021), and that people who affiliate are more likely to share food preferences (Liberman et al., 2016).

Further, some research suggests that early inferences of shared relationships may be even more easily licensed by social group information than are those of common attributes. For example, in one study (Shutts, Roben, & Spelke, 2013), four-year-old children were presented triads of unfamiliar children. In each triad, two people matched in either gender or race, and one person differed in either gender or race (e.g., on one trial, children saw two Black girls and one Black boy). When asked to guess which two people were friends, children selected the people who matched in gender or race (e.g., the two Black girls; see also Roberts et al., 2017). When asked which two people shared the same attribute (e.g., liking to play a particular game), children were equally likely to select children from the same vs. different social groups. Thus, when reasoning about social groups, young children can privilege social relationships over shared properties.

The target article lays out a possibility that human social group notions are built from representations of social relationships per se. Alternatively, in studying infants' reasoning about the nature of

social connections, Thomas and her colleagues may be studying early social group cognition. In this case, Thomas's work could be seen as indicating that some of the social group phenomena revealed most often in studies of children and adults are also present in infancy – and that realization could guide further studies building on the creative methods Thomas has developed, but linking signature phenomena identified in children and adults.

Ultimately, of course, older children and adults come to know many more things about social groups than infants and young children do, including which properties (stereotypes) are associated with particular kinds of people (Sierksma, Brey, & Shutts, 2022) – and the nature and complexity of dyadic relationships within a group certainly grows. But the heart of social groups across development appears to include social relationships as a critical downstream consequence. Indeed, adults themselves have closer and more numerous social relationships with those who match them in gender, race, and other social group dimensions (McPherson, Smith-Lovin, & Cook, 2001).

Whether Thomas's work should be conceptualized as focusing on social relationships or social groups, there is one thing that is clear at present: we are likely to learn a lot about the origins of humans' extraordinary social capacities through the clever studies and methodology of Thomas and her colleagues in the coming years. We applaud these efforts and look forward to additional work testing ideas Thomas has advanced.

Acknowledgements. N/A.

Financial support. The preparation of this article was supported in part by NIH Grant R01HD106970 to K.S. and NSF grant 1941648 to K.D.K.

Competing interests. The authors have no competing interests to declare.

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Toward a unified theory of social relationships and social networks

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doi:10.1017/S0140525X25101350, e50

Abstract

Navigating the social world requires representing how people relate to one another and how people are connected in a network. Though both are forms of relational knowledge, it is difficult to unify them in a single theoretical framework. I hypothesize that the statistics of observation may be sufficient to learn both network structure and an intuitive theory of relationships.

As the poet John Donne noted, "No [human] is an island, entire of itself; every [human] is a piece of the continent, a part of the main." The great drama of human social life is staged not only in interactions between dyads but in the larger context of our social networks. A piece of gossip shared with the wrong person can quickly spread to far-flung corners of the community; the shockwaves generated by a romantic couple's breakup might result in a cleaving of the network as people decide to take sides; an enterprising employee can try to climb the corporate ladder by strategically cultivating relationships with well-connected middle managers.

These examples illustrate that to adaptively navigate the social world, we must learn how people are connected to one another. Moreover, we must do so despite having imperfect memory and incomplete observations of others' social relationships. How can this be accomplished? It is tempting to assume that the cognitive mechanisms underlying social network representation are essentially the same mechanisms underlying the representation of social relationships. After all, social networks are, by definition, composed of social relationships.

In the target article, Thomas proposes that having an intuitive theory about social relationships can help children understand other agents' behaviors, much as intuitive theories can help us reason about the physics of an object or the psychology of an individual mind. I agree that the richness of an intuitive theory is useful for understanding how very young children and infants represent social relationships. However, it is unclear whether relational models (i.e., structured representations of different relationship "types") provide the right cognitive foundation for representing complex social structures, like networks.

Due to limitations in both observation and memory of social relationships, learning a mental representation of a social network requires extrapolation from direct experience. Recent work has