Comment on Tomasello

Feelings of obligation are valuations of signaling-mediated social payoffs

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Abstract: We extend Tomasello's framework by addressing the functional challenge of obligation. If the long-run social consequences of a decision are sufficiently costly, obligation motivates the actor to forgo potential immediate benefits in favor of long-term social interests. Thus, obligation psychology balances the downstream socially-mediated payoffs from a decision. This perspective can predict when and why obligation will be experienced.

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Tomasello advances a novel framework regarding the phylogeny and development of obligation, describing obligation as a coercive motivation. However, he did not explicitly define this motivation. To extend Tomasello's argument, we advance the following definition of obligation: *An obligation is a motivational sentiment in response to social expectations (e.g., requirements, commitments, taboos, rules) and potential social costs (e.g., loss of relationships, reputational consequences) which serves to motivate an individual to perform an action in a particular manner or to a level beyond what would maximize one's inclusive fitness if there were no social costs for acting otherwise.*

This definition adds to Tomasello's characterization of obligation by specifying that (a) there is a baseline willingness to perform said actions, e.g., the material outcome is useful to me or to those I value based on kinship or interdependence or stake (see Aktipis et al., 2018, Balliet, Tybur, & Van Lange, 2017); (b) social obligations can make one willing to perform these actions differently or to a higher level than one might otherwise "want" (e.g., allocating resources differently than the level predicted from kinship, independence, and stake); (c) these obligations derive from perceived reciprocal or reputational consequences of (not) doing so (i.e., future costs and benefits); and (d) that the strategy of this system is at the functional level, and need not be consciously accessible.

For obligation to be adaptive, the mechanism must resolve a fitness problem. Here, it accounts for negative social consequences for not performing an expected action, or not performing it in the expected way. Performing an obligated action sends information – a positive social signal to an individual or group, whereas failing to perform the action sends the opposite signals (e.g., that

one (de)values the relationship or membership, that one is (un)likely to default on existing relationships, or that one is (un)trustworthy). Given that reputation-based signals inform social decisions of others, such as partner choice, approach, and avoidance (Barclay, 2013, 2016; Barclay & Willer, 2007; Sylwester & Roberts, 2010; 2013; Wu, Balliet, & Van Lange, 2016), (in)action could result in broad social consequences with long-term costs, such that someone (not) performing an action may be chosen less often as a social partner and receive less help from others. Consistent with this interpretation, multiple lines of evidence suggest that people calibrate their behaviors according to the perceived reputational costs and benefits of their actions (Barclay, 2013, 2016; Barclay & Willer, 2007; Feinberg, Willer, & Shultz, 2014; Rotella et al., under review; Wu, Balliet, & Van Lange, 2016). Notably, when one fails to complete the expected action, they may experience social emotions (e.g., guilt, shame) to motivate them to repair the relationship or diminish the reputational costs (Ketelaar & Au, 2003; Schniter, Sheremeta, & Snyzcer, 2012; Sznycer et al., 2016; 2018). This characterization of obligation posits that the intensity of the perceived obligation will correspond to the perceived social consequences from failing to meet the expectations of others.

We can formalize this at the functional level. There are multiple pathways to fitness outcomes (reviewed by Barclay & Van Vugt, 2015), so there are multiple proximate motivation systems that cause our willingness to help. For example, one can have a kin-based interest and a reciprocal exchange interest in the same partner (e.g., "I love you brother, but this is a huge favor – you'd better repay it"). Thus, one's total fitness interest and corresponding proximate willingness to help (h) is some cumulative function of fitness consequences derived based on kinship (k), interdependence/stake (i), demands from reciprocal partners (d), signaling value (s),

and payoffs from various other social expectations (e), such that $h = k + i + d + s + e$. These various social outcomes (d, s, e) constitute one's obligation (o). If these motivations are additive, then one's obligation $o = d + s + e$. To generalize this to non-additive functions, one's willingness to help is some function (f) of these factors, such that $h = f(k,i,d,s,e)$. As such, one's obligation is the component of one's willingness which goes beyond the level directly predicted by kinship and interdependence/stake alone, i.e., $o = f(k,i,d,s,e) - f(k,i)$. This model is consistent with the idea that as social demands are greater, stronger feelings of obligation will be experienced. Further, obligation will be perceived a motivating force in situations where there is a conflict of interest, resulting in a proximate ambivalence when you "have to do" X but "want" to do Y.

Although joint intentionality often precedes obligation, our theorizing suggests that joint intentionality is not required to experience obligation; the feeling of obligation arises anytime that failure to complete the obligated action would result in negative social consequences. For example, dieting or raising pets and houseplants do not require joint intentionality. However, once these commitments are public knowledge (joint knowledge or expectations), one may feel obligated to persist because desisting would convey negative information about oneself.
 In summary, we posit that obligation will be experienced when (a) there are learned social expectations (towards an individual or group) that, if failed, can result in far-reaching social consequences by impacting one's reputation; (b) these expectations implicitly or explicitly motivate people to act in a different manner or to a different degree than they would otherwise act; and (c) the function of moral obligation is to forgo short-term benefits likely to be associated with long-term social consequences. In the absence of reputational concerns (real or perceived),

it is unlikely that feelings of obligation will be elicited. Our theorizing is consistent with the characteristics of obligation described by Tomasello, such that obligation is a special motivational force with a coercive quality which has a special social structure in human society, given the complexity of human social interactions. Thus, we extend his model by emphasizing the role of social repercussions – especially via signaling – in driving the experience of obligation, and that obligation is particularly salient when there is a conflict between one's immediate inclusive fitness interests and the potential downstream social consequences of deviating from others' expectations.

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