No single notion of cooperation explains when we respect ownership

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Abstract

Cooperation is fundamentally moderated by the form of relationship between the actors involved, as is normative resource distribution. We argue that possessions are likely treated differently across different types of cooperative relationships. Whereas Boyer's computational model might in principle account for this, the theory would benefit from a specification of how different cooperative contexts can shape the representation of ownership.

We applaud Boyer's attempt to provide a simple, computational, functional theory to account for all cases of ownership representations across cultures, including novel and historical phenomena. Boyer posits that there are no dedicated, evolved, core ownership representations per se, but that an intuitive notion of ownership is produced by evolved cognitive systems for (a) competitive interactions for the possession of resources and (b) expected mutually beneficial cooperation between agents. However, we posit that there is no one-size-fits-all form of cooperation. That is, cooperation is fundamentally moderated by the form of relationship between the parties involved, as is normative resource distribution. Thus, it is unlikely that one minimal cooperation tag will suffice in explaining our ownership psychology.

Boyer argues that whether one represents possession as legitimate ownership that should be respected will depend on whether an agent possessing the resource is seen as a potential cooperation partner, conceived broadly. It follows that any individual who fulfills this minimal requirement might be a legitimate owner, given a sufficient strength of the association between possession cues and that person. Further distinctions between types of cooperation or types of cooperation partners are not made. In other words, how one perceives ownership should not necessarily differ between a distant, but possibly cooperative stranger, a close friend, or a family member with whom one engages in regular cooperation.

Whereas this is theoretically possible, ownership behavior in close or long-term cooperative relationships constitutes an important counter-example to Boyer's claim that agents will respect (and represent as legitimate) possessions as far as they are held by cooperation partners. In fact, we may be less likely to respect the personal possessions of particularly close cooperation partners as compared to more distant cooperators. Presumably, one would be less reluctant to take an object from a close family member without asking than from a stranger. That is the point of communal sharing (see Fiske, 1991, for ethnographic

review) – not that you share in the community, as Boyer appears to use the term, but that resources (such as food or land) are shared communally, belonging to everybody and none in particular within a relationship of oneness or social unity. In addition to kin and kin-like relations, high degrees of generalized reciprocity within the group likely also makes this possible. Indeed, people who engage in frequent reciprocal sharing plausibly take each other's possessions sometimes (e.g., "borrowing" milk in the office refrigerator from a close colleague without asking, who may in turn borrow from someone else on another occasion).

These challenges to Boyer's theory may arise from Boyer's assumption that a loss of a resource is always more costly than beneficial for the owner. Following the logic of inclusive fitness (Hamilton, 1964) and reciprocal altruism (Trivers, 1971), the costs imposed upon an agent who loses a possession to close kin or someone who is likely to reciprocate might not outweigh the long-term benefits of the relationship. If so, the agent should not refrain from future cooperation. Boyer does not consider the cost of losing cooperation partners borne by owners, which would indeed be moderated by the strength and duration of the cooperative relationship: It would not be very costly to halt future cooperation with a stranger taking one's pen, but the costs would be substantial by ending the relationship with a close friend who did the same; it is annoying to return from a vacation to find that elderly neighbors "helped out" by picking and cooking for themselves all the apples of your garden while you were gone, but maintaining otherwise helpful and cordial cooperative relations for years to come is worth more than a harvest of apples and likely keeps you from making a fuzz about it. The difference between closer and distant relationships in this regard might be qualified by resource value. Although the benefits associated with close, cooperative relationships may allow individuals to respect ownership less than in more distant relationships, consequences will most likely be inevitable if the resource is of great value, even among friends and family members (witness devastating inheritance conflicts within families, for instance). Taking a

possessed object of great value would likely yield a cost too high for the owner and end most cooperative relations. An evolved computational mechanism to represent legitimate ownership would likely adaptively consider how costs and benefits of resource loss vary across relational contexts.

A counter-argument from the perspective of Boyer's model might be that cues of possession are simply weaker in the context of close cooperative relationships, and thus permit ownership not to be respected. For instance, one might argue that the shared use of resources within one family home may undermine the overall impression of possession, which would be necessary to form any representation of legitimate ownership. Yet, even if this counterargument can explain how we fail to represent the ownership of others in close cooperative relationships (and, speaking against it, at least Scandinavian siblings appear acutely aware of who owns what toys or makeup, even if they lend them to each other), it does not consider why and when the owner (who presumably knows whether a resource is hers) might represent a shift in possession as permissible. This suggests that the psychology governing how we deal with our own possessions must also be relationship-specific beyond a simple distinction between potential cooperators and non-cooperators. In sum, a computational theory of ownership representations and motives must account for the manner in which ownership plays out in different kinds of cooperative relationships, including how ownership-related motives manifest in the minds of owners across relational contexts.

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