

## **Ownership and Willingness to Compete for Resources**

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### *Abstract*

Boyer proposes that ownership intuitions depend on tracking cues predictive of agents' motivations to compete for resources. However, the account may mis-predict people's intuitions about ownership, and it may also be too cognitively costly to be feasible. Even so, alternative accounts could benefit by taking inspiration from how the account handles thorny issues in the psychology of ownership.

### *Main text*

Boyer's account is ingenious and elegant, and a major advance in theorizing about the psychology of ownership. An "invisible hand" account of ownership intuitions – an account showing how these intuitions could arise from cognitive systems not specific or dedicated to ownership – is more satisfying than explaining ownership in terms of concepts and principles specific to it. Boyer dispenses with ownership-specific principles by suggesting that ownership intuitions like *Anna owns the shovel* are rooted in processes that also support assessments of agents' motivation to compete and fight for resources. Both kinds of assessments depend on a system that keeps track of various agents' dealings with objects – for instance, the extent to which an agent has been seen with an object, defended it, and modified it. This system outputs a summary of how strongly related the agent is to the object, and strong relatedness can lead to ownership intuitions or to the sense that the agent would fight for the resource.

But one worry is that the account will mis-predict intuitions. An agent's motivation to compete for a resource will depend on its value to the agent and on the agent's likelihood of prevailing. Children aged 6-8 consider these factors when predicting who will win a fight over a resource, and who will spend more time searching for it (Pietraszewski & Shaw, 2015). But these factors are less relevant for ownership. Young children recognize that people own things they don't like, want, or value (Goulding & Friedman, 2018; Noles & Gelman, 2014) and whereas young children across many cultures ascribe ownership to the agent who created a resource, for the most part they do not ascribe ownership on the basis of neediness (Rochat et al., 2014). Hence, *accurate* summaries of others' willingness to compete for rivalrous goods are unlikely to be viable source for ownership intuitions.

Similar concerns arise if we start with ownership intuitions and try to predict willingness to compete. Suppose Anna tries to catch a butterfly and Beth sees this but then succeeds in catching it. Adults, children, and legal rulings typically see Beth as the owner in these kinds of disputes (e.g., Friedman, 2010; Pierson v. Post, 1805; Shaw et al., 2012). But it's uncertain whether people would similarly think she is more motivated than Anna to compete for the butterfly. It's true that in one series of studies, 6-8-year-olds expected owners would prevail in fights over property (Pietraszewski & Shaw, 2015). But children no longer expected this when provided with additional details, such as information that the non-owner was hungry (if the resource was food). The link between ownership and agents' motivation to compete is weak.

Another worry is that basing ownership intuitions on a system for tracking motivation to compete for resources is too cognitively pricy to be feasible. It could be worthwhile to have a sense of others' motivations to compete for highly desirable resources. But it would be

overwhelming (and probably pointless) to try to get a sense of this for all the objects and people we encounter. Some accounts of ownership paint an almost opposite picture, wherein ownership reflects principles that minimize information costs (Smith, 2012). For example, once we judge that Beth owns some land, we can assume that she owns things within its confines, including things she doesn't even know about (Goulding & Friedman, 2018; DeScioli & Karpoff, 2015; DeScioli et al., 2017; also see Starmans & Espinosa, 2020). This means we generally don't need to keep track of her ongoing dealings with her land and the objects on it, nor anyone else's either. Although many kinds of information can be useful when first deciding who owns some thing, much of this information is no longer relevant afterwards—we only need to lookout for specific events (e.g., ones that could signal rival claims or changes in ownership). What's more, while the cost-saving shortcuts we use to track ownership (e.g., Beth owns everything in her territory) could be adapted for assessing people's motivation to compete for resources, this would produce inaccurate assessments. Beth might be strongly motivated to fight for some things on her land, but her land will also hold many things she would gladly give up.

Irrespective of whether these worries are warranted, Boyer's account is, again, a major advance, and it grapples with issues (so far) inadequately addressed in other psychological work on ownership – including the proposal that people have a naïve theory of ownership (Nancekivell et al., 2019). Perhaps most important is its explanation of cases where an agent is not seen as a “true” or full-fledged owner, but is nonetheless treated as having many hallmarks of ownership—as when train passengers are seen as having some claim to their seats, or when illegal squatters are denied ownership of the land they occupy while also being accorded some rights to it nonetheless (for many more examples, see Heller & Salzman, 2021). At the same time, Boyer's explanation of these cases could inspire an alternative approach founded on principles of ownership (i.e., rather than on representations of strength of relation to a resource). For instance, one might maintain that people use ownership-specific principles (e.g., creation→ownership), but acknowledge two caveats. First, these principles do not form a coherent set and therefore can produce contradicting conclusions. Indeed, this is the rule with naïve theories (e.g., Keil, 2010). Second, whereas applying ownership principles typically produces ownership intuitions, this is not always enough to fixate ownership beliefs. Hence, we can have conflicting intuitions about who owns some resource, and we can entertain feelings that agents own resources (and respond in kind), without treating these as reflecting settled beliefs.

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## References

- Blake, P. R., & Harris, P. L. (2009). Children's understanding of ownership transfers. *Cognitive Development, 24*, 133-145. <https://doi.org/10.1016/j.cogdev.2009.01.002>
- DeScioli, P., & Karpoff, R. (2015). People's judgments about classic property law cases. *Human Nature, 26*(2), 184-209. <https://doi.org/10.1007/s12110-015-9230-y>
- DeScioli, P., Karpoff, R., & De Freitas, J. (2017). Ownership dilemmas: The case of finders versus landowners. *Cognitive Science, 41*, 502-522. <https://doi.org/10.1111/cogs.12486>
- Espinosa, J., & Starmans, C. (2020). Control it and it is yours: Children's reasoning about the ownership of living things. *Cognition, 202*, 104319. <https://doi.org/10.1016/j.cognition.2020.104319>
- Friedman, O. (2010). Necessary for possession: How people reason about the acquisition of ownership. *Personality and Social Psychology Bulletin, 36*(9), 1161-1169. <https://doi.org/10.1177/0146167210378513>
- Goulding, B. W., & Friedman, O. (2018). The development of territory-based inferences of ownership. *Cognition, 177*, 142-149. <https://doi.org/10.1016/j.cognition.2018.04.013>
- Heller, M. A., & Salzman, J. (2022). *Mine! How the hidden rules of ownership control our lives*. Doubleday.
- Keil, F. C. (2010). The feasibility of folk science. *Cognitive science, 34*(5), 826-862. <https://doi.org/10.1111/j.1551-6709.2010.01108.x>
- Nancekivell, S. E., Friedman, O., & Gelman, S. A. (2019). Ownership matters: People possess a naive theory of ownership. *Trends in Cognitive Sciences, 23*(2), 102-113. [https://doi.org/S1364-6613\(18\)30280-8](https://doi.org/S1364-6613(18)30280-8)
- Noles, N. S., & Gelman, S. A. (2014). You can't always want what you get: Children's intuitions about ownership and desire. *Cognitive Development, 31*, 59-68. <https://doi.org/10.1016/j.cogdev.2014.02.002>
- Pierson v. Post, 3 Caines R. 175, 2 Am. Dec. 264 (N.Y., 1805) [https://www.nycourts.gov/reporter/archives/pierson\\_post.htm](https://www.nycourts.gov/reporter/archives/pierson_post.htm)
- Pietraszewski, D., & Shaw, A. (2015). Not by strength alone: Children's conflict expectations follow the logic of the asymmetric war of attrition. *Human Nature, 26*, 44-72. <https://doi.org/10.1007/s12110-015-9220-0>
- Rochat, P., Robbins, E., Passos-Ferreira, C., Oliva, A. D., Dias, M. D., & Guo, L. (2014). Ownership reasoning in children across cultures. *Cognition, 132*(3), 471-484. <https://doi.org/10.1016/j.cognition.2014.04.014>

Shaw, A., Li, V., & Olson, K. R. (2012). Children apply principles of physical ownership to ideas. *Cognitive Science*, *36*(8), 1383-1403. <https://doi.org/10.1111/j.1551-6709.2012.01265.x>

Smith, H. E. (2012). Property as the law of things. *Harvard Law Review*, *125*(7), 1691-1726.