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## Distinguishing epistemic and moral grounds for legal protection

Commentary on [Crump et al.](#) on *Decapod Sentience*

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**Abstract:** The criteria proposed by Crump et al. are based on various cognitive roles associated with sentience. A subset of them may be sufficient for certain kinds of welfare, but the presence of all of them should be considered as clearly sufficient for substantial kinds of legal protection based on their relation to capacities that we consider essential for moral standing in human beings.

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**1. Importance of the criteria.** The set of criteria proposed in the target article makes clear that sentience has functional and emotive components. These criteria are indeed, as Crump et al. (2022) argue, undemanding and rigorous. Satisfying them should be accepted as a sufficient threshold for an animal to be granted sentience, and therefore, some degree of moral and epistemic standing. Moreover, verifying sentience in decapod crustaceans is a very important step towards developing a general framework for animal sentience. A key contribution of the target article is the proposal to use these findings as a justification for animal welfare. We need this kind of cross-disciplinary engagement with political and legal decision-makers for science to achieve a more concrete connection with fundamental ethical questions. The authors carefully clarify how behavioural and functional patterns can occur in the absence of sentience. This is why they add motivational, integrative, and biochemical components, which makes the case for sentience much more likely. Here, I examine the distinct normative justifications that may underlie different criteria in animal welfare based on the different roles of functional and emotive factors. Otherwise, a risk in applying this framework across species is that an evidence-based approach may result in discrepancies between the largely theoretical views on moral worth and legal standing, and the scientific evidence: Species would not be protected under a clear and uniform legal framework, but rather under a scattered and poorly understood set of belief systems concerning animal cognition.

**2. Cognition, worth, and legal protection.** There can be cognitive function without a specific kind of experience or valence, or alternatively, there can be subjective experience without certain capacities for detection, representation, categorization or knowledge. A cognitive agent may be able to recognize bodily damage with precision and make decisions based on such recognition capacities. But it is at least conceivable that they could fail to feel pain. The authors propose detection-based and anatomical markers for basic sentience, but also more

sophisticated criteria based on value judgements. Criterion number 5 (Motivational trade-offs), in particular, calls for categorization, learning, and motivational trade-offs that clearly require specific experiences of pain. These capacities should be sufficient for sentience. But perhaps something less sophisticated might suffice for *epistemic* status (the status of counting as an agent worthy of protection on the basis of the knowledge that it possesses).

1. Nociception
  2. Sensory integration
  3. Integrated nociception
  4. Analgesia: (a) endogenous (b) exogenous
  5. Motivational trade-offs
  6. Flexible self-protection
  7. Associative Learning
  8. Analgesia preference: (a) self-administer (b) location (c) prioritised
- Eight criteria for pain sentience**  
(Crump et al., 2022, §2.2)

Suppose that an agent with the capacity to recognize bodily damage, but without the capacity to feel pain, is actually better at detecting bodily damage than those who have experiences of pain. Such an agent has valuable knowledge but lacks the capacity to relate it to experiences of suffering, either because of a kind of congenital insensitivity to pain or because of pain asymbolia. The difficulty for such an agent would be to judge the trade-offs concerning when it is appropriate to undergo a certain degree of suffering to achieve valuable goals. Criterion 5 is, therefore, more closely related to the kind of cognition required in humans to have moral worth than to other criteria. In convincing legislators and the public at large, it may be useful to explicitly address which criteria are more relevant for either epistemic or moral worth. However, some legal protections can be accorded even in the absence of clearly sufficient criteria for *moral* standing (granted typically on the basis of sentience). For example, legal protections can be granted on the basis of epistemic value, considering agents as sources of knowledge. This is the kind of protection we give to corporations and their property, or to legal entities that are protected on the basis of their interest to legal systems, despite their lack of sentience.

**3. Empathic responsiveness and moral worth.** As mentioned, there might be cases in which sentience is present, but some kinds of decision-making and learning that are relevant for full moral status are absent: suffering, but no cognitive integration with memory and decision-making. One of the most comprehensive and integrative accounts of consciousness offered in the literature, grounded in cognitive functions, is defended by Ginsburg and Jablonka (2019). In their current commentary on the paper by Crump et al., Ginsburg and Jablonka (2022) indicate that although some of Crump et al.'s criteria may be redundant, there is enough overlap between the two accounts to achieve agreement. This kind of evidence-based consensus is extremely important for bridging the gap between scientific findings and legislative protection. However, precise distinctions concerning the nature of cognitive capacities, some more relevant for moral worth than others, are also crucial to fully bridging this gap. Different regimes of animal protection are possible and should be discussed on

different grounds. The dichotomy between full legal protection akin to personhood, granted on the basis of human moral worth, and no protection whatsoever, has been exceedingly harmful and unproductive. More nuance is needed in this debate, particularly concerning its potential legal consequences. Furthermore, sentience may come in a variety of forms, which may play different roles, just the way different types of attention satisfy diverse cognitive needs (Montemayor, 2021). It is also plausible that minimal forms of sentience are already sufficient for meriting some kinds of protection that require political and legal reforms. A thorough framework for animal sentience in relation to its legal protection, however, requires examining all kinds of morally and epistemically relevant sentience.

**4. Conclusion.** The most sophisticated forms of sentience and consciousness may only be relevant for the most robust kinds of moral and epistemic worth. An understanding of various forms of sentience according to different criteria is important in order to bridge the gap between scientific research and political action. We protect corporations as legal persons for epistemic, rather than moral reasons. Jurisprudence and the social sciences should be taken into account in this debate, as Gorman (2022) recommends. This effort should include a discussion of various legal protections based on the epistemic and moral capacities of animals. Justifications for legal protection require a degree of precision that a wide variety of views regarding consciousness cannot provide. There is considerable confusion in the media and even among specialists regarding this important issue, as illustrated by the recent case of the Google engineer who sought legal protection for LAMDA, a large language processor (see Levin, 2022). The conversation needs to change. Sentient life on our planet is clearly more relevant ethically than corporate products. Concrete criteria are needed to justify this conclusion. However, if we are already contemplating rights to corporate products, we should first be more than willing to extend them to a large variety of animals.

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