The Ideology of Pragmatic Humeanism

Tyler Hildebrand hildebrand@dal.ca

Abstract

According to the Humean Best Systems Account, laws are generalizations in the best systematization of non-modal matters of fact. Recently, it has become popular to interpret the notion of a best system pragmatically. The *best* system is sensitive to our interests—that is, to our goals, abilities, and limitations. This account promises a metaphysically minimalistic analysis of laws, but I argue that it is not as minimalistic as it might appear. Some of the concepts it employs are modally robust, leading to a dilemma.

1 Introduction

Let's begin with a description of Humeanism in its most general form.

Humeanism: Fundamentally, the world is just a grand mosaic of non-modal matters of fact.

At rock bottom, Humeanism posits events in spacetime, and that's all. Its *ontology*—the set of entities it posits—is economical. So too is its *ideology*—its set of primitive concepts and/or predicates. Notably, none of its primitives are modally-laden. Humeanism makes no reference to laws, powers, dispositions, subjunctive facts, and the like. These are attractive features of this general metaphysical worldview.

How, then, should Humeans think about laws of nature?¹ Most prefer an analysis along the following lines:

¹For recent introductions to Humeanism and Non-Humeanism about laws see Bhogal (2020a) and Hildebrand (2020).

Humean Best Systems Account (BSA): Laws of nature are contingent generalizations in the best systematization of the Humean mosaic.

The notion of a *systematization* is relatively straightforward: it's just a set of sentences (usually taken to be true sentences) about the mosaic. The *best* systematization is the one that best balances various theoretical virtues. For example, some systematizations are more informative (stronger) than others, and some systematizations are simpler than others.²

The BSA has many attractive features. It elegantly captures the distinction between law and accident, and in many respects it aligns with our intuitions, ordinary concepts, and scientific practices concerning laws.³ Moreover, it does so without invoking new metaphysically robust entities or primitive modal concepts, so it seems to retain Humeanism's attractive economy of ontology and ideology. In sum, the BSA is economical, easy to understand, and it does much of what we want a theory of laws to do.

Unfortunately, when we dig a bit deeper, it's unclear whether the BSA possesses all of these advantages. The question "What makes a best system *best*?" is notoriously difficult to answer, but without an answer the Humean BSA is incomplete.

One difficulty is that our choice of theoretical virtues (such as simplicity and strength) is not as straightforward as it might initially appear. For example, Woodward (2014) identifies different conceptions of simplicity and raises some doubts about its role in scientific theory choice, and others pro-

²According to the canonical version of the BSA (Mill 1875/1987; Ramsey 1978; Lewis 1973), simplicity and strength are the only major virtues. As is standard, I'm ignoring chance for ease of expression, but this won't affect my arguments.

³This is not to say that the alignment is perfect. See Carroll (1994) and Tooley (1977) for influential counterexamples. In addition, there are arguments to the effect that Humeanism strips laws of certain desirable properties, such as the power to govern nature, explain regularities, and support counterfactuals (Armstrong 1983; Tooley 1977; Bird 2007; Maudlin 2007). In response, most Humeans are willing to revise our ordinary concepts—of law, of explanation, etc. See e.g. Beebee (2000), Loewer (1996), and Bhogal (2020b).

pose new virtues (e.g., Braddon-Mitchell (2001), Dorst (2018), and Hicks (2018)).

Another difficulty concerns the weighting of theoretical virtues. A system that is best under one metric may not be the best under another, but traditional formulations of the BSA provide little guidance here. Thus, they fail to determine the laws.⁴

Yet another difficulty is that some virtues—especially simplicity—are language relative. Notably, if we allow gruesome, gerrymandered predicates we can describe arbitrarily complex mosaics with a maximally simple sentence!⁵ That's unacceptable. This led Lewis (1983) to propose the following rule:

Naturalness Constraint: Systematizations must be expressed in languages involving only perfectly natural predicates.

What is a *perfectly natural predicate*? Lewis's idea, which will be familiar to who have studied the problem of universals, is that some classifications carve nature at the joints better than others. The good classifications capture genuine similarities among objects, whereas the bad ones do not. For example: the set of all possible objects with negative unit charge is perfectly natural; the set of green objects is somewhat natural; the set of grue objects (objects that are green and first observed before the present or blue and first observed after the present) is much less natural; and a set whose only members are David Lewis's beard, this essay, and the number 7 is extremely non-natural. The Naturalness Constraint solves the problem at hand because it does not allow us to gerrymander predicates in our theorizing. However,

⁴See Cohen and Callender (2009) and Woodward (2014) for complaints along these lines.

⁵See Lewis's (1983) discussion of the infamous predicate *F*, which holds of all and only the individuals in the actual world, making the utterly simple sentence 'Everything is *F*' entail all truths.

it raises a new problem of its own. However the Naturalness Constraint is understood,⁶ it isn't metaphysically benign. In invoking the concept of naturalness, it posits objective metaphysical structure, and it requires our theorizing to be constrained by that structure. As a result, the Naturalness Constraint complicates the Humean BSA. To some, this seems to violate the minimalistic spirit of Humeanism.⁷

In light of these three problems, it is unclear whether the Humean BSA really possesses the attractive features described above. However, there is a new version of the BSA that claims to provide a unified solution.

Pragmatic Humeanism: Laws of nature are generalizations in the best systematization of the mosaic, where the best systematization for a group is the one that is best suited to advance the interests of the group—for example, by producing useful predictions and explanations given the goals, abilities, and limitations of the group.⁸

All three difficulties are (allegedly) avoided by allowing the best system to be sensitive to the interests of the agents actually employing the accounts of laws: *Why these virtues? Why this weighting? Why these predicates? Because they serve our interests!* In addition, Pragmatic Humeanism appears to accomplish this without anything like the Naturalness Constraint, so it preserves the ontological and ideological economy of Humeanism in its general form.⁹ That, at least, is the hope.¹⁰

⁶See Hildebrand (2019) for different interpretations.

⁷See, for example, Loewer (2007), Cohen and Callender (2009), and Eddon and Meacham (2015).

⁸There are different varieties of Pragmatic Humeanism, but my general statement is inspired by Hall (2015), Hicks (2018), Dorst (2018), Jaag and Loew (2018), and Loewer (2021).

⁹For example, Jaag and Loew (2018, note 18) say that their "account requires no such objective joints" as those involved in Lewis's Naturalness Constraint.

¹⁰For recent objections that Pragmatic Humeanism does not secure all of these advantages, see Friend (2022), Sánchez (Forthcoming), and Demarest (Unpublished Manuscript).

Unfortunately, I fear that this hope is misplaced. Pragmatic Humeanism introduces some new concepts into its analysis of laws. We must apply the same level of scrutiny to these concepts that Lewis's critics apply to the Naturalness Constraint. When we do, we run into a serious problem. Any version of Pragmatic Humeanism requires some pragmatic criteria: namely, a specification of our goals and what it would take to satisfy them. On the surface, some of these criteria appear to be modally robust. Indeed, I'll argue that they have to support robust subjunctives to do their work—that is, to be pragmatic in the first place (Section 2). This gives rise to a dilemma (Section 3). If the modally robust criteria are taken as primitive, the account is incompatible with Humeanism. If the criteria are analyzable in terms of laws—as is typical of Humean approaches to the semantics of subjunctive conditionals—then the account involves a problematic circularity.

2 The Ideology of Pragmatic Humeanism

In this section, I'll argue that the ideology of Pragmatic Humeanism involves some modally robust concepts. But to be clear, I won't argue that these concepts must be *primitive*.

To begin, I'll provide some initial characterizations of the concepts featured in Pragmatic Humeanism's analysis of laws: namely, of goals, abilities/limitations, and interests. I won't aim for careful philosophical analyses. These are just rough characterizations to give their basic flavor. Ultimately, I just need to show that at least one of them possesses modal character; further details won't matter for our purposes.

I share many of their concerns, but the argument I develop in this paper differs from theirs, as mine is primarily focused on the modal character of some of the concepts involved in Pragmatic Humeanism. A different objection to Pragmatic Humeanism is that it makes the laws subjective. See Armstrong (1983, Chapters 1 & 5), Lewis (1994), Hall (2015), Jaag and Loew (2018), Sánchez (Forthcoming), and Hicks (Manuscript) for discussion.

To begin, let's consider the concept of a goal.

Goals: A goal is something that you want.¹¹

What matters for our purposes is that goals aren't automatically satisfied. You can't always get what you want. At the moment you set a goal, as far as you know it remains an unactualized possibility. Here is a simple case to illustrate:

Blackberry Pie: I want a slice of Mom's blackberry pie over the holidays. I can imagine this, but I may or may not get one. Did Dad pick and freeze blackberries this summer? Is Sister, who also loves blackberry pie, visiting before then? Perhaps I should make a phone call...

This case suggests that, as a practical matter, setting goals requires us to consider various unactualized possibilities: Dad's picking or not picking the berries, Sister's visiting, etc. Thus, goals seem to have modal character.

Let's now consider the notions of ability and limitation.

Ability/Limitation: An *ability* is a kind of power or disposition that admits of degrees—of any power an agent or group possesses, we can ask "How powerful?". A *limitation* simply describes the bound of a power for a particular individual or group.

The concept of a power or disposition is straightforwardly modal. Specifically, ability/limitation ascriptions imply *subjunctive conditionals*. There is a large literature on abilities, powers, dispositions, and the like, but I'll settle for an illustration with a single example.¹²

¹¹On certain objective theories of wellbeing, a goal might be construed as something that you ought to want because it is objectively good for you. I won't explore such views further, but it would be interesting to learn that Pragmatic Humeanism required *that*!

¹²See Maier (2021) and Choi and Fara (2021) for introductions to abilities and dispositions, respectively.

Chess: My ability to play chess is limited. I know the rules, and I can play competently with certain well-known openings and middle- and end-game strategies. Unfortunately, it would be a stretch to say that I play well.

Chess provides information not only about what has happened or will happen in this world, but about what would happen under a range of possible circumstances. It supports subjunctive conditionals such as the following: 'If I were to play an absolute beginner, I would win.' 'If I were to play a master, I would lose.' If someone claimed that **Chess** lacks modal force and doesn't support such subjunctives, I simply wouldn't understand what they meant by 'ability'. Eliminating the modal character of ability/limitation ascriptions turns them into completely different sorts of claims.

Finally, let's consider the notion of something's being in someone's interests.

Interests: It is in your interests to ϕ rather than $\psi =_{df}$ if you were to ϕ that would advance your goals more so than if you were to ψ .

Since the concept of a goal brings to mind possibilities, and since the concept of an ability/limitation is essentially modal, it should come as no surprise that the notion of something's being in our interests is modally-laden, too. A realistic illustration:

Benefactor: You are a skilled philosophy teacher who would like more money. A wealthy, aspiring intellectual—someone with good intentions, noble goals, and a good work ethic—has offered to pay you \$1,000,000 per year for occasional private philosophy tutoring. Accepting this job would not interfere with your other responsibilities; it would be enjoyable; and it would require minimal time and effort.

Obviously, it would be in your interests to take the job. Accepting would advance your goals more so than declining. To arrive at this judgment, we have to determine the relative values of possible courses of action—namely, accepting or declining the job. We cannot do so without modal notions.¹³

To wrap up this section, let's return to Pragmatic Humeanism. The core idea behind its analysis of laws is that the laws (for us) are those generalizations that *would* be most useful (to us). Which generalizations are those? Well, it depends on our goals, which involves the notion of unactualized possibilities. It depends on our abilities/limitations, which directly support subjunctive conditionals. And of course it depends on that which is in our interests, which requires subjunctives as well: notably, the best system is the one that *would* best serve our interests *were* we to adopt it. The analysis is driven by modal notions.

Notice that Pragmatic Humeanism is not an analysis of what we consider to be a law at a time; it does not merely aspire to say that a statement is *considered* a law when it meets our goals. The notion of lawhood retains a degree of idealization. This is essential for making sense of scientific progress. We want to allow that our best scientific theories can be improved—that we can make sense of the claim that our best theories are true, or more modestly that they are closer/further from the truth than some of their competitors, both actual and possible. At the very least, we want to allow that the things we consider to be laws at a time might not be the laws, precisely because the best system we've found *so far* may not be the

¹³See Sánchez (Forthcoming, 2.2) for a more careful account of why our concept of practical rationality is modally robust in the sense that it supports subjunctive conditionals. I'll not also that this sort of modal robustness is standardly assumed in the field of causal decision theory. See Weirich (2020).

best *period*. This would not be possible if we took the modal "bite" out of goals, abilities/limitations, and interests.

Recall our earlier discussion of Lewis's Naturalness Constraint. On the surface, the distinction between natural and non-natural properties seems commonsensical—so much so that many may not feel compelled to closely examine it. However, many Humeans do insist that we do take a closer look. Why? Well, commonsense concepts may have metaphysical commitments that violate the spirit of Humeanism. The modal concepts involved in Pragmatic Humeanism's analysis of laws deserve this same kind of scrutiny. Pragmatic Humeans owe us an account of the relevant modalities. In the next section, I'll argue that the prospects for such an account are bleak.

3 The dilemma for Pragmatic Humeanism

We have two options. We can accept these modalities as primitive or we can provide a reductive analysis of them in terms of the Humean mosaic.

The first horn: If we take subjunctives (or any other modal features of the world) as primitive, we violate the spirit of Humeanism. The first horn is as simple as that.

The second horn: If we attempt to provide a reductive analysis, we encounter a different problem. Traditionally, Humean analyses of subjunctive conditionals appeal to the laws of nature.¹⁴ Here's a simple case to illustrate:

Phone: My first smartphone never broke, though it had no case and no screen protector. (I lived dangerously before having chil-

¹⁴Could Pragmatic Humeans seek an alternative analysis of subjunctives that has nothing to do with laws or other sorts of primitive natural modality? Perhaps, but I have no idea how such an analysis would work.

dren.) But it would have broken if I had dropped it on concrete from a great height.

Why do we believe that my phone would have broken? We imagine a world as much like ours as possible up to a certain point in time, at which we suppose that my phone is dropped. We appeal to the laws of nature, which we take to be the same as (or very similar to) the laws in our world, to deduce that my phone breaks. This case suggests something like the following analysis of subjunctive conditionals:

Sample Analysis of Subjunctives: a subjunctive conditional A > B is true in the actual world just in case: in the world(s) most similar to the actual world in which A occurs, B occurs, too.¹⁵

The details of the similarity measure don't matter except for this: *sameness of laws* is one of the crucial features that determines similarity among worlds. The important takeaway for our purposes is that *the laws play an indispens- able role in determining the truth-values of subjunctive conditionals*.

This is problematic. We need laws to support subjunctives and thereby determine that which is in our interests; but according to Pragmatic Humeanism, that which is in our interests is required to determine the laws. This is circular.

To be clear, this is not an epistemological problem. The problem is *not* merely this: We need to know what the laws are before we can know the relevant subjunctives and thereby know our interests, but we have to know some subjunctives to know the laws, so *we* don't know where to begin. Rather, the problem concerns the metaphysical structure of the theory: The Humean mosaic on its own is supposed to determine *both* the laws and sub-

¹⁵This is a simplification of the Stalnaker/Lewis semantics for counterfactuals (Stalnaker 1968; Lewis 1973).

junctives; but as far as we can tell, Pragmatic Humeanism requires one to determine the other, which means that its account of what is fundamental needs to be more robust than our initial description of the Humean mosaic.

4 Conclusion

I have presented a dilemma for Pragmatic Humeanism. On the surface, Pragmatic Humeanism involves a modally robust ideology. Modal concepts cannot be taken as primitive, since that would violate Humeanism. But the prospects for analyzing these modal concepts are bleak, since typical Humean analyses of them are downstream of the Humean concept of law or if not, they involve a naturalness constraint or some other metaphysically robust primitive. I do not claim that it is impossible to avoid this dilemma. However, I do think it suggests a challenge to Pragmatic Humeans to clarify the ideology of their view—to make it clear that it can be stated without the use of modally robust concepts.¹⁶

Acknowledgements

(omitted)

¹⁶Hicks (2018) is aware of the perils of introducing new modal machinery, and ultimately suggests that we think of the pragmatic elements of Pragmatic Humeanism as heuristics that allow us to "motivate a set of criteria for lawhood that makes no reference to agents, epistemic notions, or modally robust properties" (2018, 1001–2). Specifically, he suggests that best systems balance virtues of "breadth, strength, simplicity, and modularity" (1001). Unfortunately, I do not understand how we are supposed to balance these criteria without relying on pragmatic factors, and as Hicks (2018, 1004) concedes, some of the criteria he suggests appear to retain a degree of language-sensitivity. [NB: This is despite the fact that he understands strength and simplicity differently than more traditional formulations of the BSA.] Thus, although the suggestion to dispense with pragmatic elements is interesting, I do not think we are in the position to say that my challenge has been met.

References

- Armstrong, David. 1983. *What is a Law of Nature?* Cambridge: Cambridge University Press.
- Beebee, Helen. 2000. "The Non-Governing Conception of Laws of Nature." *Philosophy and Phenomenological Research* 61:571–594.
- Bhogal, Harjit. 2020a. "Humeanism About Laws of Nature." *Philosophy Compass* 15:1–10.
- —. 2020b. "Nomothetic Explanation and Humeanism about Laws of Nature." In Karen Bennett and Dean Zimmerman (eds.), Oxford Studies in Metaphysics, volume 12, 164–202. Oxford University Press.
- Bird, Alexander. 2007. *Nature's Metaphysics: Laws and Properties*. Oxford: Oxford University Press.

Braddon-Mitchell, David. 2001. "Lossy Laws." Noûs 35:260–277.

- Carroll, John. 1994. *Laws of Nature*. Cambridge: Cambridge University Press.
- Choi, Sungho and Fara, Michael. 2021. "Dispositions." In Edward N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy*, https://plato.stanford.edu/archives/spr2021/entries/dispositions/. Spring 2021 edition.
- Cohen, Jonathan and Callender, Craig. 2009. "A Better Best System Account of Lawhood." *Philosophical Studies* 145:1–34.
- Demarest, Heather. Unpublished Manuscript. "How (not) to be a pragmatic Humean." .

- Dorst, Chris. 2018. "Toward a Best Predictive System Account of Laws of Nature." *British Journal for the Philosophy of Science* DOI: https://doi.org/10.1093/bjps/axy016.
- Eddon, M. and Meacham, C.J.G. 2015. "No Work for a Theory of Universals." In Barry Loewer and Jonathan Schaffer (eds.), *A Companion to David Lewis*, 116–137. Malden, Mass.: Wiley Blackwell.
- Friend, Toby. 2022. "The Humean Pragmatic Turn and the Case for Revisionary Best Systems Accounts." *European Journal for Philosophy of Science* 12:1–26.
- Hall, Ned. 2015. "Humean Reductionism about Laws of Nature." In Barry Loewer and Jonathan Schaffer (eds.), *A Companion to David Lewis*, 262–277. Malden, Mass.: Wiley Blackwell.
- Hicks, Michael Townsen. Manuscript. "A Practitioner's Guide to Pragmatic Humeanism.".
- Hicks, Mike Townsen. 2018. "Dynamic Humeanism." *British Journal for the Philosophy of Science* 69:983–1007.
- Hildebrand, Tyler. 2019. "Naturalness Constraints on Best Systems Accounts of Laws." *Ratio* 32:163–172.
- —. 2020. "Non-Humean Theories of Natural Necessity." *Philosophy Compass* 15:1–14.
- Jaag, Siegfried and Loew, Christian. 2018. "Making Best Systems *Best for Us." Synthese* DOI: https://doi.org/10.1007/s11229–018–1829–1.
- Lewis, David. 1973. *Counterfactuals*. Cambridge, MA: Harvard University Press.

- —. 1983. "New Work for a Theory of Universals." Australasian Journal of Philosophy 61:343–377.
- -. 1994. "Humean Supervenience Debugged." Mind 412:473–490.
- Loewer, Barry. 1996. "Humean Supervenience." *Philosophical Topics* 24:101–127.
- —. 2021. "The Package Deal Account of Laws and Properties (PDA)." Synthese 199:1065–1089.
- John. "Abilities." In Maier, 2021. Edward N. Zalta (ed.), The Stanford Encyclopedia of Philosophy. https://plato.stanford.edu/archives/sum2021/entries/abilities/, summer 2021 edition.
- Maudlin, Tim. 2007. *The Metaphysics Within Physics*. Oxford: Oxford University Press.
- Mill, John Stuart. 1875/1987. A System of Logic. London: Longmans.
- Ramsey, F.P. 1978. "Universals of Law and of Fact." In D.H. Mellor (ed.), *Foundations*, 128–132. London and Henley: Routledge and Kegan Paul.
- Sánchez, Verónica Gómez. Forthcoming. "From Nomic Humeanism to Normative Relativism." *Philosophical Perspectives*.
- Stalnaker, Robert. 1968. "A Theory of Conditionals." In Nicholas Rescher (ed.), *Studies in Logical Theory*, volume 2 of *Monograph Series*, 98–112.American Philosophical Quarterly, Oxford: Blackwell.

- Tooley, Michael. 1977. "The Nature of Laws." *Canadian Journal of Philosophy* 7:667–698.
- Weirich, Paul. 2020. "Causal Decision Theory." In Edward N. Zalta (ed.), *The Stanford Encyclopedia of Philosophy*. https://plato.stanford.edu/archives/win2020/entries/decision-causal/, winter 2020 edition.
- Woodward, James. 2014. "Simplicity in the Best Systems Account of Laws of Nature." *British Journal for the Philosophy of Science* 65:91–123.