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Scientific Psychology for Folk Craft: The Case of IQ

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Abstract: *A comprehensive ontology of mind includes some mental phenomena that are neither (a) explanatorily fecund posits in any branch of cognitive science that aims to unveil the mechanistic structure of cognitive systems nor (b) ideal (nor even progressively closer to ideal) posits in any given folk psychological practice. Indeed, one major function of scientific psychology has been (and will be) to introduce just such (normatively sub-optimal but real) mental phenomena into folk psychological taxonomies. The development and public dissemination of IQ testing over the course of the 20th Century is a case in point.*

1) Ouch! My c-fibers are firing!

Much ink has been spilled about whether and how scientific psychology appropriates, revises, or rids itself of folk psychological concepts and taxonomies. This talk is about the flipside of that relationship: the question of how folk psychology appropriates scientific psychological concepts and taxonomies. That scientific psychology does inform folk psychology is an oft-noted (Wilkes 1991; Anderson 2015; Dewhurst 2021; Westfall 2022), but rarely scrutinized phenomenon (with important exceptions in the history and philosophy of neuroscience (Ortega and Vidal 2017; Francken and Slors 2018) and psychiatry (Foucault 1965; Hacking 1995a; Richards 2000; Murphy 2017)). The most famous claim along these lines is the Churchlands' half-jesting, half-serious insistence that folk psychology will come to adopt the terminology of neuroscience.

Here, for example, are two ways of expressing optimism.

I. "I feel like this will go well!"

II. "My rostral anterior cingulate cortex is awash in dopamine!" (Schacter & Addis 2007)

Some philosophers think that II is more descriptively accurate than I (Churchland 1979; Churchland 1986; Rosenberg 2018), or at any rate that as neuroscience matures people will (perhaps regrettably) have no choice but to replace expressions like I with expressions like II in their quotidian thought and talk about minds (Murphy 2017). As Paul Churchland (1979: 99)

puts it, folks must "learn to comprehend and report one's internal states and activities within a different and more adequate framework"—namely, the framework of cognitive neuroscience.

Others are skeptical that II is a helpful (or inevitable) way of speaking, for either cognitive scientific or folk psychological purposes. But even these theorists tend to agree with the Churchlands that if you're not speaking about minds in the best possible way (given your purposes), then you're likely not invoking real mental phenomena at all. For example, the principal figures embroiled in the folk psychology wars of the 80s and 90s—from eliminative materialists like the Churchlands, to psychofunctionalists like Fodor (1987), to interpretivists like Davidson (2001) and Dennett (1987)—shared the assumption that *some* set of normative ideals is responsible for delimiting which mental phenomena really exist (and which don't). These figures disagreed about whether it would be best to talk about mental phenomena in terms of underlying neural activity, or psychofunctional roles, or behavioral dispositions that maximize predictability from the intentional stance. But they agreed that the best way of talking about minds, whatever it is, delimits the one true ontology of mind; if you're talking about minds in some other, inferior way, then you're just wrong about which mental phenomena exist.

I don't buy this shared assumption. Much to many philosophers' chagrin, the true can and does come apart from the good, the beautiful, and even the useful; the very best descriptions of the world aren't the only true descriptions of the world. Statements like I and II can both be accurate descriptions of people's minds even while being normatively less-than-ideal ways of describing minds for either cognitive scientific or folk psychological purposes.

I'm going to advance two theses. First, I'm going to argue that a comprehensive ontology of mind includes some mental phenomena that are neither (a) explanatorily fecund posits in any branch of cognitive science that aims to unveil the mechanistic structure of cognitive systems nor (b) ideal (nor even progressively closer to ideal) posits in any given folk psychological practice. Second, I'm going to argue that**,** descriptively speaking, one major function of much scientific psychology has been (and will be) to introduce just such (normatively sub-optimal but real) mental phenomena into folk psychological ontologies. In other words, scientific psychology functions to give ordinary people new things to talk about when they talk about each others' minds (and, often, thereby to lead them to stop talking about some of the old things they used to talk about), even when talking about the new things isn't clearly preferable than talking about the old things.

In section 2, I'll introduce my preferred (more-or-less-Dennettian) framework for thinking about folk psychology and its ontologies. In section 3, I'll present the case for my twin theses, principally by way of an examination of the development of IQ research in the 20th century. Finally, in section 4, I'll consider a complication: my framework implies that scientific psychology is itself a variant—or, to be precise, a family of variants—of folk psychology.

2) Diverse folk crafts detect diverse real patterns

My framework consists in views about folk psychology and its ontology, respectively. I endorse a pluralistic account of folk psychological practices (few of which are well-described as theoretical practices). Nevertheless, I take it that even non-theoretical folk psychological

practices usually involve positing the existence of mental phenomena, and that many of these phenomena do actually exist in the form of "real patterns" (Dennett 1991).

2.1) Folk crafts

Right off the bat, it's important to distinguish between folk craft—how people make sense of each other via the attribution of mindedness—and folk theory—what people theorize they're doing when they engage in folk craft (Dennett 1998: 81). Folk psychology consists in diverse folk crafts of making sense of people—and thereby evaluating, regulating, bonding with, and predicting them—via the attribution of thoughts, experiences, attitudes, purposes, interests, traits, capacities, perspectives, moods, plans, habits, proclivities, and other mental phenomena (Mills 2001; Andrews 2012; Zawidzki 2013; Spaulding 2018; Lavelle 2022). Folks generate these attributions by modeling psychological profiles (Godfrey-Smith 2005; Maibom 2009; Moore 2021). Folk craft measures people (ourselves and others) up against these models, for various purposes: to see whether people fit a model and can therefore accurately be said to possess a particular state of mind; to normatively evaluate, explain, or predict people's actions based on whether or not they do fit a model; or to goad people into changing how they think, feel, act and react (such that they better fit the model one thinks they ought to fit). Moreover, folk psychology isn't (just) naïve psychology; rather, folks develop more flexible, sophisticated, and culturally inflected sets of models over time. As McGeer (2015: 270) says, "folk psychological competence is always a work in progress."

It's not fashionable, within the literature cited in the preceding paragraph, to speak of the "ontology" of folk psychology. Indeed, many philosophers who endorse a pluralistic

account of folk psychology also lean towards mental fictionalism (Demeter, Parent, and Toon 2022): the view that the phenomena apparently posited in folk psychological discourse are mere useful fictions, bits of make-believe not to be taken ontologically seriously. This is a mistake. I think folk psychology has earned its own subsection of a realist ontology of mind, for the flatfooted reason that people often really are the ways they're depicted as being by other folks (and themselves).

2.2) Real patterns

Several philosophers have argued that, to earn their keep in the ontology of mind, phenomena must be usefully posited as kinds within a scientific research program, but that this criterion leaves the door open for a wide range of phenomena, since scientific psychology has many different paradigms, which fasten onto many different patterns of thoughts, feelings, capacities, and behaviors (Hochstein 2016, 2017; Potochnik & Sanches de Oliveira 2020; Betzler forthcoming). Not all of those patterns are well-described in mechanistic (or more generally causally productive) terms. The evidence is clear (and I will hereby take it for granted) that real patterns like IQ and openness don't play productive causal roles in cognitive systems—they're useful posits in differential psychology and personality psychology, respectively, but they're not useful posits in cognitive psychology or neuroscience (Van der Maas, Kan, & Borsboom 2014; Serpico 2018; Curry 2021). So we have very good reason to adopt an ontology that includes phenomena over and above those that function as cogs in cognitive systems.

I think we should be realists about phenomena posited in folk craft for basically the same reason. The reality of intelligence isn't held hostage by whether cognitive psychologists

find it to be a useful posit for how minds work. But it also shouldn't be held hostage by whether differential psychologists develop IQ tests to measure it. As Hutto (2022) argues, we don't need to do any science to know that some people are smarter than others: scientifically uninformed folk craft already enables human beings to track the relevant real patterns well enough to reliably make that judgement.

2.3) Mindshaping

Diverse folk crafts don't just detect diverse real patterns. They also shape them. For instance, McGeer (2021) stresses how we shape our own minds to conform with our folk psychological models of how particular sorts of people (who we are aspiring to be) ought to be. Such mindshaping practices (Zawidzki 2013) necessitate the continual revision of models (to capture the new, mindshaped mental reality), and revised models lead to new mindshaping practices, including new forms of self-regulation. These revisions iterate indefinitely via looping effects (Hacking 1995b; Andrews 2015). Over time, both the models employed in folk craft and the real patterns that people live out can shift dramatically—often unpredictably, but usually in ways that reflect the values of the society in which folk crafts are practiced.

3) Scientific psychology as R&D for folk craft

The main upshot of section 2 is that, by modeling minds as featuring particular phenomena, diverse folk crafts can have a top-down effect on the ontology of mind, generating

new patterns of cognitive functioning, which in turn produce new mental/behavioral patterns for folk psychological models to detect.

I'm now going to unpack how scientific psychology plays a role in this process. My view is that rigorous, methodologically sound science can shed light on real patterns—incorporating those patterns first into a scientific ontology of mind, and leading to their uptake into the taxonomies inherent in folk craft—even when doing so is ultimately both worthless for reductive cognitive science and less-than-ideal given the aims of folk craft. My argument will rest on the claim that this is precisely what happened in the case of the development of IQ tests in the 20th century.

3.1) A potted cultural history of IQ

Early in the 20th Century, Binet and Spearman independently noticed correlations between how well students do in different school subjects. Spearman invented factor analysis as a technique for distilling these correlations, and thereby, he thought, for measuring intelligence (which he conceived of as a kind of mental energy powering all rational thought). Binet, meanwhile invented the IQ test on a commission from the French government to track schoolkids into remedial classes. Binet never proposed the IQ test to be a good measure of intelligence; he proposed it to be an easy way of abstracting away from disparate mental abilities to come up with a single score that could be used to determine which kids are likely to generally struggle in school.

In 1908, Goddard translated Binet's IQ test into English, and brought it to the United States for explicitly eugenic purposes. (In so doing, he pushed Spearman's interpretation over

Binet's, declaring that "the chief determiner of human conduct is a unitary mental process which we call intelligence" (Goddard 1920), and going on to argue that intelligence is almost entirely genetically hardwired.) Soon afterward, the Stanford psychologist Terman popularized IQ testing, leading to the Army Alpha and Beta exams being used to determine which recruits became officers in WWI. The Army Alpha was in turn adapted into the SAT. In short order, IQ tests, in various guises, came to serve a wide variety of functions in the socioeconomic structure of the United States (and many other post-industrial countries). By the time Mensa was established as a global society for purported geniuses in 1946, its unequivocal equation of IQ with intelligence was widely accepted, not just as reasonable, but as a matter of course.

Over the decades, IQ test construction came increasingly to mirror Spearman's vision. Binet and Simon (1916: 329) had famously declared that "one might almost say, 'it matters very little what the tests are so long as they are numerous.'" But instead of continuing to test as many disparate mental abilities as possible, IQ tests were winnowed over the course of the 20th Century. Particular IQ tests, subtests, and test items remain in circulation in the 21st Century because they are the tests, subtests, and test items that correlate most strongly with each other (Block & Dworkin 1974). As Terman himself admitted, in the iterative process of test-construction "tests that had low correlation with the total were dropped even though they were satisfactory in other respects" (Terman & Merrill: 33). In other words, psychologists self-consciously altered IQ tests to focus more narrowly on a particular, highly-positively-intercorrelated constellation of capacities.

As Nisbett puts it (2021: 198): "IQ tests do a good job of measuring people's ability to solve problems that someone else poses for them, which generally have little intrinsic interest,

which are often quite abstract, and for which there is a single right answer" and a single available route to finding that answer. Test items that don't fit that description have been culled. IQ testmakers have mostly described this winnowing process as being one of making IQ tests "culture-fair". And they've claimed success in that endeavor, since IQ subtests and items correlate even more strongly with each other now than ever before: supposed proof that they're just measuring *g*—general intelligence—rather than measuring culturally-bound knowledge or skills.

This is a bad inference. Of course throwing out subtests which are not highly correlated with the rest would make the intercorrelations among the remaining test items stronger on the whole. That's just evidence that the tests are zeroing in on a particular set of abilities to solve abstract puzzles with a single right answer in a boring, scholastic setting. In other words, the tests are zeroing in on ***a*** real pattern, which is generally called *g*. But this is a bit of a misnomer: *g* is an interesting constellation of analytical abilities, and perfectly worthy of study, but it is not nearly as general as the abstract capacity for schoolwork that Binet initially set out to measure. Moreover, there is good evidence that *g* is cultivated to different degrees in different cultures. So declaring IQ tests "culture-fair" is rather like declaring a free-throw competition "culture-fair." It's true that anybody (with arms) can shoot a basketball. But it turns out that people from some cultures have much more practice shooting basketballs than people from some other cultures.

Free-throw competitions may nevertheless reasonably be deemed "culture-fair" if free-throw-shooting were a skill that is important to cultivate in every culture. In that case, so much the worse for anybody who hasn't practiced. And many researchers do think *g* tracks a

constellation of skills that are important to cultivate in every culture, since it is strongly correlated with measures of success in life, including educational attainment, lifetime income, and job complexity (Gottfredson 1997).

However, it's not an accident that *g* predicts success in life. For one thing, IQ subtests have been winnowed based on their correlations with success, in addition to their correlations with each other. As Block and Dworkin (1974: 374) report, "The history of IQ testing right up to the present is littered with the corpses of tests which were dropped because they failed to correlate sufficiently with measures of success (e.g. the Cattell-Wissler tests and the Davis-Eels games)." Items thus only make the test if the correlate highly both with success and with the test as a whole. For another thing, most evidence of these correlations was collected after IQ tests had been seamlessly incorporated into the hierarchical structure of society. Want to take challenging classes in middle school? You'd better get marked "gifted and talented" thanks to your performance on Raven's Progressive Matrices. Want to get into MIT? You'd better have a killer SAT score. Want to get any white-collar job in Japan? You'd better ace the IQ test that's part of the application process. There are incentives to get good at taking IQ tests in post-industrial societies, where the institutions that largely dictate individuals' success care a lot about the narrow variety of analytical intelligence measured by IQ tests, and indeed often explicitly care a lot about IQ scores themselves.

And, famously, people living in such societies have gotten remarkably better at taking IQ tests. In what is known as the "Flynn effect", the 20th century saw IQ gains from each generation to the next, including small gains in vocabulary, arithmetic, general knowledge, and

large gains in analogical reasoning, logic, hypothetical reasoning, and pattern matching ability (Flynn 2009).

3.2) IQ tests as tools for mindshaping

Flynn himself has given a convincing cultural explanation of these gains. IQ scores across a population change far too significantly from one generation to the next—including within families—for these changes to be controlled by biological evolution. Instead, IQ trends are "dictated by altered social priorities that affect the cognitive problems habitually confronted and deemed worth solving … these priorities and habits of mind have changed radically as societies begin to industrialize" (2016: 121). Cultural forces (like the advent of the information economy, the ubiquitous role of computers in modern life, and so on) have selected for the analytical problem-solving abilities that make up the real pattern measured by *g* (Uchiyama, Spicer, & Muthukrishna 2021: 77–81). I think this is all right: intelligence has culturally evolved. But I also think these theorists have missed out on a key part of the story, by ignoring that folk psychological models of intelligence have culturally evolved too.

My potted history suggests that the 20th Century—including the psychometric tradition itself—introduced new looping effects, shaping intelligence largely by shaping folk conceptions of intelligence (and thus which varieties of intelligence folks sought to cultivate in themselves and others). The winnowing of IQ tests, combined with their widespread use across society, has led to greater understanding—and greater valuing—of an increasingly narrow conception of intelligence among laypeople. So it's not just that the information economy emphasizes *g*-loaded skills. It has also led folk craft to fixate on the real pattern captured by *g*. It thus also

leads to people cultivating IQ-style intelligence, and letting other varieties stagnate, since that is what's valued. Indeed, at the extremes, Mensa members have been led to conceptualize intelligence only as IQ, and to excise other conceptions of intelligence from their folk craft, which leads them to cultivate IQ and IQ alone, since that's the only style of "intelligence" even considered worthy of the label.

I am now in a position to defend my twin theses. They are, recall, first that a comprehensive ontology of mind includes some mental phenomena that are neither (a) explanatorily fecund posits in any branch of cognitive science that aims to unveil the mechanistic structure of cognitive systems nor (b) ideal (nor even progressively closer to ideal) posits in any given folk psychological practice, and second that, descriptively speaking, one major function of much scientific psychology has been (and will be) to introduce just such mental phenomena into folk psychological ontologies.

g is not an explanatorily fecund posit in cognitive science or neuroscience. The scientific study of *g* has nevertheless proceeded unabated because which research questions are asked, and which real patterns are targeted, is dictated largely by folk psychological concerns—not by any serious theory of underlying causal structures. To be blunt, research has been driven largely by the desire to have an easy way of ranking people's minds, for all sorts of (innocuous, noble, and nefarious) folk psychological purposes. And the conception of intelligence qua IQ has captured much of folk craft—even though it would be better, per many of the goals of folk craft, if practices focused on other (or additional) conceptions of intelligence instead.

Nevertheless, as per my first thesis, IQ does track a real pattern. Mensa members do have a real characteristic in common—over and above their club membership—which sets them

apart from other people. We should adopt an expansive ontology of mind which countenances that characteristic, even while insisting that it is rarely the most worthwhile characteristic to pay attention to. After all, scientific psychology has not only furnished folk craft with *g* as a pattern of potential interest; it has also conspired with folk craft, over generations, to shape people's minds such that they are more likely to really live out the patterns consonant with a high IQ.

3.3) Scientific psychology for nonideal folk craft

I think many psychological research programs are geared towards introducing patterns into folk craft in roughly this manner. Consider this list of subfields of psychology and their proprietary posits:

- Educational psychology (grit)
- Health psychology (type-A personality)
- Clinical psychology (depression, among many other DSM diagnoses)
- Personality psychology (Big Five traits)
- Social psychology (cognitive dissonance)
- Comparative psychology (nonhuman animal grief)
- Judgement and decision-making (cognitive biases)

The parentheticals on this list boast widely varying degrees of fruitfulness as both scientific and folk posits. Nevertheless, they have all been adopted, in various ways, in various folk crafts And I'm fairly confident that they all track real patterns, as invoked in folk craft—some people

really do have type-A personalities—even though I'm not at all sure that they all track patterns that are particularly worth invoking.

In some cases this introduction of real patterns into the lexicon of folk psychology is self-conscious on the part of psychologists—when they engage in so-called "pop psychology" and, e.g., promote the concept of grit in elementary schools. In other cases it is much more incidental to how psychologists themselves conceive of their research. Regardless, much of psychology is (implicitly or explicitly) concerned with unveiling (or better describing, or measuring the relationships between) patterns, not because those patterns are going to be explanatorily helpful from a mechanistic point of view, but because they are (potentially) helpful for folk craft. Scientific psychology serves as R&D for folk craft—trying out new ways of conceiving of human minds, which may or may not enter the widely-used folk psychological lexicon.

It would nevertheless be a mistake to take this sort of scientific psychology to be pushing folk psychology ever closer to an objective normative ideal—the perfect way of thinking about people. Rather, scientific psychology provides a menu of options for folk psychology, and which of those options are taken up in any given context depends on a huge range of factors, including the idiosyncratic values and interests and resources of people in that context. For one reason or another, scientists might not yet have provided folks with the conceptual resources required to exploit the most useful real patterns for their purposes (Toole 2021); or folk craft might lose touch with some real patterns with which it has been quite useful to be in touch (Diamond 1988). As Murphy writes, "if the new sciences of the mind reinterpret human beings very comprehensively, we will risk losing our grip on what matters to people because we will lack the vocabulary within which to state and justify it" (2017: 171). Unlike Murphy—a

begrudging eliminativist—I don't take it to be inevitable that we will abandon the presently meaningful aspects of our folk psychological practices as neuroscience marches on. Regardless, if we're interested in what people are talking about when they're talking about minds at some particular time and place, we want to know what real patterns they're actually latching onto (as opposed to the patterns that would be latched onto by some possible superior civilization boasting perfect folk psychological uptake of scientific consensuses without the loss of any nuance).

4) Scientific psychology is folk craft

You might be thinking: hold on a minute. Who exactly do you think does science? It ain't rabbits, or martians, or angels. It's folks. Folks do science.

As feminist philosophers of science have taken pains to remind us for decades now: science is itself a human social practice, which humans engage in using a wide variety of methods and for a wide variety of ends—including regulation and evaluation in addition to prediction and explanation. So, given the pluralistic understanding of folk psychology I've encouraged us to adopt, scientific psychology is ultimately just a peculiar variety (or, to be precise, family of varieties) of folk psychology. It isn't just R&D for folk craft—it's an R&D wing *of* folk craft.

When our folk psychological practices have certain "sciencey" goals and methods, and are appropriately institutionally situated in the social structure of science, we call them "scientific psychology". But that doesn't make them any less folksy—any less a part of the

broad human endeavor of trying to make sense of ourselves and others. Indeed, although modern scientific psychology has only been practiced for 150 years, I have argued that it can have (and often has had) wide-ranging ramifications for other parts of folk craft, many of which have distinctly non-scientific ends. In other words, scientific psychology is a peculiar part of folk psychology that, perhaps more than any other part, actively works to shape the future of folk craft as a whole.

The Churchlands are confident that science will shape folk craft for the better. Because scientific psychology has had a short history—and cognitive neuroscience has had an even shorter history—I take the jury to be out. Indeed, because folk craft needn't always bend towards justice, I take it that the jury will ever be out. If we're "genealogically lucky", to borrow Srinivasan's (2019) phrase, then the scientifically inflected future of folk craft might allow us deeper, subtler insights into each others' minds, and furnish us with better ways of living together in harmony. If we're genealogically unlucky, as the case study of IQ suggests we may well be, then the future might be way worse than Orwellian. I, for one, must admit that my rostral anterior cingulate cortex is not awash in dopamine.

References

Anderson, M. (2015). "Mining the Brain for a New Taxonomy of the Mind". *Philosophy Compass* 10 (1) 68–77.

Andrews, K. (2012). *Do Apes Read Minds?* MIT.

Andrews, K. (2015). The Folk Psychological Spiral. *Southern Journal of Philosoph*, 53:S1, 50–67.

Betzler, R. (forthcoming). Two Sources of Normativity in Enthusiastic Accounts of Kinds. *British Journal for the Philosophy of Science*.

Binet, A. & Simon, T. (1916). *The Development of Intelligence in Children*. Williams & Wilkins Co

Block, N. & Dworkin, G. (1974). IQ, Heritability and Inequality. *P&PA* 3:4, 331-409.

Churchland, P.M. (1979). *Scientific Realism and the Plasticity of Mind*. CUP.

Churchland, P. (1986). *Neurophilosophy*. MIT.

Curry, D.S. (2021). *g* as Bridge Model. *Philosophy of Science* 88:5, 1067–1078.

Davidson, D. (2001). *Subjective, Intersubjective, Objective*. OUP.

Demeter, T., Parent, T., & Toon, A. (2022). *Mental Fictionalism*. Routledge.

Dennett, D. (1987). *The Intentional Stance.* MIT.

Dennett, D. (1991). Real Patterns. *The Journal of Philosophy*, Vol 88, No. 1, 27–51.

Dennett, D. C. (1998). *Brainchildren*. MIT.

Dewhurst, J. (2021). Neurocognitive and Folk Psychological Ontologies. In Calzavarini, F. & Viola, M. (Eds.), *Neural Mechanisms*, 311-334. Springer.

Diamond, C. (1988). Losing Your Concepts. *Ethics* 98, 255–277.

Flynn, J. (2009). *What is Intelligence?* CUP.

Flynn, J. (2016). *Does Your Family Make You Smarter?* CUP.

Fodor, J. (1987). *Psychosemantics*. MIT.

Foucault, M. (1965). *Madness and Civilization*. Random House.

Francken, J. & Slors, M. (2018). Neuroscience and Everyday Life. *Brain and Cognition* 120, 67–74.

Goddard, H. (1920). *Human Efficiency and Levels of Intelligence.* PUP.

Godfrey-Smith, P. (2005). Folk Psychology as a Model. *Philosophers' Imprint* 5:6, 1–16.

Gottfredson, L. (1997). Why *g* Matters. *Intelligence* 24(1), 79–132.

Hacking, I. (1995a). *Rewriting the Soul*. PUP.

Hacking, I. (1995b). The Looping Effects of Human Kinds. In D. Sperber, D. Premack, A. J. Premack (Eds.), *Causal Cognition*, 351–94. OUP.

Hochstein, E. (2016). Categorizing the Mental. *The Philosophical Quarterly* 66 (265): 745-759.

Hochstein, E. (2017) When Does Folk Psychology Count as Folk Psychological? *British Journal for the Philosophy of Science* 68 (4): 1125-1147.

Hutto, D. (2022). A Brickhouse Defense of Folk Psychology. In Demeter, T., Parent, T., & Toon, A. (Eds.), *Mental Fictionalism*. Routledge.

Lavelle, J.S. (2022). *Mindreading and Social Cognition*. CUP.

Maibom, H. (2009). In Defence of (Model) Theory Theory. *Journal of Consciousness Studies* 16, 360.

Moore, R. (2021). The Cultural Evolution of Mind-Modelling. 199:1751–1776

McGeer, V. (2015). Mind-making Practices. *Philosophical Explorations* 18:2, 259–281.

McGeer, V. (2021) Enculturating Folk Psychologists. *Synthese*.

Mills, S. (2001). The Idea of Different Folk Psychologies. *International Journal of Philosophical Studies* 9:4, 501–519.

Murphy, D. (2017). Can Psychiatry Refurnish the Mind? *Philosophical Explorations* 20:2, 160–174.

Nisbett, R. (2021). *Thinking.* Aqora.

Potochnik, A. & Sanches de Oliveira, G. (2020). Patterns in Cognitive Phenomena and Pluralism of Explanatory Styles. *Topics in Cognitive Science* (4):1306-1320

Van der Maas, H., Kan, K. & Borsboom, D. (2014). Intelligence is What the Intelligence Test Measures. Seriously. *J. Intell*. 2(1), 12–15.

Richards, G. (2000). Britain on the Couch. *Science in Context*, 13/2: 183-230.

Rosenberg, A. (2018). *How History Gets Things Wrong*. MIT.

Schacter, D. L., & Addis, D. R. (2007). The Optimistic Brain. *Nature Neuroscience*, 10(11), 1345–1346.

Serpico, D. (2018). What Kind of Kind is Intelligence? *Philosophical Psychology* 31:2, 232–252.

Spaulding, S. (2018). *How We Understand Others*. Routledge.

Terman, L. & Merrill, M. (1960). *Stanford-Binet Intelligence Scale*. Boston.

Toole, B. (2021). Recent Work in Standpoint Epistemology. *Analysis* 81(2), 338–350.

Srinivasan, A. (2019). Genealogy, Epistemology, and Worldmaking. *Proceedings of the Aristotelian Society* CXIX: 2, 127–156.

Uchiyama, R., Spicer, R., & Muthukrishna, M. (2021). Cultural Evolution of Genetic Heritability. *Behavioral and Brain Sciences*, 1-147

Vidal, F. & Ortega, F. (2017). *Being Brains: Making the Cerebral Subject*. Fordham.

Westfall, M. (2022). Constructing Persons: On the Personal-Subpersonal Distinction. *Philosophical Psychology*.

Wilkes, K. (1991). The Relationship Between Scientific Psychology and Common-Sense Psychology. *Synthese* 89: 15-39.

Zawidzki, T. (2013). *Mindshaping*. MIT.