**Abstract:** Recent interest in phenomena of simulation, pretense, and play has given rise to new philosophical debates on the basic structure of human action and action planning. Some philosophers sought to transform Hume’s desire-belief-action model by sophisticating its basic structure. For example, they introduced “hypothetical world boxes” or imaginary “i-desires” and “i-beliefs” into the standard model, in order to account for the representational and motivational structures of imaginary scripts. Others used phenomena of behavior driven by imagination to attempt a more fundamental critique of the Humean tradition. This article aims to show how the pragmatist tradition could be used as a resource in reframing current debates on imagination, pretense, and simulation in the cognitive sciences. This will help determine the role of imagination in intelligent human deliberation.

Keywords: Humean theory of motivation, imagination, intelligence, pragmatism, pretense, rationality.

**Introduction**

In March 2012, after a conference in New York City, I went to the New York Seaport Museum in lower Manhattan, a place well worth visiting. There I happened upon a group of children with a guide who introduced them to the art and paraphernalia of sailing during colonial times. The children seemed captivated by the technical details of vessels, knots, and navigation. When the guide introduced the working of a pulley system and explained that even a child could lift a piano, I noticed how several of their number instantly and with great alacrity pretended to pull a rope in the air. The immediacy of this reaction seemed part of the process of grasping the idea, literally with their hands. I believe it is hard to find better evidence for the active and embodied working of imagination in shaping human behavior than studying children in their imaginative reflexes and explorations of their world.

Philosophers of different traditions grapple with the question of what the best explanation is of such ubiquitous human behaviors as
imagining and pretending, and what their place is with respect to our ordinary practical deliberations.

This article explores the concept of imagination in the context of Humean and pragmatist discourses. The aim is to show that recent debates on imagination, pretense, and simulation,1 which started within neo-Humean quarters, may find useful answers in the pragmatist tradition. Humean and pragmatist approaches to imagination have rarely been connected in a systematic fashion.

Little of what is labeled “Humean” in this debate is actually in line with David Hume’s thought. Hume’s own theory of imagination is rich and complex but often left to its own devices in neo-Humean contributions. A distinct faculty in the generation and organization of ideas, imagination is crucial in making causal inferences, forming complex concepts and beliefs, constructing the personal identity of individual selves, and establishing metaphysical beliefs like the existence of God for Hume. In some passages Hume seems to identify the whole of human understanding with the operation of imagination (see Traiger 2008; Wright 2013): “The understanding or imagination can draw inferences from past experience” (Hume 2000, 73). Kathleen Wallace (2002) favors a reading of Hume’s distinction between understanding and imagination as gradual scale, and she cites Hume’s *Treatise* (I.4.7, 6–7, emphasis by Wallace):

Nothing is more dangerous to reason than the flights of the imagination, and nothing has been the occasion of more mistakes among philosophers…. But on the other hand, if the consideration of these instances makes us take a resolution to reject all the trivial suggestions of the fancy, and adhere to the understanding, that is, to the general and more establish’d properties of the imagination; even this resolution if steadily executed, wou’d be dangerous, and attended with the most fatal consequences. For … the understanding, when it acts alone, and according to its most general principles, entirely subverts itself, and leaves not the lowest degree of evidence in any proposition, either in philosophy or in common life.

It is remarkable how Hume perceived not only the structural homogeneity between understanding and imagination but also the indispensability of imagination to sound reasoning. This is where a pragmatist approach seems to remain more faithful to Hume than conventionally “Humean” approaches. Nevertheless, also for Hume himself, imagination is a cognitive faculty, restricted to associating, combining, and intuitively appropriating ideas; and this notion has obstructed the view on the pervasive role of imagination in the operation of intelligence in

1 Including Currie and Ravenscroft 2002; Doggett and Egan 2007; Fesmire 2003; Funkhouser and Spaulding 2009; Gendler 2006; Kind 2016; Langland-Hassan 2012; Nichols and Stich 2003; Stich and Tarzia 2015; and Van Leeuwen 2011.
human beings. Here is a point where pragmatists part company with the great empiricist.

The body of literature that explicitly addresses imaginative practices in the Humean tradition tends to explain imaginative practices like simulation, pretense, and play as fringe phenomena or as deviant forms of rational action. These forms of behavior do not follow the “straight line” (Winner 1977) of instrumental means-ends-action patterns. It appears that imaginative practices have generated so much interest simply because they threaten to refute the fundamental structure of the Humean agency theory. Recent debates on this topic rarely aim at a deeper understanding of the imaginative nature of human intelligence or the function of imaginative practices as part of the fabric of rational deliberation.

The situation has always been different in the pragmatist tradition. The three foundational figures in the pragmatist movement, Peirce, James, and Dewey, each gave imagination a pivotal position in their theories of rationality (see Alexander 1990). Dewey was perhaps most systematic in defining the role of imagination in intelligent human deliberation, and he offered the best critique of the conventionally “Humean” approach. For Dewey, imagination has its place at the center of our deliberative projects. The topic never ceased to attract attention from pragmatists and scholars in the catchment area of this tradition.

Humean Theory of Motivation and Possible World Boxes

Jon Elster (1991, 1996, 2007), a notable writer on deliberative rationality in the Humean tradition, characterizes the structure of rational agency as indicated by the scheme in figure 1. The severed link between desires and cognitions pays tribute to Hume’s argument that reason can only be “the servant of passions” if it is allowed to work uninhibited by emotions or passions.

With minor modifications this means-ends-action model has been applied to all forms of intelligible human behavior, including pretense and play. “The pretender,” write Nichols and Stich, “engages in the pretense action because she wants to behave in a way similar to the way some person or object would behave in a possible world scenario” (2003, 38).

2 Including Carruthers 2006; Currie 2002; Doggett and Egan 2007; Friedman and Leslie 2007; Funkhouser and Spaulding 2009; Harris and Kavenaugh, 1993; Nichols and Stich 2003; Velleman 2000; and Weinberg and Meskin 2006. Some of these would not describe themselves as “Humeans” but rather as critics of the Humean tradition; however, I recognize them as important participants in a debate that is conducted largely on the premises of the Humean tradition.

Even dependable champions of the Humean theory of motivation, however, see that behavior prompted by imagination requires a special treatment, because it follows rules different from straight-line instrumental action. We can imagine counterfactual realities at will and act intelligibly in open contradiction to our veridical beliefs, for example when we use a dish brush as a microphone to give an impromptu radio interview.

In order to account for pretense behavior, Nichols and Stich found it necessary to introduce an additional “possible world box” to the Humean model, which parallels the traditional “beliefs” box, as shown in figure 2.

Possible world boxes (PWB’s) contain imagined propositions (formulated in a “script elaborator”), in a belief-like way. The only difference between belief and imagined content in the PWB is that the former is held to be true, whereas the latter is deemed non-veridical. Merely imagined propositions inform and guide activity in a different (indirect) way from their belief counterparts.

This model of imagination and pretense exemplifies some critical tenets in the Humean tradition. (1) Only actual desires have the power to motivate actions. (2) The contemporary Humean model is wedded to the eighteenth-century notion of faculty psychology: the human psyche forms an analyzable system or machine of subsystems geared to specific epistemic or deliberative tasks (such as perception, imagination, memory, belief, conceptualization, calculation, and so on). (3) Theories in the Humean tradition rest on the understanding that imagination is a propositional attitude. “Possible world boxes” are containers of imaginary entities and operations, just as imaginations are seen as “boxes”
containing counterfactual propositions about the world. (4) The Humean model represents the imagination as an add-on needed to explain special (deviant) forms of cognition and agency, like fiction, children’s play, pretense, mockery, and mental meandering. These have their place in a cognitive space paralleling our mainstream rational deliberations. All these points are addressed in subsequent sections.

Recent contributions to a theory of imagination in the Humean tradition have struggled with some severe problems. Three complexes of questions in particular have bedeviled the debate.

Motivation. If imagination is understood as a separate faculty or a logically distinct mode of functioning of the human mind, and its operation could therefore be distinguished from mainstream rational conduct, what is the exact motivational structure and force that drives behavior like pretense, play, or acting?

Rationality. Humean theorists acknowledge the importance of imaginative activities like pretending, acting, inventing fictions in the processes of learning, and exploring the space of possibilities around us. The fact that imagination is logically separated from regular instrumental
action, however, poses questions about the relevance of this faculty. What is the function of pretense? (Carruthers 2006). Why do we invent counterfactual narratives and get swayed by imaginary figments? (Gendler 2010a, b). The Humean tradition has yet to come up with a convincing notion of how imagination integrates with human intelligence.

"Boxology" and propositional character of imaginative states. If imagination is translated as a “distinct cognitive attitude” (see Langland-Hassan 2012) that is logically a propositional attitude or mentally a distinct faculty producing non-veridical intentional states, how does imagination connect with other aspects of our psychology (such as the subconscious, or pre-rational, embodied structures of our cognition), and how does it do justice to our primordially social nature?

I shall outline the debates in these three complexes and point out what advantages a pragmatist approach might have in addressing them.

Motivation

Nichols and Stich (2003) hold that imaginings, by themselves, have no power to motivate behavior directly. Imaginings are in relevant respects like beliefs: they represent possible realities and action scripts. Just like beliefs, however, they only inform and guide action originally motivated by desire.

It is uncontroversial that products of imagination can stir our emotions directly; the fate of a Cyrano de Bergerac or a Desdemona can move us to tears and paroxysms of despair. But for Nichols and Stich this does not prove any motivational power of imagination sui generis or the existence of effective desire-like imagination, which would be responsible for the execution of pretense actions. If I decide to go to a carnival and pretend to be Super Mario, I engage in role-playing to satisfy one or several actual desires: either because I like to pretend, or I wish to participate in a practice, or I want to express a hidden side of myself. My motivations are not desire-like imaginings, however, according to the authors; I am not forming Super Mario’s desires and starting to act upon them. All our motivations are constituted by actual desires, not by hypothetical or imaginary ones, according to the strict Humean position espoused by Nichols and Stich.

Nichols and Stich’s (2003) model is part of a continuing philosophical debate on the place of motivation in imaginative behavior,4 in which alternative models are traded. These usually retain central tenets of the traditional Humean theory of motivation.

4 Contributions to the debate include Carruthers 2006; Currie and Ravenscroft 2002; Doggett and Egan 2007; Funkhouser and Spaulding 2009; Goldman 2006a; Stich and Tarzia 2015; and Van Leeuwen 2011; 2014.
Doggett and Egan (2007) hold that imaginative practices (like pretending) must be motivated by *imaginary desires*, because such practices require a full-fledged motivational system. They present an architecture in which imaginative behavior arrives from a deliberation conduit parallel to mainstream rational action planning, sketched in figure 3.

Several authors claim that one’s pretending to be in a counterfactual situation or pretending to be someone (or something) else requires more than postulating a hypothetical proposition about one’s state of mind (Friedman and Leslie 2007) or acting on the presumption that this proposition is true (Stich and Tarzia 2015). Instead we are able to adopt a point of view by which we *live through* a hypothetical situation. Velleman (2000, 257) calls this the difference between *acting out* and *acting out of* an imaginary situation. In Berthold Brecht’s “epic theater” with its “alienation technique,” actors refrain from identifying with their characters. They are asked to wield their roles like shields or masks. Contrast this with the method Daniel Day-Lewis often uses, when he immerses himself in a role for several months at a time, quasi becoming the character he is portraying throughout his daily routines, as he did during the production of *Lincoln*.

According Velleman (2000) and others (Currie 2002; Harris and Kavanaugh 1993) we must allow that agents enter a genuine pretense mode rather than merely follow behavioral “scripts” (Funkhouser and Spaulding 2009). When children play, their preferences change into
those that they identify as the preferences of their adopted superheroes, in their imagined situations. These preferences are *imaginary desires* because they hold only for those imaginary situations that children inhabit; meanwhile situations that have clear exit point to empirical orders of reality, which prevent child-spider-men from jumping off heights greater than a tree stump.

Defenders of the strict Humean theory of motivation, according to which pretense behavior is motivated by a simple (non-imaginary) desire to pretend, point out that even small children are perfectly capable of telling reality and pretended situations apart, as experiments have shown (see Skolnick and Bloom 2006). I believe this is beside the point. The claim is not that a pretender actually believes a pretended story but that he or she is able to adopt the point of view of an imaginary character in a pretense situation and then act and deliberate as that hypothetical other.

The difference becomes clear if we look at the example of imagining being a doctor making a difficult ethical choice (for example, to perform a risky operation or not) (see Van Leeuwen 2011). Can we actually play through the deliberation process of the doctor and come to a genuine decision about the case in our imagination? Or, as others claim (Funkhouser and Spaulding 2009; Nichols and Stich 2003), do we simply compare two imaginary narratives and then decide which one to act out (the doctor who will perform the invention versus the doctor who decides against it)? Will Humeans bite the bullet and accept that there is no real choice within pretended scripts, that there is choice only in script writing? They could, but not without impoverishing our rational deliberation process as a whole. Perhaps they would refer the task of deciding about the course of one’s pretended narrative to a “script elaborator” (Funkhouser and Spaulding 2009; Nichols and Stich 2003), but this would be far from facing the dilemma of choice in our imagination.

Our ability to deliberate in hypothetical and counterfactual situations is crucial for understanding human intelligence in deliberation and action planning. And it is the pragmatist tradition that has provided key notions to understanding the constitutive role of imagination in our deliberative projects.

Pragmatists hold that imagination is an exploration of possibilities inherent in a situation and is thus intimately connected with human intelligence. For Dewey (1996), intelligence is the ability “to see the actual in the light of the possible” (Alexander 1993, 384; cf. Dewey, “Art as Experience,” LW 10:348), which doubles as the Deweyan

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5 Unless otherwise indicated, references to Dewey are to The Collected Works 1882–1953 and use the standard format of EW (Early Works), MW (Middle Works), and LW (Late Works).
definition of imagination: “the capacity to perceive what is before us in light of what could be” (Fesmire 2003, 65). Deliberating, we face hypothetical decisions and discover a space of possible consequences—not merely as distant hypotheses but as projections of actually experienced situations (Dorstewitz 2008). Dewey claims that imagination is not a bystander or an external influence on desires and emotions but an integral part of our motivational structure. Imagination is, in Dewey’s term, a “dramatic rehearsal” (“Human Nature and Conduct,” MW 14:132). This by extension amounts to a fundamental critique of the Humean agency model.

Ironically, Dewey begins this critique with a distinctly Humean claim: “Cold blooded’ thought may reach a correct conclusion, but if a person remains anti-pathetic or indifferent to the consideration presented to him in a rational way, they will not stir him to act in accord with them” (“Ethics Revised,” LW 7.269; cf. Hume 2000, esp. p. 413).

Dewey specifies that only present impulses have the power to motivate action, and therefore deliberation cannot concern itself only with “remote, inaccessible and indeterminate results … The present, not the future, is ours” (“Human Nature and Conduct,” MW 14:141, 144). However, the Humean model in which deliberation entails comparing future states and deciding how best to reach a preferred outcome seems to assume that arithmetic calculation of some future amount of gratification could constitute a motivational cause in the present by means of reasoned anticipation. This clearly contradicts the idea that the anticipated quantity of a future quality never has the power to motivate us now, unless we are able to translate it into a present quality of experience. And this translation is precisely what we do when we imagine. The act of anticipating, not the anticipated future object, is of present quality. Imagination for Dewey is a crucial mode of the regular functioning of our intelligence. It is therefore not a deviant or special form as the separation between mainstream instrumental action and pretense behavior in the Humean tradition suggests. “Imagination is as much a normal and integral part of human activity as is muscular movement” (Dewey, “Democracy and Education,” MW 9:245).

In fact, on Dewey’s account it is only arbitrarily possible to distinguish between actual deliberations, following real motivations and imaginative projects of pretending, simulating, or playing. As soon as we deliberate we enter the dominion of imagination. In deliberation, we hypothetically follow tendencies and potentials present in the situations and explore their capacities to transform our situation “offline”: “An act tried out in imagination is not final or fatal. It is retrievable” (Dewey, “Human Nature and Conduct,” MW 14:132–33). For example, we imagine what the likely consequences would be if we gave way to our momentary feeling of irritation or anger, and playing through
several scenarios we come to the conclusion that it may not be worth the trouble.

The very act of singling out individual motives or desires renders them indistinguishable from imaginary desires, or “i-desires.” They are not what actually motivate us, because only the complex structure of our concurrent inclinations, habits, appetites, and values can account for decisions. Deliberation then takes the form of imaginative thought experiments or even pretense behavior to accomplish its function: to arrive at a new balance of motivations, which gives coherence and direction to our practices.

By the same token, when we pretend to be an imaginary doctor who faces a diabolically difficult dilemma, we deliberate in fact by the same means as we deliberate in matters of personal relevance.

I shall now look more closely at the dividing lines between imaginative pretended and “real” decision making, which will require reconsidering the role of imagination in rational or intelligent deliberations.

Rationality and Human Intelligence

Some contemporary theorists claim that imagination steps in as a makeshift method where reliable fix points for deductive instrumental reasoning (for example, means and ends) are missing or are impracticable. In a famous article, Reinhard Selten (1978) introduces a three-level hierarchy of decision methods, with “routine” at the bottom, “imagination” in the middle, and “reasoning” at the top. “Imagination,” Selten claims, is able to discriminate alternatives by visualizing them, which ranks it above routine. Yet it lacks the analytical clarity of “reasoning” and therefore comes out only second best. In the absence of sufficient data or computational resources, which would make decision alternatives comparable in a quantified way, imagination can still produce a qualitative judgment.

What is the real position and relevance of imagination in human reasoning and intelligent deliberation? Peter Carruthers is among the few scholars in the Humean tradition who explicitly ask the question “Why pretend?” (Carruthers 2006). His answer amounts to a defense of Nichols and Stich’s model (see figure 2). At the same time, it bears considerable resemblance to pragmatist tenets: suppositional beliefs (imaginings) have the power to generate emotions and appeal to desires, which explains why we react with appetite to the mere description of a French menu or with sadness to the death of a fictional character. Such imagination-driven influences on our emotions can be instructive. Imagining our asking our boss for a higher salary can provoke actual fear in us, making the real action less likely. Carruthers is not very explicit how this link can make us more intelligent in our
choices and dispositions. He cites Damasio’s (1994) somasensory-monitoring architecture, for which the reaction of our emotions and desires is visceral and formatted in action schemata: “The emotions generated by this process are real ones, not just emotion-like. But they are directed towards one or more of the suppositions contained in the possible worlds box [imaginings], not towards some real (believed-in) state of affairs” (Carruthers 2006, 102). This makes it clear why we don’t intervene in fiction even if it moves us.

In a rather Deweyan fashion Carruthers explains that children are “mentally rehearsing some of the related action schemata” (2006, 104) when they play. Moreover, imagination helps to index action as desirable or not. This is at the very heart of Dewey’s definition of the role of imagination in human intelligence; however, it is not treated by Carruthers as the motivating force behind imagination and pretense. Carruthers simply states that both mental rehearsal and the correlative default mechanism of pretense are “emotionally rewarding, reflecting ... standing desires, values and interests” (108).

One problem in the Humean tradition lies in the one-sided dependence of emotional reactions on imaginings. Emotions are merely reactions to entertained propositions; they are not understood as both the motivator and the target of an intelligent learning process, which aims at refining emotional dispositions, not merely at evoking emotional reactions. The entire Humean tradition suffers from an impoverished notion of our emotional life. As desires or passions, emotions appear spontaneous, unsystematic, and not responsive to reasons, or as preferences they are simply taken as given.

Pragmatists see this differently: when we deliberate, present activities are not deduced from the desirability of future outcomes; the future will be imaginatively explored by investigating present desires and tendencies. Imagination is the human capacity to “give way, in our mind, to some impulse” (Dewey, “Ethics,” MW 5:293) while quarantining others, and watching hypothetical situations unfold. This means that our imaginative explorations have the power and the central function to change the quality of initial emotional reactions and form intelligent emotional dispositions. For example, exploring in imagination the ramifications of rash or impulsive behavior changes the quality of our initial emotional impulses and turns them into more educated dispositions.

This idea not only points to a more prominent place for imagination with respect to mainstream human intelligence, it also challenges the fundamental architecture of Humean rational action, because it calls into doubt whether we make a sharp division between “reasons” and “passions”: for Dewey, “Reasonableness is in fact a quality of an effective relationship among desires rather than a thing opposed to desire....Rationality... is not a force to evoke against impulse and habit. It is the attainment of a working harmony among diverse...
The most decisive revision of Humean agency and rational choice that pragmatists offer lies in the reconstruction of the distinction between reason and emotions. For pragmatists since Dewey, desires, cultivated through experience and imagination, are the very material from which reason (defined as intelligent active dispositions) is made: “The conclusion is not that the emotional, passionate phase of action can be or should be eliminated in behalf of a bloodless reason. More ‘passions,’ not fewer is the answer.... The man who would...cultivate intelligence will widen, not narrow, his life of strong impulses while aiming at their happy coincidence in operation. Emotional categories like impulses and passions therefore provide the very fabric of reason and rationality” (Dewey, “Human Nature and Conduct,” MW 14:135–36).

This approach makes any ranking order between rational-deductive and imaginative functions, as in Selten’s formulation, obsolete from the outset.

Boxology and Noncognitive Aspects of Imagination

There are important advantages to the “replacement” model (Van Leeuwen 2011), according to which pretense behavior requires a full-fledged imaginative deliberation system (see figure 3), complete with i-beliefs and i-desires (Currie and Ravenscroft 2002; Doggett and Egan 2007; Velleman 2000). This account is better equipped to explain the complex motivational structure in pretense situations, it opens the possibility for real engagement with imagined situations, and it allows actors to make in-character choices.

Subjected to the right tests, however, this approach also reveals shortcomings that turn out to be detrimental to the plausibility of its architecture. Van Leeuwen points to the problem that the replacement model in Doggett and Egan 2007 (see above) makes it impossible to bridge the gap between mainstream rational action and imagination, pretense, and play. When a mother holds up ten fingers in response to a swan dive by her daughter, she both *pretends* to be a jury in an Olympic competition and by the same token actually intends to encourage and applaud. From this observation Van Leeuwen concludes that we cannot distinguish sharply between veridical and pretended circuits of our expressions in our decision making. This phenomenon may be called “semipretense.”

The problem does not begin with separating pretense circuits from mainstream instrumental deliberation as in the replacement model. The
very boxological nature of models in the Humean tradition has a tendency to erect categorical barriers between psychological faculties (memory, desire, belief, imagination, and so forth), which should better be regarded as heuristic distinctions within overlapping processes. Dynamic cognitive structures do not have such discrete separations. This idea is also a defining notion in pragmatist theories of agency (see Dewey, “Human Nature and Conduct,” MW 14; Johnson 2010; Jung 2010).

It is unclear how a “belief box” and a “possible world box” can be sharply distinguished in the Nichols and Stich (2003) model (see figure 2). Factual beliefs often contain counterfactual elements like “if-then” relations among the hardest facts we own. The spelling out of such conditional relations in mainstream rational decision making requires some imaginative dexterity.

Van Leeuwen points to a close relation between imagination and deliberate instrumental action, based on veridical perception: “There exists a form of imagination that is a continuously updated forward model of action in the world, in which action possibilities are constructed in relation to a manifold of largely perceptual representations that can be veridical, non-veridical, or mixed—where mixed is a usual and important case” (Van Leeuwen 2011, 56).

We can in fact merge reality and imagination in Google-glass fashion, whereby we layer imaginative elements over “veridical” objects in perception, as when we imagine Santa Claus sitting on this actual chair.

Moreover, and more important, our veridical perception seems suffused with imagination: “The structure that enables me to pretend to avoid the spray of an imaginary skunk is almost entirely the same as the structure of representations that enable me seriously to avoid the potential spray of a real skunk” (Van Leeuwen 2011, 70).

The suffusion of perception with this imaginative element and the impossibility of separating simple and atomistic perception from dynamic projections of potentials and “affordances” (Gibson 1966, 1979) has occupied recent cognitive science. It has also been a theme at the heart of the pragmatist movement since William James. James rejected Hume’s associationistic model of experience in favor of a stream of consciousness (James 1950 [originally 1890]), in which any meaningful perceptual awareness comes to us ready animated with connections and directions. This of course meant giving up on a sharp distinction between perception and imagination as distinct faculties. To the present day this has been a defining theme in the pragmatist tradition. Fesmire, for example, writes: “The question What is the imagination? Is loaded with the implication that there is such a ready-made thing. Imagination is thus conceived as an autonomous mental power—a primitive force instead of a function” (2003, 61).
For Dewey, the imagination is part of his very complex concept of experience: experience “includes what men do and suffer … and also how men act and are acted upon, the ways in which they … desire and enjoy, see, believe, imagine” (Dewey, “Experience and Nature,” LW 1:18, emphasis added).

Van Leeuwen makes an important step within the pretense debate toward overcoming boxological architectures, which separate imagination from mainstream instrumental deliberation: “The forms of imagination I posit integrate with perception and guide action” (2011, 76). Relying on empirical research in the neurosciences (Kosslyn, Thompson, and Ganis 2006), Van Leeuwen concludes that imagination uses the same pathways as beliefs in influencing our desires and shaping actions. This allows him to accommodate any shade of semi-pretense in his model, right down to our bodily attitudes: “[I]mages that swim in our minds infect our actions without our explicitly intending them to do so…. The ghost of the object imitated pervades the bodily motions of the habitual actor long into the future, without any conscious knowledge on his part” (Van Leeuwen 2011, 75–76). In passages like these Van Leeuwen seems to align himself with the pragmatist tradition. In a next step, however, he distinguishes simple imaginings, such as “forward models” and “motor plans,” from “higher” propositional attitudes (in which he includes beliefs, desires, and some imagined propositions, such as in J. R. R. Tolkien’s Lord of the Rings that “elves are immortal”). This reintroduces lines of division that pragmatists spent much effort to overcome.

For Kant the faculty of imagination links the immediacy of perceptual awareness to the formation of conceptual categories and propositional beliefs via the formation of schemata (which Johnson [1987] calls “image schemata”): imagination unifies perceptions and memories into images (reproductively) and (productively) forms schemata (molds, patterns, and rules), which link perception content to conceptual thought. Kantian schemata are both perceptually formatted, allowing their application to sensual content, and they are formal enough to make categorizations in conceptual propositions possible.

Johnson (1987) uses the notion of image schema as a vehicle for connecting our propositional cognitions with perceptual archetypes, which are rooted in embodied experience. He defines an image schema as a “recurring, dynamic pattern of our perceptual interactions and motor programs that give coherence and structure to our experience” (1987, xiv). By this he establishes a seamless continuity between “the precognitive structures of our embodiment” (Alexander 1990, 343) and the propositional structure of our “higher” cognitions and judgments.

Johnson seeks to mend Kant’s separation of sensual awareness and conceptual cognition while acknowledging Kant’s genius in grasping “the scope, pervasiveness, and importance of imagination for human
experience” (1987, 166). Johnson tries to solve the problem of how imagination can be both, “formal and material, rational and material” (1987, 168), by jettisoning the idea of a disembodied conceptual rationality and the objectivist representational theory of meaning. He explicates this by a detailed analysis of the intimate connections that hold between propositional representations and embodied experiences, an analysis that would be hard to do justice to in the space available here.

The argument traces the roots of theoretical propositions, which have undergone metaphorical and polysemic transformations, framings, and categorizations that have transferred and transformed meanings; all meanings of propositions are originally rooted in situated bodily experience before they enter the plane of abstract conceptions. For example, the “in-out schema,” which pervades all aspects of our speech, as in pouring tea into or out of a cup, going into or out of a meeting, entering (into) a conversation, involving a third party, or introducing a definition. All these examples make use of the same image schema, which has its roots in the basic experience of bodily movements, transferring something into or out of another object or domain.

This genealogy serves two purposes: first, it shows that in all these translations and transformations nothing mysterious happens that would warrant a jump from a context of embodied experience to a realm propositional meanings. Second, it establishes that even our most abstract theoretical concepts still have embodied experience in their DNA.

I believe the genealogical analysis is plausible and informative, but critics might wonder why and how we are able to identify various instances of “opening” (a nut, a window, a bank account, a chess game, or an argument) without having a prior abstract concept of “open” in the first place. This objection does not, however, harm the idea that “meaning is not just a matter of concepts and propositions, but also reaches down into the images, sensorimotor schemas, feelings, qualities, and emotions that constitute our meaningful encounter with our world” (Johnson 2007, xi). Twenty years earlier Johnson had already concluded that “meaning is not situated solely in propositions; instead, it permeates our embodied, spatial, temporal, culturally formed, and value-laden understanding” (1987, 172).

Van Leeuwen, by distinguishing between imaginings that are “perceptually formatted or structured as bodily movements” on the one hand and “higher” propositional attitudes on the other (2011, 67), invokes a commonplace in the Humean tradition. It separates intentional states such as reasons and desires or pro-attitudes logically from body-enacted and contextual processes. This move would certainly have alienated the name giver of the tradition: David Hume was a naturalist right into logical theory.
Van Leeuwen drives a wedge between embodied dispositions and a propositional rational deliberation system when he writes: “The Active Imagination thesis posits a type of imagining that is a forward model of action in the world. The imagination constructs this model in relation to objects of perception and in doing so seeks to satisfy the goals set by higher attitudes, such as beliefs and desires” (2011, 71, emphasis added). Imagination as the production of forward models of perception and embodied motor plans is thus presented as “the slave” of higher propositional desires, which it guides and enables.

Alvin Goldman’s (2006a) distinction between E-imagination (enactment imagination) and S-imagination (suppositional or propositional imagination) is closely related to Van Leeuwen’s notions of imagination as a perceptual (and active) forward model and imagination as a higher-level propositional state. Goldman’s E-imagination creates perception-like and motor-response-like mental states. Goldman admits that E-imagination is essential in understanding fictional characters, but his simulation theory does not deliver a satisfactory account of establishing enactment at the center of understanding other people’s minds.

Imagination has often been identified as the capacity for taking someone else’s point of view or stepping into his or her shoes (Nussbaum 2001; Smith 2002 [originally 1759]; Werhane 1999). Two competing schools have made their bid to account for this phenomenon. The dispute between Simulation Theory (ST) and Theory Theory (TT) has spawned much debate (Aboulafia 2011; Goldman 2006b; Gordon, 1995). “What unifies theory theorists is the view that attributing inner states and making sense of the behaviour of others is carried out by a capacity that deploys knowledge encoded in a theory. The most straightforward sense in which ST is opposed to TT is that simulation theorists deny that our capacity to attribute mental states is subsumed by a body of knowledge about the minds of others. Rather, our own mental processes are treated as a manipulatable model of other minds” (Cruz and Gordon 2005).

The chief problem in ST, as Gordon points out, is accounting for the difference “between just imagining being in X’s situation and making the further adjustments required to imagine being X in X’s situation” (Gordon, 1995, 741; see Aboulafia 2011). For the latter we seem to lack the crucial property of having X’s psychological state of mind. This seems to imply the need for a (representational) theory of X’s cognitive structure process at the center of Simulation Theory. Goldman tries to avoid falling back on Theory Theory by using the notions of inhibition and quarantining for the necessary adjustments. That, however, neither rids us of the need for “theory” (how else would one know how to inhibit and quarantine) nor solves the problem of an
egocentric bias in simulating other minds. The problem remains that successful simulation would require becoming the simulated other.

The source of all these problems is a reliance on faculty psychology: “E-imagination is a method or faculty that causes mental states of the various categories” (Goldman 2016a, 46).

Can pragmatist ideas offer help here? Mitchell Aboulafia (2011) traced the arguments of George Herbert Mead and the recently emerged school of neo-Meadian social psychologists, who are able to add a new spin on our discussion so far. We must stop thinking about simulation and imagining other mental processes in cognitive or mentalist terms (Martin, Sokol, and Elfers 2008). Instead it would be more interesting to see “how the dynamic interaction of the agents is responsible for the ways in which they interpret the world and others” (Aboulafia 2011, 141). Gary Cook explains: “We can avoid some of the misleading connotations of the phrase ‘taking the role of the other’ by using in its stead the alternative phrase Mead himself often employs, namely, ‘taking the attitude of the other.’ An attitude, he says, consists of a behavioural disposition, a tendency to respond in a certain manner to certain sorts of stimuli, or the beginnings of an action that seeks an occasion for a full release or expression” (1993, 79). On this view, the imaginative perspective takes changes from an internal simulation to a form of interaction with others. It transforms, and according to Mead, originally forms one’s own self: “For Mead, the taking of the perspective of others is a condition for the possibility of self-consciousness and self-criticism” (Aboulafia 2011, 145).

Pragmatists have always seen imagination as a primarily social form of functioning. This holds also when it is not other people’s perspectives or shoes we are imagining to be in.

Fesmire writes: “To deliberate is to co-author a dramatic story with environing conditions in community with others” (2003, 78). Alexander adds, referring to Dewey’s theory of imagination: “We only deliberate with ourselves because we have deliberated with others. The tacit horizon shared by a community limits the nature of any discussion and provides for the very possibility of communicating at all. Thus the problem of imagination is first and foremost a question of social intelligence, of cooperative creativity, so to speak” (1990, 340).

In summary, any attempt to accommodate imaginative behavior within a Humean architecture will require the introduction of division and parallel circuits that separate mainstream instrumental and imaginative aspects in our psychological processes. This separation creates insurmountable problems in accounting for the complexity of our action and the interfusion of instrumental and imaginative aspects in our practical deliberations.

Pragmatists offer a comprehensive alternative by pointing to the central role of imaginative functioning in all forms of human deliberation, including mainstream instrumental action. They also trace the genealogical
connections between propositional attitudes and embodied experience in order to mend categorical rifts between the two. The pragmatist program calls for a revision of all fundamental divisions and categories in the Humean architecture, including the separation between passions and reasons and between propositional and non-propositional (enacted) attitudes. Finally, this may create room for accommodating the primordially social nature of our deliberation processes.

**Conclusion**

What, then, is the best explanation for the behavior of the children at the Manhattan Seaport Museum I mentioned in my introduction? First, it seems that their immediate grasping of the imaginary pulley system with their hands did not follow a representation of a hypothetical reality, following a desire to pretend (under the description of enjoying a counterfactual activity) as Nichols and Stich (2003) and other Humean scholars suggest. Neither is it a parallel circuit of make-believe activity, enacting hypothetical i-desires under the guidance of i-beliefs. Such abstraction feels like mockery because it fails to account for the embeddedness of imagination in the whole context of life’s pursuits and the evident continuum between imaginary and real elements in our transactions.

Pragmatists seem to offer a more authentic and informative alternative. The immediacy of the reaction and the self-sufficiency with which children pretend point to the relevance of this activity in their learning processes. Seen as an exploration of possibilities inherent in the actual, imagination becomes functional without serving predetermined purposes. This makes the imaginative grabbing of a virtual pulley rope an actual grasping for a purchase on life’s rich possibilities.

**References**


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