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Author post-print (accepted) deposited by Coventry University's Repository

Original citation & hyperlink:

van Mulukom, V & de Wet, M 2021, 'The Importance of Narrative and Intuitive Thought in Navigating Our Realities', *Evolutionary Studies in Imaginative Culture*, vol. 5, no. 2, pp. 61-64.

<https://dx.doi.org/10.26613/esic.5.2.244>

DOI 10.26613/esic.5.2.244

ISSN 2472-9876

ESSN 2472-9884

Publisher: Academic Studies Press

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The Importance of Narrative and Intuitive Thought in Navigating Our Realities

Valerie van Mulukom and Micia de Wet

Stephen Asma presents an alternative model of mind, “mythopoetic cognition” (MC). We applaud Asma’s Herculean effort in bringing together this many ideas—with considerable breadth and depth—in a single article, and wholeheartedly agree that the importance and adaptiveness of “nonrational” cognition are often rendered invisible in post-Enlightenment (“disenchanted”) perspectives. We do believe, however, that some additional nuance is required.

Narrative Thought and Social Realities

The distinction between Asma’s “indicative” and “imperative” modes of mind is not new, as he also mentions: another, similar distinction was previously made between “paradigmatic” (indicative) and “narrative” (imperative) thought by Jerome Bruner (1986): Paradigmatic thought is a formal system of description and explanation, organizing thought through abstract categorization and conceptualization. Narrative thought, on the other hand, deals with “human or humanlike intention and action and the vicissitudes and consequences that mark their course” (Bruner 1986, 13), and organizes thought by “story devices.” These two modes of thought operate by their own principles and aims, and are complementary rather than reducible to each other.

The paradigmatic mode of thinking seeks to explain relationships between sets of observable variables, thus providing causal explanations about “natural” reality (we can call this “objective truth”), whereas the narrative mode of thought seeks to understand relationships between individuals, thus providing meaningful explanations about social

reality (we can call this “subjective truth”) (Brendel 2000). This is not to downplay the aim of narrative thought: Subjective truth is still a truth, in the same way that social realities are real. It matters whether someone is considered a king or queen, even if there is nothing in the natural world that scientifically demonstrates this (e.g., “royal blood”), and belief in gods and other supernatural beings has similarly significantly exerted shaping force on human evolution (van Mulukom 2019). However, the different aims mean that the two modes cannot be rendered equal, and their merits not judged by the same criteria: we suggest that there may be a conflation as to which reality needs to be explained, and that an epistemology of the natural world is better served by paradigmatic or indicative thought, whereas an epistemology of the social world is best served by narrative or imperative thought.

Thus, we resist the notion that the natural world is inherently intentional or teleological, and that instead intentionality occurs when other agents are involved (whether human or animal), but not beyond that. Considering that human procreation is inevitably tied up with social relationships—after all, it takes two to tango—it may appear that imperative epistemology is superior to indicative epistemology when it comes to human survival. However, we resist the more extreme notion that indicative thought is “neither natural nor necessary,” as Asma puts it. We don’t believe that earlier developments are more “natural” than others (e.g., lactose intolerance is not more natural than being able to drink cow’s milk), or more necessary. Moreover, the evolution of indicative thought has allowed culture and technology to expand at a tremendous rate, and has ultimately contributed enormously, via culture and technology, to the survival of the human species—though we concur that this development may also have contributed to the prestige of indicative thought in the Western world (Henrich 2020).

The Vilification of Intuitive Thought

It is clear that nonrational thinking is increasingly vilified in the West, whether through its educational systems (van Mulukom 2018) or its researchers (van Mulukom 2017). This means that it now has to be defended that “[i]ndicative descriptive knowledge is not intrinsically or always adaptively superior,” in Asma’s words. A similar bias against nonrational cognition is evident in the literature on analytical and intuitive thinking, which positions rational, logical thinking against emotional, holistic thinking (Evans 2008). For example, one of the literature’s most common and important measures, the Cognitive Reflection Test (Frederick 2005), determines analytical and intuitive thinking through *correct* and *incorrect* answers to mathematical puzzles, respectively. We suggest that there is a persistent indicative understanding of an imperative phenomenon (intuitive thinking). As a corrective, we need to appreciate both as valid ways of thinking, which can occur simultaneously (e.g., in magical and naturalistic explanations).

We must be careful not to swing the pendulum too far the other way either: Imperative or intuitive thinking is not necessarily superior either. For instance, imperative/intuitive thinking is associated with more cognitive biases than indicative/analytical thinking, such as the bandwagon bias, which refers to the tendency to agree with something because everyone else is saying it, or prestige bias, which refers to the tendency to agree with something because a prestigious individual says it. However, aim matters here too: If the aim is to make a decision based on empirical facts, these biases can lead one astray; but if the aim of the decision-making is social—that is, to create and/or maintain relationships—then such “biases”—following others— can undoubtedly lead to a successful outcome.

The lack of understanding of the value of mythopoesis, and the reduction of it to conspiracy or (equally dismissed) magical beliefs in a Western narrative, is tragic. Its consequences can be dire, as illustrated by legislations to remove arts subjects in schools in

favor of scientific ones, forgetting that meaning-making is as important as fact-generation. Symbolic systems, emerged from the organization and projection of bodily feeling states, do not just describe (label, organize, model) the world but importantly also inspire us and motivate us, something which is particularly clear in the arts (van Mulukom 2021a). However, we do maintain that representation (not necessarily propositional) in the form of simulation underlies these symbolic expressions (van Mulukom and Clasen manuscript), and that simulation as a system supports the various functions of imagination, including Theory of Mind (van Mulukom 2020).

Emotions, Motivation, and Predictive Processing

Emotions are affective states differing in arousal (from low to high) and valence (unpleasant to pleasant) (Barrett 2017). The interoceptive experiences that we call emotions are interpretations of bodily signals which tell the individual to pay attention to something. While there is no universality in identified emotions and their labels, we argue that this does not mean that the interoceptive experience underlying them requires higher conceptual cognition to be felt. Emotions signal salience and induce motivation (to approach or avoid). By extension, rather than calling the amygdala a brain region preoccupied with emotion, it can be called a salience detector (Cunningham and Brosch 2012)—it just so happens that fear is a highly salient and significant emotion. Motivations are important because they “get the job done,” as Asma says, which may be another reason why indigenous knowledge—imbued with emotion—and its transmission may be so important (cf. Alcorta and Sosis 2005), and indeed superior in specific, local contexts. In this regard, a probabilistic, generalizable explanations may be of less use than specific, unique perspectives (Brendel 2000). This underlines the context-specific, pragmatic usefulness or appropriateness, and indeed adaptiveness, of imperative knowledge.

Nonetheless, we suggest that a predictive processing framework can be used in conjunction with the MC model, even as a statistical probability calculation. We argue that priors can be established through imperative processing as much as indicative processing (van Mulukom and Lang forthcoming). Indeed, this is what makes imperative thought so important yet underappreciated: imperative narratives shape not only how we interpret the world but also perceive it (Schjoedt et al. 2013; van Mulukom 2020). Such narrative structures or mythopoetic templates exist in a Western context too, such as the Hero's Journey (Campbell 1949). Narratives work with and through characters (social worlds), not only with plot (predictions) and plot twists (prediction errors).

However, we suggest that the merger Asma presents between predictive processing and embodied cognition may benefit from more nuanced contextualization; overlaps of predictive frameworks with embodied cognition disguise fundamental theoretical differences and disagreements (Bruineberg, Kiverstein, and Rietveld 2018). For instance, the predictive coding and processing frameworks rely on inference and representation, which cannot survive in enactive contexts of embodiment (Hutto and Myin 2018; Gallagher and Allen 2018).

In the same vein, imagination may be highlighted as an active embodied cognitive facility beyond the default mode network; concerns for MC may be better served within psychology and anthropology than neuroscience. The story unveils itself between people in social narratives; the power of myth does not reside in objective truth, but rather, in its value to affectively mobilize people through its narrative (Armstrong 2004). Indicative, disembodied, and individual understandings of the mind and imagination would profit from embodied, narrative, and social understandings, and fortunately a trend towards this is gradually appearing (van Mulukom 2021b).

Conclusions

Imaginative cognition is undervalued and under-researched. We commend the mythopoetic cognition model, albeit whilst disagreeing with some of its implications: We argue that the different modes of thinking have different aims. Indicative processing is for factual understandings of natural reality; imperative processing for meaningful understandings of social reality. Thus the function of cognition is to motivate but also to inform, and both functions are adaptive. Overall we believe that this is a timely model in the cognitive science of imagination and imaginative culture.

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