Can We Share Mental Imagery?

Mental imagery plays a central role in many forms of human cognition, yet its place in interpersonal coordination remains unclear. Unlike perception, it is not anchored to publicly accessible stimuli, and unlike propositional attitudes, it lacks clear criteria for when two individuals are in the same mental state. This might lead to the view that while imagery may accompany communication or joint action, it cannot itself be genuinely shared, given its standard characterization as perceptual processing not directly triggered by sensory input (Pearson et al. 2015; Dijkstra et al. 2019; Nanay 2023). This paper challenges that conclusion. It argues that sharing mental imagery is possible without shared imagistic tokens or fully identical imagistic contents, by distinguishing three senses of sharing: by token identity, by content identity, and by structural coordination of cognitive activity.

On the first sense, two subjects would share a mental image only if the same imagistic token occurred in both minds. This is implausible: mental images are instantiated in individual subjects, and there are no obvious criteria for re-identifying a numerically identical imagistic token across minds. Moreover, the high variability of mental imagery, even at the level of conscious report, undermines any such attempt.

On the second sense, sharing would require fully identical representational content. This standard is overly demanding. Imagistic content is often indeterminate along dimensions such as perspective, scale, orientation, and detail, and there is little reason to expect convergence on fully identical content in successful coordination.

These difficulties motivate a third, weaker but functionally relevant sense of sharing. On this sense, subjects share a mental representation insofar as they engage in coordinated imagistic activity structured by the same representational constraints. What is shared is not a mental object or determinate content, but a way of imagining: a format-governed activity regulated by task-sensitive constraints on transformation, elaboration, coherence, and content generation.

Several accounts converge on a constraint-based framework of imagination (Kind 2016; Langland-Hassan 2016; Dorsch 2016; Myers 2021; Gauker 2024). Imagining is regulated by world-preserving, knowledge-based, and format-specific constraints that determine permissible transformations. Coordination is achieved when agents' imagistic activities are jointly answerable to the same constraints, even if their images differ in some dimension, such as vividness or detail (Marks 1973; Zeman 2024).

Although mental imagery typically lacks an external and sharable stimulus, it can be aided by public scaffolds such as diagrams, gestures, and shared descriptions. Recent work on shared perception shows that coordination does not require shared experiences, but shared orientation toward what counts as commonly available and relevant (Deroy et al. 2024). A similar point applies to shared imagery.

I contend that imagistic coordination parallels perceptual coordination for joint action and is best explained by a notion of commitment (Bratman 1993). Subjects can be committed to regulating their imagistic activity in light of shared constraints and purposes, as when they discern constellations or plan routes with maps and sketches. In such cases, coordination

depends on imagistic operations -- simulating trajectories, comparing spatial relations, adjusting perspectives -- that are not captured by shared belief alone.

Drawing on work on non-propositional motor representations in joint action (Sinigaglia & Butterfill 2022; Mattei 2025), the paper concludes that while imagistic tokens and phenomenal character remain private, mental imagery is shareable in a functionally relevant sense. What can be shared is a way of imagining: a format-governed cognitive activity that can be sustained across agents and that supports interpersonal coordination even in the absence of shared experiences or publicly accessible stimuli.

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