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Understanding Lightbulb Moments: Meaning-making in visual morphology from comics and emoji

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Abstract

How do we interpret a lightbulb above a head to mean inspiration? We investigated the semantic processing of these "upfixes" like lightbulbs or gears that float above characters' heads. We examined the congruity of face-upfix dyads presented sequentially with words describing their literal ("lightbulb") or non-literal meanings ("inspiration"). To examine if upfixes alone sponsor meanings, upfixes either matched or mismatched the facial expression (ex. lightbulb over an excited vs. sad face). Literal words always evoked faster response times when presented before images. When images appeared before words, literal words were responded to slower than non-literal words for matching dyads, but faster times for mismatching dyads. Non-literal words were rated as more congruous with matching dyads, while literal words were more congruous with mismatching dyads. Thus, non-literal upfix meanings (e.g., inspiration/lightbulb) are ingrained in memory only when matching their faces, supporting that they belong to a constrained visual lexicon.

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