Do you just see the Mug Handle? Let’s take a look at Affective Affordances too!

Marta Caravà, PhD [1] & Claudia Scorolli, PhD, PsyD [2]

[1] PhD from University of Bologna, [2] University of Bologna, Department of Philosophy and Communication Studies

In brief
Can physical objects instantiate “affective affordances”? Under which conditions? By combining philosophy and embodied cognitive science we
• offer a new definition of the concept of “affective affordance”;
• propose a feasible operationalization for its empirical testing.

1. Introduction
Affordances are perceived opportunities for beneficial or harmful action arising out of the interaction between an embodied agent and her environment (Gibson, 1966). Although this definition may suggest a valence-based approach, affordances have been usually interpreted as invariant properties (Gibson, 1979). This is one of the reasons why philosophical research has started investigating the subjective dimension (e.g., affective) of affordances only in recent years (Rietveld, 2008; Gallagher, 2017; Dings, 2018; Colombetti, 2014). Yet, there is a body of experimental literature encouraging an inquiry into the subjective contextual features of motor affordances. It includes, e.g., research on variable affordances deriving from temporary objects characteristics (Borghi and Riggio 2015), the modulation of affordances based on the actual object reachability (Costantini er al. 2011) and the actual functional capabilities of one’s body (Ambrosini et al., 2012), the impact of action and observation verbs on affordance perception (Borghi, 2012), and the influence of the stimulus-evaluation and the reference-frame (self/object) on approach-avoid behavior (Saraiva et al., 2013).

2. Method
Empirically informed philosophy

• contextualization of the reviewed empirical results into the embodied and enactive approach (Varela, Thompson and Rosch 1991);
• critical comparison of affective affordances in philosophy and experimental approaches to emotional affordances (Schutte and al., 2008);
• identification of the core problem: too broad philosophical concept of affective affordance (Krueger and Colombetti, 2018).

2.1. Diachronic dimension
Likelihood of affective activation of an item: defining aspect of affective affordances. The item’s integration in the agent’s practices at a diachronic level: predictor of this likelihood.

3. Results

3.1. Diachronic dimension

• environmental items of various kinds (i.e., cultural artifacts, material objects and tools);
• integrated in a human agent’s everyday habitual practice;
• can solicit emotional states and behaviors in a consistent and reliable manner.

Investigation of two temporal dimensions: diachronic and synchronic.

3.2. Synchronic dimension
Context-sensitiveness of motor affordances in intersubjective settings (Gianelli et al., 2013; Scorolli et al., 2014): making predictions on the on the temporal dynamics of affective activation in individual interactions with affective affordances.

Future testing through kinematic analysis: affective affordance effect in the early kinematic events (roughly 35% of movement duration), since they reflect the relatively slow process of planning (Glover 2004) more than on-line control.

4. Discussion

• A novel empirically testable concept at the crossroad of philosophy and cognitive science.
• Future research should include complex sets of objects and the role of normative, linguistic and social aspects to bridge the gap between individual affective affordances and socio-cultural affective affordances.

Contact & website: [1] marta.carava@gmail.com; [https://www.marta-carava-philosophy.com/]; [2] claudia.scorolli@unibo.it; [https://www.unibo.it/sitoweb/claudia.scorolli/en]

Want to know more? Please, check «When affective relation weights more than the mug handle: investigating affective affordances» - Frontiers in Psychology (2020), [https://doi.org/10.3389/fpsyg.2020.01928]