

# Grouping notes through nodes: The functions of Post-It notes in design team cognition

Graham Dove, Department of Digital Design, Aarhus University, 8200 Aarhus, Denmark

Sille Julie Abildgaard, Copenhagen Business School, Frederiksberg, Denmark

Michael Mose Biskjaer and Nicolai Brodersen Hansen, School of Communication and Culture, Aarhus University, Denmark

Bo T. Christensen, Copenhagen Business School, Frederiksberg, Denmark

Kim Halskov, School of Communication and Culture, Aarhus University, Denmark

*We investigate the way Post-It notes support creative design team practice, focusing on how they function as cognitive externalisations that, through grouping activities, support categorisation qualities associated with semantic long-term memory. We use a multimodal approach, drawing on ethnomethodology and conversation analysis, which places gestures and interactions with Post-It notes on a similar footing to speech and text. This highlights the role of these interactions in the situational context, as the design team shape and are shaped by them. Following Dix and Gongora (2011), we identify four overlapping functions: informational, formational, transformational and transcendental. We then examine the emergence of concepts and themes through grouping individual Post-It notes, showing how they might be considered nodes in an emerging semantic network.*

© 2018 Elsevier Ltd. All rights reserved.

**Keywords:** Post-it notes, design cognition, design tools, collaborative design

The humble *Post-It note* is one of the most frequently used materials in creative practice. For instance, they play an important role in affinity diagramming as part of contextual design (Beyer & Holtzblatt, 1997, pp. 154–163), and in the brainstorming activity in Future Workshops (Kensing & Madsen, 1991). In this paper, we investigate the functions these small sticky notes play in design cognition. In particular, we consider their use in terms of the *cognitive support* they provide for the design team's creative practice in the sessions recorded for the DTRS11 dataset (Christensen & Abildgaard, 2017, pp. 19–37) from the Design Thinking Research Symposium in 2017 (Christensen, Ball & Halskov, 2017).

To frame our understanding of cognitive activities, we draw on the theory of distributed cognition (Hollan, Hutchins, & Kirsh, 2000; Hutchins, 2006), which shows us how cognitive processes may be distributed across the

## Corresponding author:

Graham Dove  
[grahamdove@nyu.edu](mailto:grahamdove@nyu.edu),  
[dove.graham@gmail.com](mailto:dove.graham@gmail.com)



[www.elsevier.com/locate/destud](http://www.elsevier.com/locate/destud)

0142-694X *Design Studies* ■ ■ (2018) ■ ■ ■ ■ ■

<https://doi.org/10.1016/j.destud.2018.03.008>

© 2018 Elsevier Ltd. All rights reserved.

members of a social group, through periods of time, and may involve coordination between internal (i.e. mental) and external (i.e. material and environmental) structures. To investigate the way Post-It notes are used during the design activities recorded for DTRS11, we draw upon literature discussing the functions design materials and artefacts serve as *externalisations* (Dix & Gongora, 2011) that aid reflective design practice (Schön, 1992). We also investigate the way in which collections of Post-It notes are clustered and grouped, as this phenomenon is such an important aspect of their use in creative practice. To support this additional level of analysis, we make reference to theories of *categorisation in semantic long-term memory* (Collins & Loftus, 1975).

## *1 Post-It note use in design practice*

Despite being commonplace, the practices surrounding designers' use of Post-It notes have not, to our knowledge, previously been the subject of close analysis and theorising. Where they have been discussed, it has typically been to compare the use of digital implementations with paper Post-It notes during common ideation activities (e.g. Harboe & Huang, 2015; Hilliges et al., 2007). This is in contrast to comparable design activities, such as sketching (Buxton, 2010; Purcell & Gero, 1998; Stolterman, 1999) or prototyping (Lim, Stolterman, & Tenenbergs, 2008), which have been studied closely in their own right. However, the value of informal paper-based design tools is commonly acknowledged (Cook & Bailey, 2005). For instance, Post-It notes are commonly used to capture individual ideas and form categories when brainstorming, support design thinking and design outcomes (Christensen & Ball, 2017, pp. 249–269), and can be used in synthetic or compositional activities (Stolterman, McAtee, Royer, & Thandapani, 2009). An example of this is *affinity diagramming*, a technique that uses Post-It notes to derive meaning out of data drawn from user studies (Beyer & Holtzblatt, 1997, pp. 154–163).

### *1.1 Properties of Post-It notes*

Post-It notes are characterised in part by their regular shape and small size. This makes them ideal for carrying small, self-contained pieces of information, and results in them typically being used to represent a single idea. They have a strip of semi-permanent, reusable adhesive along their top edge, which allows them to be positioned (and later re-positioned) relative to other Post-It notes; e.g. on larger sheets of card or a whiteboard. This facility to intentionally position and re-position Post-It notes relative to each other also makes it possible for the connections between different Post-It notes to become meaningful. Post-It notes are also available in a number of different colours, which allows intentional selection of colour to carry semantic value. Finally, individual Post-It notes are of little value in themselves and, can therefore be easily discarded if the idea they contain is no longer considered important. In summary, Post-It notes can be considered capable of flexibly carrying symbolic

Download English Version:

<https://daneshyari.com/en/article/6726470>

Download Persian Version:

<https://daneshyari.com/article/6726470>

[Daneshyari.com](https://daneshyari.com)