

Assembling affordances: towards a theory of relational affordances

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Abstract

Drawn from a long-term ethnographic research into personal blogging, this paper proposes a theoretical approach to the issue of materiality and culture in technology that combines the concept of affordances and that of Deleuze & Guattari's concept of assemblage. Highlighting the relational aspect of these concepts, a list of blog affordances is proposed. These can provide a basis for further analysis of blogs as well as other internet media forms.

Keywords

affordances, assemblage, blogs, internet

Introduction

The concept of affordances address the central issue of materiality and culture in technology , and has been used by Wellman et al. (2003) and Baym (2010), as well as by blog analysts (e.g. Al-Ani, Mark, & Semaan, 2010; Graves, 2007; Luehmann, 2008). However, there is a lack of theoretical consideration of the term and the need for a more developed understanding of the role of affordances in blogging. Thus, this paper proposes a theoretical approach that combines Deleuze & Guattari's 'assemblage' with the concept of affordances,¹ and proposes a list of blog affordances that can provide a basis for further analysis.

Although Deleuze & Guattari did not address social sciences directly (Brown, 2009), their ideas have been fertile in social-scientific analyses – as demonstrated in some edited volumes (Collier & Ong, 2005; Jensen & Rödje, 2009; Poster & Savat, 2009). Developed from a long-term ethnographic research project, this paper draws upon their concept of the assemblage to explore the intermingling of material, technological, sociocultural, and personal components that are relevant to an analysis of internet media forms such as blogs.

Affordances

Hutchby has defined affordances as “functional and relational aspects which frame, while not determining, the possibilities for agentic action in relation to an object” (2001, p. 444). James Gibson, who coined the term, explained that an “affordance cuts across the dichotomy of subjective-objective and helps us to understand its inadequacy. It is equally a fact of the environment and a fact of behavior” (1986, p. 129). His arguments suggests that affordances are relational, stating that “[a]ffordances are properties taken with reference to the observer” (Gibson, 1986, p. 143). Although they remain properties of the object, they are only empirically relevant when actualised through interaction with other actors or actants.

Seeking to clarify the use of this popular term, Norman has made a distinction between ‘real’ and ‘perceived affordances’ – the former are those that Gibson described, and the latter are “visual

¹ There are clear parallels with Latour's actor-network theory, but not enough space here to discuss these.

feedback that advertise the [real] affordances” (Norman, 1999, p. 40). This visual emphasis may be extended to other forms of social perception. Thus, bloggers may learn about different blogging affordances through observing other bloggers’ practices, as well as being presented with naturalised choices – for example, the option to include embedded advertisements in their blog is integrated into the setting up process of the blog software.

When Deleuze & Guattari argue that “tools exist only in relation to the interminglings they make possible or that make them possible” (Deleuze & Guattari, 1987, p. 99), there is a resonance with this relational conceptualisation of affordances.

Assemblage & affordances

An assemblage is a relatively stabilised multiplicity of heterogeneous components that resonate through their causal relations, which have consistent effects on its constituent parts, and the other assemblages with which it interacts. It contains an axis of ‘expressive’ and ‘machinic’ poles that lie “in reciprocal presupposition” (Bogard, 2009, p. 16), and which consist of incorporeal components and material bodies and/or actions, respectively. It is a dynamic model – the assemblage tends to stabilise and reproduce itself, through ‘territorialising’ movements, but nonetheless also contains ‘deterritorialising’ components that may lead to ‘lines of flight’ that can result in new assemblages (DeLanda, 2006; Deleuze & Guattari, 1987).

Assemblages have emergent properties that are only possible because of the particular configuration of the heterogeneous components. These emergent properties are however consequences of the assemblage, not causes – they are observed or deduced from the operation of the assemblage, but this does not mean they can be inferred as antecedent causes.

Thus, ‘assemblage’ is useful because it not only allows that both human and non-human components can have agency but it also emphasises how the world is built of many clusters of interlocking mechanisms, components connected through causal relations that are not restricted by predetermined spheres such as ‘virtual’ and ‘real’ dimensions. A blog is an assemblage of computer code, blogger, readers, a CPU, and other components. Each of these components can be understood on one level as independent actors, and on another as dynamically interconnected clusters of components – as DeLanda describes it, there can be a “series of differently scaled assemblages, some of which are component parts of others which, in turn, become parts of even larger ones” (2006, p. 18).

This paper will argue that, within the concept of assemblage, affordances also provide a ‘diagrammatic function’, describing a potential relation between non-necessarily related factors (Deleuze & Guattari, 1987). Thus an affordance is one way of estimating the potentials and limits to the conjunction of persons and technology.

Blog affordances

The ability to quickly develop and iterate changes means that blogging software can be flexible and open to innovation. However, blogging templates are typically taken as given and manipulated only by a minority of users (Papacharissi, 2007), with most changes being made to the sidebar (Scheidt & Wright, 2004). Similarly, in language that coincides with the use of affordances, Schmidt states that “[s]oftware code is fundamental for blogging episodes because it enables or restricts certain actions [...] a blogger can modify and personalize the software to a certain degree, depending on individual skills” (2007).

Basic and emergent blog affordances

This paper proposes a distinction between two types of blog affordances. **Basic affordances** are those that are intrinsic to the blog medium itself – for example, the ability to hyperlink which is based on a

functioning semi-autonomous piece of code. This is not only a surface level element used to connect to other website, but also connects the webpages and blog database together internally. **Emergent affordances** arise from the interaction of the components of the blog, but are not reducible to any particular programmable code. For example, the ability to interact anonymously with other bloggers and readers is not the result of any one piece of program code explicitly written to enable anonymous interaction, but is an unintended, emergent, objective consequence of a series of sociotechnical decisions relating to the lack of legal restrictions on online publishing, and the distributed architecture of the internet. The proposed blog affordances are outlined in Table 1.

Table 1: Blog affordances

	Affordance	Description
Basic affordances	Storage	Memory is automated and expanded. Search and retrieval are simplified.
	Perfect reduplication	Multiple readers can access the same blog content simultaneously, and interact via the comments.
	Asynchronous communication	Asynchronous communication enables one-to-many two-way communication.
	Multimedia	A range of media modalities are available. At least one is necessarily used.
	Modularity	Relatively autonomous blocks of code, each enabling particular functions, constitute a blog. Blog posts are fundamental modules.
	Hyperlinking	Quick and simultaneous connections to other websites are possible, inserting a blog into a network of potential relations. Structural consistency is maintained through internal hyperlinking.
Emergent affordances	Anonymity	Functional anonymity is easy to achieve.
	Disembodiment	Social interaction is possible without physical collocation.
	Accessibility	Given internet access, there are minimal barriers to creating a blog, and a very large potential audience.
	Personalisation	Gate keeping processes can be eliminated.
	Interactivity	Interpersonal interaction is possible, via the comments and between blogs. Passive interaction can occur via visitor traces in server logs.

Conclusions

This paper has argued for a theoretical approach that combines affordances with the concept of assemblage. It has used blogs as an example (for an example as applied to political blogging, see Hopkins, Forthcoming), but this approach – as well as many of the particular affordances – can be applied to other internet media. The relational aspect means that the social relevance of internet media can also be explored via affordances (see also DeLanda, 2006 for a discussion of ‘social assemblages’).

It is also important to note that, in the fluid context of the Internet, affordances can shift rapidly. They are presented here as a form of ‘virtual diagram’, describing potential relations between non-necessarily related factors – they are not purporting to detail a fixed set of actual properties, but the virtual diagram represents potential nodes, opportunities for causal relations. The actual assemblage, the blogs, bloggers and associated collective practices, is what is in motion at any point in time, and the affordances – as actualised, used, and observed – can be used as explanatory vectors.

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