

**Concise Critical Notes: Articles and papers**

Name of author(s)	Donald A. Norman		
Full title of article	Affordance, conventions and Design		
Year published	1999	Month	May
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Hypothesis: What is the paper setting out to prove? Are research hypotheses supported?	The author doesn't consider that the affordance is something that really exists, believes that it doesn't have any sense and that it's irrelevant, and his objective is to prove how it really exists and is useful and necessary to understand the interaction of a user with an object.		
What is the theoretical position underlying the research? Type of theory?	The appearance of the device could provide the critical clues required for its proper operation, his kind of theory is explicative, because he tells how to attend a Cambridge course on psychology and constant research helped him to learn more about affordance.		
What is the key literature used as background to the article or paper?	<p>The word affordance was coined by the perceptual psychologist J. J. Gibson to refer to the actionable properties between the world and an actor (a person or animal). To Gibson, affordances are relationships. They exist naturally: they do not have to be visible, known, or desirable.</p> <p>The author originally hated the idea and tells Gibson waved them off as irrelevant.</p> <ol style="list-style-type: none"> <li>1. Gibson, J. J. "The Theory of Affordances." In R. E. Shaw &amp; J. Bransford (eds.), <i>Perceiving, Acting, and Knowing</i>. Lawrence Erlbaum Associates, Hillsdale, NJ, 1977.</li> <li>2. Gibson, J. J. <i>The Ecological Approach to Visual Perception</i>. Houghton Mifflin, Boston, 1979.</li> </ol>		
Which research methods are used?	He based the research on his work with the interaction between the human and the software interfaces with which the user normally works, and with the different tools that the user can have, and the comparison between the physical, logical and cultural factors that affects it.		
What kind of sample is used?	<p>The author uses an example based on the tool of the courses, it is not possible to move the cursor out of the screen: this is a physical restriction. The logical constraints use reasoning to determine the alternatives, for example: click on five locations and only four are immediately visible, the person knows, logically, that there is a place outside the screen. The logical constraints are valuable for guiding behavior. It's like the user knows how to move. Down and see the rest of the page. Users know when they have finished a task. By making the fundamental design model visible users can easily deduct (logically) what actions are required. The logical constraints go hand in hand with a good conceptual model.</p> <p>Cultural restrictions are conventions shared by a cultural group. The fact that the graph on the right side of a screen there is a "scroll" and that one must move the cursor, down to see the objects located below the current</p>		

	visible set (thus causing the The very image that appears to move upwards is a cultural convention, learned.
Key results	The choice of the actions is arbitrary: there is nothing inherent in the devices or design that the system requires. Act in this way. The word "arbitrary" makes does not mean that any random representation would do it equally well: the current choice is an intelligent one. Suitable for human cognition, but there have alternative methods that work equally well.
Key conclusions or recommendations	The most important design tool is that of coherence and understandability, which comes through an explicit, perceivable conceptual model. Affordances specify the range of possible activities, but affordances are of little use if they are not visible to the users. Hence, the art of the designer is to ensure that the desired, relevant actions are readily perceivable. Today we do much of our design on computer screens, where the range of possible actions are limited to typing on a keyboard, pointing with a mouse, and clicking on mouse and keyboard switches. Soon we will add spoken words and visual gestures to the list of interactions. All of these actions are abstract and arbitrary compared to the real, physical manipulation of objects, which is where the power of real and perceived affordances lies. Today's design often lies in the virtual world, where depiction stands in for reality. Many aspects of physical affordances are denied the designer: the alternatives are constraints and conventions.
<b>Strengths of the research</b>  - How does it advance our understanding of the subject or how to research it? - Are there appropriate hypotheses, methods to test the hypotheses, sample sizes or types, controls for variables, recommendations? - Considerations of ethics?	I really liked the article, I consider that an important strength of the task is that the author at first didn't consider Affordance as something important, nor did it believe that it was something that the people who design interfaces had to take into account when they do their work, and the method that he used to verify that if it was necessary was just the work to which he was dedicated (in this case, interface design), I consider the ethical article because I know it is something that benefits the human being, as a user and as client, it is something that can make your life easier and is something really useful.

**Weaknesses of the research:**

- In what ways is it limited? When and where would it not apply?
- What are the flaws in the research, in the hypotheses, research design and methods, sample size and type, conclusions drawn on the basis of the results?

Actually, I consider that the only weaknesses of the article is that it doesn't explore the specific data on the kind of tests that it does, it only highlights the existence of affordances as an important factor and talks about how it has psychological, logical and cultural domains, and despite the existence of it is understood, I would have liked to know more about how the existence of it can represent differences in complete cultural areas.