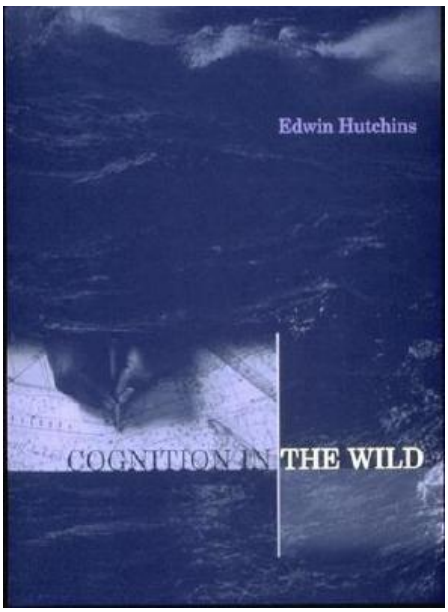

Cognition in the Wild (Bradford Books)

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Cognition in the Wild (Bradford Books) Edwin Hutchins
Edwin Hutchins combines his background as an anthropologist and an open ocean racing sailor and navigator in this account of how anthropological methods can be combined with cognitive theory to produce a new reading of cognitive science. His theoretical insights are grounded in an extended analysis of ship navigation -- its computational basis, its historical roots, its social organization, and the details of its implementation in actual practice aboard large ships. The result is an unusual interdisciplinary approach to cognition in culturally constituted activities outside the laboratory -- "in the wild."

Hutchins examines a set of phenomena that have fallen in the cracks between the established disciplines of psychology and anthropology, bringing to light a new set of relationships between culture and cognition. The standard view is that culture affects the cognition of individuals. Hutchins argues instead that cultural activity systems have cognitive properties of their own that are different from the cognitive properties of the individuals who participate in them. Each action for bringing a large naval vessel into port, for example, is informed by culture: the navigation team can be seen as a cognitive and computational system.

Introducing Navy life and work on the bridge, Hutchins makes a clear distinction between the cognitive properties of an individual and the cognitive properties of a system. In striking contrast to the usual laboratory tasks of research in cognitive science, he applies the principal metaphor of cognitive science -- cognition as computation (adopting David Marr's paradigm) -- to the navigation task. After comparing modern Western navigation with the method practiced in Micronesia, Hutchins explores the computational and cognitive properties of systems that are larger than an individual. He then turns to an analysis of learning or change in the organization of cognitive systems at several scales. Hutchins's conclusion illustrates the costs of ignoring the cultural nature of cognition, pointing to the ways in which contemporary cognitive science can be transformed by new meanings and interpretations.

A Bradford Book

Cognition in the Wild (Bradford Books) Details

Date	:	Published August 26th 1996 by Bradford Books (first published 1995)
ISBN	:	9780262581462
Author	:	Edwin Hutchins
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Genre	:	Psychology, Anthropology, Nonfiction, Design, Philosophy

From Reader Review Cognition in the Wild (Bradford Books) for online ebook

Stephanie says

I get it, an extended metaphor on distributed cognition. But holy moly, hard to read and lots of detail.

Amy says

I read this book for Professor Hutchins' class on distributed cognition, and I loved it. The reading takes seemingly ordinary events on a Naval Carrier and breaks them down to illustrate the ways in which cognition is not only in the brain but also situated in the world. Sometimes a bit one-sided, but an important book that will change the way you view the world.

Matthew says

Great book, really makes you think about how we think.

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aloveiz says

Fascinating analysis of navigation methods, and the neurocogntive structures they suggest. Compares Western, tool-dependent navigation to purely mentation based methods of tribal pacific islanders.

Stuart Macalpine says

I had seriously high expectations of this book, which realistically it was not going to meet... but it is a brilliant and imaginative ethnographic account of the nature of a 'cognitive ecosystem'.

The lengthy aside on how Micronesian navigators use 'imaginary, over-the-horizon islands' and the azimuth of groups of stars that form 'star lines' or a 'sidereal compass' to navigate for days out of sight of land to make landfall on extremely small atolls, is fascinating.

One of the most interesting and central ideas is related to the detailed ethnography of how navigators use their tools. A single statement encapsulates some of the thinking:

"Perhaps this should also give us a new meaning to the term "expert system". Clearly, a good deal of the expertise in the system is in the artefacts (both the external implements and internal strategies) -not in the sense that the artefacts are themselves intelligent or expert agents, or because the act of getting into coordination with the artefacts constitutes an expert performance by the person; rather, the system of person-in-interaction-with -technology-exhibits-expertise."

This could just as well be applied to the way that teachers use pedagogical tools (assessments, instructional techniques, classroom set ups etc. etc.) as it can be used with naval navigators, and is a quite brilliant perspective.

Overall the book is probably a bit techy unless you are really interested, but if you are... then it is a wonderful read and a worth addition to what we know about professional judgement and expertise.

Nic says

"Interesting, though a bit dry at times. While I agree with him that cognition certainly has external, social and cultural elements, I'm not really convinced that he has successfully argued against the conventional, internal, symbol-oriented view of cognition."

Cynde Moya says

Pretty amazing phenomenological ethnography. Detailed, complicated, yet grounded in [bracketed] reality.

Jack says

Why is this book so good? The prose is solid, but rather workmanlike at times. Yet it is utterly a classic. At its core, Hutchins argues that we think in an environment -- that how we are not a computer that sits on its own, and interfaces with an environment. Instead, we are fundamentally a part of that environment. Moreover, a well-constructed environment can let us, as part of a team, think things we cannot individually thing. He develops this notion in terms of the way a navigating team, with its equipment, can do computations that no member of the team directs or does on their own. But the idea is really more general -- that a team can know things without any member of the team knowing it, a team can solve problems without any member of the team solving them, and the basic devices with which a team does it work is a fundamental part of the team's knowing and thinking -- and so better devices can lead to better thinking even without changing any of the individuals doing the thinking.

Ari says

Clever.
Distributed cognition is something that many still can't wrap their heads around, and Hutchins work is what brought this way of thinking out of the shadows and gave it a name.
