# Article information:

Somatosensory Cortex Efficiently Processes Touch Located Beyond the Body - ScienceDirect  
<https://www.sciencedirect.com/science/article/pii/S0960982219313831>

# Article summary:

1. Human sensorimotor system is able to rapidly localize touch on a hand-held tool.

2. Brain responses in a deafferented patient suggest vibrations encode touch location.

3. Somatosensory cortex efficiently extracts touch location from the tool’s vibrations and reuses neural processes devoted to mapping touch on the body.

# Article rating:

May be slightly imbalanced: The article presents the information in a generally reliable way, but there are minor points of consideration that could be explored further or claims that are not fully backed by appropriate evidence. Some perspectives may also be omitted, and you are encouraged to use the research topics section to explore the topic further.

# Article analysis:

The article “Somatosensory Cortex Efficiently Processes Touch Located Beyond the Body” is an interesting exploration of how the human brain can treat a tool like an extended sensory organ. The article provides evidence from experiments conducted with healthy participants and a proprioceptively deafferented patient, as well as simulations of mechanoreceptor responses, to support its claims that the somatosensory system can rapidly and efficiently use a tool as an extension of the body.

The article is generally reliable and trustworthy, providing evidence for its claims and exploring potential counterarguments. It does not appear to be one-sided or promotional in any way, presenting both sides equally and noting possible risks associated with its findings. The authors also provide references to previous research in this area, which adds credibility to their work.

However, there are some points of consideration that are missing from the article. For example, it does not explore how these findings might apply to other types of tools or objects beyond those used in the experiments (e.g., virtual reality). Additionally, while the authors note that their findings could have implications for prosthetics design, they do not provide any further detail on this point or explore it further in their discussion section.

In conclusion, overall this article is reliable and trustworthy but could benefit from further exploration of certain points raised by its findings.

# Topics for further research:

* Prosthetics design implications
* Virtual reality applications
* Somatosensory system and tools
* Mechanoreceptor responses
* Proprioceptively deafferented patients
* Extended sensory organs and the brain

# Report location:

<https://www.fullpicture.app/item/04d2484ae205538aa2b3a32464114daa>