

# Science Focus

## THE MYSTERY OF FREE WILL

Why you might have less control over your choices than you realise

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## EYE OPENER

### Sight and sound

KERTEMINDE, DENMARK

How do you blindfold a porpoise? It sounds like the start of a joke, but it was a genuine problem for the scientists at Fjord & Bælt, a research facility in Denmark. A problem they had to solve in order to test the animal's echolocation abilities.

The solution, as you can see here, is suction cups.

They're being worn by Freja, the oldest-living harbour porpoise (*Phocoena phocoena*). She has been trained to participate in experiments like this, which are intended to help with conservation efforts geared towards the ocean mammals.

Harbour porpoises rely on echolocation to navigate and hunt, and human interference in their environment – such as the underwater noise generated by boats – can disrupt their abilities.

To observe how much harbour porpoises rely on echolocation, the Fjord & Bælt scientists are observing whether Freja can use it to distinguish between two materials commonly found in the open ocean: aluminium and plastic. A digital tag on her back records her acoustic responses.

After each experiment, Freja is heavily rewarded with herring and mackerel, and the findings she helps collect go on to guide conservation strategies.

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