**Issue 1 – Affordances/Mapping**

The device does a good job at conveying a message on how to use the device as it resembles any other common water tap that you would see. However, the label on the two individual knobs does not convey a good message on how to use the device. Typically, a tap will have a red and blue label or a letter C and H to indicate the water temperature that is going to be flowing out of the tap when that knob is turned. However, this device has one side of the knob labelled blue and the other labelled with the letter C. This indicates that both sides produce cold water causing confusion for the user and breaks the universal law of design where characteristics of the device indicate what it is used for. This also breaks the universal design law of logical mapping as we have been programmed to associate the colour blue and the letter C on taps, to indicate cold water.

**Issue 2 – Constraint**

As you turn the knob on the tap, a good constraint would be to limit the amount of turning the knob can turn while turning the tap on. This will indicate to the user that the water flow has reached its limit. However, the knob on this tap does not stop turning and the user can continuously keep turning the knob until the knob itself is unscrewed from the tap. This breaks the universal law of design by not constricting the user’s ability to perform an error while using the device.

**Issue 3 – Feedback**

Typically, when turning a knob on a tap to stop the flow of water, reaching a point of turning where the knob no longer turns indicate the point where the water stops flowing. This is the feedback that the tap gives you that the knob is fully closed. However, on this tap, the left-hand knob of the tap will give you this feedback, but the water will still be flowing out of the tap. This is because the knob has not been fully closed but further requires the user to turn the knob back the other way before being able to turn the knob to a fully closed position and stop the water flow. This has led to many instances where the user has thought that the water flow has been stopped but in reality, it is still flowing. This breaks the universal law of design where the device’s feedback is meant to indicate the action that the device is performing.

**Solution**

Some design solution to solve these issues are correct labelling of the knob. By sticking to the logical and cultural mapping design principle of cold water being associated with blue or the letter C and hot water being associated with red or the letter H. The user can automatically know how to use the device as they intend to. Fixing and smoothing out the tread for the knob can also fix the issue of no error constraint while turning the knob to full and also the sticking motion while turning the knob to off.

A picture containing indoor, wall

Description generated with very high confidence