Do young children appeal to an object's history under conditions of object transformation?

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Introduction
• Gutheil, Bloom, Valderrama and Freedman (2004) investigated how children and adults categorise everyday objects that have been degraded to different degrees (e.g. cut/crushed or both). Their study found that the objects history became more important in categorisation decisions over the course of development.

• Keil (1989) found that children are more likely to believe an object has changed kind but are less willing to believe that a natural kind has changed.

Aims
1) Investigate whether 3-6 year olds categorise objects based on an object’s history or the object’s current state.
2) Investigate whether the type of alteration made to an object impacts upon the categorisation decision.

Method
Design
A 2x2 within-subjects design.

DV’s: The number of historical object state responses and the number of current state responses.

Participants
• 27 children (mean age = 4:8 years) and 40 adults (mean age 19:6 years)

Procedure
• Children and adults participated in two conditions. One condition involved degrading objects by cutting them in half.

Degrading condition

Adding condition
The other condition involved transforming objects by adding to the original object. All alterations were made in the presence of the participants.

Test Question: ‘How many X can you see in front of you?’

Results and Conclusions
Percentage of historical and current state responses for degraded and transformed objects.

Analysis revealed that adults significantly appealed to the history of the object over current state when the objects had been degraded \( \chi^2 (1)=6.400, p=0.017 \) but not when the objects were added to \( \chi^2 (1)=0.100, p=0.875 \). However, children showed no significant preference for either current state or the history of the object when objects were degraded \( \chi^2 (1)=0.926, p=0.442 \) or when objects were added to \( \chi^2 (1)=0.333, p=0.701 \).