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### **Proceedings of the Annual Meeting of the Cognitive Science Society**

#### **Title**

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#### **Permalink**

<https://escholarship.org/uc/item/8nt7p7z7>

#### **Journal**

Proceedings of the Annual Meeting of the Cognitive Science Society, 24(24)

#### **ISSN**

1069-7977

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#### **Publication Date**

2002

Peer reviewed

# If Only I Had Acted Differently: Reasons and Actions in Counterfactual Thinking

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## Counterfactual Thinking

Suppose an action of yours leads to a bad outcome. You are plagued by thoughts of 'if only I hadn't acted'. But suppose you are reminded of a very good reason why you acted. Will the reason diminish your tendency to think 'if only' about your action? Our aim is to report experimental results on how the *reasons* for actions can influence 'if only' thoughts.

Generating counterfactual thoughts about what might have been may be central and pervasive in human cognition (e.g., Byrne & McEleney, 2000). Counterfactual thoughts follow certain regularities. Most importantly, for our purposes, people think 'if only' about controllable events (e.g., stopping for a beer) rather than uncontrollable ones (e.g., sheep crossing the road) (Giroto, Legrenzi & Rizzo, 1991; McCloy & Byrne, 2000). The focus on controllable actions has been demonstrated repeatedly in real life as well as laboratory studies. The ability to imagine that a person could have acted differently may be central to our concepts of freedom and responsibility and may underlie emotions such as guilt and regret.

Why do people think 'if only' about controllable actions? The answer may be that they are perceived to be independent of external causes (Giroto et al., 1991). But most actions depend on a *reason*. We examine how reasons for acting can influence 'if only' thoughts.

There are many different sorts of reasons (Walsh & Byrne, 2002). Reasoners may view some reasons as necessary, and may imagine that without the reason the action would not have occurred. Other reasons may be viewed as non-necessary and reasoners may imagine alternative reasons for acting. We suggest necessary reasons are generally *enduring*, oriented towards longer term plans whereas non-necessary reasons tend to be *immediate*, satisfying current desires and short-term goals. We expected that reasoners' would generate fewer 'if only' thoughts about actions for which there were necessary reasons compared to non-necessary reasons or no reason.

## Imagining Counterfactual Alternatives

In one experiment, we constructed three versions of a scenario about an individual, Tom, who is delayed by several events on his way home from work, only to find he is too late to save his dying wife. In one version the action (going to the gym) was preceded by a non-necessary reason, an immediate desire to act 'for its own sake' (Tom really likes to go to the gym'); in a second, the action was preceded by a necessary reason, an enduring long-term plan

('Tom is trying hard to lose weight'), and in the third version no reason was given.

We assigned 194 students to one of the three groups. They listed four completions for the following counterfactual thought:

As commonly happens in such situations, Tom often thought, "if only..."

The results showed that a necessary reason reduced participants' tendency to think 'if only he hadn't acted' (75%) compared to a non-necessary reason (89%,  $\chi^2 = 3.86$ ,  $p < .025$ ), and compared to no reason (88%,  $\chi^2 = 3.32$ ,  $p = .03$ ). A necessary reason shifts some 'if only' thoughts from the action to the reason instead. The possibility in which the reason does not occur and the action occurs anyway is ruled out and so a counterfactual can be generated of the form, "if only the reason had not happened, the action would not have happened." In contrast, for non-necessary reasons there is the possibility that the reason does not occur and the action occurs anyway and so a counterfactual cannot be generated of the form, "if only the reason had not happened, the action would not have happened."

The focus of counterfactual thoughts on controllable actions may arise in part because controllable actions seem to be independent of any external constraint. Once such constraints are made apparent, in the guise of the provision of reasons for acting, the tendency to think 'if only' about controllable actions is reduced.

## Acknowledgements

The research was supported by Enterprise Ireland, the Irish Research Council for the Humanities and Social Sciences, and Dublin University.

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