## Yesterday came suddenly

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## The Economist:

IN "TIME'S Arrow", a novel by Martin Amis, the protagonist experiences time backwards. Eating involves regurgitating food into his mouth, sculpting the mush with his tongue, packaging it up and selling it to a grocery store. The passage on defecation is best left undescribed.

Such a comic device would once leave physicists cold. They used to think that time does not have a direction, at least at the subatomic level, though they now agree that it does. Ordinary people, of course, have always known this. Nearly all cultures have a version of the arrow of time, a process by which they move towards the future and away from the past. According to a paper to be published in *Psychological Science* this has an interesting psychological effect. A group of researchers, led by Eugene Caruso of the University of Chicago, found that people judge the distance of events differently, depending on whether they are in the past or future.

The paper calls this the "Temporal Doppler Effect". In physics, the Doppler effect describes the way that waves change frequency depending on whether their source is travelling towards or away from you (think of the change in pitch of an ambulance siren as it passes). Mr Caruso argues that something similar happens with people's perception of time. Because future events are associated with diminishing distance, while those in the past are thought of as receding, something happening in one month feels psychologically closer than something that happened a month ago.

Read the whole story: *The Economist*