Russell Ackoff Doctoral Student Fellowship for Research on Human Decision Processes and Risk Management: 2013 Application

Examining When People Talk About and Why: How Uncertainty, Accessibility, and Arousal Affect Whether People Talk About the Past, Present, or Future

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Requested Support:
$3,000.00

Descriptive Summary of Project

People often think about events that span a continuum of the past to the present to the future. Much past research has concentrated on differences in how people think about the past, present, and future (Jason et al. 1989; Van Boven & Ashworth, 2007). But, people also reference these time frames in speech for events that will or have happened. However, relatively little is known about why people choose to speak about one time frame versus another-- something they do very regularly, and the content of which could have implications for individual emotionality (Hart, 2013), idea generation (Rollier & Turner, 1994), and sales (Chevalier & Mayzlin, 2006).

Dr. Jonah Berger and I aim to explore why individuals elect to speak about the past, the present, or the future, and why they choose to discuss one time frame. We have chosen to investigate this question by examining data from a real world context of what people are saying before proceeding with lab experiments to test potential mechanisms. For real world data, we employ online and offline communication channels because prior literature has found that communication channel can change both conversation norms and whether people discuss more accessible or more interesting topics (Berger & Iyengar, under review). We will also examine the age of speaker, which may also be important to establish if accessibility based on age or time focus differences across ages drives results (Carstensen, Fung, & Charles, 2003; Spreng & Levine, 2006).

So far we have handled the first part of this task: real world data. We have had research assistants code data in terms of how far into the past, present (right now), or future people talk about from a) over two thousand public stream tweets, b) over two thousand Facebook statuses with demographic information, and c) hundreds of pages of offline conversations among multiple participants with speaker information. These data will help us ascertain both how often people refer to the past, present, and future, and how far into the past, present, and future they talk about.

Results from Twitter and Facebook suggest people share the present most often, and the past and future less often. 60-70% of the time frames shared occur within an hour of the present time of the tweet/status. We've also found that while individuals may share more about details within the past day than within the next day, people also share more about events further than a day in the future as opposed to events more than a day into the past across both Twitter and Facebook. Additionally, people talk more about events within the next day in the future as the weekend becomes closer. Finally, examining data through hours and minutes over the course of the day has found that more past-related information is shared later in the day.

We plan to follow up these real world datasets with a series of 5 lab experiments to uncover the mechanism(s) behind the patterns. We first will look at the general main

effects differences between past and future. One possibility regards how accessibility drives word of mouth (Berger & Schwartz, 2011). Differences in accessibility among the past, present, and future may drive differences in sharing. Prior research has also found the past and future can differ in terms of accessibility of positive and negative information (Newby-Clark & Ross, 2003; D'Argembeau & Van der Linden, 2004).

On the other hand, differences in arousal among the past, present, and future may have an impact on sharing. Prior research has found that the future is more evocative than the past (Van Boven & Ashworth, 2007) and that mood is less intense with past verbs as opposed to ongoing descriptions (Hart, 2013). This possibility could be consistent with word of mouth research that finds arousal can drive sharing (Berger, 2011; Berger & Milkman, 2012). However, our initial real world results suggest the opposite inasmuch as future isn't shared more than past. One potential explanation may involve future, past, and present differ in terms of uncertainty, which may change peoples' willingness to share information about the time frame. Other research has found some evidence that in specific cases uncertainty may affect transmission (Dubois, Rucker, & Tormala, 2011). Similarly, individuals are less willing to act (purchase vacation tickets) when an outcome is uncertain than either outcome possibility is known (Tversky & Shafir, 1992), and search more heavily for information about future uncertain events than certain past events (Grant & Tybout, 2008). So, although the future is more evocative than the past, it also is more uncertain, which may offset any benefits from increased sharing through arousal.

In one study, we plan to test how differences in accessibility of the past versus future may drive differences in conversation topics (time frames) for individuals. If accessibility really drives differences in sharing the past versus the future, as it does with sharing generally (Berger & Schwartz, 2011), then we should see making the past or the future more accessible will lead to relatively more past or future oriented thoughts. Another planned study will test how reducing uncertainty about the future may lead to differences in sharing future-oriented thoughts; if uncertainty reduces the sharing of future thoughts, then bolstering the certainty of the future should attenuate or reverse the pattern of more past than future sharing found in the real world data. Further studies will test the interactions among these explanations, and the findings regarding sharing near or distant past/future. For these studies we will use mTurk and lab subjects at a cost of ~$2 per subject, for 5 studies, which would amount to approximately $2000 in support.

I hope the Ackoff Fellowship will allow me both to pursue web and lab studies, and to present some of the real world data and lab studies at the ACR Conference in Chicago this October. I thank you for your consideration of this proposal, and please feel free to contact me if you have any questions.

Budget of Anticipated Expenses

Item	Cost per Unit	Number	Total
Subject Payment	2	1000	2000
Association for Consumer Research Conference (Chicago) costs			
Registration	225	1	225
Travel Expenses	400	1	400
Hotel	125	3	375
Total Costs			**3000**

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