

### The Stalwart “Econ” and the Influenceable “Human” Against Culture and Framing

Contrary to the wishes and models of standard economics, human beings can be unpredictable and irrational. There is such a stark contrast between the human beings in standard economics and the human beings in reality, that economist Daniel Kahneman (2011) even distinguishes between the two, calling the former group, “Econs,” and the latter group, “Humans.” One way in which the behavior of Econs and Humans diverges lies in how they form preferences. Can preferences be influenced by a Human’s culture, and in turn, impact decisions? If so, how would culture interact with framing, another preference-influencing factor? Such questions challenge the notion of unalterable “true preferences,” which is one of the tenets of standard economics. Scholars in the field may gloss over this potential violation of the standard model, seeing Humans and Econs as one and the same. However, “outsiders” experience the real world in all of its unpredictable glory, and thus see the significance of these preference-influencing factors. In the 2007 paper, *Valuing Cultural Differences in Behavioral Economics*, law scholar Justin D. Levinson and psychology scholar Kaiping Peng examine how culture affects the way Humans encounter framing, form preferences, and make decisions.

In order to do so, Levinson and Peng first establish the focus of their study, namely, the cultures they will compare. They choose directly contrasting cultures: American and Chinese. The former is object-focused, tends to “see the world as more orderly,” and possesses a linear perspective of the world (Levinson & Peng, 2007). The authors attribute this behavior to ancient Greek philosophy, the foundation of Western culture. As numerous philosophers during the height of ancient Greek civilization, such as Aristotle, the “father of western logic,” were also involved in mathematics, current American culture rests on a foundation that espouses the linearity of events and order within the world (Humphreys). In addition, though not mentioned in the study, the object-focused perspective can imply an individualistic perspective; context or external information are not as important as the actual object or person.

These traits of American culture all contrast with Chinese culture, which is situation-focused, tends to “see the world as more in flux,” and possesses a “holistic” perspective of the world (Levinson & Peng 2007). The authors attribute this behavior to ancient Chinese philosophy, in which “two complementary forces,” *yin* (darkness) and *yang* (light), are not only interconnected, but also exist within each other (*Yinyang*). This holistic perspective can also be seen in traditional Chinese medicine, which states that a person’s health depends on their

combination of *yin* and *yang*, as well as how their energy (*qi*) “flows along pathways in the body called meridians” (*Traditional Chinese Medicine*). Every illness can be treated by focusing on these two factors. For example, one can “relieve symptoms associated with a cold” by pressing on the lung meridian, which is located near the thumb (Fletcher, 2019). Even though the lungs and thumb are located far away from each other, traditional Chinese medicine states that the two are connected. This view, in which everything is connected to, and influenced by, everything else, can imply a community-oriented perspective, in which one individual can impact the entire community. Therefore, Chinese Humans may be more sensitive to framing than American Humans, a phenomenon that standard economics does not even account for, let alone examine how it may be influenced by culture.

In order to discern if these cultural differences influence the way Humans encounter frames and make decisions, Levinson and Peng next narrow the field of potential decisions. Keeping to economics, they focus on the *financial* decision of “[estimating] the value of an object over time.” This is especially important, as it “rests close to the heart of financial and economic assumptions in today’s global marketplace” (Levinson & Peng, 2007). As trade becomes more international, and as countries themselves become more diverse, it is crucial for both producers and consumers to be on the same page. If producers understand how consumers think, then they may be better able to tailor and customize the marketing of goods and services, thus maximizing their producer surplus. Similarly, if consumers understand how producers think, then they may be better able to choose the best product and maximize their consumer surplus. However, if the two parties hold opposing assumptions about the same product, or about each other, then surplus may be lost on both sides. As such, understanding the influence of cultural differences has evident applications in the real world.

Property ownership gives nuance to the financial decision of valuing an object. As a scholar in law, Levinson has a vested interest in property ownership, which is “related to principles underlying trade relationships and systems of laws” (Levinson & Peng, 2007). Once more, how people approach this legal concept can be helped or hampered by external factors, such as culture and frames. In order to strengthen “trade relationships,” and to help “systems of law” be as efficient as possible, it is imperative that involved parties understand each other. For example, suppose there exist two parties: Party A, who loses a good, and Party B, who finds it and decides to sell it. Party B’s decision may be influenced by their culture, which states,

“finders, keepers,” alluding to a law from ancient Rome (*Finders, keepers*). However, Party A does not share the same background, and may see Party B’s act of selling as an offense. In this example, neither party is inherently malicious towards the other; they simply hold different viewpoints. Thus, they need to explain themselves and understand the other party before resolving the issue. However, if they continue to operate on different perspectives that are never clarified or explicitly stated, as both assume the perspectives to be clear, then both will walk away unsatisfied and perhaps with a new distaste for the other party. Understanding how other cultures view the concept of property ownership is imperative in maintaining a diverse, not divisive, country and an efficient economy.

As important as this financial decision and legal concept seemingly are, they have only been tested with framing, which occurs when external context influences preferences, and with primed culture, which makes Humans more likely to conform to a primed identity’s norms and expectations. Such previous experiments are not robust, and cannot be generalized or applied outside of the lab, due to the fact that Humans are not regularly primed for their cultural identity in everyday life. Culture may influence behavior, without necessarily causing stereotype threat or making an identity salient; previous experiments do not examine the nuances of culture. Also missing in the field of behavioral economics is the study of the intersection between framing and unprimed culture. Therefore, Levinson and Peng aim to alleviate this issue by including frames for all participants, and examining the decisions for the same frame and object between participants of different cultures.

After establishing the scope, focus, and context of the study, Levinson and Peng recruited six hundred fifteen participants, two hundred thirty one of which were Chinese citizens, and three hundred eighty four of which were American citizens. Within the group of American citizens, one hundred forty three were Caucasian, and one hundred eighty five were Asian-American. The remaining participants’ ethnicities were either not listed, or irrelevant. It should be noted that the demographics of the American participants imply a significant distinction between culture and ethnicity; the aforementioned perspectives (such as viewing the world in a holistic manner) are not inherent due to one’s ethnicity, but form due to one’s culture. “The average age for Chinese participants was 27.68 years old,” whereas that for Caucasian-Americans was 21.59 years old and that for Asian-Americans was 20.39 years old (Levinson &

Peng, 2007). As the two cultures' participants had relatively similar ages and were in college, they had similar life experience. Thus, it is reasonable to compare decisions across cultures.

In the experiment, each participant received four objects, "a gold ring, an antique chair, commemorative coins, and a municipal bond," each with a story that included one independent variable concerning the object--the "frame (losing v. finding the object)"--and two independent variables concerning the story's protagonist--their moral character and group membership (Levinson & Peng, 2007). The fourth independent variable, culture, was inherent in each participant. For example, a participant may have been told that a prostitute found a ring, thereby creating a "loss frame" and an immoral protagonist with an out-group identity. Conversely, another participant may have been told that "a social worker from [their] hometown" found the same ring, thereby keeping the "loss frame" but creating a moral protagonist with an in-group identity (Levinson & Peng, 2007). After learning of the objects' values from "20 years prior," the participant was asked to estimate the current values, and answer questions concerning property ownership, such as "who owned the object," whether or not the finder had the right to sell or give away the object, and "how [the participant] would divide the proceeds of the object between the loser and the finder" (Levinson & Peng, 2007). With this procedure, Levinson and Peng (2007) "could simultaneously evaluate cognitive understandings of economic principles (such as inflation and return on investment) and test [the effect of] situational factors." In other words, they could examine how people of different cultures consistently approach economic principles differently. By doing so, the experimenters target the heart of their initial inquiry: does culture influence preferences and behavior across frames?

In order to evaluate their results, the authors adjusted all estimated values for inflation (using the CPI of the participant's country), before converting the adjusted values into ratios of the 20-years-prior values. For example, if an object was worth \$10 in 1985, and the participant's adjusted, estimated value was \$100, then the ratio would be 10.0. This procedure ensured that the results were comparable across participants. After running a "2\*2\*2\*2 Multivariate Analysis," Levinson and Peng (2007) found that, due to culture, Chinese participants consistently "estimated values of all four objects higher than Americans." For example, the Chinese participants' value ratio for the ring was 6.21, whereas that of American participants' was 2.68. Thus, the results support the hypothesis that culture does play a large role in decision-making.

In addition, though not examined in the paper, the results can be related to the model's assumption of unbounded selfishness. (While exhibiting altruism does not inherently violate the standard model, doing so, as economist David R. Just (2013) says, still “demonstrates a deviation from the most commonly made assumptions of economic models,” and is thus an indication of a Human, not Econ, actor.) Standard economics claims that human beings are utterly selfish, and will act to maximize their own well-being. For example, when encountered with a free-rider problem, in which people share donations by dividing among the group, they will not contribute but will accept a portion of an ultimately smaller pool of resources. When externalities are at play, Econs will only act for the good of the group when it benefits them; for example, though pollution may harm neighbors, a factory owner will only reduce emissions when their personal cost overrides their personal benefit. At first glance, Levinson and Peng's study appears to support this assumption. In particular, Americans' low valuation of all objects may not represent the low appreciation of the objects over time, but strategic bargaining, in which they would desire a cheaper price if they themselves met the actor in the story. The individualistic perspective of American culture may influence this low valuation, as the low valuation is relatively similar for both in-group and out-group actors. It is the participant “against” the world.

However, upon further inspection, the assumption of selfishness begins to disintegrate. For Chinese participants, the objects' valuations are consistently higher than those given by Americans. If one uses the logic of strategic bargaining from before, this result initially does not make sense. Why would a potential consumer want a good to be more expensive? A more expensive good would benefit the seller more than the consumer. In this case, it can be argued that the community-oriented perspective of Chinese culture places a stronger emphasis on harmony and togetherness. It is more important to treat people well than to strive for a bargain. Therefore, Chinese participants may be influenced by their culture to value objects higher, even for out-group actors. Ultimately, Levinson and Peng's study shows weaknesses in the standard economic model.

On the other hand, the strengths of the behavioral economic model become apparent, as the experiment's results suggest that framing does influence preferences and decisions, albeit in a nuanced way. Corresponding with the situation-focused perspective of their culture, Chinese participants were significantly affected by the framing variable, estimating the values of objects in the “lose” frame as more than twice the values of those in the “find” frame. For example, the

ratio for objects in the “find” frame was 8.70, whereas the ratio for objects in the “lose” frame was 21.84. Conversely, the object-focused perspective of the American culture may have influenced the American participants’ estimations, leading them to exhibit loss averse tendencies to a lesser extent. The difference between the objects in the two frames marginally exhibit the effects of framing; those in the “lose” frame had a ratio of 4.25, whereas those in the “find” frame had a ratio of 3.67. As such, the phenomenon of loss aversion within prospect theory generally rings true, in which losses loom larger than gains. Levinson and Peng (2007) thus conclude that while framing does influence the estimated values of objects for both cultures’ participants, as the behavioral economic model suggests, there is a level of nuance: the Chinese culture’s focus on situation, rather than object, caused Chinese participants to “[display] framing and loss aversion patterns that are more consistent with prospect theory than” Americans. Moreover, Chinese participants’ estimates varied significantly across the morality and group membership of the story’s actors. For example, the objects with the highest value ratios belonged to actors who were part of the participants’ group, and had low morality; the lowest ratios belonged to actors who were not part of the group, and had low morality. The difference between the two ratios was 14.8. On the other hand, the difference between the American participants’ highest and lowest ratios was approximately 1.0. Therefore, even though the questions asked were purely object-focused, as they concerned “intrinsic value estimations,” the holistic aspect of Chinese culture may have exerted more influence on the estimations than the questions did.

Regarding the property ownership aspect of the experiment (both ownership and the right to transfer the good), the predicted effects of framing also hold. In particular, American participants “were more likely to believe that” the actor in the story had the right to transfer the good when the actor was a “finder,” not a “loser,” of the good (Levinson & Peng, 2007). It is evident that framing influences decisions, which falls in line with the behavioral economic model. As with the value estimations, other contextual information, such as the morality and group membership of the actor, affect Chinese participants’ judgments, more than Americans’. Corresponding with the communal aspect of the culture, Chinese participants were significantly more likely to judge that an in-group actor had the right to transfer the good.

Moreover, the results indicated that “Americans were more likely to favor the party they read about” as the owner who had the right to transfer the good, “while Chinese were likely to favor the party they did not read about” (Levinson & Peng, 2007). Americans’ responses

corresponded with their culture, which places more emphasis on activity in the foreground. Similarly, Chinese responses corresponded with their culture, which places more emphasis on activity in the background. Though not examined in the paper, the results can be further interpreted to demonstrate the formers' individualistic perspective and the latter's community-oriented perspective. For example, both Americans and Chinese may have placed themselves in the position of the story's actor, thus empathizing with and caring for the actor as if the actor were themselves. However, the individualistic aspect of the former's culture may have led Americans participants to only care for the actor, whereas the community-oriented aspect of the latter's culture may have led Chinese participants to think about and prioritize characters other than the actor. As such, Levinson and Peng conclude that 1) framing does influence preferences and decisions, and 2) the way such preferences and decisions are altered also relate to an individual's culture.

While the results of the study create convincing arguments against the standard economic model, and for the behavioral economic model, there are still aspects of the methodology that limit the study's generalizability. By considering some extensions, one can make the study more robust. A follow-up experiment can extend the average age, or increase the range of the participants' ages. As the participants were recruited on university campuses, their average ages were in the early-to-late 20's. In addition, the average age for American participants was approximately six years younger than that for Chinese participants. This may be an issue that affects the study's results, due to the fact that participants were given the values of objects 20 years prior, and were instructed to estimate the current values. It may be difficult for such estimations to be useful, for how can these participants think about the previous value, and its appreciation, accurately? Moreover, while both groups of participants were enrolled in "major public universities," and thus had similar life experiences (as students), the gap between the average ages may still be problematic. In general, any Chinese participant may have had six more years as a consumer, learning how goods and services appreciate over time. The difference in *market* experience yields an uncontrolled variable in the experiment, which can be corrected in future experiments.

Furthermore, the morality of the actors and the objects are grounded in a Western point of view. As such, Levinson and Peng cannot be confident that both have the same connotations for each culture, thus rendering comparisons less robust. For example, a study on the perception of

social work, one of the roles in the study, reveals that “a majority of the public understands the social work profession and in many ways recognizes its value” (LeCroy & Stimson, 2004). Consequently, social work may be regarded by Americans as one of the more moral and selfless professions. Indeed, there is even a month dedicated to the profession (*Social Work Month*). However, in China, there are “distinct value tensions between the profession and the state” (Ying Xu, 2013). Moreover, though social work has distanced itself from its origins, there may still be a significant portion of the population which views it “as an instrument of Western bourgeois capitalism” (Szto). Therefore, while the morality of the story’s actor may influence estimated values for both groups of participants, the responses may not be wholly comparable due to the fact that the morality associated with this profession differs depending on the culture. If Levinson & Peng wish to compare responses regarding an actor with high morals, then they may need to introduce a different profession to Chinese participants and ensure that it scales to the “same level of morality” as social work. One example might be a son who returns home to care for his elderly parents; such an actor can be considered to be the epitome of filial piety, one of the most important tenets of traditional Chinese culture (Teon, 2016). Thus, for robustness, the authors should ground the morality and objects in the participants’ point of view.

In conclusion, not only does standard economics miss an important influencer of preferences and decisions in the real world, framing, but it also fails to address the impact that culture can have on framing itself. The way in which people approach a good or service is more nuanced and less stable than the standard model allows. However, although behavioral economics does account for the effects of framing, as well as the phenomenon of loss aversion, previous studies in the field have neglected to examine the intersection between framing and culture. Levinson and Peng contribute to this missing intersection through their 2007 study, *Valuing Cultural Differences in Behavioral Economics*, and discover that culture does indeed play a role in financial decision-making. Through this finding, everyone, from small business owners to traders on the Wall Street floor to judges in court, can adjust their behavior to become more efficient. As countries become more diverse, and as international trade becomes increasingly more widespread, it is crucial for both producers and consumers to understand the other party. By easing potential divisive tensions in an increasingly diverse world, they may also reach Pareto efficiency, thereby improving both human relationships and the economic market in the process.



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