Utility versus pleasure: the grand paradox

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Consider the following experimental demonstration: when undergraduate volunteers judged the pleasantness of winning small amounts of money (from 1 to 30 cents per trial), their successive ratings reflected the position of each winning in the frequency distribution of their other winnings (Parducci, 1968).

Table 1 shows how the different distributions were skewed. Ratings of individual payoffs are not shown, for the present interest centers on the overall mean rating for each of the distributions. The overall mean rating on a 7-point scale was more than one category higher for the negatively skewed distribution (in which the higher winnings were more frequent), although the mean winning was 14 cents for each distribution). More generally, negatively skewed distributions always yield higher overall mean judgments. This is entailed by my range-frequency theory of judgment and supported by experiments on various kinds of hedonic and psychophysical judgments (Parducci, 1995).

RANGE-FREQUENCY THEORY

The basic notion of the theory is that each dimensional judgment represents the place of what is being judged in a context of similar events that affect the judgment. This is represented as a compromise or weighted average:

$$J_{ic} = wR_{ic} + (1 - w)F_{ic} \tag{1}$$

where J_{ic} represents the internal judgment (e.g., experienced pleasantness) of Stimulus i in Context c, R_{ic} is the proportion of the contextual range below i, F_{ic} is the cumulative proportion of contextual representations below i in the same context, and w is the weighting constant, assumed here to be 0.5, with J, R, F, and w all on 0-to-1 scales. From this, it follows algebraically that the mean of the judgments of all contextual values (winnings in this case) is proportional to the skewing of the contextual distribution.

When applied to this experimental demonstration, the mean of all judgments (ratings transformed linearly to a 0-to-1 scale)

is predicted to be 0.58 for the negatively skewed distribution, 0.42 for the positively skewed distribution (both within 0.005 of the empirically obtained overall mean judgments). This effect of the skewing of the contextual distribution has been demonstrated for other hedonic dimensions, e.g., pleasantness of lemonades of varying sweetness, melodies of varying loudness, photographs of an actress simulating varying degrees of friendliness, and also for a variety of non-hedonic dimensions, e.g., size of squares, heaviness of lifted weights, largeness of abstract numerals. Applications to social planning and comparisons of life styles (e.g., Parducci, 1995, Chapters 12 and 13) are more speculative because of the difficulty of controlling the contexts experimentally.

PLEASURE VERSUS UTILITY¹

Returning to the judged pleasantness of winning different amounts of money, we should note that the total amount won was the same for both conditions of the demonstration experiment. Insofar as utility is linear to monetary values within this limited range of winnings, there seems little to choose between the two distributions. But consider the predicted effect of increasing the total winnings in the 1-21 condition by substituting 30 cents for one of the 21-cent trials: this extension of the upper endpoint of the context eliminates the skewing and thus reduces the mean judgment to 0.5 (i.e., to neutral, neither pleasant nor unpleasant). In this case, an increase in utility would have produced a decrease in pleasantness.

The simplest assumption would be that the effects of contextual skewing for hedonic judgments are absent for utility estimates. However, the lottery method for estimating utilities showed the usual skewing effects (Zaidel, 1971), and manipulation

of contextual ranges can reverse the choices (Mellers and Cooke, 1994). In the absence of extensive research on the effects of contextual skewing upon choices, it seems intuitively likely that the effect would be much smaller for utilities.

Within any particular context, the order of pleasantness judgments must be the same as the order of utilities. It is when the context changes that these alternative measures yield profound differences. For example, in my computerized "Happiness Game" (Parducci, 1995, Chapter 8), players choose, on each trial, between different contexts (each context being the distribution of daily earnings of an imagined door-to-door salesman). The points earned by the player are proportional to the salesman's pleasures, as measured by range-frequency predictions from contextual skewing. Each context represents the salesman's distribution of earnings in a different neighborhood, with the game rigged so that the distributions are skewed more positively for the more profitable neighborhoods. The longer this game is played, the more likely players are to choose the more positively skewed contexts – so that the points they win actually decrease with increased experience at playing the game.

This kind of misapprehension seems characteristic of the profoundly sad paradox that maximizing utilities can sometimes minimize pleasures. We choose the job that pays more even when its likely hedonic context will be more positively skewed and thus yield less pleasure. A contemporary example is provided by the new PhDs, trained for research careers in academia, who flood onto Wall Street seeking jobs as investment bankers. If successful in this search, the hedonic contexts in which they experience pleasures and disappointments with their earnings may in many cases be positively skewed. The painful disappointments when they are earning less than their more successful colleagues will hardly be balanced by their occasionally triumphant investments.

¹Although pleasure and utility are often confused, Kahneman and Varey (1991) present a cogent discussion of the conceptual differences.

Parducci Utility versus pleasure

Table 1 | Frequency distribution of winnings.

Skewing		frequencies															_										
Positive							2	2	2	1		1			1				1				1				1
Negative	1				1				1				1			1		1	2	2	2						
Winnings	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26 2	27

Real life is too complex to pin down contexts like this. However, we should at least consider the discouraging paradox that what we prefer may often afford less pleasure. One hears people complain that they are earning more but enjoying it less. By definition, we choose the alternative with higher utility. We may even tell ourselves that the consequences of our choice will average out to be more pleasant. But the contextual effects of skewing, unless they operate in the same way for utility as for pleasure, may often insure a preponderance of unpleasantness.

When distinguishing pleasure from utility, a deeper but less resolvable difference lies in what is experienced. No experienced sense of preference is crucial to the assessment of utility: the choice itself indicates the preference and hence the relative utility. However, it is difficult to assess the usual assumption that ratings of pleasantness indicate how much pleasure is actually experienced.

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