ABSTRACT
        Trait adjectives have both evaluative and denotative
meanings. Evaluation of a trait varies with the context of other
traits attributed to the person. The meaning-change interpretation
suggests that denotative change in trait meaning underlies evaluative
change. The evaluative-halo interpretation attributes context effects
of single trait ratings to an amalgamation of trait and person
evaluation. Two experiments contrast these interpretations. In the
first, context effected judged implication of traits even where
judgments were made to semantic scales which were denotatively
unrelated to the test word. In the second experiment, test words were
paired with contexts which either did, or did not, denote an aspect
of the test word. Magnitude of context effects was not influenced by
test-context denotative relationship. Context evaluation alone
affected trait evaluative ratings. Judgment appears to be influenced
by the aspects of traits falling on the judgment dimension.
Evaluative judgments are based on evaluative meanings. (Author)

Evaluative Judgments Are Based on Evaluative Information:

Evidence Against Meaning Change in Evaluative Context Effects.[1]

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Our judgments of others are often based on words. Reflecting this, trait-adjectives most commonly provide the source of information in person perception research. Two different meanings may be ascribed to these words: evaluative and denotative. Honest, for example, is evaluatively positive, and denotes a lack of deceit. In most person perception research, evaluative judgments of word sets describing a stimulus person are elicited, and component words are selected for their position of this evaluative dimension.

When judges are asked to evaluate likableness of a single word, evaluative meaning of that word appears to shift with the context of other traits attributed to the stimulus person. Evaluation of a word will be more positive if it is embedded in a set of positive words, and more negative if appearing with negative words, compared to out-of-context evaluations. Context effects are well established in person perception (Anderson, 1971; Asch, 1946; Kaplan, 1971a; Wyer & Watson, 1969), but the mediating processes remain a controversial issue.

One interpretation invokes the mediation of denotative meanings. According to the meaning-change formulation (Asch, 1946; see also restatements by Ostrom, 1974; and Wyer, 1974), the test words undergo a change in denotative meaning to conform to context denotations. This occurs via the selection of word meanings, from the universe of potential denotative associates for the word, which are most congruous with the context. The evaluative meaning assigned to the word is determined by the valence of the selected denotations.

Information integration theory (Anderson, 1971) furnishes the second major explanation. It proposes that evaluative judgments are based on the evaluative components of the

stimuli being judged. In the evaluation of a single test word in a set of words, the relevant components are the context-free evaluation of the test word, and the evaluation of the stimulus person described by the set. Denotative meaning is not invoked; in fact, given the same evaluative levels and stimulus weights, words of different denotations should be equipotential in producing, or in experiencing, context effects. Only evaluative information determines an evaluative response. The context exerts an evaluative halo effect, and not a semantic effect.

This paper reports two experiments designed to clarify the nature of processes underlying context effects on component evaluations. Consider first the relationship between the test word and its assigned meanings. If meaning change occurs within contexts, denotative ratings of word meanings should vary with the context only for scales tapping denotatively relevant meanings, and not for denotatively irrelevant meaning scales. If solely evaluative influences apply, however, context effects should appear independent of denotative relationship. Suppose, for example, the word proud appears in a context of positively evaluated words, and then in a context of negative words. On a semantic scale anchored by confident and conceited, which are respectively evaluatively positive and negative denotations of proud subjects should rate proud closer to the positive pole when in a positive context, and closer to the negative pole when in a negative context. Indeed, Hamilton and Zanna (1974) have recently demonstrated this effect. This, however, is not evidence that denotative meaning change has occurred. It is unclear whether proud has assumed a more confident or conceited denotation, or whether the subject is simply reporting that this likable (or dislikable) person is likely to have evaluatively consistent attributes. Should the same context effects appear on scales with similarly valued endpoints, but denotatively unrelated to the test word (e.g., humorous and silly), it would suggest that the response to the word is value-mediated, rather than denotatively determined. Experiment I tests this.

Consider now the denotative relationship between the test and context words. Comparing contexts of similar value, meaning change predicts greater effects for a context denoting a particular aspect of the trait than for one denoting unrelated aspects.

For example, the word conforming denotes a negative aspect of agreeable, and should
exert a larger effect on ratings of agreeable, compared to stingy, which is denotatively
unrelated to the test word. For the information integration formulation, the denotative
relationship is not crucial: only the evaluative component of the context should exert
an effect. Experiment II tests this.

Experiment I

Method

Stimulus and Rating Materials

Adjective-word sets describing each of 42 stimulus persons were identical to those
reported in Kaplan (1971a, Exp. I) and will be briefly described here. Twenty-four
experimental sets were constructed according to a 2x2x2x3 matrix, with two levels of
test word likableness (moderately positive/moderately negative), two levels of test word
variability in normative evaluative ratings, two levels of context word likableness
(highly positive/highly negative) and three set-sizes of context (1, 3. or 5 traits).
Likableness was determined by reference to Anderson's (1968) trait-adjective norms. The
2x2 matrix of test words was randomly paired with either 1, 3, or 5 context words at each
likableness level to complete the design. Selection of traits from the normative list,
whether test or context, was without replacement, so that no word appeared more than
once in the experiment. Twelve filler sets were added, composed of uniformly high or low
likableness words, two sets of each size. Sets were presented in random order, preceded
by 6 practice sets, which spanned the range of likableness.

For each test word, two eight-point bipolar semantic scales were constructed. The
first, similar to Hamilton and Zanna (1974), had endpoints representing positive and
negative denotations of the test word. For the test word dependent, for example, trusting
and helpless give the positive and negative scalar endpoints, respectively. The second
scale was anchored by positive and negative words implicationally unrelated to either the
test word or the particular context in which it appeared. For example, careful and
overmeticulous give unrelated scalar endpoints for dependent. Care was taken to equate

the endpoints within each pair of scales for evaluative likableness, according to Anderson's (1968) norms.

Procedure

Similar to Hamilton and Zanna (1974), subjects first rated the likableness of the stimulus person on a seven-point scale (1 = Dislike very much, 7 = Like very much). Then subjects rated the extent to which the test word meant one or the other of the pair of traits in both semantic scales. For each of the 42 stimulus sets, order of related and unrelated scales was random.

The six practice sets were given first, followed by the 36 experimental and filler sets, in the same randomized order for all subjects. Stimuli were projected via slides in group sessions, with approximately 10 subjects to a session.

Subjects

Twenty male and 23 female undergraduates, enrolled in an introductory psychology course, served as volunteer subjects, earning extra credit in the course for participation.

Results

Test word ratings

Mean ratings on the test word related and unrelated scales are presented in Figure 1. Lower ratings reflect a response toward the negative end of the scale. For each scale, data were analyzed in a 2x2x2x3 analysis of variance, with test word likableness (moderately positive or negative) and normative variability (high or low), and context likableness (positive or negative) and size (1, 3, or 5 words) treated as within-subjects factors.

Figure 1 about here

For the denotatively related scale, data reflect a strong effect for context $(F=531.88, df = 1/42, p < .001)$, with more negative ratings obtaining for words embedded in negative contexts. This finding agrees with the context effect reported by Hamilton and Zanna (1974). But, note the effect of context on ratings for the word-unrelated scale.

Here too, context exerts a strong effect ($F = 325.78$, df $= 1/42$, $p < .001$), and in the same direction. Also, for both scales, the effect increases with increases in the number of context words (Context x Set-size interaction F's $= 27.89$, 34.35 for word-related and word-unrelated scales, respectively, with df $= 2/84$ for both). Test word characteristics affected only word-unrelated scale ratings: moderately positive words received more positive ratings than did moderately negative words ($F = 7.71$, df $= 1/42$, $p < .01$), and high variability words were rated more positively than were low variability words ($F = 6.70$, df $= 1/42$, $p < .05$).

The Variability x Context interaction was insignificant for both scales (F's $= .00$, 1.39, df $= 1/42$, for related and unrelated scales, respectively) indicating that the context effect was similar at both levels of test word varibility. While of some interest with regard to the meaning change formulation, this finding is peripheral to this paper and will not be discussed further.[3]

Person ratings

Ratings of person likableness closely followed the pattern observed for test word semantic ratings. Positive words, whether designated as test or context, led to more positive person ratings (F's $= 7.15$, 1998.00, respectively, for df $= 1/42$). And, the person rating was more extreme for larger sets than for smaller sets (Context x Set-size interaction $F = 38.99$, df $= 2/84$). Thus, more extreme person impressions were accompanied by larger context effects.

Experiment II

Method

Stimulus Materials

Moderately positive (M+) and moderately negative (M-) words, 11 of each, were selected from Anderson's (1968) norms. Test words were subsequently selected from these subsets to conform to experimental requirements. For each word, eight highly positive (H) and eight highly negative (L) words were chosen so that some H and L words might be denotatively related, and others denotatively unrelated, to their respective M+ or M- word.

For each potential test word, subjects (N=34) were asked to consider a person possessing that trait, and to rate the likelihood of that person also possessing, in turn, each of the 16 H or L traits. Ratings were given on a 21 point scale, with anchors at 0 ("Extremely unlikely"), 10 ("can't tell from the trait") and 20 ("Extremely likely"). In this manner, it was possible to designate, for each of 4 M+ and 4 M- words, positive or negative context words that implied either strongly or not at all a denotation of the test word. Table 1 gives the related and unrelated test-context pairings, and their relatedness ratings. Higher ratings reflect greater relatedness within a test-context pairing.

<u>Insert Table 1 about here</u>

Procedure

Four replications of eight experimental sets were constructed so that each test word would be rated once in each replication, but within a different context each time (see Table 1). Each replication was a complete 2x2x2 design of test likableness (M+ or M-), context likableness (H or L) and test-context relatedness (high or low). To the experimental sets were added 12 filler sets of uniformly H, M+, M-, or L words. Two H and two L filler sets preceded all others in presentation, and the remaining fillers and experimental sets were administered in random order.

Subjects first rated the person described by a set, on a 7 point likableness scale, and then rated the test word on a 21 point scale (0 = Dislike very much, 20 = Like very much).

Each subject rated only one of the experimental replications, giving a 2x2x2x4 factorial design, with test or context word likableness, and test-context relatedness as within-subject factors, and replications as a between-subject factor.

Subjects

Forty undergraduates in an introductory psychology course, half of each sex, served as volunteer subjects, earning extra credit for participation. Ten subjects served in each stimulus replication condition.

Results

Test Word Ratings

Test word likableness ratings, collapsed across replications, are given in Table 2. While a main effect appeared for replications, as well as an interaction with test words, these were considered uninterpretable since it had not been possible to equate test or context word values across replications.

Test words were rated lower in likableness in an L context compared to an H context, and this was true for both M+ and M- words. This uniform context effect is supported in ANOVA by a significant effect for context ($F = 12.64$, df $= 1/36$, $p< .005$) and the absence of a Test x Context interaction ($F<1$).

The effect of denotative relatedness of test and context was central to this experiment. Degree of relatedness had no effect upon the magnitude of context effects. Within context levels, the mean responses to high related and low related contexts were almost identical. The test of this observation lies in the Context x Relatedness interaction, which was negligible ($F<1$). The only effect for relatedness appeared in a non-significant interaction with Test words ($F = 3.79$, df $= 1/36$, $p <.10$) whereby the difference between ratings of M+ and M- words, regardless of context, likableness was greater in high related contexts, compared to low related. The source of this interaction is unclear, as are its' implications for context-induced meaning change.

Insert Table 2 here

Person Ratings

Significant Context ($F = 237.33$, df $= 1/36$, $p< .001$) and Test Word ($F = 13.95$, df $= 1/36$, $p <.001$) effects were observed for person ratings. This is not surprising; it reflects the fact that ratings of persons will be more positive if either the test or context word is more positive. The effect of context, however, was greater for sets in which the context was implicationally unrelated to the test (Interaction $F = 4.85$, df $= 1/36$, $p< .05$). That responses were more extreme for impli-cationally unrelated sets is consistent with the redundancy effect (Kaplan, 1971b) in

which information which is redundant with other existing information receives less
weight in the integration process and consequently results in less extreme responses.

No other effects reached significance.

Discussion

The magnitude of context effects on trait evaluation was unaffected by the deno-
tative relationship between test and context words in Experiment 2. Context Word
value alone exerted an effect on trait ratings. In Experiment 1, semantic ratings,
for scales both denotatively related or unrelated to the test trait, were influenced
by the number and value of context traits. That is, an evaluative halo effect was
observed even for ratings denotatively unrelated to the test trait, and under condi-
tions where context traits did not imply a denotation of the test word.

Evaluative context effects appear not to involve a meaning selection process,
nor are they mediated by denotative changes. Instead, evaluative components of trait
meaning appear crucial. The simple generalization may be made that judgments are based
on meaning components relevant to the judgment dimension. In a similar vein, Rosenberg,
Nelson, & Vivekananthan (1968) and Hamilton & Fallot (1974) have shown that a given
trait will influence judgment to the extent that both trait and judgment fall on the
same dimension. If a test trait is evaluated, this dimensional relevance principle
suggests that the evaluative meaning of context traits would be the locus of context
effects.

Person perceptions are not always totally evaluative. In some judgments, parti-
cularly those calling for a denotative implication of the information, denotative
meaning of stimuli would be important. In the present data (Experiment 1) the effect
of the context was greater for scales denotatively related to the trait word, compared
to unrelated scales (see Fig. 1). An analysis of variance, treating response scales
as an independent variable, gives a significant F-ratio of 44.77 for scale (df = 1/42,
$p < .001$). Thus, in a task containing both descriptive and evaluative elements (e.g.,
studies of trait implication) it is proper to ask for the relative contribution of

evaluative and denotative meaning. It should be noted, however, that even where the task is apparently descriptive, evaluative halo influences are powerful (see also Rosenberg and Olshan, 1970).

The relative influence of evaluative and denotative properties in person perception has been at issue in studies of trait implications. The label "implicit personality theories" is frequently applied to the consistencies uncovered in judging the existence of traits from given traits. It is a matter of contention whether descriptive or evaluative properties are predominant in determining such trait relationships (Felipe, 1970; Lay & Jackson, 1969; Peabody, 1970; Rosenberg & Olshan, 1970), but there is evidence that the extent of either influence depends on task requirements (Felipe, 1970; Peabody, 1970), and on familiarity with the stimulus person (Schneider, 1973). For example, in the resolution of simultaneous evaluative and descriptive inconsistencies, evaluative differences dominate when subjects make evaluative judgments (Kaplan, 1973), but descriptive influences are primary where extrapolations to descriptively related traits are required (Peabody, 1970). Evaluative halos appear pervasive in many judgment tasks; descriptive or denotative meaning has more limited importance. The importance of denotative meaning as a mediator of evaluative context effects has yet to be systematically demonstrated.

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Kaplan 10

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Footnotes

1. Research was supported by NIMH Grant MH23516.

2. Requests for reprints should be sent to Martin F. Kaplan, Department of Psychology, Northern Illinois University, DeKalb, Illinois 60115.

3. The lack of a variability x context interaction was also reported in an earlier study using the same stimuli. See Kaplan (1971a, Experiment I) for a full discussion of the implications for meaning change.

TABLE 1

Test and Context Words, and Their Implicational Relatedness

(Experiment II)

	Context Word			
Test Word	High Related		Low Related	
	H	L	H	L
M+				
Sophisticated	Educated[a]	Snobbish[c]	Forgiving[b]	Humorless[d]
Meticulous	Self-disciplined[d]	Petty[b]	Warm[a]	Hard-hearted[c]
Bold	Enthusiastic[c]	Boastful[a]	Trusting[d]	Humorless[b]
Objective	Openminded[b]	Cold[d]	Enthusiastic[c]	Vulgar[a]
Relatedness	15.30	13.90	9.81	9.27
M−				
Radical	Ambitious[a]	Disobedient[c]	Respectful[b]	Boastful[d]
Clownish	Witty[d]	Childish[b]	Honorable[a]	Deceptive[c]
Gullible	Trusting[c]	Dumb[a]	Well-spoken[d]	Irritating[b]
Rebellious	Ambitious[b]	Disobedient[d]	Gentle[c]	Unfair[a]
Relatedness	14.72	14.60	9.77	10.51

Note: H = high likable, M+ - moderately likable, M- = moderately dislikable,
L = high dislikable.
Superscripts designate one of four experimental replications of test-context
pairing (see text for further explanation).

TABLE 2

Test Word Ratings as a Function of Test and Context Value, and

Relatedness o. Test and Context (Experiment II)

Context Word		Test Word		
Value	Relatedness	M-	M+	Mean
H	High	10.40	11.98	11.19
H	Low	11.13	11.28	11.20
L	High	8.85	10.68	9.76
L	Low	9.42	9.85	9.64

Figures

Fig. 1 Semantic ratings as a function of test word likableness and context likableness and size (H = High likable, L = High dislikable, Solid curves = moderately likable test words, Broken curves = moderately dislikable test words).

B. WORD-UNRELATED SCALE

A. WORD-RELATED SCALE

H CONTEXT

L CONTEXT

CONTEXT SIZE

SEMANTIC RATING

8
7
6
5
4
3
2
1

1   2   3

1   3   5