



## FlashReport

## You're getting warmer: Level of construal affects the impact of central traits on impression formation

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## ABSTRACT

Construal Level Theory argues that psychologically distant information will be processed conceptually, while psychologically near information will be processed concretely. Such theorizing implies that in the classic Asch (1946) paradigm in which participants make trait judgments of targets after viewing lists of trait words describing the targets, the words “warm” and “cold” should have *more* impact on impressions when targets are psychologically distant than when they are psychologically near. Results from two studies, indeed, found that the “warm–cold” effect reported by Asch was moderated by psychological distance. We interpret these findings as providing support both for the idea that the processes used to form impression of others can vary across situations and they do so in accord with the tenets of Construal Level Theory.

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In 1946 Asch published his now-classic article “Forming Impressions of Personality.” In the first of ten experiments, Asch presented participants with a list of traits ostensibly describing another person. Participants saw nearly identical trait lists, but for some participants the fourth descriptor in the list was the word “warm” (i.e., intelligent-skillful-industrious-warm-determined-practical-cautious), others saw the word “cold” as the fourth descriptor (i.e., intelligent-skillful-industrious-cold-determined-practical-cautious). The insertion of either “warm” or “cold” in the trait list dramatically affected impressions of the targets: those described by lists including the trait “warm” were seen as generous and sociable; those described by lists including the trait “cold” were seen as calculating and unsympathetic. In later experiments Asch used the same paradigm but omitted the words “warm” and “cold” (Experiment 2) or replaced them with the words “polite” and “blunt” (Experiment 3). From the results of the experiment series, Asch concluded that the inclusion of the descriptors “warm” and “cold” were especially influential, even central, to impressions that people formed of others (for the conditions necessary for “warm” and “cold” to be central traits, see [Wishner, 1960](#)).

Why did these two traits have such a powerful influence on impressions? [Asch \(1946\)](#) argued that in this task “We see a person as consisting not of these and those independent traits (or of the sum of mutually modified traits), but we try to get at the root of the personality once more than one trait is attributed to an individual.” Asch argued that in the impression formation process, the traits “cease to exist as isolated traits, and come into immediate dynamic interaction” (p.284). Asch concluded that impression formation

reflected a Gestalt-like process of seeking meaning from a stimulus array (e.g., [Köhler, 1929](#)), and not an element-driven process in which the implications of individual stimuli were simplistically combined. In modern terminology, Asch was arguing that the process of impression formation involved thinking about others conceptually, abstractly, and holistically instead of concretely and in piecemeal fashion (e.g., [Fiske & Neuberg, 1990](#)).

However, recent scholarship suggests that this tendency to think conceptually might vary across situational conditions. If this were true, then the Asch warm–cold effect either could be enhanced further by establishing conditions that promote abstract and configural thinking, or could be reduced by establishing conditions that promote piecemeal and concrete thinking. Construal Level Theory (CLT, e.g., [Trope & Liberman, 2010](#)) provides a guide to the establishment of such conditions. CLT proposes that as entities become psychologically distal vis-à-vis the self in the here-and-now, they will be increasingly thought of configurally and abstractly. Conversely, when psychologically near, CLT suggests that entities will be thought of in a piecemeal and concrete fashion.

Such predictions have been borne out empirically. For example, when imagining events in the distant (versus near) future, peoples' responses suggest that they construe things associated with those events in few, superordinate (versus many, subordinate) categories (e.g., [Liberman, Sagristano, & Trope, 2002](#)). Moreover, peoples' use of linguistic abstractions increases when they describe spatially distant entities than when they describe spatially near entities (e.g., [Fujita, Henderson, Eng, Trope, & Liberman, 2006](#)).

These principles seem to apply in the impression formation domain. For example, when forming impressions, psychological distance affects whether perceivers construe behavioral information about another person relatively concretely (e.g., how a behavior was

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performed) or relatively abstractly (e.g., why a behavior was done; Liberman & Trope, 1998; Rim, Uleman, & Trope, 2009). Additional empirical support for CLT in the domain of impression formation comes from studies showing that the behaviors of distant individuals are especially likely to spontaneously elicit trait inferences (i.e., reflecting abstract thought – Rim, Uleman, & Trope, 2009). Moreover, once an impression is formed, people expect distant (relative to near) individuals to behave in a manner that is especially consistent with their inferred dispositions (McCarthy & Skowronski, 2010, April–May; Nussbaum, Trope, & Liberman, 2003). Finally, CLT informs theoretical predictions about how information will be combined during impression formation. For example, numerous studies have shown that under many (but not all) conditions, participants who make a judgment of a target described by trait descriptors presented one at a time tend to exhibit a primacy effect in impressions: The descriptors that appear early in the list have a greater impact on the impression than the descriptors that appear later in the list (see Hogarth & Einhorn, 1992). Studies that have examined the effect of psychological distance on primacy effects (e.g., Eyal, Hoover, Fujita & Nussbaum, 2011) suggested that, as predicted by CLT, this primacy effect was especially evident when the person described was psychologically distant.

Pursuing the theme established by such research, two experiments were designed to test the implications of CLT in the context of the classic Asch “warm–cold” paradigm. If Asch was correct in his argument that the impact of the traits “warm” and “cold” on impression judgments reflected abstract configural thinking, and if CLT is correct in its argument that the tendency to engage in such thinking depends on perceived psychological distance to the target, then one might expect that the Asch “warm–cold” effect should be moderated by psychological distance. Specifically, the difference in trait ratings between the “warm” and “cold” conditions used in the Asch studies should be especially large when targets are framed as being psychologically distant, and should be especially small when those targets are framed as being psychologically near. These predictions were tested in two similar studies, each of which used a different method of manipulating psychological distance.

## Methods

### Participants

Ninety-six participants (57% female; Median = 20 years-old) completed Study 1a and one hundred and two participants (46% female; Median = 19 years-old) completed Study 1b. All participants were Northern Illinois University undergraduates and were compensated with partial credit towards a course research requirement.

### Procedure

Following Asch (1946), participants were told they were going to engage in an experiment on forming impressions. Participants in both studies received a survey packet explaining that they would see a set of traits describing an NIU student. Participants viewed one of two sets of traits:

intelligent-skillful-industrious-warm-determined-practical-cautious  
or  
intelligent-skillful-industrious-cold-determined-practical-cautious.

These two sets of traits will be referred to as the “warm” trait set and the “cold” trait set.

In Study 1a, half of the participants viewed instructions indicating that these traits were describing an NIU student in DeKalb (home of NIU; near condition) and half viewed instructions indicating that the traits described an NIU student studying abroad in Florence, Italy

(distant condition). In Study 1b, half of the participants were told the traits described a current NIU student (near condition) and half were told that the traits described an NIU student who had been at NIU ten years ago (distant condition).

Thus, participants in both studies fell into one of four between-participants conditions: “warm” trait set–near condition, “cold” trait set–near condition, “warm” trait set–distant condition, and “cold” trait set–distant condition.

After reading the set of trait descriptors, participants rated the target described by the trait set on four new traits. The trait ratings were made on 5-point scales anchored by the terms *unsociable–sociable*, *ungenerous–generous*, *unlikable–likable*, and *disagreeable–agreeable*. The first two traits were included because in Asch’s research “sociable” and “generous” were especially responsive to the warm–cold manipulation. The second two traits were included because they were consistent with the open-ended impressions described by Asch’s participants.

## Results and discussion

Parallel 2 (Trait Set: “warm” vs. cold)  $\times$  2 (Psychological Distance: near vs. far)  $\times$  4 (Trait Judged: sociability vs. generosity vs. likability vs. agreeableness) ANOVAs in which the last variable in the design was within-subjects were conducted on the data collected from each experiment. To maximize the comparability among the different traits, prior to analysis all of the ratings for each trait were standardized within each of the four trait types.

Both analyses yielded a significant main effect for the warm–cold manipulation: Study 1a  $F(1, 92) = 88.14, p < .05, \eta^2 = .47$ ; Study 1b  $F(1, 98) = 41.33, p < .05, \eta^2 = .28$ . These results conceptually replicate Asch’s (1946) outcome (see Fig. 1): persons depicted by the descriptor “warm” were generally rated more positively than persons described as “cold.”

Importantly, in both studies significant Trait Set  $\times$  Psychological Distance interactions also emerged: Study 1a  $F(3, 276) = 6.29, p < .05, \eta^2 = .03$ ; Study 1b  $F(1, 98) = 4.12, p < .05, \eta^2 = .03$ . The data (see Fig. 1) conformed to the expectations of CLT theory: Across all four traits judged (in neither study did the Trait Set  $\times$  Psychological Distance  $\times$  Trait Judged interaction reach significance: Study 1a  $F(3276) = 0.80, p = .50$ ; Study 1b  $F(3294) = 0.71, p = .55$ ), the effect of the warm–cold manipulation on trait judgments was exaggerated in the distant condition relative to near condition. In other words, the inclusion of the descriptors “warm” and “cold” had more influence on impressions when the target was psychologically distant than when the target was psychologically near.

Only one other result emerged from the analyses. In Study 1a the trait judged interacted with the psychological distance variable,  $F(3276) = 4.16, p < .01, \eta^2 = .04$ . We are unsure of the theoretical implications of this interaction, especially because we did not observe this pattern in Study 1b;  $F(3294) = 1.14, p = .25$ . Nonetheless, this finding did not involve the warm–cold manipulation so it does not change the interpretation of the results discussed above.

## Coda

Research results have suggested that the mental processes that are used while forming impressions of others change in response to manipulations of the characteristics of situations in which impressions are formed. Construal level theorists add the psychological distance to the target to this list, suggesting that psychologically distant targets are thought about more holistically than psychologically near targets. The two studies described in this article used the Asch (1946) warm–cold paradigm to confirm this idea, finding that judgments about targets who were psychologically distant were more affected by inclusion of the words “warm” and “cold” in a list of traits than judgments made about targets who were psychologically near.

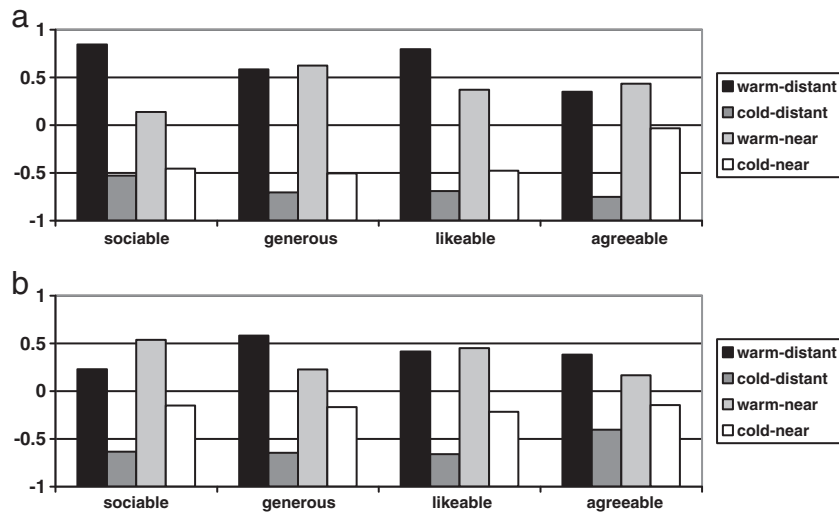


Fig. 1. Standardized trait ratings for Studies 1a and 1b.

Our results may seem paradoxical to some. For example, some might wonder why psychological nearness doesn't prompt attempts to understand the target, which should (at least in the minds of some) prompt heightened conceptual processing. Such nearness certainly seems to prompt heightened attention to target information. For example, Devine, Sedikides, and Fuhrman (1989) reported that when anticipating interaction with a target, perceivers were more likely to remember more information about the target relative to memory for other stimulus people, to be more likely to individuate the target in memory, to form more name-to-item associations for the target than for the other stimulus people, and to be especially likely to organize information about the target in memory. However, such findings suggest that one effect of anticipated interaction is that people are more likely to attend to the details of a target, not necessarily that one will be more likely to use such details in a search for the meaning that unites those details. This argument suggests that, paradoxically, heightening the goal of understanding others might cause perceivers to "get lost in the details," which may obscure the abstract level of understanding that is at the heart of the goal.

Such intriguing possibilities suggest many possible directions for future research. Obviously, one could imagine direct extensions of the two studies that we report, such as the manipulation of non-central traits (e.g., polite-blunt) or testing the warm–cold manipulation using different traits as dependent variables. Although these extensions seem rather incremental, there are important questions to be answered by such studies. Examples of such questions are: "Does increasing psychological distance merely exaggerate trait ratings or do people form qualitatively different impressions of near and distant individuals?" and "Are there particular sets of traits for which the effects of psychological distance are especially pronounced?" Results of these studies would help explain the processes by which mentally representing trait information abstractly leads to central traits imbuing non-central traits with meaning.

Indeed, a second line of research can focus on specific cognitive processes that might be involved in our effects. For example, one possibility is that psychological distance affects the attention paid to different traits, such that large distances cause people to focus on abstract traits and small distances cause people to focus on concrete traits. This mechanism can explain our effects given the finding that attention to stimuli is related to weight in impression formation (Fiske, 1980). A second possibility is that distance alters the weights assigned to traits as they are being combined into an impression. This might occur if high psychological distance causes people to see abstract traits as especially important while small distance causes

people to see concrete traits as especially important. Such effects might occur if central traits function in ways that are similar to the ways that stereotype cues work in the Fiske continuum model of impression formation (Fiske & Neuberg, 1990).

Another intriguing area of research to which CLT could be applied is in the domain of metaphors and embodied cognitions. Indeed, the terms "warm" and "cold" may be especially important to impression formation because of the fundamental relationship that actual warmth and coldness have to social interactions (e.g., Williams & Bargh, 2008). For example, the warmth that a baby feels when being swaddled by its mother suggests a positive social relationship for both interactants. In this regard, "warm" and "cold" may inherently reflect both social closeness and physical closeness, and invoking such terms when describing targets might implicitly link targets to those constructs. Alternatively, when people think abstractly and globally their judgments may be especially swayed by the implicit physical sensations associated with central traits.

Such speculations make it clear that we believe that the general approach of looking at old paradigms through the lens of new theories and knowledge will continue to produce fruitful research. The utility of this framework can certainly be seen when considering the results of the Asch (1946) studies. From the perspective of history, those studies were tremendously important in making the case that perceivers sometimes do not straightforwardly combine the implications of stimulus elements in the process of person perception (as might be implied by the work of Anderson, 2008), but search for the global meaning of those elements. However, our current understanding of how psychological distance affects cognitive representations provides a framework for when people are especially likely to think globally and holistically.

Such speculations reinforce the idea that the simple label "impression formation" actually reflects an area of study that contains considerable diversity and complexity. Despite the fact that impression formation is a "classic" area of study in social psychology, there is still much to be learned. New views, such as CLT, provide ongoing theoretical insights into the processes that underlie impression formation. The fact that such insights can work in the context of classic paradigms, such as the Asch warm–cold paradigm, illustrates the utility and importance of both the new ideas and the old classics.

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