

Personality traits that distinguish you and me are better memorized

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Abstract

Female participants described themselves via desirable and undesirable traits that they possessed or lacked. For each trait, they then received feedback informing them whether they were similar to, or different from a female target. After a distracting task, participants received a recognition test and completed a recall test of the traits. The traits that allowed the participant to be differentiated from the target (because they were applicable to one but not the other) were best recognized and recalled. Undesirable traits were better recognized than desirable ones. However, the picture of the target emanating from the recall data presents her in a very desirable way. The results are discussed within a pragmatic framework. ©1997 John Wiley & Sons, Ltd.

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INTRODUCTION

Imagine that Ms Silky buys a new dress to attend a party. When she joins the party, she realizes that another woman is wearing exactly the same dress. How will Ms Silky feel? Certainly not very happy. Imagine that a French person says to a Belgian, Mr Bossemans, that Belgians are slow-minded. Bossemans will probably resent the remark, not because he believes that Belgians are quick-minded, but because he thinks he is not like other Belgians. In other words, people, at least in Western cultures, prefer to be somewhat different from others rather than being completely similar to others. Psychoanalysts use a refined expression to describe our efforts to differentiate ourselves from others; they speak of 'narcissism of small differences'.

Positive–negative asymmetries

In this paper, we link the problem of differences to positive–negative asymmetries. McGuire and McGuire (1992) have made several helpful distinctions in the area of positive–negative asymmetries. First, they distinguish between cognitive and affective asymmetries. A typical way to test cognitive asymmetries is to ask people to list characteristics that someone does have (positive) or does not have (negative). The affective equivalent would be to ask for a list of the desirable (positive) or undesirable (negative) characteristics that someone possesses. Obviously, the cognitive and affective dimensions are independent. Second, McGuire and McGuire (1992) distinguish between ability (or capacity) and proclivity (or preference) in positive–negative asymmetries. The test of ability requires that the participant is specified the kind of stimuli he or she should list: 'possessed' or 'non-possessed' characteristics for cognitive asymmetry, 'desirable' or 'undesirable' characteristics for affective asymmetry. The test of proclivity, on the contrary, does not specify which kind of traits should be listed, allowing us to see whether the participant spontaneously selects more 'possessed' or 'non-possessed' characteristics, 'desirable' or 'undesirable' ones.

McGuire and McGuire (1992) hypothesized a positivity bias in the case of cognitive thinking. The positivity bias for cognitive asymmetries is well documented (e.g. McGuire, 1984; Nisbett & Ross, 1980). The simplest explanation for this phenomenon is that characteristics possessed by things or people are more accessible, distinctive, and informative, than non-possessed characteristics. McGuire and McGuire (1992, p. 577) also predicted 'relatively small differences in capacity to think positively versus negatively (...) because environmental demands will have required the person to develop at least moderate proficiencies in both positive and negative thinking. However, small ability differences are greatly magnified in proclivity; that is, if a person can think just slightly better in one mode than in another, he/she greatly prefers to think in the better mode to the virtual exclusion of the slightly more difficult mode'. Regarding affective thinking, McGuire and McGuire (1992) did not expect a bias for ability. Indeed, their reasoning for cognitive thinking applies even more for affective thinking; if people have developed about the same aptitude to think about possessed and non-possessed characteristics, they are certainly capable of thinking equally well about desirable and undesirable

characteristics. McGuire and McGuire did, however, predict a bias for proclivity in affective thinking. Importantly, the asymmetry for proclivity in affective thinking would favour either positivity or negativity depending on the adaptation value for the participant (Peeters & Czapinski, 1990; Skowronski & Carlston, 1989). McGuire and McGuire's data supported their hypotheses.

The cognitive positivity bias is thus a well established phenomenon. Now, does the bias still occur when what is positive (present, applicable) for someone is negative (absent, non-applicable) for the self? For instance, Fiedler, Fladung and Hemmter (1987) distributed to their participants a 30-item questionnaire about a patient; half of the items dealt with desirable characteristics and the other half with undesirable ones. In each category, the patient had supposedly answered 'Yes' to about half of the items and 'No' to the remaining ones. Participants remembered better the items answered 'Yes' to by the patient and the items with desirable characteristics. Now, what would have happened if participants had first answered the questionnaire for themselves before being informed of the patient's answers? Presumably, some of their answers would have been identical to those of the patient (i.e. positive or negative for both of them) whereas some would have been different (i.e. positive for the participant and negative for the patient and vice versa). We hypothesize that participants memorize better those attributes that differ in applicability for the self and for another person (*differentiation hypothesis*).

The importance of being different

There is a lot of empirical evidence showing that, at least in Western cultures, being different from other people is especially valued (Codol & Jarymowicz, 1984). For instance, people need more information before admitting that they are similar to another person than that they are different from this person (Leyens, Yzerbyt, & Bellour, 1993). This does not mean that people want to be completely different from other individuals (e.g. Byrne, 1971); being social implies an equilibrium between similarities and differences (e.g. the 'PIP' effect: Codol, 1975; the optimal level of distinctiveness: Brewer, 1991; Snyder & Fromkin, 1980). It simply means that, on average, the Western individual prefers to be somewhat different from another person.

This affective explanation is complemented by a cognitive one relying on the information salience of differences. As we wrote earlier, the cognitive positivity bias is often explained by saliency (i.e. accessibility, distinctiveness, information-richness; see McGuire, 1984). If an applicable stimulus is considered salient, a stimulus that differs in applicability from a standard, that is, the self, should be even more salient.

The differentiation hypothesis and Gilbert's true–false paradigm

To test these ideas, we borrow a paradigm invented by Gilbert, Krull and Malone (1990). Participants are presented with information that is followed by a feedback 'true' or 'false'. Their aim was to show that people's first spontaneous reaction is to accept any information as true even if it is false. This debate goes back to a controversy between Descartes and Spinoza. When people are first faced with an

idea, the Cartesian view proposes that they sustain their judgment until they decide to accept it as true or to reject it as false. The Spinozan view, on the contrary, proposes that people first accept the idea as true before an eventual decision is made. Gilbert takes sides with Spinoza. Spinoza's view is one of the explanations for the cognitive affirmational (positivity) bias suggested by McGuire and McGuire (1992): a trait is assumed to be applicable unless it is explicitly negated, or, in other words, applicability is more accessible than non-applicability that requires further reasoning.

In our study, however, 'true' or 'false' feedback does not imply that an attribute is applicable or non-applicable; it is slightly more complex. Imagine that you receive feedbacks concerning your similarities to another person or about your differences from this other person for personality traits that you possess or that you lack. Depending on whether you possess or lack the trait, the combination of the formulation (similar or different) and of the feedback ('true' or 'false') informs you about what traits the target possesses or not. For instance, if it is 'true' that the target is similar to you for a trait that you possess, this trait is also possessed by the target. On the contrary, if it is true that the target is different for a trait that you possess, this trait is lacked by the target. The reverse occurs for the traits that you lack. In such a context, Gilbert and colleagues (1990) would predict better memory for items associated with a 'true' feedback than to items associated with a 'false' feedback; indeed, their predictions are independent of the meaning of the items. Predictions from a cognitive affirmational point of view à la McGuire are more difficult to make: will the 'true' feedback matter, or the traits applicable to the self, or, even the traits applicable to the target? On the contrary, the predictions are easy if one stresses differences: traits applicable to one person and not to the other will be better memorized; traits non-applicable to either person will be least remembered.

In the current experiment, participants had first to recognize the information and then to recall it. Half of the items were desirable and the other half were undesirable. We wanted to test whether the better memory for differences in applicability would hold for people's deficiencies as well as for their qualities.

METHOD

Participants

One hundred and five female students from the university of Louvain-la-Neuve took part in the experiment to fulfil a requirement for their laboratory class in psychology. Female participants were used because we did not want to add another factor to the experiment and female students are much more numerous than males in psychology classes. Participants completed the procedures individually.

Material

One hundred and seventy-two personality traits were rated by 50 students for desirability/undesirability on 9-point scales. Another 50 students rated the traits'

importance in defining personality on 5-point scales. Participants could also answer that they did not know the exact meaning of the traits. None of these 100 participants took part in the main study.

Traits were discarded for three reasons: when more than five persons ignored their exact meaning, when their score of favourability approached the mid-point of the scale, or when their variance for the importance rating was below 0.06. This procedure left 800 traits. Eight series of five desirable traits and eight series of five undesirable traits were constructed according to the following criteria: (1) the desirability or undesirability of the traits within a particular series was almost equal, (2) the range of importance of the traits within a series was as large as possible, and (3) no synonyms were included in a series.

Instructions and procedure

When participants arrived in the laboratory, the experimenter explained that the experiment dealt with memory for other people's personality compared with one's own personality.

Self-description phase

Participants then saw 16 series of five traits on a computer screen. For each series, they had first to select the trait that described themselves best (i.e. trait possessed), and, second, to select the trait that described themselves least (i.e. trait lacked). The series were presented in a different random order for each participants.

Learning phase

After a 5-minute distracting task (crossing out diphthongs), the experimenter explained that, for each of the 32 traits just selected (i.e. eight desirable possessed, eight desirable lacked, eight undesirable possessed, and eight undesirable lacked traits), the participant would see whether she was different or not from (similar or not) another person; on the basis of that information, she could then infer whether each trait was possessed or lacked by the target. The experimenter gave these instructions with the help of a sheet of paper that simulated what would appear next on the screen. The learning phase started when the participant clearly understood the task. Half of the participants received the 'different' instructions and the other half the 'similar' instructions.

For each of the 32 selected traits, the participant saw the following information on the computer screen: 'For the trait X (Y, Z, etc.), you are similar to her (different from her). True (False)'. For half of the items (randomly chosen), the feedback was true; for the other half, it was false. The list was random and each statement was displayed for 10 seconds.

Recognition phase

After the 32 traits were presented with their feedback, they were again presented, one at a time, in an order different from that during the preceding phase and without feedback. The information appearing on the screen took the following form: 'For the trait X (Y, Z, etc.), you are similar to her (different from her)?' The subject had 14 seconds to press one of two keys corresponding to 'true' or 'false'.

Recall phase

After this recognition test, all but four participants listed as many traits as they could remember that the other person possessed and did not possess. The data obtained with this recall procedure allowed three measures: (1) number of correct answers, (2) number of inversions (i.e. stating that a given trait was possessed by the target when it was in fact lacked, and vice versa), and (3) number of inventions (i.e. reporting a trait never mentioned during the learning phase).

Participants were thanked for their participation after a short debriefing. A collective and thorough debriefing took place at the end of the experiment.

RESULTS

Recognition test

The different predictions were tested to see whether participants would better remember traits that are possessed or lacked by the target; they also compared traits that discriminate between the target and the participant (because they are possessed by one but not the other) and traits that did not. Moreover, the valence was also of interest.

Thus the data were analysed in a 2 (traits possessed by the target *versus* lacked by the target) \times 2 (differentiating *versus* non-differentiating traits) \times 2 (valence of the traits: desirable *versus* undesirable) within-subject factorial design. The type of feedback (true or false) and the type of instructions (similar or different) had no effects and, therefore, will no longer be considered.

The analysis revealed a significant main effect for the differentiation factor, $F(1, 104)=17.32$, $p < 0.001$, and for the applicability of the traits to the target, $F(1, 104)=36.26$, $p < 0.001$. People recognized traits that distinguished them from the target ($M=2.68$) better than those that did not ($M=2.35$). They also recognized traits that the target possessed ($M=2.76$) better than traits the target lacked ($M=2.27$). The interaction was also significant, $F(1, 104)=5.50$, $p < 0.03$. This interaction tests the applicability of the traits to the self. Traits applicable to the self ($M=2.58$) were better recognized than traits unapplicable to the self ($M=2.44$). However, this difference is mainly due to the traits that were possessed neither by the target, nor by the participant; these traits were the least recognized ones. A contrast analysis comparing recognition of traits in the latter condition to recognition in the

Table 1. Average recognition of the traits as a function of their applicability to the target, their differentiating nature, and their valence

	Applicability of the traits to the target	
	Possessed	Lacked
Desirable traits		
Differentiating	2.97	2.30
Non-differentiating	2.74	1.59
Undesirable traits		
Differentiating	2.73	2.70
Non-differentiating	2.60	2.48
Total		
Differentiating	2.85	2.50
Non-differentiating	2.67	2.03

other three conditions was highly significant, $F(1, 104) = 50.03$, $p < 0.001$ (see Table 1).

Valence of the traits had an impact on their recognition. Overall, undesirable traits ($M = 2.63$) were better recognized than desirable ones ($M = 2.40$), $F(1, 104) = 13.90$, $p < 0.001$. Valence also interacted with the applicability of the traits to the target, $F(1, 104) = 20.92$, $p < 0.001$. The least recognized traits were the desirable ones that the targets lacked. A contrast opposing this cell to the three others was highly significant, $F(1, 104) = 63.39$, $p < 0.001$. Valence also tended to interact with the differentiation factor, $F(1, 104) = 3.64$, $p < 0.06$: the desirable traits that do not discriminate participant and target are less recognized than the three other kinds of traits, $F(1, 104) = 23.79$, $p < 0.001$.

Recall test

At the end of the experiment, participants were asked to list the traits that they recalled as possessed and as lacked by the target. We analysed separately the correct answers, the errors due to inversions, and the errors due to inventions.

Correct answers

The traits spontaneously recalled by participants were analysed according to the same design as the recognition data. Overall, the results mirror those already obtained for the recognition test. First, people recall the traits that distinguish them from the target ($M = 1.20$) better than those that do not ($M = 0.83$), $F(1, 100) = 21.87$, $p < 0.001$. Second, they recall traits that the target possessed ($M = 1.11$) better than those the target lacked ($M = 0.92$), $F(1, 100) = 11.29$, $p < 0.005$. Third, the interaction was also significant, $F(1, 100) = 14.61$, $p < 0.001$. The traits that were lacked by both the target and the participant were least recalled. A contrast analysis comparing

Table 2. Average recall of the traits as a function of their applicability to the target, their differentiating nature, and their valence

	Applicability of the traits to the target	
	Possessed	Lacked
Desirable traits		
Differentiating	1.24	1.12
Non-differentiating	1.13	0.43
Undesirable traits		
Differentiating	1.12	1.34
Non-differentiating	0.96	0.82
Total		
Differentiating	1.13	1.23
Non-differentiating	1.04	0.62

recall of traits in the latter condition to recall in the other three conditions was highly significant, $F(1, 100) = 68.38$, $p < 0.001$, as can be seen in Table 2.

Participants did not recall differentially the desirable and undesirable traits. However, valence interacted significantly with the applicability of the traits to the target, $F(1, 100) = 11.28$, $p < 0.005$. Among traits possessed by the target, desirable ones were better recalled than undesirable ones. The opposite pattern occurred for the traits lacked by the target. So, again, the traits applicable to the self were better remembered than the unapplicable ones, and, again, this difference is essentially due to the positive ones that were lacked by the target.

Inversions

In the recall test, participants sometimes reported that a given trait was possessed by the target when it was not; we will call this kind of error 'over-misattributions'. At other times, participants reported that a trait was lacked by the target when it was actually possessed; we will call this second kind of error 'under-misattributions'. These two kinds of errors could occur for traits that discriminated or did not discriminate the target from the subject. Consequently, the inversion data were analysed according to a 2 (over-misattributions *versus* under-misattributions) \times 2 (differentiating traits *versus* non-differentiating traits) \times 2 (valence of the traits: desirable *versus* undesirable) ANOVA; all three variables are within-subject.

Significantly more inversions occurred in the non-differentiating ($M = 0.59$) than in the differentiating conditions ($M = 0.38$), $F(1, 100) = 16.10$, $p < 0.001$. As can be seen in Figure 1, this result held true for desirable traits, $F(1, 100) = 10.98$, $p < 0.005$, and for undesirable traits, $F(1, 100) = 7.46$, $p < 0.01$. This pattern of inversions is completely in line with the difference hypothesis. People make more errors that make them different from someone else than errors that make them similar.

There were also significantly more over-misattributions ($M = 0.56$) than under-misattributions ($M = 0.41$), $F(1, 100) = 12.71$, $p < 0.001$. Interestingly, the interaction between the kind of inversion and the valence of the traits is significant, $F(1, 100)$

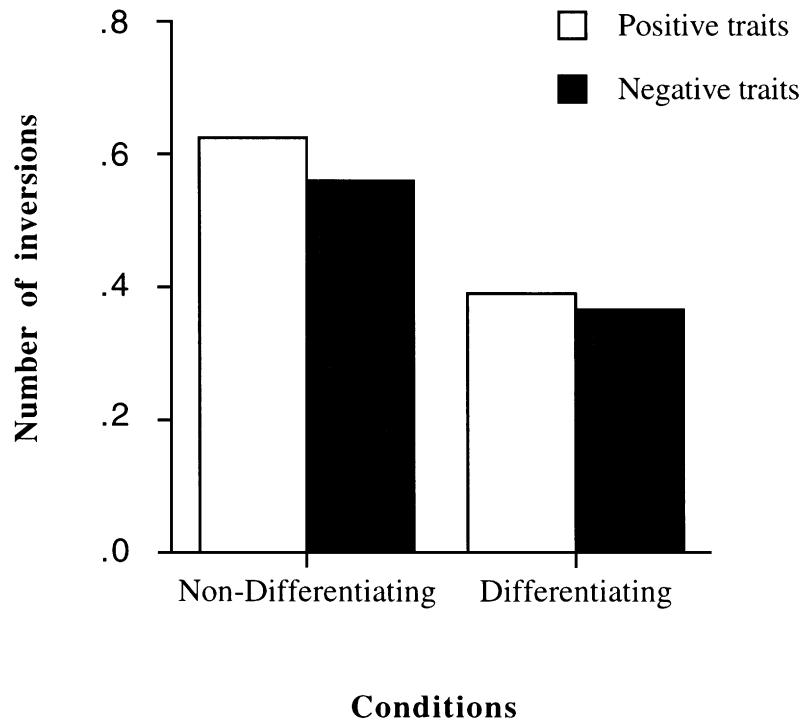


Figure 1. Number of inversions as a function of the differentiating nature and valence of the traits

=17.66, $p < 0.001$. For desirable traits, over-misattributions ($M=1.38$) are significantly more frequent than under-misattributions ($M=0.65$), $F(1, 100)=26.35$, $p < 0.001$. For undesirable traits, on the contrary, over-misattributions ($M=0.86$) are less frequent than under-misattributions ($M=0.99$), although not significantly so, $F(1, 100)=1.14$, n.s. In other words, the participants attribute to the target positive qualities that she does not have and they tend to forget deficiencies that she has.

Inventions

Participants sometimes reported traits that were not mentioned in the learning phase. These inventions were analysed according to a 2 (reported as possessed *versus* lacked) \times 2 (valence of the traits: desirable *versus* undesirable) within-subject factorial design. Participants invented more desirable traits ($M=0.22$) than undesirable ones ($M=0.10$), $F(1, 100)=7.51$, $p < 0.01$. This difference was more pronounced when the traits were reported as possessed ($M_s=0.30$ and 0.11 for desirable and undesirable traits, respectively) than when they were reported as lacked ($M_s=0.14$ and 0.10 for desirable and undesirable traits, respectively), as testified by a slightly significant interaction, $F(1, 100)=3.67$, $p < 0.06$.

DISCUSSION

In this experiment, participants received feedback informing them whether they were similar to or different from a target on a series of personality traits that they themselves possessed or lacked. More specifically, they were told that it was either true or false that they were similar to (or different from) a target for each of the traits. Half of the traits were desirable and half were undesirable. Participants were asked to remember whether they were similar or not (different or not) for each trait. They also had to recall as many traits as possible that the target possessed or lacked.

Focus on differences

Contrary to Gilbert *et al.*'s (1990) prediction, participants did not make more errors in the recognition task when they were provided with a 'false' feedback than when they received a 'true' feedback. Rather, the difference hypothesis received very strong support from all the dependent measures. Participants recognized better traits that differentiated them from the target than non-discriminative traits. In addition, the recall for these same differentiating traits was also better. Finally, when they made an inversion in the recall test, this inversion was such that it interfered more with memory for traits that make them similar than different.

Given the complexities of the task, one could be surprised that such support for the difference hypothesis emerged. The task was indeed extremely complex: a large amount of material was presented in an unconventional and sophisticated way, traits had to be memorized, etc. We believe that the support was so strong *because* of the complexities of the task. The memory task was made so difficult that participants used the strategy of resorting to differences and similarities between oneself and the target. Stated in another way, similarities and differences were not the primary focus in the experiment, but became an indirect way to master the material. Therefore, participants might not have hesitated to emphasize differences and to downplay similarities although (or because) this was not what they consciously attempted to do, that is, to memorize as many traits as possible.

Interestingly, the difference hypothesis received almost as much support from the undesirable traits as from the desirable ones. This result is original because previous research has concentrated on desirable items. It is not surprising that people appreciate having positive qualities different from other individuals, but one could expect that they would like to see others share their deficiencies. The last idea is not verified in the present study. Our results indicate that people think about themselves as uniquely good *and* bad. It remains to be seen whether the link between memory and liking is the same for desirable and undesirable traits.

Pragmatic concerns

The recognition and recall data also showed that people remembered better the traits that were applicable to the target than those that were not applicable. In other words, memory was better for what the other person was rather than for what she

was not. In many ways, such a difference has pragmatic implications. Indeed, people often think that the presence of a given characteristic is more informative than its absence (Peeters & Czapinski, 1990). Coupled with the difference hypothesis, it is not surprising that the pragmatic concerns led to worse memory (recognition and recall) in the condition that combined non-applicability of the traits to the target and non-differentiation, that is, to traits that did not apply to both the target and the participant.

Memory for desirable and undesirable traits also indicated pragmatic concerns (McGuire & McGuire, 1992; Peeters & Czapinski, 1990). First, recognition and recall of traits lacked by the target was superior for undesirable traits than for desirable ones whereas the reverse tended to occur for traits possessed by the target. Second, inversions in the recall test presented the target as more positive than she deserved. Third and finally, inventions in the recall test also favoured the target's desirability.

Undesirable information is especially important for efficient interactions because of the potential danger attached to it. Therefore, undesirable traits should be better recognized than desirable traits, just as a poison should be precisely detected among medical drugs (Peeters, 1971). This was the case. On the other hand, everyone prefers to interact with a pleasant person and it may therefore help if one recalls this partner as more desirable than she really is (Taylor, 1989). These results seem compatible with Vonk's (in press) suggestion that people would automatically be alerted to negative stimuli as potential sources of negative consequences for others in general; in contrast, it would be adaptive to anticipate a positive interaction with a real person.

Admittedly, these remarks are *post hoc*: we had not intended to test them in this experiment. Nevertheless, they make good sense in explaining the results. Consider experienced authors who plan to send a paper to a reputed journal: they should pinpoint (recognize) their study's weaknesses that reviewers will not fail to perceive but, if they do send their manuscript, they should also recall previous reviewers as helpful persons.

REFERENCES

- Brewer, M. B. (1991). The social self: On being the same and different at the same time. *Personality and Social Psychology Bulletin*, *17*, 475–482.
- Byrne, D. (1971). *The attraction paradigm*. New York: Academic Press.
- Codol, J. P. (1975). On the so-called 'superior conformity of the self' behavior: Twenty experimental investigations. *European Journal of Social Psychology*, *5*, 457–501.
- Codol, J. P., & Jarymowicz, M. (1984). L'estimation de la ressemblance entre des personnes: Quelques directions de recherche. *Bulletin de Psychologie*, *366*, 813–822.
- Fiedler, K., Fladung, U., & Hemmeter, U. (1987). A positivity bias in person memory. *European Journal of Social Psychology*, *17*, 243–246.
- Gilbert, D. T., Krull, D. S., & Malone, P. S. (1990). Unbelieving the unbelievable: Some problems in the rejection of false information. *Journal of Personality and Social Psychology*, *59*, 601–613.
- Leyens, J. Ph., Yzerbyt, V. Y., & Bellour, F. (1993). Social judgeability and motivation: The ingroup overexclusion effect. In M. F. Pichevin, M. C. Hurtig, & M. Piolat (Eds), *Studies on the self and social perception*. Singapore: World Scientific.

- McGuire, W. J. (1984). Search for the self: Going beyond self-esteem and the reactive self. In R. A. Zucker, J. Aronoff, & A. I. Rabin (Eds), *Personality and the prediction of behavior*. Orlando, FL: Academic Press.
- McGuire, W. J., & McGuire, C. V. (1992). Cognitive-versus-affective asymmetries in thought systems. *European Journal of Social Psychology*, **22**, 571–591.
- Nisbett, R. E., & Ross, L. (1980). *Human inference: Strategies and shortcomings of social judgment*. Englewood Cliffs, NJ: Prentice Hall.
- Peeters, G. (1971). The positive–negative asymmetry: On cognitive consistency and positivity bias. *European Journal of Social Psychology*, **1**, 455–474.
- Peeters, G., & Czapinski, J. (1990). Positive–negative asymmetry in evaluations: The distinction between affective and informational negativity effects. *European Review of Social Psychology*, **1**, 33–60.
- Skowronski, J. J., & Carlston, D. E. (1989). Negativity and extremity biases in impression formation: A review of explanations. *Psychological Bulletin*, **105**, 131–142.
- Snyder, C. R., & Fromkin, H. L. (1980). *Uniqueness. The human pursuit of difference*. New York: Plenum Press.
- Taylor, S. E. (1989). *Positive illusions: Creative self-deception and healthy mind*. New York: Basic Books.
- Vonk, R. (in press). Negativity and potency effects in impression formation. *European Journal of Social Psychology*.

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