

# Comparing is believing –

## The ease of comparison as a means to induce gullibility

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### Approaching gullibility

I must admit that until recently, I did not know the meaning of the word „gullibility“. Meanwhile, I have learned that in its German translation, it means “leichtgläubig”, literally translated: “eager to believe”, in a more social context “easy to be convinced”.

Of course, the easiest way – perhaps another type of gullibility – is to convert this characteristics into a feature of *personality*, and I am sure the “big five” (e.g., Borgatta, 1964)) will manage to describe to it, perhaps as a blend of high openness and low conscientiousness.

The second approach is more *social* in nature. One may ask about persuasive techniques that promote the acceptance of a messages without being convinced by its content. Persuasion that is based on impression management (s., Hass & Mann, 1976).

Finally, one may go one more step in a *reductionist* direction and ask about the psychological processes that facilitate believing. And of course, social cognition is the discipline that may provide insights that may help to understand the underlying mechanisms.

### Gullibility - heuristically generated

First and foremost, it seems obvious that gullibility can be produced by heuristics (Tversky & Kahneman, 1974; s.a., Strack & Deutsch, 2002). As it is well known, heuristics describe ways in which judgments can be simplified. If judgments express beliefs, heuristics can be understood as promoters of gullibility. Indeed, at the beginning of this research program, heuristics had a pejorative flavor and were often described as judgmental fallacies resulting from deviations from normative rules. This was particularly reinforced by efforts to link psychological biases with judgmental heuristics (Nisbett & Ross, 1980).

Subsequently, however, heuristics were seen as strategies that simplify judgments by reducing their complexity with the goal of making them easier, less effortful and faster to execute. In fact, it has been argued that under specific circumstances, heuristics may even improve human judgment (Gigerenzer & Gaissmaier, 2011). As a consequence, one may wonder if the negative associations elicited by “gullibility” deserve to be examined more closely.

As much as heuristics are candidates as determinants of gullibility, there is one severe problem: Heuristics do not share a common psychological property. As much as they converge in their consequences, namely facilitating and accelerating the judgmental process, their operation cannot be reduced to a joint mechanism. As Kruglanski and Thompson (1999) had pointed out in their “unimodel”, simplified judgments are cut from the same psychological cloth as their more systematic counterparts, because they are based on syllogistic inferences. Of course, the various bases of such inferences may differ and this may depend on the goal of the judgment. Thus, assessments of frequency or probability may be built on the experienced ease with which a given content can be retrieved (Schwarz, Bless,

Strack, et al., 1991) or recognized (Goldstein & Gigerenzer, 2002) while the similarity with a prototype may be harnessed to consider a category membership (e.g., Tversky & Kahneman, 1982). In an attempt to reach an overarching understanding of the operation of heuristics, Kahneman and Frederick (2004) have proposed “attribute substitution” as a common denominator. For example, while systematic judgments are based on normative parameters of logic or probability, heuristic simplification may replace them with peripheral assessments that are, imperfectly though, related to them. The similarity of a target with the prototype of a category is one prominent example. Linda, whose characteristics fitted that of a liberal activist was less likely to be seen as a banker than as a banker who is active in the feminist movement. The neglect of the most basic rule of probability theory led to the so-called “conjunction fallacy” (Tversky & Kahneman, 1982).

However, if heuristics are not defined as deviations from normative rules but as simplifications of comparatively complex and effortful judgmental procedures, the heuristic nature of a judgmental procedure is defined in contrast to a less heuristic way of generating the judgment. For example, to estimate the relative size of cities, the recognition heuristic is a simplification compared to searching for the relevant information in an encyclopedia, which may be characterized as “systematic”. At the same time, to be even more precise, one might consult the official statistics. Thus, depending on the reference point, searching the encyclopedia may be described as a strategy that is both systematic and heuristic in nature.

This suggests that the terms “heuristic” and “systematic” do not describe psychologically defined categories of human judgment but are synonyms for “simple” and “complex” as endpoints of a scale of judgmental complexity. To be sure, if the additional time and effort reduces adaptive value of accuracy, there is no reason to assume that complex is always better. At the same time, heuristic and systematic judgments do not form categories that are distinct with respect to their psychological characteristics.

As a consequence, the search for the determinants of gullibility must continue and focus on the psychological mechanisms involved. One way would be to generate a list of those cues and mechanisms that are involved in various heuristics. This strategy, however, runs the risk of coming up with an infinite number of specific procedures, that are employed with the intention to simplify one’s judgment. Alternatively, one might take a closer look at the general dynamics of human judgment and identify overarching psychological/cognitive principles that facilitate beliefs with or without a concomitant intention.

### **From Heuristics to Social Influence**

Social influence is typically understood as a type of compliance and conformity (Cialdini & Goldstein, 2004). Motivational forces were typically associated with the positive consequences of complying and conforming and/or the negative consequences of failing to do so. Thus, the influence was seen to be mediated by rewards or punishments as a function of the target’s behavior.

Frequently, however, social influence may be more effective if it affects the targets’ judgments in a ways that is not immediately obvious. This is the case if it is not the outcome that causes pleasure or pain but the process that varies in pleasantness. This applies if the generation of a judgment requires little or much effort. And this is exactly what heuristics are all about: simplifying judgments. Thus, social influence may be effectively achieved by offering heuristics that result in the desired outcome.

This is exactly what Robert Cialdini (1988) has described in his book titled “Influence: Science and Practice”. Instead of using external reward and punishment, Cialdini identified tendencies within the individual to be harnessed for the purposes of the influencer. This “jijitsu” (Cialdini) strategy includes the reliance on simple rules (e.g., reciprocity) and the simplification of judgments. Comparison plays a cru-

cial role. For once, there is “perceptual contrast” that that is driven by standards activated by the influencer. However, the perceptual nature that presupposes adaptation is not necessary. Mere judgmental mechanisms will suffice. Perhaps best known, the author describes the letter of a young female college attendant who makes her parents believe that she was pregnant and about to bring home a socially unacceptable husband, only to reveal that these stories had been invented to provide a perspective in which they see the fact that she had just received poor grades in in two fields of her studies. As much as adaptation may intensify experiences of contrast, the judgmental effect and its behavioral consequences do not need a perceptual representation (Kahneman, 1999). As we shall argue, the accessibility of the standard and the ease comparison will play a crucial role.

The second type of comparison discussed by Cialdini is assimilative in nature. It describes a Festingerian type of social comparison (Festinger, 1954) that validates people’s own assessments based on the judgment and behaviors of others. Interestingly, this assimilation affect also has a perceptual component when it comes to social contagion, e.g, in the domains of laughing or yawning. Most important, it provides a “social proof” that releases judges from assessing the situation and allows them to facilitate the process by simply following the others. Often, the validity of an assumption may be quantitatively evaluated by the number of others who behave in a consistent manner. However, to the degree that their behavior was socially based as well, the validity assessment may be misleading. Also, others’ preferences may differ from one’s own. Even if “millions of flies can’t be wrong”, the proof of the observation depends on the transferability.

To overcome the traps of mere frequency, authority and expertise are identified as characteristics that validate social influences. Even if such “peripheral” (e.g., Petty & Cacioppo 1986) cues do not differ in the basic psychological mechanisms that result in the judgment (s. Kruglanski & Thompson, 1999), they facilitate the process compared to a more elaborate evaluation of the “central” aspects of the facts.

Of course, providing these facilitators or cues that suggest their presence liberate judges from weighing pros and cons. Even if there exist no pertinent data, it can be assumed that these aspects contribute to the gullibility that triggers the judgment.

## **Social Cognition**

As a basic model, the paradigm of information processing provides a framework in which human judgments are generated. They are understood as the result of information processing, which consists of the encoding, categorization, storage in memory, retrieval and syllogistic inferences. In a more elaborate variant of the basic model, we (Strack & Deutsch, 2004, 2015) attempted to integrate different modes of information processing and link it to affect and behavior.

Specifically, we identified two processing systems that follow distinct principles. The *Impulsive System (IS)* directs behavior by linking external cues to behavioral schemata based on previously learned associations. The internal responses that are generated during its operation can be perceived by the Reflective The *IS* conceptualized as a network in which information is processed automatically through a fast and parallel spread of activation along the associative links between contents. In contrast, processes of rule-based reasoning and of symbol manipulation are assumed to be carried out in the *RS*. Although this enables great flexibility, the reflective system operates slowly, tends to be disrupted by other processes, and depends on intention.

Specifically, the *IS* represents environmental regularities as patterns of activation in an associative network. Links are created or strengthened if stimuli are presented in close temporal or spatial proximity.

The *IS* works like a simple memory system (s. Johnson & Hirst, 1991) that slowly forms enduring, non-propositional representations of the typical properties of the environment (see McClelland, McNaughton, & O'Reilly, 1995; Smith & DeCoster, 2000). Propositional knowledge cannot be represented in the impulsive system.

Processes in the impulsive system may be accompanied by an experiential mode of awareness. Specifically, processing a stimulus elicits three types of feelings. First, it triggers feelings related to the physical senses, such as colors, sounds, or tastes. Second, based on innate or learned links, it triggers positive or negative affective feelings. Third, it triggers cognitive feelings, such as familiarity or ease. Generally, these feelings are assumed to result from strong stimulation of specific perceptual and affective structures within the impulsive system. Sources of activation are external perception of a stimulus, reflection about the stimulus, and spreading activation to stimulus representations from associated representations.

Consider, for example, an individual who repeatedly sees, smells, and finally buys and eats a piece of cake in a bakery. On the basis of the described principles, all sensory and motor representations that take place during the episodes will be linked, and an associative cluster that relates to cake will be created. When the person encounters a similar situation and engages in thinking about cakes or related concepts, this cluster will be activated and lead to anticipatory sensations of taste and smell, as well as to the anticipation of the pleasure of sweet taste. Likewise, behavioral schemata that are related to eating will be activated.

In contrast, *RS* serves regulatory and representational goals that complement the operation of the impulsive system. It is in charge of generating explicit judgments and decisions and of performing executive functions such as overcoming habits or putting together action plans in new situations (Lieberman, 2003). To fulfill these functions, reflective processes are based on symbolic representations, which are momentary re-representations of the concepts stored in the impulsive system. Only the reflective system can combine symbols flexibly by syllogistic operations. This flexibility, however, comes at the cost of slow processing and a great instability of representations in the *RS*. Such representations need to be rehearsed during operation, which activates the corresponding concepts in the impulsive system. Representations of this kind are a prerequisite for generating explicit, propositional judgments and decisions, as well as for correcting judgments to increase their accuracy and or socially desirability.

If knowledge has been generated, syllogistic rules allow inferences that “go beyond the information given” (Bruner, 1973). Through reflection, the person exposed to a cake may link the perceptual input to a suitable category (i.e., cake, pie). In addition, elements that are associated with the category (e.g., sweet) may be activated and used for further reasoning. For instance, from the property of sweetness a high calorie content and a damaging potential may be inferred. These inferential processes are fundamentally different from the mere activation of associations in memory because they connect the activated contents, resulting in propositional knowledge, aka beliefs. While the mere activation of the concept facilitates the inference, it does not create knowledge about cakes being high in calories. This knowledge, in turn, may be employed to form a behavioral decision (e.g., not to buy the cake).

Operations of the reflective system may be accompanied by an awareness that something is or is not the case. Such *noetic* states of awareness may be accompanied by *experiential* states of awareness. For example, trying to answer an almanac question may be accompanied by a feeling of knowing (Koriat, 1993) that is not the same as actually knowing that something is the case. This feeling may be triggered by peripheral characteristics of the answer that are unrelated to the required information, for example, that the answer starts with a certain letter.

## **Gullibility from the perspective of the Reflective-Impulsive Model (RIM)**

The *RIM* provides a theoretical framework that allows to look at the cognitive determinants of gullibility from a more systematic perspective. Specifically, it describes several psychological routes on which judgments can be simplified and thus increase the likelihood of belief.

It is important to note that judgments are based on beliefs that are propositional in nature. That is, we assign a characteristic to a target and assign a truth value to the resulting characterization. From the vantage point of the *RIM*, this is produced by the *RS*. However, its effortful operations can be simplified in different ways. Moreover, existing heuristics can be understood in their underlying psychological dynamics.

### *Accessibility of information (and anchoring)*

Most importantly, the accessibility of information in the *IS* operates as a major judgmental determinant. Prior activation in close temporal distance is the best guarantee that a piece of applicable information will simplify and shortcut the search for information. US-President Trump who is frequently described as highly impulsive in his decisions is known to be influenced the most by those advisors with whom he had spoken most recently. Priming research has demonstrated the operation of accessibility in a great number of studies showing that the influence may operate automatically without an awareness of the priming episode (s. Cheesman, & Merikle, 1984).

At the same time, reflective operations may affect the ease with which an information comes to mind. An example is judgmental anchoring that was mentioned as a heuristic by Tversky and Kahneman (1974) next to “availability” and “representativeness”. The phenomenon is an assimilation of an absolute judgment toward the standard of a preceding comparative judgment. Best known is a study by Tversky & Kahneman in which participants were provided with a randomly generated number that served as a standard to decide if the proportion of African nations in the UN was higher or lower. Subsequently, when judges had to assess the true proportion, their judgments were distorted into the direction of the previous standard.

Of course, providing a standard in a natural conversation typically suggests that the true value is somewhere in the vicinity. Thus, gullibility is influenced by the intention of the communicator. Tversky and Kahneman, however, excluded this possibility by openly generating the standard in a random fashion. The resulting assimilation effect must be explained without invoking communicative influences. The original authors proposed “insufficient adjustment” as an underlying mechanism. However, this explanation seems to beg the question without suggesting a psychological mechanism. As a consequence, Thomas Mussweiler and I (Strack & Mussweiler, 1997; Mussweiler & Strack, 1999) approached the phenomenon from an information-processing perspective. Specifically, we assumed anchoring to be the result of semantic priming. This assumption gave rise to a more elaborate ‘selective accessibility model’ that was corroborated in a number of experiments. The model assumes that to generate a comparative judgment, relevant information must be retrieved from memory. Simultaneously, the provided standard operates like a hypothesis to be tested. That is, people who were asked if the proportion of African states in the UN is higher or lower than a high anchor of 65 percent are assumed to have tested the possibility that the proportion is 65 percent and then responded by providing information about the direction in which the retrieved information deviated from the standard. However, research on hypothesis testing has shown that this information search is selective such that hypothesis-consistent information (e.g., ‘Many African nations that are members of the UN come easily to mind.’) will be more likely to be retrieved than inconsistent information. Even if the hypothesis is rejected, this type

of activation in the *RS* will cause the consistent information to remain accessible and enter into the absolute judgment.

This conceptualization of anchoring as a knowledge accessibility effect is supported by a large body of evidence demonstrating that anchoring effects share many of the qualities that are typical for knowledge-accessibility effects in general. First, anchoring effects depend on the applicability of the knowledge that was rendered accessible by the comparative task. A second aspect is the similarity in use of the accessible information. Research on the judgmental effects of accessibility has repeatedly demonstrated that the direction of an influence depends on how similar the accessible knowledge is to the judgmental target. If an accessible concept is similar, it is typically used as a basis for the judgment, which leads to assimilation. If, however, an accessible concept differs largely from the target, it will be used as a standard of comparison, which produces a contrast effect. For example, comparing the mean winter temperature in the Antarctic to a high versus low anchor (20 °C versus 50 °C) produced an assimilation effect on absolute judgments of temperatures in the maximally similar Antarctic while the same comparison produced a contrast effect on absolute judgments of temperatures on maximally dissimilar Hawaii. Thus, the direction of anchoring effects appears to depend on the similarity of the activated concept and the judgmental target, just as is true for knowledge-accessibility effects in general.

A third feature that anchoring and knowledge-accessibility effects have in common is that the degree of accessibility of judgment-relevant knowledge determines the time and effort that is needed to make a judgment. This pattern was replicated in the anchoring domain where response latencies for the absolute judgment depended on the extent to which the accessibility of relevant knowledge had been increased during the preceding comparative task.

However, different levels of accessibility do not only influence the speed of absolute judgments, but also their content. That is, larger anchoring effects occur under conditions that promote an extensive generation of anchor-consistent knowledge. Furthermore, judges who generate more anchor-consistent knowledge during the comparative task because they are in a sad mood, which is typically associated with more elaborate processing, show larger anchoring effects than judges in a neutral mood.

A final characteristic of knowledge accessibility effects that is shared by anchoring is its temporal robustness. Knowledge accessibility effects are typically long-lasting, provided they are not superimposed by other applicable information. The same temporal robustness also characterizes judgmental anchoring. In particular, it has been demonstrated that anchoring effects still occur if the comparative and absolute questions are separated by one week.

In summary, this line of research demonstrates how the dynamics of basic cognitive processes can be harnessed to understand heuristics whose underlying mechanisms have not been sufficiently understood. Moreover, it sheds light on mechanisms of comparison that simplify social judgments in many domains. That is, they show how comparisons may ease and distort categorical judgments and they explain how people can be manipulated by being induced to engage in specific comparisons.

### **Comparisons in social settings**

One of first theories of modern social psychology was Festinger's (1954) theory of social comparison processes. It was a seminal attempt to understand interindividual processes by identifying their underlying intraindividual, cognitive dynamics. Its first hypothesis identifies individuals' needs to evaluate their opinions and abilities. More important, its second hypothesis is about social facilitation. Specifically, it claims that "to the extent that objective, non-social means are not available, people evaluate their opinions and abilities by comparison (.) with the opinions and abilities of others (p. 118)." Festinger has not only pointed at the readiness to be influenced by others, he has also pointed at the

determinants that initiate or prevent comparisons. In particular, he has identified the difference between one's own characteristics and those of the comparison person to be a main obstacle for comparisons. Importantly, he has identified a motivational component that he calls a "unidirectional drive upward" which applies if abilities are compared, but not if the comparison is about opinions. Finally, comparisons are terminated if they turn out to be unpleasant.

Festinger's (1954) theory was the starting point of a social psychology that is based on cognitive operations. Even if their structure was more in the focus than their temporal dynamics, social judgments occupied a focal point in social psychology (s. Suls & Wills, 1991). As Festinger has aptly observed, these judgments were driven by two motives that might occasionally stand in conflict: truth and positive feelings about oneself. Under the label "downward comparison" the latter has subsequently (e.g., Wills, 1981, 1987) stimulated a new research program that proved to have even therapeutic implications (Taylor & Lobel, 1989).

In social-cognition research, comparative judgments were embedded in more basic mechanisms of priming. Specifically, the activation of information was found to influence the generation of judgments. However, this influence may occur in two directions, assimilation and contrast, depending on the similarity of the target and the prime. That is, if information about others is sufficiently similar to the target, it may serve as a cue to elicit related information that will become the basis of the judgment, which will become more similar. However, if the accessible information is very dissimilar to the target, it may serve as a standard and generate a contrast effect (Sherman).

Similarity may also be created by superordinate categories. That is, if a category is activated that causes the target and the standard to belong to together, the target will be judged to be more similar. However, if the context suggests that the two belong to different categories, they will be judged to be more different. As a consequence, the same piece of information can produce both assimilation and contrast effects.

Schwarz and Bless (1992; s.a., Bless & Schwarz, 2010) have proposed an "inclusion/exclusion model" that describes the underlying mechanisms. It assumes that evaluative judgments require mental representations of both the target of judgment and a standard against which the target is evaluated. Both representations draw on information that is most accessible at the time of judgment. The degree of accessibility. However, the way accessible information influences the judgment depends on its use. If the information is used in forming a representation of the target, assimilation will occur such that the features in the representation of the target result in a corresponding representation and, as a consequence, in a corresponding judgment. The size of the assimilation effect is assumed to increase with the amount and the extremity of relevant information that is included in the representation of the target.

According to the model, contrast effects can take two forms. First, excluding a corresponding attribute results in a less converging representation of the target and hence in a less converging judgment. Like assimilation effects, this subtraction-type of contrast effect is based on changes in the representation of the target and therefore limited to evaluations of this specific target. Subtraction-based contrast effects are assumed to increase with the amount and extremity of converging information that is excluded from the representation of the target.

Second, the inclusion/exclusion model states that if information has been excluded from the representation of the target it may also be used in constructing a representation of a standard. If this information is converging, it results in a more positive representation of the standard, relative to which the target is evaluated more differently. These comparison-based contrast effects generalize to all targets to which the standard is applied. Their size increases with the amount of converging information that

is used in constructing the standard. Thus, the model predicts the direction (i.e., assimilation vs. contrast) and size of context effects, as well as their generalization across targets.

While assimilation versus contrast can be elicited by a variety of variables (s. Bless & Schwarz, 2010), one determinant seems to be particularly important. It is the categorization of the standard that allows the target to be subsumed or not. In an early study, Bless and Schwarz (1998) had asked participants different questions about their political knowledge, one of them about Richard von Weizsäcker who was a highly respected (formal figure head) president of Germany and a member of the Christian Democratic Union (CDU), a party that was held in very low regard at the time. Depending on conditions, the participants were either asked about the name of the party Weizsäcker had belonged to for more than 20 years or about his office that sets him aside from party politics. As predicted by the inclusion/exclusion model, participants' subsequent evaluations of Weizsäcker's party were more positive if the preceding question triggered his inclusion in, rather than his exclusion from, the representation they had formed of his party.

### **The ease of forming comparative judgments**

This research shows that contrast effects may not only be the results of outright comparisons. They may also be caused by selective accessibility. To trigger and facilitate comparisons, commensurability must be created. Popular knowledge has it that you cannot compare apples with oranges. Much less should it be possible to relate buying a car to forgoing an overseas family vacation. In economics, however, such comparisons are believed to be the basis for the assessment of utility. Under the name of "opportunity costs" (e.g., Rieskamp & Hoffrage, 2008), economic agents are assumed to compare what they are willing to give up or do without if they acquire a new good. Opportunity costs are often defined as "the next best choice" or the "loss of other alternatives when one alternative is chosen." Thus, the value of the loss or the waiver can be taken to assess the utility of a purchase.

Psychologically, however, it is highly questionable if such a comparative assessment is commonly taking place. To be sure, important decisions that involve major expenses may trigger purchases one has to renounce. In daily life, however, assessing the opportunity costs to generate a comparison standard seems to be rare. For once, the "next best alternative" is not really a loss but can be acquired as well. More important, perhaps, is the fact that preferential comparisons need a common dimension on which the target and the standard can be allocated. This may require some effort and involve ambiguities that need to be resolved. If a decision has to be made between a new kitchen and a family vacation involves comparisons on many dimensions that need to be weighed in order to enter into a global preferential decision.

At the same time, providing such a dimension greatly facilitates comparisons and induces people to reach desired conclusions. Perhaps, the most effective facilitator of comparisons is the dimension of money. On an interval scale with a natural zero point, the value of a good can be described with any desired numerical exactness. However, the result of comparing different targets on the same value dimension may have been caused by different characteristics and preferences implies a comparison of these characteristics. If I like alternative A better than B, it is not necessarily due to the fact that A has more of what I like than B. Instead, it may be the case that the two alternatives have different characteristics and I like that of A more than that of B, which may require some serious deliberating.

Thus, the easiest way of comparing is when the same target causes different losses. Thus if the same product is cheaper in outlet A than in outlet B, the evaluator may consider a purchase from A good deal. Of course, B may try to reduce the commensurability by pointing at peripheral characteristics that may revalue the product, such as the location of the shop or consulting and support. Therefore, the ease of comparison can be further increased by comparing the target with itself at different times.



Such an intra-target comparison typically occurs on a temporal dimension such that the current price has been reduced compared to a higher price some time ago. Alternatively, the current price is offered for only a limited period of time and that it will be increased in the future. Advantageous monetary comparisons are often advertised as “saving”. Ironically, its definition as “income not spent” is turned into its opposite “saving by spending”. Obviously, the arbitrary use of comparison standards combined with the ease of comparing on the joint evaluative dimension provides an ideal instrument of social influence. Thus, even if the recipients are convinced to have achieved a “good deal”, it has induced a type of gullibility that was produced by directing the evaluation from the characteristics of the target to the relative utility of the purchase.

### **Comparative judgments in the Ultimatum Game**

Such judgments and decisions deviate from assumptions of economic rationality if the standard is merely a reference point but not an actual alternative to be chosen. It is therefore. It is therefore not surprising that comparisons play a major role in the so-called anomalies in micro economics (Thaler, 1988). Perhaps best known is the “ultimatum game”, where players have to agree on the distribution of a given sum of money. Specifically, proposers suggest the proportion that they want to keep for themselves and the resulting proportion for the responders. If the responder agrees, the money will be distributed as proposed. If, however, the responder does not accept the proposed distribution, nobody will receive anything.

From the vantage point of economic rationality, responders should accept any offer that gives them a share above zero. However, numerous studies (s. Güth, 1995) have demonstrated that offers resulting in shares below 40 percent are frequently rejected. This “anomalous” and irrational behavior has been explained by invoking the concept of fairness (Fehr & Schmidt 1999). Specifically, it has been argued that proposers violate the social norm, which should be sanctioned to maintain it.

Whatever explanation is preferred, the irrational choice is always driven by a comparison standard, namely 50 percent standing for an equal distribution. It generates a conflict between the rationally prescribed acceptance of anything above zero and the relatively disadvantageous outcome.

More generally, however, comparative assessments can be aggravated if relative judgments are in conflict with the possibility of consumption, which is the basis of rational choice. This will be intensified if the responder’s focus is directed on the consumatory consequences of deal. In other words, if responders’ are primed with what they can do with the money, its relative value is less important.

This was shown in two studies (Zürn & Strack, 2017) in which participants in the Ultimatum Game were induced to think about what they would do with the money (or a corresponding gift voucher) they were to earn. Specifically, to activate specific consumption opportunities, these participants had to contemplate for 1 min what they could buy with the gift voucher. Therefore, we presented them with the ten main product categories offered by Amazon.de and asked them to select the category from which they would most likely buy something.

We predicted that responders would be less likely to engage in comparative assessments and accept more disadvantageously unequal offers if consumption was primed and therefore more accessible than in the control condition where the deviation from the standard was assumed to be more important. This results indicated that this was the case. That is, the acceptance rate of responders for whom the consumption was primed was significantly higher than that for the no-priming control group.

In a second, replication study, the conflict between the two types of judgments (consumption vs distribution based) was assessed by recording responders’ response latencies. Indeed, responders for

whom the consumption possibilities had been primed took longer to decide than the no-priming control group. That is, if conflict is an indication of reduced gullibility, aggravating comparative judgments may be a means in that direction.

In another set of experiments (Zürn, et al., unpublished) we manipulated their difficulty in a more direct fashion. Specifically, we told responders in the Ultimatum Game that the game would be played with foreign currencies whose value would be converted into euro cents. As a consequence, both the amount to be distributed by the proposer and the share offered to the respondent were uneven numbers, which made it difficult to calculate the exact proportion or deviation from the mean. This manipulation was innovative because in previous publications, the full amounts were typically reported as multiples of ten, which made deviations from the mean rather obvious.

As expected, while we replicated the typical rejection of unfair offers, the response latencies were significantly increased for the converted currencies. Moreover, responders were more likely to accept offers below an equal distribution if the amount could be easily converted into proportions than if this was more difficult.

## **Conclusions**

In summary, I am arguing that the human tendency to accept one of many judgmental alternatives depends not only on their convincingness but also on the ease with which they can be generated. As a consequence, offering heuristic routes affects the believability of various outcomes and serves as a powerful means of social influence. Heuristics are broadly defined in relation to some more difficult (systematic) way of processing while the types of simplification are numerous and even unlimited.

In this chapter, I argue that that a basic judgmental element may contribute to facilitation, namely the accessibility of a standard and the ease of comparison. This has been recognized as a powerful means of influence in the marketing domain. Beyond that, the ease of comparison deserves a more basic exploration as a fundamental mechanism of gullibility and social influence.

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