

If it walks like fairness, and quacks like fairness, it sometimes is fairness: instrumental and true fairness in bargaining

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To what extent are bargainers motivated by fairness and self-interest? To answer this question, we will review previous research on ultimatum bargaining. Based on this review, we argue that it is relevant to distinguish between instrumental fairness and true fairness. We speak of instrumental fairness when bargainers use fairness to maximise their own outcomes. In contrast, true fairness is linked to a concern for the outcomes of one's opponent. Our review reveals four moderators that affect the use of the two types of fairness: (a) the social value orientations of the bargainers, (b) the emotions bargainers communicate, (c) the valence of the bargaining outcomes, and (d) the initial distribution of property. (*Netherlands Journal of Psychology*, 65, 155-162).

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Bargaining can be described as 'the process whereby two or more parties attempt to settle what each shall give and take, or perform and receive, in a transaction between them' (Rubin & Brown, 1975, p. 2). This definition illustrates that bargaining is a mixed-motive situation (Komorita & Parks, 1995; Pruitt & Carnevale, 1993), where parties have their own interests but realise that they need the cooperation of their opponent to secure these interests. So how do people rea-

lise their goals in bargaining? According to the motivated bargaining approach, bargaining behaviour can be best understood by assessing what motivates bargainers (De Dreu, Beersma, Steinel, & Van Kleef, 2007; De Dreu & Carnevale, 2003). In this respect, prior research on bargaining has identified two main motivations: Self-interest and fairness. Whether people are primarily motivated by self-interest or by fairness has been the topic of many studies that partly reflect a debate between insights derived from economics and insights derived from social psychology. Whereas economic theory is essentially built on the assumption of self-interest, social psychology has paid great attention to the importance of fairness.

In the following, we elaborate on the importance of self-interest and fairness by discussing research on ultimatum bargaining. We restrict our review to this domain because ultimatum bargaining, in our view, provides a perfect para-

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digm to study self-interest and fairness. One could even say that the ultimatum bargaining game (Güth, Schmittberger, & Schwarze, 1982) has become the place (and sometimes even battleground) where economists and psychologists meet to pit self-interest against fairness (see also Van Dijk & Tenbrunsel, 2005).

Ultimatum bargaining

The ultimatum bargaining game was developed by Güth et al. (1982), and essentially describes the final phase of bargaining, i.e., where bargainers make a 'take it or leave it' offer to their opponent. In this game, two players – an allocator and a recipient – have to distribute a certain amount of money. The allocator first offers a proportion of the money to the recipient, who then either accepts or rejects the offer. If the recipient accepts, the money is distributed in agreement with the allocator's offer. If the recipient rejects, both players get nothing. With its simple structure, the ultimatum bargaining game is highly suited to study motivated bargaining behaviour, and thereby the importance of self-interest and fairness. To illustrate, suppose that the allocator and recipient can divide 10 euros. What would self-interested bargainers do? If the allocator and recipient would only be motivated to maximise their own outcomes, the result of this game should be that the allocator only offers 1 cent to the recipient, and that the recipient would accept this low offer. After all, this one cent would be more than what the recipient would obtain should he/she reject the offer (i.e., nothing). The prediction of what the bargainers should do if they were only motivated by fairness seems equally simple: The allocator should offer the recipient half of the money (i.e., 5 euros). In the absence of any differences regarding prior inputs (cf. Walster, Walster, & Berscheid, 1978), such an equal division seems to be the fairest solution (see also Messick, 1993).

One might expect that with such a clear paradigm, and such clear predictions, it should not take too many studies to settle the issue on what motivates bargainers. Indeed, the first studies that were conducted with this paradigm appeared to be clear-cut: The findings provided strong support for fairness and not for self-interest. Allocators, for example, often make equal splits and rarely make one-cent offers (see for overviews e.g., Camerer & Thaler, 1995; Güth & Tietz, 1990; Handgraaf, Van Dijk, & De Cremer, 2003; Thaler, 1988; Van Dijk & Tenbrunsel, 2005). Subsequent studies, however, indicated that it was too early to declare fairness as the winner. In particular, the argument was made that equal offers could, at least partly, have a strategic underpinning. That is, allocators may only offer an equal share because they fear that low offers will be rejected. Below we will first review studies on the effects of information

asymmetries and power differences that corroborated this view.

Information asymmetry and power differences: fear of rejection as an alternative explanation

The studies on information asymmetries basically investigated how allocators would decide if they felt that the recipient would not be able to recognise an offer as an unfair offer. Van Dijk and Vermunt (2000, Experiment 1), for example, designed an ultimatum game in which bargainers had to divide 100 chips that were worth twice as much to the allocator than to the recipient. In addition to this, they manipulated the distribution of information. The allocators were informed that the recipient knew about this differential value (symmetric information condition) or that the recipient did *not* know about the differential value (asymmetric information condition). The results indicated that the distribution of information strongly affected the offers. In the symmetric information condition, allocators tended to compensate for the differential value, by allocating twice as many chips to the recipient than to themselves. In the asymmetric condition, things were different. There, many allocators offered to split the chips equally; i.e., they did not compensate for the differential value. Note that by offering an equal split of the chips, these allocators made an offer that seemed fair to the recipient, but which can hardly be seen as truly fair because it means that the allocator ends up with twice as much money as the recipient. But because it seemed fair to the recipient, the allocator did not have to fear that the offer would be rejected.

These findings are important for the current discussion on the importance of fairness, because they suggest that bargainers may strategically use fairness (see for similar findings e.g. Kagel, Kim, & Moser, 1996; Croson, 1996; Pillutla & Murnighan, 1995; Straub & Murnighan, 1995). More specifically, they indicate that if 'it walks like fairness, and quacks like fairness', it does not necessarily have to be true fairness that you see. In this case, the findings suggest that it would be more appropriate to conclude that self-interest may disguise itself as fairness. Or, as Camerer and Thaler (1995) put it, people act as 'sophisticated maximisers.'

A similar picture emerges from the research on power differentials in ultimatum bargaining. Suleiman (1996), for example, introduced the *delta game*; a modified version of the ultimatum game. In this game, rejection of the offer does not imply that both players end up with nothing, as they do in the traditional ultimatum game. Instead, the offer is multiplied with a factor delta, with $0 \leq \delta \leq 1$. Thus, for $\delta = 0$, the delta game is identical to the standard ultimatum game (the recipient and the allocator both end

up with nothing). But when δ increases, the effect the recipient has on the outcomes of the allocator diminishes: The recipient becomes relatively less powerful and allocators have less to fear when making low offers. For example, in the case of $\delta = 0.8$, rejection means that the offer is only diminished by 20%. With this modification, Suleiman showed that as δ increased, offers to the recipient became less generous. These findings too, are in agreement with the notion that positive offers may reflect fear of rejection. If there is less to fear, as is the case when δ increases, offers go down.

Similar findings were reported in yet another variation of the ultimatum game, the *unequal punishment game*, also referred to as the *lambda game* (Fellner & Güth, 2003). In this game, the consequences of rejection are unequal for the recipient and the allocator. After rejection of the offer, the allocator's share of the offer multiplied by λ (with $0 \leq \lambda \leq 1$), while the recipient's share is multiplied by $(1 - \lambda)$. For low levels of λ , the consequences of rejection are thus high for the allocator, and low for the recipient. For high levels of λ , the consequences of rejection are low for the allocator and high for the recipient. Like the delta game, the unequal punishment game allows one to manipulate the consequences of rejection (low vs. high). For the current purposes, it is relevant to note that the results found by Fellner and Güth (2003) resembled the findings of Suleiman (1996): When the consequences of rejection for the allocator are reduced (i.e., with increasing lambda), offers go down.

True fairness versus instrumental fairness

So what should the conclusion be from the findings we have presented above? Given all this evidence, one might now be tempted to conclude that true fairness does not exist in ultimatum bargaining (see e.g. Pillutla & Murnighan, 2003). After all, reduce the fear of rejection, either by introducing information asymmetries or by reducing the consequences of rejection, and offers go down. In this article, we will argue, however, that such a conclusion would be premature and in fact inaccurate. The finding that offers on average go down does not imply that true fairness will never play a role. It does suggest that it is important to try and distinguish true fairness from 'self-interest in disguise', or as we prefer to put it: To distinguish true fairness from instrumental fairness.

True fairness, as we define it, would be immune to manipulations of information and power. For example, if one were to offer an equal split if the consequences of rejection are high, one should also do so when the consequences of rejection of one's offer were low. We will use the term *instrumental fairness* when bargainers are primarily motivated to appear fair to their opponent, for example because they fear that unfair offers may be

rejected. In such cases, the making of a seemingly fair offer is instrumental in maximising their own outcomes (i.e., fairness serves self-interest).

Based on this distinction we will argue and show that the documented effects of information and power can be moderated and that sometimes instrumental fairness will dominate, whereas on other occasions true fairness will dominate. More specifically, we will discuss how the use of instrumental versus true fairness is dependent on:

- 1 The social value orientations of the bargainers (Personality)
- 2 The emotions bargainers communicate (Emotions)
- 3 The valence of the bargaining outcomes (Valence)
- 4 The initial distribution of property (Property rights)

Personality

The first possibility that may come to mind when considering the instrumental versus true fairness distinction is whether personality characteristics play a role. Are some people more instrumental than others? Do some people have a more genuine concern for fairness than others? In this context, the most relevant personality characteristic is referred to as 'social value orientation.' Social value orientations are stable individual differences in how people evaluate outcomes for themselves and others in interdependent situations (Kuhlman & Marshello, 1975; Messick & McClintock, 1968; see for a recent overview e.g. Van Lange, De Cremer, Van Dijk, & Van Vugt, 2007). Most people can be classified as prosocials, competitors, or individualists (Van Lange, 1999). Prosocials tend to strive for maximising joint outcomes and equality in outcomes. Individualists seek to maximise their own outcome, regardless of other's outcome. Competitors are motivated to maximise the difference between outcomes for self and other. These last two – individualists and competitors – are usually taken together and defined as proselfs (Van Lange & Kuhlman, 1994), because they both assign a higher weight to the own outcomes than to the outcomes of others.

Given these descriptions of what characterises proselfs and prosocials, it seems a reasonable suggestion that prosocials will show a stronger preference for true fairness, whereas proselfs are the most likely candidates to use fairness for more instrumental reasons (i.e., only use fairness if it serves the own interests). This proposition was tested in Van Dijk, De Cremer, and Handgraaf (2004). In a first experiment, they manipulated the distribution of information, along the lines that we described earlier (symmetric information versus asymmetric information). In a second experiment, the power posi-

tions of the bargainers (i.e., the consequences of rejection) were manipulated by employing the delta game. The results of both experiments corroborated the view that proselves were the ones who used fairness for instrumental reasons. That is, they were the ones who lowered their offers when they thought the recipient was not aware of the fact that chips were worth more to the allocator, and they were the ones who lowered their offer when the consequences of rejection were low. In contrast, the prosocials were unaffected by the manipulations of information and power: They made sure that the outcomes were distributed equally, no matter what. Note that another way of describing these findings is by concluding that that offers of prosocials and proselves did not differ in the case of symmetric information (Experiment 1) or when the consequences of rejection were high (Experiment 2). Again, this fits with our current framework, because under these conditions, true and strategic fairness align.

These findings provide first evidence for the use of distinguishing true from instrumental fairness. Moreover, these findings indicate that it would be as inaccurate to say that bargainers are predominantly motivated by fairness as it is to say that (sophisticated) self-interest rules the world. Both motivations play a role, and in this study the motives seemed to belong to different kinds of people.

Emotions

The findings on personality characteristics that we discussed above show that bargainers' own characteristics may determine how they bargain. But of course, in bargaining, people are confronted with their opponent. To what extent is the relative importance of instrumental versus true fairness dependent on what you know about your opponent? Bargaining can be an emotional, and sometimes even a heated process. Recently, Van Dijk, Van Kleef, Steinel, and Van Beest (2008) investigated how emotions shape the bargaining process. In particular, they studied how allocators respond when the recipient communicates anger or happiness. To study this, participants in an ultimatum game, all in the role of allocator, first answered a few general questions about how they viewed bargaining (e.g., 'Strategy is important in negotiations,' and 'In negotiations I quickly try to reach agreement'). Subsequently, this information was (supposedly) sent to the recipient, who then reacted either by communicating anger or happiness. The results indicated that this communication strongly affected the bargaining behaviour. For example, in one of their experiments, Van Dijk et al. (2008, Experiment 2) used a manipulation of information similar to the information studies we discussed before (e.g., Kagel et al., 1996; Pillutla & Murnighan, 1996). Participants were

asked to bargain over 100 chips that were worth twice as much to the allocator as to the recipient. In the symmetric information conditions, participants were informed that the recipient was aware of this value difference. In the asymmetric information conditions, participants learned that the recipient was not aware of the difference. Before making their offer, but after the manipulation of the recipient's emotion (anger vs. happiness), participants were asked to inform the recipient about the value of the chips. They could either do this truthfully, or they could misinform the recipient by stating that the chips were of equal value. Interestingly, the data showed that participants predominantly deceived the angry recipient whereas they truthfully informed the happy recipient about the differential value of the chips. Moreover, after having deceived the angry recipient into believing that chips were of equal value, participants subsequently tended to offer the angry recipient only half of the chips, an offer that would indeed seem fair to the misinformed recipient. In contrast, participants compensated for the differential value when facing the happy recipient.

It thus seems that participants were more inclined to display true fairness when facing a happy recipient: They did not lie and they compensated for the differential value of the chips. When facing an angry opponent, participants were more likely to respond strategically, and even resort to a deceptive strategy that many would call unethical (see Bok, 1978; Boles, Croson, & Murnighan, 2000; O'Connor & Carnevale, 1997; Steinel & De Dreu, 2004). After having deceived their opponent, they made a seemingly fair offer. Instrumental fairness would best describe such behaviour.

In a subsequent experiment, Van Dijk et al. (2008, Experiment 3) obtained similar findings when they manipulated the consequences of rejection by using a delta game (Suleiman, 1996; Van Dijk & Tenbrunsel, 2005). In this experiment, δ was either set at 0 or at 0.9. Half of the participants thus faced a typical ultimatum game ($\delta = 0$), where both players would end up with zero outcomes if the recipient rejected the offer. The other half faced a setting where upon rejection, the offer would only be reduced by 10% ($\delta = 0.9$). With this setup, it was again demonstrated that the offers of the participants facing a happy recipient were more indicative of a preference for true fairness: Participants predominantly offered an equal split, even when the consequences of rejection were mild. But when facing an angry opponent, participants seemed to adhere to instrumental fairness: They only offered an equal split when the consequences of rejection were high ($\delta = 0$). When the consequences of rejection were mild, they lowered their offers to the recipient.

Taken together, these findings suggest that, in addition to personality characteristics, the choice between true fairness and strategic fairness is

also partly affected by who we bargain with. We react strategically to opponents who communicate anger, but we are more likely to make truly fair offers to those who communicate a positive emotion like happiness. Although at present it is too early to provide a definite answer as to why anger is met with strategic fairness and happiness with true fairness, it seems likely that the answer should be sought in the (implicit) message that both emotions communicate. Anger, being a negative emotion, may communicate the possibility of rejecting an offer (anger leads to rejection an offer). In contrast, happiness, being a positive emotion, may communicate the possibility of accepting an offer (happiness leads to accepting an offer). Because strategic fairness appears to be more connected to the motivation to prevent rejection, it seems plausible that emotions that directly convey a message of possible rejection (i.e., anger) are more likely to evoke strategic fairness.

Valence

It may be noted that in all the ultimatum bargaining studies we have reviewed so far, the parties involved had to distribute positive outcomes. In the typical ultimatum game study the allocator and recipient basically face a situation where the prospects are positive; they start out with nothing, and only have to decide how to distribute the money that the experimenter hands them. Not bad. In reality, however, people often have to bargain over negative outcomes and decide, for example, who pays what. Will the valence of outcomes affect the bargaining process? Will people be more or less fair when they have to bargain over negative outcomes than when bargaining over positive outcomes? Will it affect whether bargainers base their offers on true fairness or instrumental fairness? To investigate these questions, Leliveld, Van Beest, Van Dijk, and Tenbrunsel (2008) designed a negative valence ultimatum game. In this game, the allocator and recipient are each first endowed with a certain amount of money, and learn that the two of them have to pay back a certain amount, with the question of course being 'who pays what?' In this setting, the allocator and recipient may each start out with for example 10 euros, and then learn that the allocator has to make an offer on how to divide the loss of 10 euros. If the recipient accepts the offer, their outcome will be their initial 10 euros minus the amount each of them has to pay according to the offer. If the recipient rejects the offer, both players lose their initial 10 euros (cf. Buchan, Croson, Johnson, & Wu, 2005). Note that the payoff structure is identical to the traditional positive valence ultimatum game where two parties bargain on how to distribute 10 euros: In both the positive and negative valence ultimatum game, the players for example

end up with zero outcomes if the recipient rejects the offer.

So how does all this affect the importance of fairness? In a first experiment, Leliveld et al. (2008) assessed the importance of fairness by first presenting participants either a description of an unequal offer in the negative valence game or of an unequal offer in the positive valence game, and subsequently presenting them with an unobtrusive way to measure the accessibility of fairness. Research on coalition bargaining (Van Beest, Van Dijk, De Dreu, & Wilke, 2005) had already shown that the accessibility of the fairness concept can vary depending on the social situation (see also Van Prooijen, Van den Bos, & Wilke, 2002). In a similar vein, Leliveld et al. (2008) were able to show that the fairness concept becomes more accessible in the negative valence game. This was established by presenting participants with a word completion task (derived from Van Prooijen et al., 2002). In this task a number of uncompleted target words can be completed as a fairness-related word or a non-fairness related word. They were presented with 20 uncompleted words. Six out of these 20 words were the target words. For example, one of the target words was the incomplete (Dutch) word '-nrecht', which can be completed as 'onrecht' (unjust), but also as 'aanrecht' (kitchen sink). Interestingly, the results indicated that the fairness construct was more accessible in the negative valence ultimatum game than in the positive valence ultimatum game. Thus, participants were especially likely to complete the target words as a fairness-related word after reading the description of the negative valence game.

This does not necessarily mean, of course, that it is true fairness that is evoked in the negative ultimatum game. After all, based on the current insights one could also claim that the increased accessibility of the fairness construct in the negative domain would reflect increased accessibility of instrumental fairness concerns. A subsequent study (Leliveld et al., 2008, Experiment 3) did show, however, that it is true fairness that is evoked in the negative-valence ultimatum game. In that study, the unequal punishment game (Fellner & Güth, 2003) was used to manipulate the consequences of rejection. In the positive domain, Leliveld et al. replicated the effect that is typical for manipulations on the consequences of rejection and indicative for the instrumental use of fairness: Participants made lower offers when the consequences were low rather than high (cf. Suleiman, 1996). In contrast, in the negative domain, offers were not affected by the consequences of rejection. Whether the consequences were low or high, participants predominantly offered to split the loss equally, suggesting that offers are motivated by true fairness concerns.

So what accounts for the preference for true fairness in the negative domain? Leliveld et al. (2008) explained these findings on the basis of

the do-no-harm principle. The do-no-harm principle states that people are reluctant to benefit themselves if this implies that they harm others (Baron, 1995; 1996; Van Beest, Van Dijk, & Wilke, 2003; Van Beest et al., 2005). Because inflicting a loss can be considered to be more harmful than withholding a gain, this would indeed explain why bargainers in the negative valence ultimatum game are so reluctant to favour themselves over the recipient.

Property rights

In ultimatum bargaining, the allocator and recipient bargain over property, i.e., about who will eventually own what. It is interesting to see that in the typical study on ultimatum bargaining, nothing is said about the ownership of the property *before* the negotiation starts. Participants simply learn that there is a certain property over which they have to bargain. In real life, the negotiated properties may initially be held by one of the two parties. For example, in the bargaining process that takes place between buyers and sellers, buyers own the money and sellers own the products before the bargaining begins. Would the initial distribution of property also affect the use of instrumental versus true fairness? This was what was investigated in Leliveld, Van Dijk, and Van Beest (2008). To investigate this question, new adaptations of the ultimatum game were introduced. In what was termed the 'taking ultimatum game', participants learned that initially the property was assigned to the recipient, and then had to make an offer by indicating how many of these chips he/she would take from the recipient. In the 'giving ultimatum game' the property was initially assigned to the allocator, and the participants then had to make an offer by indicating how many of these chips they would give to the recipient. Note that these variations did not alter the structure of the game. In both versions of the ultimatum game, the consequences were identical and similar to the traditional ultimatum game: If the recipient rejected the offer, both players would end up with zero outcomes.

The results indicated that the participants, all in the role of allocator, were especially likely to make high offers to the recipient in the taking game, that is, when the property was initially assigned to the recipient. Again, these findings were explained in terms of the do-no-harm principle by reasoning that allocators are reluctant to infringe on the initial property rights of the recipient when the property was initially assigned to the recipient. Moreover, the data indicated that these allocations were not affected by manipulations of information (Leliveld et al., 2008, Experiment 1) nor by the consequences of rejection (manipulated by varying the lambda in an unequal punishment game; Leliveld et al., 2008, Experiment 2).

Concluding remarks

Taken together, the selective review and results we have presented here not only suggest that it is meaningful to distinguish between self-interest and fairness, they also highlight the importance of distinguishing between instrumental fairness and true fairness. Fairness can have its strategic underpinnings, but on many occasions, people show a genuine concern for fairness, even in competitive settings like bargaining.

We realise that by focusing on ultimatum bargaining, we have presented the reader a narrowly defined setting. This approach has its advantages because it enabled us to provide a focused discussion of the distinction between strategic and true fairness. For this purpose, it is good to have a setting in which both motives can be clearly distinguished. But, naturally, such a controlled setting also has its limitations. Real life will often contain situations in which it is more difficult to disentangle both motivations. This does not, of course, mean that these motivations would not exist outside the controlled laboratory settings we discussed here. For example, when bargaining and considering whether or not to accept a job offer, applicants may be motivated by both self-interest and (true) fairness concerns (see e.g., Bazerman, Blount White, & Loewenstein, 1995). Moreover, based on the current framework, we would suggest that even then it is sometimes possible to distinguish between the motives. For example, when the consequences of negotiation impasse are low, or when good alternatives to the job offer are available, it may be expected that personality differences (such as social value orientation) become more predictive of bargaining behaviour. In future studies, it may be useful to incorporate such settings and to take these lab insights to the field.

In this respect it may also be worthwhile in future research to incorporate other features of real-life. It may be noted that in the studies we discussed, participants always faced a single bargaining setting in which they had to bargain with others they did not know. In real life, people often face situations in which they repeatedly bargain with others they do know. In such settings, new dynamics (e.g., due to reputation effects) may emerge that may bear on the current discussion. For example, it is conceivable that reactions become more strategic when people know that the current negotiation is one of a series of negotiations. In such settings it also becomes relevant to investigate the recipient behaviour. In the studies we discussed the main interest was in trying to explain allocator behaviour (i.e., why would they make high offers?) In repeated settings, however, recipient's behaviour may be motivated by strategic concerns as well (e.g., recipients may then reject low offers in order to induce allocators to make higher offers in the future; see also Nowak, Page, & Sigmund,

2000). Studies along these lines would definitely help to bridge the gap between the sterile ultimatum settings and the more muddy reality of daily life.

That self-interest and fairness should be seen as separate motivators has been recognised before. For example, the social utility model (Blount, 1995; Loewenstein, Thompson, & Bazerman, 1989; Messick & Sentis, 1985) explicitly distinguishes between an absolute component and a comparative component. The absolute component refers to the utility people derive from increasing their own outcomes. The comparative component is generally interpreted as the utility that people derive from obtaining fair outcomes. What the current studies show is that – whereas on a conceptual level self-interest and fairness can be clearly distinguished – in many situations

self-interest and fairness are intertwined. As a consequence, one may sometimes mistake self-interested behaviour for fair behaviour. In a strategic setting like bargaining, people may realise that agreement can sometimes only be reached by making attractive offers that seem fair to the opponent. Such considerations and strategic reasons are captured by the concept of instrumental fairness. As the studies on asymmetric information and power differences show, however, it is possible to distinguish instrumental fairness from true fairness. With the help of these paradigms, and the moderating factors that we introduced, we were able to show that indeed both types of fairness operate in bargaining. By doing so, we were also able to show that self-interest and (true) fairness are distinct but sometimes also highly connected motivations.

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