

Integration Through Redefinition: Revisiting the Role of Negotiators' Goals

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Accepted: 16 June 2021
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Abstract

Effective negotiation rests in part on generating integrative agreements, or agreements advancing parties' interests through generating joint gains. Theorists have outlined multiple possibilities to achieve integrative agreements (Pruitt in Negotiation behaviour, Academic Press, New York, 1981; Carnevale in: Deutsch, Coleman, Marcus (eds) Handbook of conflict resolution: theory and practice, Jossey-Bass, San Francisco, 2006), but negotiation research relies disproportionately on studies of one method of integration—making efficient tradeoffs on existing issues. The current studies examine integration through redefinition—modifying the issues under discussion. Doing so encourages revisiting the role goals play in negotiation. Study 1 found that positive and negative bargaining zones are not just indicators of agreement rates, but also cues to consider redefining issues. Specifically, negative bargaining zones spurred attempts to create value that positive bargaining zones did not. Study 2 found that focusing on interests was useful for redefining issues, whereas focusing on ambitious targets was no better than focusing on reservation points. Implications for negotiation theory are discussed.

Keywords Negotiation \cdot Integration \cdot Bargaining zone \cdot Goal setting \cdot Interest pursuit

Published online: 24 June 2021

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1 Introduction

Foundational theories about negotiation discuss integration, or the attaining of parties' interests through generating joint gains, as a desirable goal (Follett 1940; Walton and McKersie 1965), and it remains as a focus in current research (Brett and Thompson 2016). Theorists have outlined multiple methods for generating integrative agreements (Pruitt 1981; Carnevale 2006), yet in empirical studies, the focus has been to study making tradeoffs on established issues. The current studies explore integration through the redefinition of issues, which leads to revisiting discussions of negotiators' goals.

Redefining issues is critical to explore because it is a feasible and consequential move negotiators can make in nearly all negotiation settings. However, the large base of experimental negotiation research (as reviewed by, for example, Brett and Thompson 2016) has generated conclusions that might be limited to situations in which negotiators are *unable* to redefine the negotiation problem. Redefining issues is not possible in the vast majority of experimental negotiation studies. This is because a common method used to study negotiation is to present participants with a payoff matrix that presents a fixed set of issues with fixed values for each option within each issue (Pruitt and Lewis 1975) and requires an outcome within the specified possibilities. We reviewed 330 negotiation studies from 1990 to 2005 identified in prior research (Jang et al. 2018) and found only 2% (i.e., 6 out of the 330) allowed for issues to be redefined.

What is so striking about making the redefinition of issues impossible in nearly all experimental research is that scholars established integration as important to negotiation nearly entirely through a focus on redefinition. Redefinition has long been seen as a central and even a necessary part of integration. Mary Parker Follett (1940) emphasized that creatively re-thinking what is under discussion is at the heart of integration. Follett described "the revaluation of desires" or what has come to be known as shifting from positions to interests (Fisher and Ury 1981). Redefinition features in many well-known pedagogical examples, such as about the sisters and the orange (House 1982; Kolb 1995) and the Sinai Peninsula (Fisher et al. 2011), which are about redefining issues such that there are two issues instead of one to discuss. Consequently, we explore integration through issue redefinition by first examining its role in the negotiation process, outlining mechanisms for integration, and examining when negotiators' goals might serve as antecedents.

1.1 Issue Redefinition is an Opportunity for Value Creation

Observational research shows defining and redefining issues to be an ordinary part of the negotiation process. Parties often describe issues differently (Putnam and Holmer 1992; Putnam 1994; Gray 1997, 2004, 2005). As a result, parties spend much of their time contesting issues and redefining issues so as to arrive at a mutually comprehensible and useful common ground (Gulliver 1979). For example, a negotiation between teachers and a school board demonstrates how issues develop over time (Putnam et al. 1986). The initial proposal from teachers included 14 issues. Just five



remained the same from this initial proposal to the final contract. Four issues were dropped. Two were subdivided. For instance, insurance was subdivided into a discussion of who would be covered (single or family) and how much teachers would pay. The remaining issues were adjusted by modifying their content and the options that were possible to consider. These observations suggest that issue redefinition is an ordinary, necessary, and continually available possibility in negotiation.

The possibility of redefining issues is pursued not just to form common understandings, but also to provide opportunities for creating value. Specifically, we consider the possibility of unbundling and adding issues as ways to redefine issues to create value. Unbundling involves splitting an issue into multiple components, with the idea that negotiating over components of an issue can create more value than negotiating it whole. Follett (1940) described the "breaking up of wholes" or what has come to be known as unbundling (Sebenius 1992) or issue decomposition (Hampson and Hart 1999). Unbundling manifests in countless ways, such as in the case of unbundling the returns from investments to allow variable percentages across the product life span to reflect time preferences of various investors (Lax and Sebenius 2002). Unbundling facilitates value creation by allowing for the removal of unnecessary costs or by creating new opportunities for exchange.

Adding an issue can create value by satisfying interests that are outside the initial scope of the negotiation. In Follett's (1940) example of the Dairymen's cooperative league, there was a dispute over who should be allowed to unload their goods first. Parties ultimately added the capability for a second party to unload goods at the same time. More recently, Sebenius (1983) discussed adding issues using an example of entrepreneur who was selling concession stands. One sold suntan oil, the other rain umbrellas. Separate buyers were found, but both were hesitant because sales would fluctuate with the weather. Sales in one stand would be high when it is low for the other. Combining the two negotiations should result in a more attractive proposition for both buyers, especially if they are open to a partnership. Adding issues facilitates value creation by increasing the total value available or by reducing risks.

Both unbundling and adding issues represent ways of redefining issues to create value and both are distinct from making tradeoffs, or the process of optimizing concessions across established issues. Both actions are inherently dyadic in nature, since agreeing to change the issues and agreeing to terms on a modified set of issues requires cooperation from all parties. Thus, our theorizing and measurement is at the dyadic level.

1.2 Reservation Points as Prompts to Redefine Issues

Redefining issues is an integral part of Walton and McKersie's (1965) theory of integrative bargaining. They posit that negotiators first exchange information about the problems they face, and with that information, define the joint problem to be addressed. Then, negotiators search for possible solutions to the joint problem, by inventing or discovering solutions. In the final step, negotiators evaluate the solutions against criteria, aiming to satisfy goals formed before the bargaining



process. Throughout this process, redefinition is an option negotiators can exercise as they reveal or discover information, generate possible solutions, and evaluate solutions, and it is central to joint problem solving: "The model assumes redefinition of the problem as the problem-solving process continues." (p. 138).

Redefinition is assumed because it is assumed negotiators will encounter difficulties identifying mutually satisfying solutions. Walton and McKersie did not specify the conditions for when redefinition is likely to take place, but their model implies the more challenging the bargaining situation, the more likely parties are to engage in redefining the issues. Redefinition is posited to occur when proposed solutions do not meet parties' goals. Further, redefinition generally involves effortful exploration and consideration of ambiguity, or information with multiple or unknown plausible interpretations (Daft and Macintosh 1981; Brugnach et al. 2008). The additional effort required to redefine is unlikely to occur without a prompt since people tend to make satisficing, rather than optimizing decisions (Simon 1947). This implies that negotiators who make or receive nonviable offers are most likely to redefine issues.

One of the largest influences on the ease or difficulty of identifying viable proposals is the size of the bargaining zone. A large positive bargaining zone implies a satisfying solution can be readily found with the initial definition of the issues. In such situations, parties likely have little reason to try redefining issues even if better outcomes were possible to find. Consistent with this thinking, negotiators have been observed to ignore information that could lead to better outcomes if they can meet their goals without it (Polzer and Neale 1995). Thus, large positive bargaining zones are unlikely to prompt parties to redefine issues.

In contrast, efforts to redefine should be more likely when the initial definition of issues and reservation points results in a negative bargaining zone. If parties receive proposals that are worse than their reservation points, they will necessarily fail to identify better proposals using the existing definition of the issues. At this point, they have a choice. They can, as conventional wisdom about reservation points (and so alternatives, BATNAs, and bargaining zones) indicates, walk away (Pinkley et al. 1994). But that conventional wisdom presumes reservation points are fixed aspects of the situation. In negotiations defined by payoff matrices, reservation points are indeed fixed aspects of the situation. However, in most negotiation situations, they are not fixed but instead are a function of how the negotiation is defined. As a result of reservation points (and so bargaining zones) being contingent on the definition of the issues, failing to find a satisfactory proposal is not just an indication to walk away. It can also serve as a prompt to one or both parties to attempt to redefine issues. While parties might blame their inability to find acceptable proposals on the other party or lack the motivation to find acceptable proposals, a perceived negative bargaining zone could also be a prompt to one or both parties to attempt to redefine the issues so parties can create sufficient value to meet their goals.

In between negative and large positive bargaining zones on the initial conceptions of issues are situations in which parties' initial definition of the issues provides a small positive bargaining zone. This situation is likely to be a mix of the first two,



with some finding viable proposals or some not, and so sometimes being prompted to attempt to redefine the issues.

Hypothesis 1 Negotiators are more likely to redefine issues when there is a negative bargaining zone compared to a small positive bargaining zone. Negative and small bargaining zones should result in greater redefinition compared to a large positive bargaining zone.

1.3 Redefining Issues is Guided by Interests

Bargaining zones may prompt negotiators to consider redefining issues, but they are not the only factor at work. For example, when confronted with a small positive bargaining zone, negotiators can be prompted to consider alternatives. If they focus on beating their reservation price, they may settle for an agreement that just betters it. A small bargaining zone is an in-between case that may or may not prompt negotiators to undertake the work of exploring redefined issues. Alternatively, if negotiators are actively thinking about their interests, this could be an additional prompt to redefine the issues under discussion. Longstanding discussions of the role of negotiators' desires or interests emphasizes that interests provide negotiators with flexibility (Spector 1995). This flexibility can be conceptualized as negotiators comparing proposals against their interests to see which best satisfies those interests. Alternatively, in ambiguous situations where the issues themselves are not given but need to be constructed, interests can be conceptualized as guides to redefining the issues. It is this second, richer role for interests that is so often described in qualitative research and practitioner discussions about negotiation: as guides to redefining issues. Thus, interests can serve as a motivation to redefine issues over and above the size of the bargaining zone and interests can also serve as a guide through ambiguous negotiation situations as parties attempt to find ways to create value. For both reasons, focusing on interests could lead parties to redefine issues.

In contrast to these discussions of interests as prompts and guides to redefining issues and creating value, the experimental literature far more often emphasizes the role of targets in creating value. In a typical experimental negotiation situation using a payoff matrix, a meta-analysis shows that parties given high, specific, and concrete targets achieve greater profit than those told to get the best offer they can (Zetik and Stuhlmacher 2002), making target goals an empirically supported approach to creating value. These findings have led to advice about setting an ambitious target before the bargaining process begins (e.g., Thompson, 2014). These findings are also consistent with goal setting theory (Locke and Latham 2002), and accompanying empirical research that demonstrates high, specific, and concrete goals leads to better performance when tasks are well understood. Pursuing targets is a legitimate and rational approach if all of the issues have been identified and appropriately valued (Keeney and Raiffa 1991) and, critically, the issues are fixed rather than subject to redefinition.

Interest and target goals differ in critical ways. Setting a high and specific target is predicated on committing to specific issues prior to bargaining. For example, setting a



target price of \$24 per widget means committing to "price per widget" as an issue in the bargaining process. If targets are set across multiple issues, they are still defined with respect to the type and total valuation of those particular issues, meaning targets are not independent of but instead commitments to a predefined set of issues. In contrast, an interest goal does not need to be set with respect to any issues. The lack of a commitment to any particular issues means a focus on interests provides flexibility to redefine issues.

If issues can be redefined, interests provide a basis and the specificity to generate and to assess the content of alternative issues. The prescriptive negotiation literature tends to emphasize that interests provide the flexibility needed to discard positions (Pinkley and Northcraft 2000; Fisher et al. 2011). We shift the focus: interests are useful because they provide a reason and the necessary specificity to seek out and to assess possible alternative issues or definitions of issues. In all the examples of redefining issues noted earlier (the school board, the Dairymen's league, and so forth), it was parties' interests that provided the information needed to redefine the issues. We note that redefining issues does not necessarily require joint consideration of one's own and counterpart interests. Focusing on one's interests to acquire a particular component (i.e., unbundling), or stating the need for a particular object outside the scope of the initial discussion (i.e., adding) can both lead to redefinition without consideration of counterpart interests. Proposals to unbundle and add issues are likely to be accepted if they are neutral or benefit the counterpart in some way. In contrast, a target provides little specificity with which to guide such a search for alternative definitions of the issues.

These lines of reasoning support the contention that the effectiveness of target and interest goals differ when issues can be redefined. Interests are more likely to foster redefining issues than targets when the negotiation situation is ambiguous. Targets are less likely to be useful in such negotiations because they offer little guidance for redefining issues, and instead focus negotiators to initially provided issues. As an additional point of comparison, we include a focus on reservation points. A focus on own reservation points is unlikely to spur high levels of performance (e.g., Galinsky et al., 2002), and so are used as a comparison point for examining interest and target goals. These considerations lead to the following hypotheses:

Hypothesis 2a Focusing on interests is likely to lead to greater issue redefinition than focusing on targets or reservation points in negotiations where issues can be redefined.

Hypothesis 2b Focusing on interests is likely to lead to greater likelihood of deals satisfying both parties' interests than focusing on targets or reservation points in negotiations where issues can be redefined.

2 Materials Development

To facilitate studying the redefinition of negotiation issues, we developed a simulation that allows that possibility. The simulation needed to provide negotiators with interests that are plausibly advanced by obvious issues while also allowing parties to



develop alternative issues. It needed to have enough specificity that the alternative issues, while not obvious initially, could be specified and quantified from the information within the exercise. It also needed to put the parties into roles that clearly provided them the autonomy and authority to redefine the issues.

Few existing simulations allow parties to redefine the negotiation problem. The two most common are the Texoil exercise (Goldberg 2008) and its variants as well as the Ugli Orange exercise (Lewicki et al. 1988) and its variants. While Texoil and the Ugli Orange exercise are useful, it is not always straightforward to score the outcomes of these simulations or calculate joint gains. To expand our research opportunities, we generated a situation with one main issue that was obviously under discussion, while providing sufficient information that parties could unbundle the main issue as well as add a second issue.

The BlueLights exercise is a quantifiable, two-party simulation that allows unbundling and adding issues. Briefly, the simulation involves Griggs, a company making a new kind of LED light, a BlueLight LED. The light contains 5 individual LED bulbs, which are valued at \$4 each, along with other parts and labor for a total \$30 production cost. The manager at Griggs is seeking to sell the lights to generate profits to fund a purchase of 20 high quality bicycles to reward the R&D team. Healey, an outdoor equipment company, is seeking to buy 2000 LED lights, ideally at \$24 each. Critically, Healey only uses individual LED bulbs. Because Griggs manufactures all parts of the light, it is possible to change the negotiation issue from lights to individual bulbs, which has greater profit potential. Furthermore, Healey happens to manufacture bicycles and has the opportunity to sell bicycles to Griggs directly, bypassing some costs associated with selling via distributors. Thus, parties can simply bargain over the price of the lights in a distributive fashion or they can redefine the issues (and so create value) by unbundling the lights and/or adding bicycles to their agreement. An example of unbundling involves Healey realizing they only need the bulbs, and precisely 6,000 of them. Since Healey can spend up to \$11 per bulb, any price per bulb between \$4 and \$11 represents a joint gain of \$42,000. Including components of the light that Healey does not need can reduce that joint gain. An example of adding involves Griggs realizing they can buy bikes directly from Healey. Given the gap between production costs and Griggs' budget, this represents an additional source of joint value worth \$21,360 if 20 bikes are exchanged within limits. We note that the following study does not focus on distributive outcomes, and nor do we distinguish between how parties redefine issues (i.e., unbundling, adding, or both). These are opportunities for future research.

2.1 Materials Testing

We conducted a pilot test to ensure that parties would initially approach their discussions as single-issue distributive negotiations. That is, we wanted to ensure that parties would not normally enter the negotiation thinking about unbundling the main

¹ Exercise materials are available on the Negotiation and Team Resources website: https://www.negotiationandteamresources.com/.



issue and including the separate issue. To examine this, we randomly assigned either the Griggs or the Healey role to 168 business students (M_{age} =20.46, SD=0.50, 51% female) from a large Midwestern university. The role materials were provided on paper so that participants could readily refer to the materials throughout the task. Participants were asked to report their goals, alternatives, worst and best proposals, and what issues they could include in negotiation.

Nearly all (91%; 153 out of 168) participants mentioned attaining a certain price for the lights or a certain profit level when setting their goals. In contrast, only 17% of the participants incorporated their interests into their goals, such as mentioning a need to attain a certain profit level so that they could attain bikes or securing more than their production cost for a standard or custom specification of the lights. When it came to discussing possible issues to include in a simulated discussion with a counterpart, almost none of the participants listed bikes or custom lights (99%; 167 out of 168 participants). The materials strongly focus parties on the main issue and are highly likely to make redefining the negotiation problem necessary to form a proposal with custom lights or bicycles.

3 Study 1: Redefining Issues and Reservation Points

Study 1 examined Hypothesis 1—whether parties' reservation points and so the perceived bargaining zone influences the likelihood of redefining the negotiable issues. Existing discussions around reservation points and bargaining zones are largely about power and distributive gains (Kim et al. 2005). But when it is possible to redefine issues, the threat of an impasse has the potential to spur parties to redefine the issues. Thus, in the current study, we varied the size of the budget provided the buyer such that the bargaining zone on the obvious issue, with no redefinition, was large and positive, small and positive, or negative.

3.1 Method

3.1.1 Participants and Procedure

A total of N=138 business students from a large Midwestern university participated in the study as part of a negotiation class exercise. Participants were randomly assigned a counterpart, role (buyer or seller), and to either the negative (N=48), small positive (N=48), or a large positive (N=42) bargaining zone. All were undergraduate students, and no demographics were collected. After preparing for about 15 min, participants negotiated for about 20 min, but had as much time as they wished. After concluding their bargaining, participants wrote down their negotiation outcomes.

3.1.2 Negotiation Task

We used the BlueLights simulation as detailed in the materials development section.



3.1.3 Bargaining Zone Conditions

The bargaining zone conditions differed only in Healey's reservation point, governed by Healey's budget limit for buying the LED lights. The Griggs role specifies a \$30 per light production cost for the standard configuration. Healey was given a budget of \$28 per light in the negative bargaining zone condition, \$33 per light in the small positive bargaining zone condition, or \$38 per light in the large positive bargaining zone condition. Unbundling issues, adding issues, or doing both presents sufficient value to enable both parties to meet their interests in the small positive and in the negative bargaining zone conditions.

3.1.4 Negotiated Outcomes

We considered three ways to evaluate negotiated outcomes. They included indicators for redefined issues, interests satisfied, and joint gains. They represent distinct ways negotiators respond to a negotiation where issues can be redefined. They separately describe attempts to change the issues under discussion, if they were able to satisfy their interests, and since some agreements can be more efficient, how much value they were able to generate.

An indicator variable measured whether dyads redefined issues during negotiation. If the statements of parties' outcomes showed that bicycles were exchanged or that custom LED lights were ordered, then they were coded as having redefined the issues, with the value of this indicator equaling one for the dyad. Otherwise, the indicator was set to zero. We also coded impasses as an instance of not being able to redefine issues.

An indicator variable measured if both members of the dyad satisfied their interests. By examining the content of the agreements, we calculated if Griggs would be able to satisfy their interests for bicycles and if Healey would be able to equip kayaks with brighter lighting without going beyond their reservation points. If both parties' interests were satisfied without going beyond their reservation points, the indicator was equal to one, otherwise it was set to zero. If the parties reached an impasse, the dyad was coded as not being able to satisfy their interests. Satisfying interests did not require parties to both add and unbundle issues, since unbundling alone could generate enough surplus for Griggs to purchase bicycles and for Healey to have brighter lights on their kayaks. Similarly, adding bicycles alone could suffice to satisfy both parties' interests. It is also the case that unbundling the LED lights or adding bicycles alone could be done in a way such that it only satisfied one party's interests and not both. For these reasons, this measure is conceptually distinct from the redefinition variable because it distinguishes between dyads who redefined to meet both parties' needs from those that did not.

Using the case materials and the terms of the agreements, we calculated the joint gain created by the dyad. Because the bargaining zone conditions meant that joint gains were not directly comparable, we computed a standardized joint gain by adding \$4000 to agreement values in the negative bargaining zone condition, subtracting \$6000 in the small positive bargaining zone condition, and subtracting \$16,000 in the large positive bargaining zone condition. These amounts reflect the difference



Table 1 Negotiation outcome by bargaining zone size

	Bargaining zone size		
	Negative (24 dyads)	Small positive (24 dyads)	Large positive (21 dyads)
% Dyads that redefined	83%	54%	24%
% Dyads that satisfied interests	54%	17%	71%
Average joint value	16,840.00 (11,642.66)	10,930.33 (2957.04)	3263.71 (6532.98)

Numbers in parentheses represent standard deviations

in bargaining zone size across conditions and making these adjustments ensure a net zero dollar joint value in each condition if the negotiators were to reach a price deal. We scored deal terms in the same way across conditions, based on details provided in agreements. This measure captures granularity in what parties attained. Parties could simply make price deals or they could find small or large amounts of value and do so from one or several changes to the issues in the negotiation.

3.2 Results

A total of nine dyads reached an impasse, three in the negative bargaining zone condition, six in the small bargaining zone condition, and none in the large bargaining zone condition. We coded these impasses as not having redefined issues or satisfied interests.

3.2.1 Effect of Bargaining Zone Size on Negotiation Outcomes

Table 1 shows the percentage of dyads that redefined issues, satisfied interests, and joint value by condition.

Consistent with the prediction, dyads in the negative bargaining zone condition were most likely to redefine the issues, followed by dyads in the small positive bargaining zone condition, and in turn dyads in the large positive bargaining zone condition. Table 2 shows that a binary logistic regression supported the effect of bargaining zone size. Using the small positive bargaining zone condition as the reference group, we found negotiators in the negative bargaining zone condition were more likely to redefine issues, while negotiators in the large positive bargaining zone condition were less likely to redefine issues. This pattern supports hypothesis 1. We conducted analyses that evaluated if the estimates are likely to be of the wrong direction (i.e., a sign or Type S error) or of an exaggerated size (i.e., a magnitude or Type M ratio) (Gelman and Carlin 2014). Using observed effect sizes given the lack of prior studies from which to generate effect size estimates, we found the effect size for the comparison between the negative and small bargaining zones (Type S error < 1%, Type M ratio = 1.33) and the comparison between large and small bargaining zones (Type S error < 1%, Type M ratio = 1.37) did not suggest unlikely results.



Table 2 Predicting redefinition and interests from bargaining zone conditions

Variables	Redefinition (1)	Interests satisfied (2)
Negative bargaining zone	4.23*	5.91**
Large positive bargaining zone	.26*	12.50**
Intercept	1.18	.20**
Observations	69	69
Likelhood ratio χ^2	17.16**	15.43**
$\chi 2 df$	2	2
Nagelkerke R ²	.30	.27

 $^{^{\}dagger}p$ < .10, $^{*}p$ < .05, $^{**}p$ < .01. Logistic regression conducted, and exponentiated coefficients (i.e., odds ratios) displayed. Reference category was the small positive bargaining zone condition

The likelihood of both parties satisfying their interests varied considerably with the bargaining zone. In the large bargaining zone condition, a simple price deal could, if the price was in the upper range for the seller, address both parties' interests, and as a result, most dyads in this condition had their interests satisfied. In the negative and small positive bargaining zone conditions, redefining the issues was necessary for dyads' interests to be satisfied. As a result, more dyads in the negative bargaining zone condition were more likely to satisfy their interests than the small positive bargaining zone condition. Using the dyad's interests satisfied indicator as the dependent variable, we estimated a logistic regression with the bargaining zone indicators, again using the small bargaining zone condition as the reference category. Table 2 shows an effect of bargaining zone size. Using the small positive bargaining zone condition as the reference group, we found negotiators in the negative bargaining zone condition were more likely to satisfy interests (*Type S error* < 1%, *Type M ratio* = 1.18), as were negotiators in the large positive bargaining zone condition (*Type S error* < 1%, *Type M ratio* = 1.04).

Joint gains also varied by the size of the bargaining zone. The negative bargaining zone generated the highest joint gains, followed by the small bargaining zone condition, and the large bargaining zone condition. With joint gains as the dependent variable, we estimated a linear regression with the bargaining zone indicators and used the small bargaining zone condition as the reference category. Table 3 shows that joint gains in the negative bargaining zone condition were marginally higher than the small bargaining zone condition (p=0.065, $Type\ S\ error$ <1%, $Type\ M\ ratio$ =1.47), while the large bargaining zone condition was significantly lower than the small bargaining zone condition (p<0.01, $Type\ S\ error$ <1%, $Type\ M\ ratio$ =1.25).

3.3 Discussion

Negotiators were likely to redefine the negotiation problem if they could do little or no better than their reservation point by simply negotiating over price. While reservation points and alternatives are usually discussed as sources of power and guides to accepting or rejecting final offers, the current results provide experimental evidence of a further role when redefining the issues is possible. Parties' reservation points can raise the possibility of an impasse, which then provides a prompt to redefine issues. This



is consistent with Walton and McKersie's theorizing about the centrality of redefining issues to integrative negotiation.

The findings in this study are also consistent with the idea that people tend to satisfice rather than optimize (Simon 1947). Negotiators might only rarely pursue opportunities for value creation if their initial definition of the issues allows them to meet their interests, as seen here in the large positive bargaining zone condition. But for those in the negative bargaining zone condition, many were willing to redefine the issues rather than walk away.

4 Study 2: The Efficacy of Interest Goals When Issues Can Be Redefined

Study 2 examines the effectiveness of target and interest goals when redefinition is possible. Focusing on interests is likely to lead to better performance than a focus on targets or reservation points in ambiguous negotiation situations. This is because interest goals offer better guidance for redefining issues than other types of goals.

4.1 Methods

4.1.1 Participants and Design

Participants were N=588 undergraduate (38%) and graduate (62%) business students from a large Midwestern university, who completed negotiation simulations as part of a class exercise. Participants were randomly assigned to a counterpart and assigned a goal type in a 3-cell design (goal type: interests / target / reservation point).

4.1.2 Materials and Procedure

The simulation used was the small positive bargaining zone version of the Blue-Lights exercise as used in Study 1. The case indicates a high, specific, and concrete target of \$24 per light for Healey and \$40 per light for Griggs. The reservation points were defined as \$33 per light for Healey and \$30 per light for Griggs.

Negotiator goals were operationalized by providing instructions at the top of the role materials (i.e., the header section of a page). Participants were told, depending on condition, that "part of being a successful negotiator is establishing and then being aware of your [interests/target/bottom line] during your negotiation". Then the focal item was defined: "Your interests are the underlying reasons for which you are even engaging in the negotiation", "Your target is the greatest amount of value you think you can gain from your negotiation", or "Your bottom line is the lowest amount of value you will accept rather than walk away".



Table 3 Predicting joint gain from bargaining zone conditions

Variables	Joint value
Negative bargaining zone	5909.67†
Large positive bargaining zone	- 7666.62*
Intercept	10,930.33**
Observations	69
F statistic	8.71**
df	2, 66
\mathbb{R}^2	.21

 $^{^{\}dagger}p$ < .10, $^{*}p$ < .05, $^{**}p$ < .01. Reference category was the small positive bargaining zone condition

Participants were asked to write down their interests, targets, or bottom lines (based on condition) at the top of their materials to help keep them in mind during negotiations. The procedure involved negotiators reading their role materials, filling out the condition prompt, negotiating with a counterpart in the same condition, and then reporting their outcomes.

4.1.3 Negotiation outcomes

Redefinition of issues, interests satisfied, and joint gain was measured as in Study 1.

4.2 Results

4.2.1 Data Treatment

There were N=230 participants in the interest goal condition, N=182 in the target goal condition, and N=176 in the reservation price condition. There were 13 dyads that reached an impasse in the interest goal condition, 11 in the target goal condition and 10 in the reservation price condition. Impasses were scored as generating zero joint gain and not satisfying the interests of either party. We note that with the large numbers of agreements, we were able to identify a class of agreements that did not lend itself to analysis. These included a) deals that did not provide sufficient detail to score outcomes, b) one or both parties ignoring their interests (e.g., Healey ignoring their interest to buy 2000 lights; Griggs reporting selling LED bulbs with different specifications than given in the briefing information), or c) when participants reported divergent deal terms. There were 13 dyads that reached such unworkable deals in the interest goal condition, 11 in the target goal condition and 6 in the reservation price condition. We excluded unworkable deals from further analyses.



4.2.2 Effect of Goal Type on Negotiation Outcomes

Table 4 shows the rate of redefinition, interests satisfied, and joint value across conditions.

Dyads in the interest goal condition were more likely to redefine issues than those in the target condition and the reservation point condition. Column 1 in Table 5 displays results from a binary logistic regression with redefinition as the dependent variable and type of goal as the independent variable. This analysis indicated support for the effect of goal type on the likelihood redefinition. Using the interest condition as the reference group, dyads in target condition ($Type\ S\ error < 1\%$, $Type\ M\ ratio = 1.13$), and dyads in reservation point condition ($Type\ S\ error < 1\%$, $Type\ M\ ratio = 1.32$) were less likely to redefine issues. This finding supported hypothesis 2a.

Supporting hypothesis 2b, dyads were more likely to satisfy their interests in the interest goal condition, compared to target goal, or reservation goal conditions. Column 2 in Table 5 displays results from a binary logistic regression with interests satisfied as the dependent variable and type of goal as the independent variable. This analysis indicated support for the effect of goal type on the likelihood redefinition. Using the interest condition as the reference group, dyads in target condition (*Type S error* < 1%, *Type M ratio* = 1.16), and dyads in reservation point condition (*Type S error* < 1%, *Type M ratio* = 1.30) were less likely to satisfy both parties' interests.

There was a non-significant difference among for interest goals to produce higher joint gain compared to reservation point goals, and target goals. Table 6 shows that there was no difference on joint gains between the interest and target goals (*Type S error* < 1%, *Type M ratio* = 1.67), and no difference between the interest and reservation point goals (*Type S error* < 1%, *Type M ratio* = 2.24). The lack of a direct effect of interest goals on joint gains is likely due to the high variance in the joint gains measure, rendering it relatively insensitive. Impasses result in \$0 joint gains, price deals \$6000, and redefined issues deals ranged from \$4760 to \$64,020, averaging \$27,287.

4.3 Discussion

This study indicates that interest goals are particularly helpful for redefining issues and generating agreements that satisfy interests relative to target and reservation point goals. As there is relatively little experimental negotiation research on situations that allow parties to redefine the negotiation problem, there is relatively little experimental evidence providing causal tests of the prescription to focus on interests. To our knowledge, this study provides some of the first evidence of a causal effect of focusing on interests leading to satisfying interests.



Table 4 Negotiation outcome by goal type

	Bargaining zone size		
	Interest goal (102 dyads)	Target goal (80 dyads)	Reservation price (82 dyads)
% Dyads that redefined	60%	39%	44%
% Dyads that satisfied interests	41%	23%	26%
Average joint value	17,298.49 (14,314.84)	13,971.84 (13,653.35)	14,931.80 (14,299.37)

Numbers in parentheses represent standard deviations

5 General Discussion

Redefining issues is a common part of negotiating that has the potential to create value. Study 1 explored the possibility that negotiators engage in redefinition due to higher or lower probability of encountering the reservation point. The study affirmed an established observation about problem solving, namely that people rarely seek to optimize their outcomes through rigorous exploration of the problem space (Simon 1947). This suggests that if negotiators can reach an agreement without the effort of redefining issues, negotiators may settle without changing the issues. In Study 1, negotiators in positive bargaining zone conditions did not have to redefine issues to reach an agreement, where it was necessary for negotiators in the negative bargaining zone condition. Accordingly, negotiators in a positive bargaining zone condition were observed to redefine issues at a lower rate than negotiators in the positive bargaining zone condition. Further, this means a reservation point, and accordingly a BATNA, are not just sources of power but also spurs to consider redefining issues. Another implication from Study 1 is that situations that are initially perceived to be zero-sum may contain the possibility for an integrative solution if issues can be redefined. If issues are added or unbundled, the possibilities for benefit can change. Bargaining zones are not always fixed.

Study 2 provided evidence that interest goals are preferable if redefining issues is possible. Few negotiations are entirely devoid of ambiguity and so few rule out the possibility of redefining issues (Gulliver 1979; Putnam et al. 1986). In the field, it is very rare to find situations where negotiators are constrained to a fixed set of issues—in some contexts, negotiations may include mandatory issues or forbidden issues as mandated by custom or law (e.g., compensation package negotiations), but there are hardly any situations where it is forbidden to discuss optional issues. This suggests there is almost always a way to redefine issues, and so research with payoff matrices may not generalize as widely as previously thought; there is usually more ambiguity in the issues than a payoff matrix would imply. Redefining issues is a subset of the broader set of possibilities raised by reframing a negotiation (Druckman and Olekalns 2013), with interests serving as guides to the flexibility (Spector 1995) offered by ambiguous negotiation situations.

Ambiguity is distinct from uncertainty about a counterpart's interests and motives as well as about future events (Bazerman and Gillespie 1999). Ambiguity concerns



Table 5 Predicting redefinition and interests from goal type conditions

Variables	Redefinition (1)	Interests satisfied (2)
Target	.43**	.41**
Reservation price	.53*	.49*
Intercept	1.49*	.70†
Observations	264	264
Likelhood ratio χ^2	9.01*	8.71*
χ2 df	2	2
Nagelkerke R ²	.05	.05

 $^{\dagger}p$ < .10, $^{*}p$ < .05, $^{**}p$ < .01. Logistic regression conducted, and exponentiated coefficients (i.e., odds ratios) displayed. Reference category was the interest goal condition

the nature of the issues, as studied here, as well as the parties and the situation as a whole. That ambiguity led to revisiting the effect of negotiator goals in the form of reservation points, targets, and interests. As parties likely confront ambiguous situations with some regularity, these are not minor concerns. Considering ambiguity more broadly provides negotiation research with an opportunity to revisit other concerns and prescriptions. For example, high quality planning prior to bargaining may not only entail thinking about prioritizing issues and thinking about various plausible configurations of them, but also stepping back and thinking about unmet needs or undiscussed issues more generally (Kolb & Williams 2003). The initial definition of the issues may not best represent the parties' interests, and situations may be sufficiently ambiguous to allow parties to change them.

There are limitations to the findings that suggest opportunities for future research. In Study 1, we presented reservation points as fixed options, but they too, like issues, can be dynamic (Pinkley et al. 2019). In Study 2, both dyad members adopted the same type of goal, which raises the question of what would happen if parties adopted different goals. Another limitation of Study 2 was that we manipulated interest goals by asking participants to consider their own interests. However, as suggested by the Dual Concern Model (Pruitt 1983), an integrative agreement could be still more likely when parties consider each other's interests as well as their own. Although our manipulation resulted in higher rates of integrative outcomes, encouraging a focus on both own's own and the other party's interests could have been a still more effective prompt to redefine, integrate, and achieve higher joint gains. The effect of such prompts is a topic for future research. Another avenue for research is to focus on the content of the discussions, which would present an opportunity to examine the process of redefining issues. Across both studies, we observed outcomes but not the process by which negotiators decided to redefine issues, form integrative agreements, and create value. Understanding the process is likely to provide further insights into how negotiators can be more flexible in their approach to negotiation situations. Across the two studies, we used a negotiation exercise that allowed redefinition, which could limit generalization. Future research could examine the manipulations we used with an exercise that has fixed issues to further develop thinking on this topic, such as the effect of interest vs. target goals when a payoff matrix is used.



Table 6 Predicting joint gain from goal type conditions

Variables	Joint value	
Target	-3326.65	
Reservation price	-2366.69	
Intercept	17,298.49**	
Observations	264	
F statistic	1.36	
df	2261	
\mathbb{R}^2	.01	

 $^{^{\}dagger}p$ < .10, $^{*}p$ < .05, $^{**}p$ < .01. Reference category was the interest goal condition

Finally, replicating the effects in a field context will be necessary to see if such striking effects can be observed outside the classroom context.

Our conclusion is that many aspects of negotiation may benefit from further thinking and exploration specifically in ambiguous negotiation contexts. The possibility of redefining issues, and the negotiation problem more generally, brings dynamism that could lead to updating our views on negotiation. More empirical work awaits.

Data availability Data will be available on request.

Code availability Code used to perform data analysis will be available on request.

Declarations

Conflict of interest The author declaraes there is no conflict of interest.

References

Bazerman MH, Gillespie JJ (1999) Betting on the future: the virtues of contingent contracts. Harv Bus Rev 77:155–160

Brett JM, Thompson LL (2016) Negotiation. Organ Behav Hum Decis Process 136:68–79. https://doi.org/10.1016/j.obhdp.2016.06.003

Brugnach M, Dewulf A, Pahl-Wostl C, Taillieu T (2008) Toward a relational concept of uncertainty: about knowing too little, knowing too differently, and accepting not to know. Ecol Soc 13:30. https://doi.org/10.5751/ES-02616-130230

Carnevale JP (2006) Creativity in the outcomes of conflict. In: Deutsch M, Coleman PT, Marcus EC (eds) Handbook of conflict resolution: Theory and practice. Jossey-Bass, San Francisco, CA, pp 414–435

Daft RL, Macintosh NB (1981) A tentative exploration into the amount and equivocality of information processing in organizational work units. Adm Sci Q 26:207. https://doi.org/10.2307/2392469

Druckman D, Olekalns M (2013) Motivational primes, trust, and negotiators' reaction to a crisis. J Confl Resolut 57:966–990. https://doi.org/10.1177/0022002712453707



- Fisher R, Ury W (1981) Getting to yes: Negotiating agreement without giving in. Houghton Mifflin, Boston, MA
- Fisher R, Ury W, Patton B (2011) Getting to yes: Negotiating agreement without giving in. Penguin, New York, NY
- Follett MP (1940) Dynamic administration: the collected papers of Mary Parker Follett. Harper & Row, New York, NY
- Galinsky AD, Mussweiler T, Medvec VH (2002) Disconnecting outcomes and evaluations: The role of negotiator focus. J Pers Soc Psychol 83:1131–1140. https://doi.org/10.1037/0022-3514.83.5.
- Gelman A, Carlin J (2014) Beyond power calculations: Assessing Type S (sign) and Type M (magnitude) errors. Perspect Psychol Sci 9:641–651. https://doi.org/10.1177/1745691614551642
- Goldberg S (2008) Texoil. In: Brett JM (ed) Negotiation and decision making exercises. Dispute Resolution Research Center, Northwestern University, Evanston, IL
- Gray B (1997) Framing and reframing of intractable environmental disputes. In: Lewicki RJ, Bies RJ, Sheppard BH (eds) Research on negotiation in organizations. JAI Press, Greenwich, CT, pp 163–188
- Gray B (2004) Strong opposition: frame-based resistance to collaboration. J Community Appl Soc Psychol 14:166–176. https://doi.org/10.1002/casp.773
- Gray B (2005) Framing in mediation and mediation as framing. In: Herman M (ed) Mediation from beginning to end. Blackwell, New York, NY, pp 195–216
- Gulliver PH (1979) Disputes & negotiations: a cross-cultural perspective. Academic Press, New York, NY, US
- Hampson FO, Hart M (1999) Multilateral negotiations: lessons from arms control, trade, and the Environment. Johns Hopkins University Press, Baltimore, MD
- House R (1982) The ugli orange exercise. In: Bowen DD, Lewicki RJ, Hall FS (eds) Hall DT. Experiences in management and organizational behavior. John Wiley & Sons, New York, NY, US
- Jang D, Elfenbein HA, Bottom WP (2018) More than a phase: form and features of a general theory of negotiation. Acad Manag Ann 12:318–356. https://doi.org/10.5465/annals.2016.0053
- Keeney RL, Raiffa H (1991) Structuring and analyzing values for multiple-issue negotiations. In: Young HP (ed) Negotiation analysis. University of Michigan Press, Ann Arbor, MI, US, pp 131–151
- Kim PH, Pinkley RL, Fragale AR (2005) Power dynamics in negotiation. Acad Manage Rev 30:799–822. https://doi.org/10.2307/20159169
- Kolb DM (1995) The love for three oranges or: what did we miss about Ms. Follett in the library? Negot J 11:339–348. https://doi.org/10.1111/j.1571-9979.1995.tb00750.x
- Kolb DM, Williams J (2003) Everyday negotiation: navigating the hidden agendas in bargaining. Jossey-Bass, San Francisco, CA
- Lax DA, Sebenius JK (2002) Dealcrafting: the substance of three-dimensional negotiations. Negot J 18:5–28. https://doi.org/10.1111/j.1571-9979.2002.tb00248.x
- Lewicki RJ, Bowen DD, Hall DT, Hall FS (1988) Experiences in management and organizational behavior. Wiley, New York, NY
- Locke EA, Latham GP (2002) Building a practically useful theory of goal setting and task motivation: a 35-year odyssey. Am Psychol 57:705–717. https://doi.org/10.1037/0003-066X.57.9.705
- Pinkley RL, Northcraft GB (2000) Get paid what you're worth: the expert negotiator's guide to salary and compensation. St. Martin's Press, New York, NY, US
- Pinkley RL, Neale MA, Bennett RJ (1994) The impact of alternatives to settlement in dyadic negotiation. Organ Behav Hum Decis Process 57:97–116. https://doi.org/10.1006/obhd.1994.1006
- Pinkley RL, Conlon DE, Sawyer JE et al (2019) The power of phantom alternatives in negotiation: how what could be haunts what is. Organ Behav Hum Decis Process 151:34–48. https://doi.org/10.1016/j.obhdp.2018.12.008
- Polzer JT, Neale MA (1995) Constraints or catalysts? reexamining goal setting with the context of negotiation. Hum Perform 8:3–26. https://doi.org/10.1207/s15327043hup0801_2
- Pruitt DG (1981) Negotiation behavior. Academic Press, New York, NY, US
- Pruitt DG (1983) Strategic choice in negotiation. Am Behav Sci 27:167–194. https://doi.org/10.1177/000276483027002005
- Pruitt DG, Lewis SA (1975) Development of integrative solutions in bilateral negotiation. J Pers Soc Psychol 31:621–633. https://doi.org/10.1037/0022-3514.31.4.621



Putnam LL (1994) Productive conflict: Negotiation as implicit coordination. Int J Confl Manag 5:284–298. https://doi.org/10.1108/eb022748

Putnam LL, Holmer M (1992) Framing, reframing, and issue development. Communication and negotiation. Sage Publications, Thousand Oaks, CA, US, pp 128–155

Putnam LL, Wilson SR, Waltman MS, Turner D (1986) The evolution of case arguments in teachers' bargaining. Argum Advocacy 23:63–81. https://doi.org/10.1080/00028533.1986.11951331

Sebenius JK (1983) Negotiation arithmetic: adding and subtracting issues and parties. Int Organ 37:281–316. https://doi.org/10.1017/S002081830003438X

Sebenius JK (1992) Negotiation analysis: A characterization and review. Manag Sci 38:18–38. https://doi.org/10.1287/mnsc.38.1.18

Simon HA (1947) Administrative behavior. Macmillan Company, New York, NY

Spector BI (1995) Creativity heuristics for impasse resolution: reframing intractable negotiations. Ann Am Acad Pol Soc Sci 542:81–99. https://doi.org/10.1177/0002716295542001006

Thompson L (2014) The mind and heart of the negotiator. Pearson, Boston, MA, US

Walton RE, McKersie RB (1965) A behavioral theory of labor negotiations: an analysis of a social interaction system. McGraw-Hill, New York, NY

Zetik DC, Stuhlmacher AF (2002) Goal setting and negotiation performance: a meta-analysis. Group Process Intergroup Relat 5:35–52. https://doi.org/10.1177/1368430202005001537

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