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Fair Is Fair, or Is It? Territorial Identity Triggers Influence Ultimatum Game Behavior

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Fairness perception underpins the concept of societal solidarity and is central to regime cohesion, collective identity, and popular legitimacy. The European Union faces challenges on all of these fronts. Perceptions of intergroup (un)fairness and of being “left behind,” for example, provided much of the momentum behind the U.K. Brexit decision. Fairness perception is not, however, an objectively reliable measure. In/outgroup alignments, including race and even football team membership, have been shown experimentally to influence individuals' behavior in response to equally fair/unfair monetary offers, even when this behavior is economically irrational. We develop an experimental task, using an adapted ultimatum game design, to examine how this dynamic plays out in the context of multilevel territorial identity systems, such as the European Union (EU), where no straightforward territorial in/outgroup dynamic pertains. We discuss the implications of our findings for understanding complex social-identity effects in multilevel systems. We ask how our findings on differential perceptions of fairness might be built upon to help understand variable citizen perceptions of, for example, the Brexit process and of the outcomes secured by an individuals’ “own side” in the negotiations and more generally in relation to psychological attachment to the EU.

KEY WORDS: European Union, fairness, ingroup, morality, national identity, ultimatum game

Fairness perception underpins the concept of societal solidarity and is central to regime cohesion, collective identity, and popular legitimacy. The European Union (EU), currently in the throes of a legitimacy crisis, faces challenges on all of these fronts. The vote for Brexit, for example, was delivered largely by the “left behind”—citizens who have long felt excluded from the wider U.K. consensus, who used this opportunity to have their voices heard “not only about Britain’s EU membership but about a wider array of perceived threats to their national identity, values, and ways of

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life” (Goodwin & Heath, 2016). As Mudde (2004) presciently anticipated, populism has become a more regular feature of worldwide democratic politics, “erupting whenever significant sections of ‘the silent majority’ feels that ‘the elite’ no longer represents them” (p. 563). A sense of intergroup unfairness underpins such movements but fails to fully capture the emotional turmoil, the sense of humiliation and estrangement, the anger, resentment, and popular outrage that animate populist revolt (cf. Sandel, 2018, p. 358). However, understanding the critical import of (psychological mechanisms of) (un)fairness calculations is not itself straightforward. Perceptions of unfairness both fuel a sense of intergroup deprivation, reinforcing intergroup distinctions and grievances, and are fuelled by those very group identities as well as by individual sociopsychological characteristics.

Fairness perception is not an objectively reliable measure. In/outgroup alignments, including race (Kubota, Li, Bar-David, Banaji, & Phelps, 2013) and even football team membership (Apps, McKay, Azevedo, Whitehouse, & Tsakiris, 2018) can influence individuals’ behavior in response to equally fair/unfair monetary offers, even when this behavior is economically irrational. This process is further complicated in multilevel polities where simple in/out relationships between individuals’ various territorial identities do not pertain—where multiple identities coexist in a “marble-cake” fashion (Risse, 2003) and when low-level or banal, often implicit, reminders of co-occurring territorial belongings are widespread and pervasive (Cram, 2001, 2012).

To gain insights into the significance of territorial/political ingroup identifications and their impact on perceptions of (un)fairness in multilevel systems such as the EU, we employ a laboratory-controlled experimental task on (un)fairness based cooperative behavior. Participants from Scotland, where multilevel identities are complex and highly salient, were partnered with their declared primary ingroup or with an alternative possible identity group (Scottish, British, European) in a repeated economic ultimatum game (UG). Using our adapted UG design, along with a series of attitudinal and psychological measures, we investigate whether experimental tasks that cue an individual’s primary territorial/political identity can reveal biases in behavior related to reciprocity and (perceptions of) fairness in multilevel identity systems (such as the EU). To the extent that the answer is yes, we ask how such effects might be moderated by related psychological characteristics other than territorial/political identity itself. The behavioral data provides insights into the influence of social identity on choices beyond what can be revealed by traditional surveys, interviews, and focus groups. We examine not only overall trends in choices as a function of primary social-identity group, but also the evolution of behavior over time/repeated interaction as an index of responsiveness to the behavior of others, thus how such behaviors might feed future interactions. This design (see below) captures, in simplified form, fundamental aspects of the multilevel identity structures common throughout the EU (where EU citizens must also by definition be a citizen of an EU member state). We discuss how our experimental findings, on how social/territorial identity can produce differential perceptions of fairness, might be built upon to help understand, for example, citizen perceptions of contemporary political negotiations, such as the United Kingdom’s Brexit withdrawal agreement and the expectations of fair play placed on negotiators from both sides. These effects are relevant not only to territorial group identities but also to the emerging “Remain” and “Leave” group identities discussed, for example, by Manners (2018). We discuss the wider implications of these insights in relation to psychological attachment to and identification with the EU over the longer term.

Identity Effects in Multilevel Polities: An Experimental Approach

Identities in multilevel polities have been described variously as “nested” (Diez Medrano & Guttierrez, 2001), “layered” (Laitin, 2001), “hybrid” (Citrin & Sides, 2004), or “entangled” (Ichijo & Spohn, 2005), making their effects complex and difficult to measure using standard methods. Our experiment builds upon the insights of social identity theory (Tajfel & Turner, 1979, 1986) and the
related social categorization theory (Tajfel, Billig, Bundy, & Flament, 1971; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) to try to understand the complex relationship between the range of in/outgroup identities at play in multilevel polities such as the United Kingdom, Belgium, Spain, and the European Union and to examine the behavioral effects of social/territorial identities in practice.

Identity in multilevel polities is both contingent and contextual (Cram, 2012). Political identification or “habits of loyalty” can be shifted from one territorial unit to another (Deutsch et al., 1957). In Renan’s (1990) terms, the very existence of any nation is a “daily plebiscite.” Attachment or identification with a territorial unit is contingent on individuals’ perception of themselves as getting fair treatment from the regime and (albeit tacitly) consenting to its continuation. In our experimental study, we examine whether in multilevel polities, the perception of what is “fair,” and any consequent strategic decisions, are also shaped by the individuals’ co-occurring identities and the identity (mis)match with those with whom they interact.

Identity has implicit as well as explicit dimensions. Indeed, within scientific psychology the distinction between implicit and explicit motives is clear and well documented (Asendorpf, Banse, & Mücke, 2002; Kehr, 2004; Koestner, Weinberger, & McClelland, 1991; McClelland, Koestner, & Weinberger, 1989), with the former typically predicting task performance (e.g., Koestner et al., 1991) and the latter predicting conscious decision-making, particularly with regard to social situations (cf. McClelland et al., 1989; Sussenbach & Moore, 2015). The symbols associated with territorial identity—for example, national flags—are well-recognized implicit identity triggers, but there has been little research on the behavioral impact of these triggers in multilevel polities. National symbols can provoke enhanced national identification and encourage the promotion of group unity at an unconscious level (Butz, 2009, 779). Indeed, even subliminal exposure to a national flag can partially homogenize extreme political attitudes found at both ends of the Israeli nationalist spectrum (Hassin et al., 2009). In the multilevel EU, implicit exposure to an EU symbol also impacts on attitudes to European integration (Cram & Patrikios, 2015) and is found to be context sensitive (Patrikios & Cram, 2016). Here we investigate experimentally whether implicit cueing of an individual’s primary territorial/political identity while interacting with partners’ thought to share the same primary identification or an alternative possible shared identity (in this case Scottish, British, or European) impacts on their perception of fairness and on the individual’s consequent strategic behavior.

There is an emerging strand of experimental laboratory work on how identity impacts on EU-related behaviors (Kuhn, Solaz, & van Elsas, 2017) and excellent focus-group research into how individuals view the EU and what influences their attachment to it (Duchesne, Frazer, Haegel, & Van Ingelgom, 2013). However, in political science, the effect of social identity in the EU has most typically been measured using cross-sectional surveys and attitudinal/public opinion analyses. These highlight, for example, the importance of: exclusive or inclusive attachment to one’s national identity on attitudes to the EU (Hooghe & Marks, 2005) or to issues such as immigration (Curtis, 2016), symbolic/cultural influences (McLaren, 2002), and wider public support for integration (Hobolt & de Vries, 2016). While these approaches are rich and fruitful, they do not aim to capture the “revealed” preferences of individuals (what they do). Even innovative experimental survey approaches (see Guinjoan & Rico, 2018) typically rely on the analysis of self-report—the “expressed” preferences of participants (what participants say or tell us) in response to survey questions. As “what we say” can be influenced by what we think others want to hear (i.e., demand characteristics), or by what we think is appropriate, it is important also to try to examine what individuals do, however unthinkingly. While in some cases expressed and revealed preferences correspond quite well (e.g., McDaniels, 1988) and can mutually inform researchers as to the underlying “true” preferences (cf. Adamowicz, Louviere, & Williams, 1994), it remains the case that observed behavior can demonstrate an impact on decision-making by factors that can occur outside of explicit awareness (e.g., Harvey, Kirk, Denfield, & Montague, 2010). Further, even in cases where the existence of such a
factor is known and such bias is explicitly norm-violating, decision-makers may still be affected by it without their knowledge (Rachlinski, Johnson, Wistrich, & Guthrie, 2009). Lab experiments allow researchers to examine the impact of implicit factors by selectively exposing participants to different treatment in a controlled manner (Bol, 2018). They also have the potential to go beyond correlational or observational approaches and to generate potential answers to causal questions. The internal validity of well-executed experimental studies is high, but the question of external validity/generalizability of results beyond the lab to the real world is important. We now briefly review our task/economic game, employing implicit territorial identity cues, and explain why it is a valuable proxy for real-world negotiation, exchange, and reciprocal interaction more generally and thus provides a useful lens on the effect of social identities in multilevel polities such as the EU.

**Ultimatum Game**

Introduced by Güth, Schmittberger, and Schwarze (1982), the UG is an economic exchange game in which two players interact to decide how to divide an actual sum of money that is given to them. The first player proposes how to divide the sum between the two players while the second player can either accept or reject the proposal. If the second player rejects, neither player receives any money. If the second player accepts, however, the money is split according to the proposal. For example, given “£10” in total, if Player 1 offers “£4” and Player 2 accepts the offer, Player 2 would keep the “£4” and Player 1 the remaining “£6.” As rejection of an offer leaves both players with nothing, classical game theory predicts that in a one-turn game, any nonzero offer should be accepted. However, studies consistently find that players will reject low offers to punish what they perceive to be unfairness (Levine, 1998; see Thaler, 1988 for a review). Interestingly, proposer behavior (i.e., the amount offered) tends to a modal 50% in standard games, in violation of game theoretic equilibrium predictions, indicating a strong social norm for “fairness” in distributive allocation. Both of these behaviors persist even when the amounts on offer are up to three times the average monthly expenditure of the participants (though proposer behavior is more robust to this change than responder behavior; Cameron, 1999). Evidence suggests that rejection of offers is emotionally driven and that subjects may be responding to the violation of the norms of social fairness and a desire to enforce these norms (Sanfey, Loewenstein, McClure, & Cohen, 2006) and that acceptance of lower offers may require cognitively demanding overriding of this emotional response (De Neys, Novitskiy, Geeraerts, Ramautar, & Wagemans, 2011; but see Knoch et al., 2008). On balance, the evidence suggests that the rejection of perceived unfair behavior is a socially reinforced, overlearned behavior which, in adults, is automatic, intuitive, and emotionally laden. It generally requires conscious effort to override, but it does not seem to be innate (for experimental demonstrations of this, see Hoffman, McCabe, Shachat, & Smith, 1994; see Bolton & Ockenfels, 2000; Fehr & Schmitt, 1999; Murnighan & Saxon, 1994 who provide theoretical models). Indeed, fairness behavior seems to emerge as a natural product of learning within such interactions (Nowak, Page, & Sigmund, 2000). Results from cross-cultural studies suggest that such behavior is even more pronounced in tribal societies where reputation concerns are a more central part of daily life (Alvard, 2004). Computational modeling of reciprocity/fairness considerations as part of the cost function driving responding in the UG have met with significant success (e.g., Cox, Friedman, & Gjerstad, 2007; but see also Kagel & Wolfe, 2001). Similarly, the dictatorship game, in which proposals are automatically enforced without contest or recourse, has been successfully employed to examine the impact of cosmopolitanism on willingness to redistribute funds to individuals from other EU member states (Kuhn et al., 2017). However, as we are particularly concerned to investigate the impact of social/territorial identity on norms of reciprocity/fairness, which are somewhat (and sometimes very strongly) attenuated, or absent, in dictator games, we have selected the UG for our experiment. The processes measured in the UG essentially form the building block of any social interaction/negotiation with time-sensitive
deadlines, and the use of UG paradigms has produced profound advances in both theoretical models and in empirical investigations (Camerer, 2003; Sanfey, 2007).

Although, to our knowledge, ours is the first study to employ the UG in a study of territorial identity effects, it has been effectively used to examine intergroup relations in the context of racial bias. When playing the game with mixed race and same-race pairings, White participants' behavior demonstrates not only a form of “ingroup love” (i.e., increased willingness to accept offers from White than from Black participants), but also “outgroup hate” (i.e., increased rejection of offers from Black participants at amounts accepted from White participants; Kubota et al., 2013). This pattern of results was magnified by increased implicit racial bias, that is, bias measured in behavioral effects but denied in explicit survey questionnaires. The combination of identity bias and the UG revealed subtle but important effects that would otherwise most likely have been missed. Similarly, and directly relevant to our work here, under conditions of information and payoff asymmetry, differing fairness norms can emerge that lead to significantly higher rejection rates (Kagel, Kim, & Moser, 1996), with offers to an outgroup less generous, and more self-regarding, than offers to an ingroup (Robert & Carneval, 1997). Three key points are worth summarizing with regard to this paradigm. First, there is a face-valid link between the structure of the game and the real-world use of ultimatum tactics in national political interaction, for example, the rise in issue-based valence politics and citizen’s strategic decisions to punish or reward governments in response to perceived gains and losses (Clarke, Sanders, Stewart, & Whiteley, 2004). Second, by playing the game repeatedly, as done here, the extended dynamics of behavioral interaction are available for analysis. Tolerance of rejection, or acceptance of lower offers from an ingroup member but not from an outgroup member, even when the offers are objectively equal, would reveal bias similar to Kubota et al. (2013). However, when faced with a rejected offer on one trial, what do participants do in response to the return offer on the next, and does this depend on the territorial/political identity of the other player? Tit-for-tat behavior (rejecting in response to rejection and acceptance in response to acceptance) may reveal more subtle bias/aggression against outgroup members even in the absence of overall average differences in behavior. Third, in repeated games, reputation effects are present. This refers to the desire of the participants to be seen to be a certain type of player and possibly also to perceive themselves in a way consistent with preferred self-image (i.e., as a fair person). This is the sort of reputation management that is critically salient in intergroup interaction. Evidence suggests that there are at least two distinct types of strategy players adopt: fair or tough (Slembeck, 1999). Which identity our participants adopt, and which they play against, may impact the choice of such strategies in as yet unknown ways, particularly when territorial identity is triggered. We expect that triggers for territorial/political identity will lead to differential responses to offers similar to racial biases in Kubota et al.’s (2013) work. Specifically, we expect that participants will be more accepting of offers from those who share their selected primary identity, and more willing to reject offers from those with a different identity, even at levels they accept from their own primary ingroup. However, we do not expect such identity effects to be homogenous across individuals. Indeed, individual differences in response to identity cues are to be expected.

Moral Values and Personality Effects

With respect to political orientation/identity and general personality dimensions, openness to experience and agreeableness have most commonly been positively associated with liberal political attitudes and greater egalitarian/social inclusion beliefs (Carney, Jost, Gosling, & Potter, 2008; Duckitt & Sibley, 2010; McCrae, 1996; see also Sibley & Duckitt, 2008, for a meta-analytic review). Moral facets of identity differ widely and systematically, particularly with respect to the extent to which people morally value considerations of care and harm, fairness/injustice, ingroup loyalty, obedience to authority, and spiritual, social, and physical purity (Graham, Haidt, & Nosek, 2009), with
conservatives placing greater value on the latter three dimensions than liberals (van Leeuwen & Park, 2009). These lines of research have converged to reveal that the impact of personality differences on political orientation/identity is largely mediated by differences in moral values (Lewis & Bates, 2011). Personality traits such as openness and neuroticism also predict performance across a variety of economic exchange games (Brocklebank, Lewis, & Bates, 2011), with higher levels of openness and lower levels of neuroticism associated with more generous exchanges and overall prosocial orientation (Lönnqvist, Verkasalo, & Walkowitz, 2011). Given that personality traits and moral values form interlocking aspects of political identity, and consonant with Sandel’s (2018) recognition of the import of the moral drivers of group dissent, we expected that individual differences in these constructs would moderate the impact of territorial/political identity triggers on interpersonal behavior during our economic exchange game. Those participants with a less open, prosocial personality type, and/or who place greater moral value on loyalty to their perceived ingroup may well respond quite differently to objectively equal offers depending on who makes those offers. Thus, we collect information regarding personality type and moral values to explore whether or not these predict our participants’ responses. To summarize, we expect to find an overall pattern of ingroup generosity and outgroup miserliness, with higher overall offers to ingroup members and higher acceptance rates for ingroup offers (cf. Kubota et al., 2013; Robert & Carnevale, 1997) but that the strength of this effect would be moderated by lower moral concern for ingroup loyalty with such participants showing more acceptance of lower offers from outgroup members. In line with the growing and productive strand of research examining personality effects in relation to EU attitudes and identity (Bakker & de Vreese, 2016; Curtis & Nielsen, 2018; Nielsen, 2016), we also examine personality traits for similar effects. Our predictions here are less robust and more exploratory, since—as noted above—previous research has shown that personality effects on political orientation/identity expression is largely mediated through moral values and, as yet, the EU-related studies reach diverse conclusions about the causal mechanisms underpinning the relationship between personality and EU attitudes.

In summary, our study combines a unique set of tools from various empirical and theoretical domains, experimental methodology, behavioral game theory, differential psychology, the politics of identity, and advanced quantitative modeling to test the effect of social/territorial identity cues on fairness perceptions and strategic behavior in multilevel polities. Multilevel identity is fundamentally different from simple in/outgroup identification. Ours is the first work to examine the import of these differences at a behavioral level, examining iterated social exchange/negotiation interaction(s). Our overarching goals are to demonstrate the usefulness of this novel approach and to build insight into a more comprehensive/sophisticated theory of multilevel identity and its consequences for the EU.

**Method and Procedure**

**Participants**

A total of 136 male participants, aged between 18 and 90, were recruited from the local population in Edinburgh, Scotland \(N = 136; \text{age: } M = 38.54 \pm 18.72 \text{ years} \) between March 3 and May 21, 2014 (see the online supporting information for the full methodological details of our study as well as summary and recruitment details). Our study took place during the campaign period for the Scottish independence referendum. EU membership featured heavily in this campaign and the issues of Scottishness, Britishness, and Europeanness were highly salient.\(^1\)

\(^1\)The study was funded by the Economic and Social Research Council (ES/L003139/1). In accordance with ESRC guidelines, full details of the research design, all materials used, consent and participant information sheets, data, and codebooks are available at https://beta.ukdataservice.ac.uk/datacatalogue/studies/study?id=852182. The study received ethical approval from the School of Social and Political Science Ethics Committee, University of Edinburgh.
Participants were prescreened to allow groups to be created on the basis of the participants’ self-declared primary identity while avoiding drawing attention to the identity focus of the research during the experimental intervention. Among other questions, participants were asked “when forced” to choose which one, and only one, identity group they belonged to: European Union, British, or Scottish. The final sample reported here includes: “Scottish” ($n = 74$), “British” ($n = 58$), and “European” ($n = 5$). As part of our interest in the extent to which individual differences in physiological characteristics might moderate identity effects on behavior, we also collected saliva samples from our participants (see the online supporting information for a detailed description of materials and procedure regarding this, results to be reported elsewhere). Hence, the sample for this study was male only as the serum-saliva correlation for testosterone is very high for males but is only modest for females.

**Materials**

Participants played the Ultimatum Game by writing their offers on a laminated game card (see Appendix B), which the confederate then indicated whether they accepted or rejected. The confederate had a similar card on which they wrote their offers and on which the participants indicated their acceptance or rejection. Cards had the flag indicating identity of the player at the top (see Appendix B). No text or other indication of purpose or identity was present. Surveys included demographic questions, self-identification of territorial identity, and several psychological measurements. The Moral Foundations Questionnaire (MFQ; Graham et al., 2011) is a robust and reliable measure of differences in the degree of moral valuation of five “foundations” of moral concern: Care/Harm, Fairness/Injustice, Ingroup Loyalty/Betrayal, Obedience to Authority/Subversion, and Physical/Spiritual Purity/Degradation. To measure personality differences in Openness to Experience, Agreeableness, Conscientiousness, Extraversion, and Neuroticism, we employed the abbreviated Five Factor Inventory (NEO-FFI).

**Procedure**

Participants were randomly assigned their ultimatum game opponent by coin flip (i.e., heads = same identity pairing) and were told only that their opponent could be from one of a number of geographical places/areas. The term “identity” was not employed and postexperimental debriefing revealed that participants had not been consciously aware of the purpose of the experiment. However, the identities of the participants and their opponents were implicitly reinforced during the game by the corresponding flag on the laminated game card (see Appendix B). Participants remained in the same study room throughout the UG and the completion of the survey instruments, while both the confederate and researcher entered and exited the room to play the game.

A large trifold divider was used to prevent visual interaction between participants and confederates while entering the room and playing the UG. Participants were told they were not allowed to speak to the other “participants” throughout the experiment, while confederates were trained not to speak to participants and to note if participants tried to speak to them. Participants were taught the UG rules and were provided with a paper copy of simplified instructions, while confederates were trained ahead of time and their responses were randomized by a clock device (see Appendix A). This was devised to ensure that randomization in the confederates’ responding was equivalent across participants without the need for communication with the experimenter or consideration of complex response rules by the confederate.

The selection of “Player 1” was randomized by coin flip, and both the participant and confederate took alternating turns making offers using the laminated game card (see Appendix B) and
choosing to accept or deny each offer until both players had done so 10 times. Game data were collected from the participant after the first 10 iterations and after the second set of 10 iterations.

After the end of the game all participants completed a brief survey questionnaire containing basic demographic, self-identification, the MFQ, and the NEO-FFI. The research was conducted in English, but all UG cards were free of language.

Results

General Analytical Approach

Preliminary analysis was carried out to identify any relationship between territorial/political identity reported at prescreening and personality and moral foundations. Mean scores on all variables were comparable across self-identified substate (Scottish), state (U.K.), and suprastate (EU) identity. We mostly employed linear mixed-effects models (LMM) for our analyses of offers and generalized linear mixed-effects models (GLMM) with a logistic link function for our analyses of acceptance/rejection of offers. For these models, we used the maximum random-effects structure, which means by-subject random intercepts as well as by-subject random slopes for turns and games. Using the maximum random-effect structure has been shown to lower the Type I error rate with only minor reduction in statistical power (Barr, Levy, Scheepers, & Tily, 2013). Table 1 provides descriptive statistics on all variables.

We collected data from 136 participants of which 74 identified as Scottish at the prescreening, 57 as British and five as European. As the latter group was too small, we removed all participants who identified themselves as European from our dataset, leaving a total of 131 participants. We treated homogeneous dyads (same territorial ID) as our baseline control and compared different ID pairings against them. Collapsing across all homogeneous ID pairings and separately across all

Table 1. Descriptive Statistics on All Variables

| Variable          | M     | SD    | Median | Minimum | Maximum |
|-------------------|-------|-------|--------|---------|---------|
| MFQ harm          | 21.32 | 4.87  | 22     | 4       | 30      |
| MFQ fairness      | 23.04 | 3.30  | 23     | 8       | 30      |
| MFQ ingroup       | 15.41 | 5.12  | 15     | 2       | 28      |
| MFQ authority     | 15.94 | 5.46  | 17     | 0       | 30      |
| MFQ purity        | 12.61 | 6.28  | 12     | 0       | 30      |
| BIG 5 neuroticism | 19.06 | 7.90  | 18     | 2       | 36      |
| BIG 5 extraversion| 28.14 | 6.67  | 28     | 11      | 42      |
| BIG 5 openness    | 32.40 | 6.31  | 33     | 15      | 43      |
| BIG 5 agreeableness| 30.60 | 5.92  | 31     | 12      | 43      |
| BIG 5 conscientiousness | 31.67 | 6.77  | 32     | 15      | 48      |
| Participant Offers| 4.99  | 1.34  | 5      | 0       | 10      |
| Participant Accepted Offers | 5.37 | 1.87  | 5      | 0       | 10      |
| Participant Rejected Offers | 3.65 | 2.02  | 4      | 0       | 10      |

All data analyses were conducted using the R statistical language (version 3.1.1; R Core Team, 2014). GLMMs and LMMs were conducted with the [lme4] package (version 1.0-5; Bates, Maechler, Bolker & Walker, 2012). All data, individual model outputs, and code are available upon request.
different ID pairings was possible, as we found no significant differences in the average amount of money offered as a function of specific combinations of pairings within these two categories.

**General Offers and Rejections**

Without controlling for other variables, we found that the amount of money participants offered depended on whether participants played a same or different ID confederate. More precisely, and contrary to our hypothesis, participants offered on average about 38 pennies more to different ID confederates, \( b = 0.38, SE = 0.18, t = 2.13, p = .05 \), as compared to same ID confederates. The probability of accepting offers did not depend on whether participants played a same or different ID confederate (z < 1 in GLMM). In line with our first finding, we also found that the average rejected offer was significantly higher in different ID pairings than same pairings (\( M_{\text{different}} = 3.89\£, M_{\text{same}} = 3.29\£, t(95.44) = 2.68, p = .009 \)), and the average accepted offer was marginally significantly higher in different ID than in same ID pairings (\( M_{\text{different}} = 5.45\£, M_{\text{same}} = 5.11\£, t(70.51) = 1.84, p = .069 \)). Thus, in the context of the game, participants were more generous to, but also less tolerant and more demanding of, outgroup partners than partners of their own national identity.

As we were interested in how participants’ initial bargaining behavior changed in reaction to confederates’ decisions, we investigated the difference between participants’ overall first and second offer with a 2×2 ANOVA, using offer change as outcome and acceptance (confederate accepted vs. rejected first offer) and identity (same ID vs. different ID pairing) as predictors. This analysis yielded no significant main effects or interactions (\( ps > .11 \)). Descriptively, however, participants offered more money in their second offer when their first offer was rejected in a same ID pairing but did not change their offer in a different ID pairing (see Figure 1).

Taken together, these findings show that participants offered more money in different ID pairings as compared to same ID pairings but also that the average rejected and the average accepted offers were (marginally) significantly higher in a different ID pairing as compared to a same ID pairing.

**Moral Values**

We hypothesized that moral concerns about ingroup loyalty would positively correlate with the probability of accepting offers and the amount of money offered when playing a same identity confederate but not when playing a different identity confederate. Hence, we conducted a GLMM and an LMM with participant’s acceptance decision (0 = rejected; 1 = accepted) and money offered as DVs, respectively, as well as ingroup concerns and confederate identity (effect coded: same ID = −.5; different ID = .5) and their interaction as IVs. Contrary to our hypothesis, we found that ingroup loyalty concerns were negatively related to the probability of accepting offers, \( b = −0.21, SE = 0.09, p = .022 \), regardless of playing a same or different ID confederate, (\( ps > .44 \) for main effect of identity and interaction term, see Figure 2a). Moreover, the amount of money offered was also negatively related to ingroup loyalty concerns, \( b = −0.22, SE = 0.08, t = −2.61 \), which did not differ between same and different ID pairings (\( t < 1 \) for interaction term). Notwithstanding, as reported previously, we found the same effect on higher offers for different ID confederates as compared to same ID confederates, \( b = .42, SE = 0.17, t = 2.41 \), (see Figure 2b). These findings show that participants were less likely to accept offers and offered less money as a function of moral concerns for ingroup loyalty regardless of playing a same or different ID confederate. Moral concerns for fairness did not predict participants’ offers or their acceptance behavior, neither solely nor in interaction with the same-different identity variable.
Exploratory analysis revealed no significant relationship between any of the Big 5 personality variables revealed and participants’ offers or acceptance behavior. Therefore, we will not discuss these further.

*Tit-for-tat behavior.* As discussed above, we were interested in whether there was a more pronounced tit-for-tat behavior within different ID pairings as compared to same ID pairings. Hence, we investigated participants’ offers in interaction with the previous confederate offer (i.e., the confederate offer immediately previous to the participant offer) and the confederates’ purported identity. We found that participants’ offers were positively related to confederate’s previous offers, $b = .08, SE = 0.03, t = 2.47$, such that for every pound increase (or decrease) in confederate offers, as compared to a previous offer, participants increased (or decreased) their next offer by about eight pennies. This tit-for-tat behavior was independent of playing a same or different identity confederate.

To see whether this tit-for-that behavior would also apply to acceptance behavior, we investigated participant’s acceptance decision in interaction with confederates’ previous acceptance decision and...
the confederates’ purported identity. We found no relationship of participants’ acceptance decision and confederates’ previous acceptance decision in either same or different ID pairings.

Discussion

Using the UG to explore territorial/political-identity effects on interpersonal interaction/negotiation, we find several results of theoretical and practical interest. We find that cueing an individual’s
chosen primary territorial identity in a multilevel polity does indeed have an observable effect on their perceptions of (un)fairness and on their strategic interactions with those believed to be from the same primary identity group or from an alternative possible shared identity (in this case Scottish, British, or European). Contrary to our initial hypotheses, however, our participants on average offered more money to outgroup partners than to those who shared their own primary ingroup identity. While the overall probability of accepting or rejecting an offer did not differ based on identity, the average accepted outgroup offer was marginally greater in amount than that of ingroup offers, and the average rejected offer was significantly greater for outgroup offers, compared to ingroup offers. Also contrary to our expectation, moral concerns for fairness did not predict behavior in the game, and moral concerns for ingroup loyalty negatively predicted probability of accepting an offer and amount offered, but these effects were similar regardless of partner identity. We found no significant effects for any of the five personality traits in an exploratory analysis. Finally, when examining the dynamics of behavior in the game over time, we found that participants follow a tit-for-tat strategy; they increase their offers after their partner increases, and decrease in response to decreases, but the probability of accepting/rejecting does not depend on a partner's preceding actions, and these effects are equivalent regardless of in/outgroup status of the partner.

Our results for territorial/political-identity effects do not entirely match Kubota et al.'s (2013) findings for racial-identity effects in the UG. This is of significant potential theoretical interest, since it suggests that racial and territorial/political identity may have different downstream effects on behavior. Whereas (White) people were less generous to, and less tolerant of, outgroup (Black) participants, we found that our Scottish participants were less generous to confederates from their primary territorial ingroup (whether Scottish or British self-identifiers). However, this was balanced by participants requiring marginally higher amounts to be offered by outgroup partners to trigger an acceptance, and they rejected offers from outgroup partners that were significantly higher than those they rejected from their primary ingroup partners. The tendency to offer more generously to those of a different identity group may be related to self-presentation management. Participants seek to create a good impression of themselves to individuals perceived as “others,” whereas they may take somewhat for granted that they are viewed positively by those that they consider as one of “their own.” This sort of reputation management is in line with the strong norm for modal 50% offers in a game where the rational choice is to take anything offered above zero (cf. Cameron, 1999; Thaler, 1988), but it begs the question why are racial and territorial/political identity (partially) different in their effects? Kubota et al.’s findings may be due to the distinction between the boundary and the meaning of identity (Huddy, 2001). Race defines a boundary of identity—a line dividing us and them. Territorial/political identity does this also (cf. Huddy, Mason, & Aaroe, 2015), but more importantly, the meaning of this identity is largely defined in terms of behavior and, as discussed, territorial identity in multilevel systems is both contingent and contextual, hence the boundary and meaning of identity may be less clear-cut than in Kubota's example (see e.g., Haslam, Turner, Oakes, McGarty, & Hayes, 1992). In relation to the wider comparative study of social-identity effects in multilevel polities such as the EU, we might also expect the specific behavioral effects observed to vary according to the domestic context, relations between different territorial levels and the salience of the different co-occurring identities.

Though it was somewhat surprising that moral concerns of fairness and ingroup loyalty did not interact with identity in our experiment, this may be due to the participants not perceiving the experiment as a morally relevant interaction. That people are only intermittently moral and often do not consider moral issues unless prompted to do so is a well-replicated finding in both the social psychology of corruption (cf. Darley, 2005) and experimental studies of moral judgement (e.g., Sachdeva, Illiev, & Medin, 2009; see also Shalvi, Gino, Barkan, & Ayal, 2015).

A legitimate question with respect to these results is whether or not the UG reflects behavior outside the lab. We claimed a face-valid link between such ultimatum bargaining and mainstream
political discourse (e.g., Brexit negotiations). Indeed, research into the question of how generalizable effects found in such lab experiments are suggests that we may well have underestimated the impact of identity in this case. Factors known to decrease the impact of social-identity-related factors in lab experiments relative to the “real world” are anonymity, restricted communication between interaction partners, and lack of external observation by ingroup others (Levitt & List, 2007), all of which were present in our design. Moreover, the flags used are banal symbols and likely do not trigger identity as strongly as more overt (and social) cues. Nevertheless, even such weak manipulations appear to drive measurable discrepancies in behavior/judgement critical to democratic negotiation. Thus, we expect that in a more realistic sociopolitical setting, where the stakes are higher and behavior is (highly) visible and intended to be so, identity effects (even when triggered by banal indicators) will be much stronger. The same may well be true of the role of moral values (and perhaps personality traits) as well.

In relation to the current Brexit negotiations, the behavioral patterns that we observe may help explain differential responses, within and beyond the United Kingdom, to the perceived fairness of the outcomes being negotiated between the U.K. government and the EU. Scotland and Northern Ireland voted to remain in the EU, while England and Wales voted to leave. In this study, participants’ behavior revealed a higher “fairness” threshold for those of a different identity group in a multilevel polity, with low tolerance of unfair behavior from those perceived to be “others.” This pattern suggests that whatever the negotiated package, it is only likely to exacerbate current rifts in the U.K. electorate in relation to Brexit. We would expect to see a similar pattern of differential fairness calibrations to be evident when cueing the emerging, “Remain” and “Leave” identities, that cross-cut traditional party affiliations.

**Conclusion**

Our study demonstrates that territorial/political-identity effects in multilevel polities can, with some difficulty and attenuation of magnitude, be successfully studied in controlled laboratory settings, providing insights into observed behaviors and implicit aspects of identity effects, beyond those available through surveys and focus-group approaches. Perceptions of territorial/political identity can reliably shift responses to offers in negotiation exchanges, in sometimes surprising ways. Generosity may be given, but intolerance of perceived lack of reciprocity may lurk beneath, even when the offers are objectively acceptable in other circumstances. Tit-for-tat behavior is unsurprising, but how it might be magnified, and its effects on perceptions of (lack of) fairness/reciprocity as a function of identity outside the lab is unknown. Future research should focus on this issue—how sociopolitical behavioral spirals begin and accelerate is a question of extreme importance at the present time. Similarly, how moral values, and personality differences, might magnify or reduce the likelihood of such interactions is a question of both theoretical and practical significance.

Our experiment provided a tough test for our hypotheses and also exemplified the challenges and benefits of introducing more nuanced categories into laboratory-based identity studies that allow researchers to probe beyond oversimplified binary in/outgroup delineations. Laboratory experiments are often the first tool of scientific inquiry, as they allow for the controlled disassociation of putative causes for a given phenomenon. However, this approach is limited in cases where that disassociation weakens a multiply determined effect of interest, as we believe the case is here. Acknowledging these limitations and attempting to systematically reintroduce them by including external social observation in the lab, communication between players, and other such factors could well increase the power of the experimental/laboratory approach significantly.

The Ultimatum Game cannot, of course, tell us directly how identity is constructed in the European Union. However, the observed behavioral effects of cueing social/territorial identity on fairness calibrations and on strategic behavior in interaction with others give us some important
insights into the mechanisms through which attachments are formed in multilevel polities. These may help to explain why different identity groups perceive the “costs” and “benefits,” for example, of European integration in very different ways and how polarization and intergroup grievances can unwittingly be reinforced in practice. Given the centrality of fairness perceptions to consent and to psychological regime attachment, as well as for social solidarity and perceptions of legitimacy, these findings have significant implications for the wider study of identity and for the process of European integration.

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Appendix

Appendix A. Ultimatum Game Confederate Behavior Randomizer (to be placed on the face of a clock and used to determine game response based on the location of the seconds hand).
Appendix B. Sample Ultimatum Game Cards (the amount range and response column headers were randomized as an added means of control).

Supporting Information

Additional supporting information may be found in the online version of this article at the publisher’s website:

Supplementary Material