
Original Article

Why there is less supportive evidence for contact theory than they say there is: A quantitative cultural–sociological critique

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Abstract The finding that ethnic prejudice is particularly weakly developed among those with interethnic friendships is often construed as confirming the so-called 'contact theory,' which holds that interethnic contact reduces racial prejudice. This theory raises cultural–sociological suspicions, however, because of its tendency to reduce culture to an allegedly 'more fundamental' realm of social interaction. Analyzing data from the first wave of the European Social Survey, we therefore test the theory alongside an alternative cultural–sociological theory about culturally driven processes of contact selection. We find that whereas interethnic friendships are indeed culturally driven, which confirms our cultural–sociological theory, contacts with neighbors and colleagues do indeed affect ethnic prejudice. They do so in a manner that is more complex and more culturally sensitive than contact theory suggests, however: while positive cultural stances vis-à-vis ethnic diversity lead interethnic contact to decrease ethnic prejudice, negative ones rather lead the former to increase the latter.

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Nothing that strikes our eyes or ears conveys its message directly to us. We always select and interpret our impressions of the surrounding world. Some message is brought to us by the “light without” but the meaning and significance we give to it are largely added by the “light within”.

Allport (1979 [1954], p. 165)

Introduction

Cultural sociology constitutes a much-needed correction to sociology’s inherited tendency of marginalizing the role of culture. It aims to overcome an intellectual understanding of culture as a mere ‘side issue,’ a ‘“soft,” not really independent variable’ – an understanding that is informed by the notion that ‘explanatory power lies in the study of the “hard” variables of social structure, such that structured sets of meanings become superstructures and ideologies driven by these more “real” and tangible social forces’ (Alexander and Smith, 2003, p. 13). Acknowledging cultural sociology’s tendency to rely on the qualitative data and methods that are traditionally associated with the study of culture, e.g., ethnography, qualitative content analysis, and discourse analysis, Houtman and Achterberg (2016) have recently pointed out the cultural–sociological potential of quantitative methodologies. According to their account, the latter do not only provide outstanding opportunities to systematically demonstrate culture’s causal efficacy, but can on top of that be deployed to assess whether established theories that neglect the causal role of culture are as empirically grounded as many hold them to be.

One of the theories that raises cultural–sociological suspicions is the ‘contact theory’ about how interethnic contacts reduce racial prejudice, which constitutes a contemporary rendition of Allport’s (1979 [1954]) seminal work from the 1950s. The theory has meanwhile become a central reference point in a rich and thriving research field (see for a recent overview: Hewstone, 2015) and is regarded as firmly empirically established by many. Yet, the research field at hand exemplifies precisely the sociological blind spot for culture referred to above: it conceives of cultural understandings (here: ethnic prejudice) as an outcome of a ‘more fundamental’ social reality (here: patterns of social interaction, understood as purged of cultural meaning). Despite repeated warnings that empathy with out-group members’ perspectives may be a vital cultural condition for interethnic contact’s ability to reduce prejudice (e.g., McLaren, 2003; Pettigrew and Tropp, 2008), two assumptions that are questionable from a cultural–sociological point of view do still dominate this research field. The first is the assumption that allegedly ‘objectively’ definable characteristics of contact situations – like the degree to which contact is either (objectively) ‘positive’ or ‘negative’ or the degree to which the setting in which it occurs is (objectively) ‘cooperative’ – do make a difference in interethnic contact’s causal efficacy. The second assumption is that interethnic contact has universal effects, i.e., that it works basically the same for



everyone, a notion that is brought forward in the bluntest of fashions in the claim that ‘while there may be facilitating conditions that improve its effectiveness, contact basically *works*’ (Husnu and Crisp, 2010, p. 943, italics in original). As different sides of the same positivist coin, these assumptions are debatable from a cultural–sociological point of view, because they both write the cultural factor out of the equation.

Interethnic contact, just like any other event, is after all not ‘objectively’ projected onto people, but is actively sought or avoided and interpreted through cultural lenses, in this instance, those lenses pertaining to the existence and meaning of ethnic boundaries. Indeed, Allport already acknowledged more than half a century ago that ‘a person’s prejudice is unlikely to be merely a specific attitude toward a specific group; it is more likely to be a reflection of his whole habit of thinking about the world he lives in’ (Allport, 1979 [1954], p. 175). It is, however, exactly this ‘habit of thinking,’ this cultural framework through which people make sense of their world, that is typically neglected in contemporary studies of interethnic contact. This is because these studies typically treat cultural understandings pertaining to ethnic boundaries as inevitably dependent variables rather than potentially independent ones.

This theoretical neglect of culture’s relative autonomy is tellingly underlined by the construal as striking evidence in favor of contact theory of the common finding that ethnic prejudice is particularly weak among those with interethnic friendships (e.g., Aberson *et al*, 2004; Levin *et al*, 2003; McLaren, 2003; cf. Pettigrew and Tropp, 2011 for an overview). From a cultural–sociological point of view, this strong negative relationship is after all more likely to constitute an outcome of culturally driven selection processes in forging friendships than, the other way around, an outcome of the causal dynamics assumed by contact theory. To find out to what extent this is indeed the case, effects of culturally informed contact selection need to be disentangled from ‘genuine’ contact effects as assumed by contact theory. Such a disentanglement should enable us to critically assess whether the marked negative relationship between interethnic friendship and ethnic prejudice does indeed confirm the alleged beneficial effects of this particular variety of interethnic contact, or does rather stem from a misguided tendency among researchers to relegate ethnic prejudice to the status of a necessarily dependent variable on misconceived a priori grounds.

Interethnic Contact and Ethnic Prejudice: A Cultural–Sociological Interpretation

The problematic focus on interethnic friendship

A vast amount of research evidence shows that contact with ethnic minority group members is related to less negative thinking about ethnic minorities (e.g.,



Schalk-Soekar *et al.*, 2004; Wagner *et al.*, 2003; see Pettigrew and Tropp, 2006 for an overview). However, the existence and strength of the association between interethnic contact and ethnic prejudice varies across type of contact. It is typically found that interethnic friendship is more strongly related to positive thinking about ethnic minorities than interethnic contact with colleagues or neighbors (e.g., Aberson *et al.*, 2004; Levin *et al.*, 2003; see also Pettigrew and Tropp, 2011).

In contact theory literature, this difference is typically attributed to the fact that friendship is more intimate than contact with colleagues or neighbors. McLaren (2003, p. 913), for example, holds that ‘if a contact situation provides an opportunity to see that beliefs are actually similar, prejudice should be reduced. The primary type of contact that should provide this opportunity is intimate contact, such as friendship.’ Similarly, Pettigrew and Tropp (2008, p. 923) suggest that ‘[i]ntergroup contact, and especially, close, cross-group friendship, may enable one to take the perspective of outgroup members and empathize with their concerns.’ Nonetheless, these observations raise concerns, because there is of course a simple and obvious alternative cultural–sociological explanation for the association between interethnic friendship and a benevolent stance vis-à-vis ethnic minority groups. This alternative interpretation is based on the notion that friendship is more prone to culturally motivated contact selection than contact with either colleagues or neighbors – a causal logic that is at least as plausible as the one posited by contact theory, i.e., that interethnic contact erodes ethnic prejudice. It remains to be seen whether there is as much evidence for the validity of contact theory as its supporters suggest there is: the strong negative association between ethnic friendship and ethnic prejudice may alternatively prove the validity of this cultural–sociological explanation, central to which is culturally driven contact selection.

Of course, we are not the first to point out the issue of contact selection in research relating to contact theory (Aberson *et al.*, 2004; Dixon, 2006; McLaren, 2003; Sigelman and Welch, 1993), which is a typical example of self-selection bias. However, what has thus far remained insufficiently acknowledged is that it probably plays a much stronger role in interethnic friendships than in interethnic contact with neighbors or colleagues. For, as De Souza Briggs (2007) rightly points out, ‘[w]hile homophily shapes many types of relationships, it appears to act more powerfully on close or strong ties, including marriage and friendships, than on acquaintanceships or other “weak” ties’ (De Souza Briggs, 2007, p. 267; cf. Granovetter, 1973; Marsden, 1988). To the degree that people actually choose to avoid or enter into interethnic contacts on cultural grounds, then, this will apply more to interethnic friendships than to interethnic contacts with neighbors or colleagues. This is exactly why the contact-theory-derived claim that interethnic friendship is a particularly beneficial type of interethnic contact may well be premature: there may be less-supportive evidence for contact theory than they say there is.

Contact selection: converting a methodological problem into a theoretical one

The issue of contact selection is typically treated as a methodological problem of canceling out the ‘distorting’ influence of contact selection, so as to retain the ‘genuine’ contact effects that are needed to assess the empirical validity of contact theory. What is most relevant from a cultural–sociological point of view, i.e., culture’s causal efficacy, is here in effect treated as mere noise that needs to be wiped out statistically so as to arrive at an unbiased image of ‘social reality as it really is’ – not unlike the treatment of so-called ‘placebo effects’ in double-blind trials in medicine (Houtman and Achterberg, 2016). These attempts at methodological purification are, however, impeded by the lack of suitable data sources, i.e., the scarcity of panel data with multiple measurements across time that allow for direct assessments of causal direction (Pettigrew and Tropp, 2011, p. 118). The few panel studies that are available show that the causal path from contact to prejudice is about equally strong as the one from prejudice to contact (Binder *et al*, 2009; Levin *et al*, 2003; Sidanius *et al*, 2008; Van Laar *et al*, 2005, 2008; cf. Pettigrew and Tropp, 2011).¹

Yet, the latter studies are typically based on student samples (Binder *et al*, 2009; Eller and Abrams, 2003, 2004; Levin *et al*, 2003; Sidanius *et al*, 2004, 2008; Van Laar *et al*, 2005, 2008), which have been accused of introducing selection bias. Pettigrew and Tropp (2011, p. 58) have for instance pointed out that samples of students have a tendency ‘to yield stronger mean effects than adults [which] is consistent with Sears’ (1986) contention that college students’ attitudes are typically more flexible and open to change than those of older adults.’ This echoes concerns voiced in a well-cited review article by Henrich *et al* (2010), who demonstrate on the basis of a large number of empirical studies not merely that ‘(...) this particular population is highly unrepresentative,’ but even that this is ‘(...) one of the worst subpopulations one could study for generalizing’ (Henrich *et al*, 2010, p. 79).

The scarcity of good panel data and abundance of cross-sectional survey data have led others to try and tackle the issue of contact selection methodologically by means of structural equation modeling, estimating the two opposite causal paths simultaneously. The resulting findings suggest that the path from interethnic contact to prejudice is indeed stronger than the reversed path from prejudice to contact (Pettigrew, 1997, 1998; Van Dick *et al*, 2004), which has subsequently been seized to downplay the role of contact selection, even to the extent of discarding the issue in one’s own analyses altogether (e.g., Biggs and Knauss, 2012; Dhont and Van Hiel, 2009; Escandell and Ceobanu, 2009).

¹ In these studies, contact is operationalized variably: sometimes as contacts with friends sometimes with neighbors and or colleagues. The results between these different types of operationalization do not differ markedly.



More interesting from a cultural–sociological point of view, others have proposed a treatment of contact selection as not so much a methodological problem, but rather a substantive theoretical issue in and of itself. Pettigrew (1998), for instance, has proposed to compare different types of contact, distinguishing between those that are more and those that are less prone to culturally informed contact selection² (see also Welch and Sigelman, 2000; Wilson, 1996) and McLaren has suggested to include variables in the analysis that are theoretically prior to prejudice (McLaren, 2003). Dixon and Rosenbaum (2004) combine both strategies, distinguishing types of contact that are, respectively, more and less open to choice and also including individuals' unwillingness to engage in interethnic contact in the first place.

In this paper, we follow their approach, but add one final element that is crucial from a cultural–sociological point of view, i.e., the role of cultural frames in shaping interpretations of interethnic contact. Instead of understanding interethnic contacts as mere stimuli that can trigger only one 'natural' response, we hence include cultural interpretive frames, 'principles of selection, emphasis and presentation composed of little tacit theories about what exists, what happens, and what matters' (Gitlin, 1980, p. 6; see also Goffman, 1974). This enables 'objectively' identical conditions of interethnic contact to nonetheless have different interpretative consequences, shaped by preconceived stances toward ethnic diversity. As such, in this study, we develop an alternative to contact theory. We elaborate on the central elements of the corresponding theoretical framework below.

Different types of contact

Studies on the influence of interethnic contact have emphasized time and again that interethnic friendships tend to be associated with less-prejudiced thinking about ethnic minorities (e.g., Aberson *et al.*, 2004; Levin *et al.*, 2003; Paolini *et al.*, 2004; Pettigrew, 1997, 1998; Powers and Ellison, 1995; Wagner *et al.*, 2003). This evidence has moreover been seized to narrow down the scope of contact theory research to interethnic contacts with friends as the allegedly most beneficial type of interethnic contact (e.g., McLaren, 2003). The remarkable success of this particular type of interethnic contact is attributed to the fact that friendships provide more knowledge about and understanding for others than other types of contact, which is held to result in more favorable and nonprejudiced evaluations. Whereas it is acknowledged that these assumed

² In a meta-analysis of interethnic contact studies, Pettigrew *et al.* (2011) compare contacts open to choice with no choice contacts, holding that 'no choice eliminates the possibility of selection bias' (Pettigrew *et al.*, 2011, p. 274). They claim to find stronger contact effects for no choice contacts, 'just the opposite as what we would expect from a strong selection bias' (Ibid). However, they do not elaborate upon the way in which choice and no choice contacts are measured. Unfortunately, this makes it rather complicated for the reader to assess the validity of their claim.



causal links may be weaker and less linear than those assumed in the classical contact literature (e.g., Allport, 1979 [1954]), the intimate nature of interethnic friendship and the opportunities for empathizing it engenders stand out as pivotal among contact students (Pettigrew and Tropp, 2008, p. 923; see also McLaren, 2003, p. 913).³

Alternatively, it can be theorized that interethnic friendship already *presumes* a low degree of ethnocentrism. After all, ‘the fundamental distinction between in-group and out-group is captured by feelings of trust, familiarity, and personal security’ (Brewer and Campbell, 1976, quoted in Kinder and Kam, 2009, p. 49). Rather than assuming that interethnic contact reduces ethnic prejudice, as is common practice in contemporary contact research, it hence appears at least equally plausible that interethnic friendships blossom on the basis of benevolent stances toward ethnic minorities that precede these friendships. Ethnically prejudiced people are unlikely to have friends from ethnic minority groups in the first place.

Whereas interethnic friendships are hence likely to be based on contact selection, the same does not hold true for other types of interethnic contact, such as with neighbors⁴ and colleagues, because the latter are more markedly imposed by contact opportunities and individuals’ social environments. Of course, friendships are not entirely freely chosen either, because ‘[w]hile friends reflect an element of personal choice, they do not reflect a free choice: we are most likely to become friendly with those who are thrown consistently in our path’ (Jackman and Crane, 1986, p. 467). Kalmijn’s work on assortative mating has indeed shown the importance of contact opportunities and third parties in interethnic marriage, next to the importance of individual preferences (Kalmijn, 1998; see also 1991, 1994), and it has been argued that these findings can indeed be extended to other forms of interethnic contact (cf. Martinovic *et al*, 2009). In addition, some differences in eligibility may also exist in neighborhood and workplace contact. Interaction may, for instance, be more easily avoided in independent housing situations than in apartment buildings, and in some work places, more joint activities may be required than in others. However, on the aggregate, it is still highly plausible that the degree of eligibility is greater for interethnic friendships than for less-intimate types of interethnic contact, like neighbors or colleagues. A first indispensable element of our theoretical framework is thus a distinction between types of interethnic contact according to their degrees of eligibility. Hence, it is to be expected that contact selection plays a much stronger role in forging interethnic friendships than in

³ The authors following this rationale seem to assume that interethnic friendships should necessarily lead to the sharing of beliefs and values. It is, however, questionable whether perceiving beliefs and values as similar is a necessary condition for friendship. Another possibility is that differing opinions on certain issues are acknowledged and accepted without adopting the befriended person’s view.

⁴ For an interesting view on the implausibility of contact selection in neighborhoods, see, Putnam (2007, pp. 153–154).



forging contact with neighbors or colleagues. An empirical assessment of these processes of contact selection calls for an understanding of what drives them, which is what we now turn to.

Appreciation and avoidance of interethnic contact selection

The second element that we need is an accurate understanding of what exactly drives contact selection. Previous research has understood the latter as a quintessentially cultural process. As Thompson *et al* (1990, p. 266) state, contact selection serves to ‘seek out social relationships that are compatible with their [cultural] bias and shun those relations in which they feel less at home’ (quoted in Vaisey and Lizardo, 2010, p. 1602). Similarly, Douglas (1978) has emphasized that friendship choices are inherently culturally biased. Research has indeed shown that ‘highly prejudiced individuals engage in less intergroup interaction, finding contact undesirable and aversive’ (Hodson *et al*, 2009, see also Altemeyer, 1998; Hodson, 2008; Pettigrew, 1998). Those who are ethnically prejudiced are hence less likely to engage in interethnic contact than those who are more open to ethnic diversity. The latter type of openness has time and again been shown to be closely related to education, with the higher educated being more accepting of ethnic diversity than those with lower levels of education, so that the latter are more likely to attempt to avoid interethnic contact than the former (e.g., Emler and Frazer, 1999; Gabennesch, 1972; Houtman, 2003; Kunovich, 2004; Scheepers *et al*, 2002; Stubager, 2008, 2009). What apparently drives contact selection, then, is a cultural tendency to either avoid or appreciate interethnic contacts, which is in practice closely related to the distinction between the more (appreciation) and the less (avoidance) educated (Houtman, 2003).

The role of interpretive frames

As a proxy for cultural frames pertaining to ethnic boundaries, education does also structure the ways in which interethnic contacts are interpreted and evaluated. Even though empirical contact research has thus far paid surprisingly little attention to this interpretive role of cultural frames (cf. Hodson *et al*, 2009), various authors have indicated its potential significance. Pettigrew (1998), for example, has suggested that interethnic contact may not so much influence individuals’ opinions about ethnic minorities in a direct fashion, but rather reinforce their ‘initial attitudes.’ Responses to interethnic contact are in this cultural–sociological perspective, hence not simply triggered by (allegedly) ‘objective’ characteristics of the contact situation, but rather by interpretive differences that stem from different cultural understandings of ethnic group boundaries. More specifically, whereas those who think in terms of rigid ethnic boundaries (i.e., the less educated) are likely to find their negative ideas about



ethnic minorities reaffirmed through interethnic contact, those who hold more benevolent notions of ethnic diversity (i.e., the more educated) are likely to see their positive ideas reaffirmed. We thus expect the effect of interethnic contact on ethnic prejudice to depend on the cultural framework used to interpret and evaluate it, here captured by level of education as a crude yet endlessly empirically corroborated proxy.

Hypotheses

The foregoing elements enable us to empirically distinguish between the contact effects assumed by contact theory and the contact selection effects foregrounded in our alternative cultural–sociological theory. More specifically, we can now formulate two clusters of hypotheses. The first consists of hypotheses pertaining to interethnic friendship as a type of interethnic contact that is particularly prone to contact selection. We expect to find that people who are open to ethnic diversity tend to engage in interethnic friendships, while those who are less open to it will tend to avoid such contacts. This should show up as a positive association between education and interethnic friendship (*hypothesis 1*) and a negative one between interethnic friendship and ethnic prejudice (*hypothesis 2*). Furthermore, if interethnic friendships are indeed outcomes of culturally driven processes of contact selection, we expect to find no framing effects, and hence no influence of level of education on the strength of the relationship between interethnic friendship and ethnic prejudice (*hypothesis 3*). Technically speaking, we hence expect no interaction effect of education and interethnic friendship on ethnic prejudice. If all of these three hypotheses are confirmed, the commonly found negative relationship between interethnic friendship and ethnic prejudice does not provide proof for the validity of contact theory, as is commonly asserted, but rather needs to be attributed to culturally induced contact selection.

The second cluster of hypotheses concerns interethnic contacts in which choice is more restricted, namely contacts with colleagues and neighbors. Because contact selection is less likely in these cases, we do not necessarily expect to find associations between education on the one hand and interethnic contact with either colleagues or neighbors on the other. In marked contrast with the previous cluster of hypotheses, we moreover expect to find evidence of culturally induced interpretive differences for these more ‘socially imposed’ and less self-chosen types of interethnic contact. More specifically, these differences should show up as stronger relationships between socially imposed interethnic contact and ethnic prejudice for the more than for the less educated (*hypothesis 4*). Technically speaking, we thus expect to find significant positive interaction effects between education and interethnic contact with colleagues and neighbors on ethnic prejudice.



Data and Operationalization

Data

The data used in this paper are taken from the first wave of the European Social Survey (Jowell *et al*, 2003). This dataset is especially apt to use in this paper as it contains measurements of the three forms of interethnic contact to be studied. Furthermore, due to extensive use in studies in the field of interethnic relations, it has been shown that the data are of high quality (e.g., Meuleman, 2009).

Since our hypotheses only include individual level relationships we have chosen to use data for one country of the dataset. Using data from the Netherlands is convenient since various studies have pointed to the strong polarization on ethnic prejudice in the Netherlands (see for example De Koster *et al*, 2010; Vasta, 2007). While the Netherlands is one of the most secularized and morally permissive countries in the world (Norris and Inglehart, 2004; Duyvendak, 2004; cf Houtman *et al*, 2011), cultural polarization on ideas about ethnic diversity have increasingly replaced polarization over issues of Christian morality. As such, the Netherlands can be considered one of the countries in which cultural polarization on ethnic prejudice is greatest (see for example De Koster *et al*, 2010). The Netherlands was therefore theoretically selected as a case in which cultural framing of interethnic contacts should be most clearly present. A total number of 2,364 respondents are included in the Dutch dataset. After selecting only Dutch nationals and respondents with valid scores on all variables used, the total *N* in our analyses is 1,578.

Operationalization

The dependent variable *ethnic prejudice* is measured using six items in which respondents are asked to take position on issues related to immigrants. It is of course possible that respondents have different groups in mind when asked for their ideas about immigrants. However, previous studies have shown that the word ‘immigrant’ is mostly interpreted as referring to non-Western immigrants in western European societies (e.g., Hagendoorn, 1995 for the Netherlands). Furthermore, it was shown that resistance toward a specific group strongly corresponds to a general resistance toward ‘out-groups’ (see Hainmueller and Hopkins, 2014, p. 9; Kinder and Kam, 2009). Even though treating immigrants as one single out-group may indeed obscure important cross-national variation (cf. Bail, 2008), it is plausible that within a society consistent ideas exist about whom are part of ‘us’ and whom of ‘them.’ As such, this is not expected to be problematic in the context of our study, even though respondents may have different groups in mind when asked about ‘immigrants.’ This is especially true because our goal here is not so much to offer a most accurate description of

people's culturally informed lifeworlds. Instead, we aim to test the explanatory power of cultural lifeworlds, which by default requires some empirical reduction (cf. Houtman and Achterberg, 2016).

The six items used to measure *ethnic prejudice* are as follows⁵: *immigrants take away jobs or rather create new jobs* (1); *if immigrants use more taxes than they contribute* (2); *whether immigration is good or bad for the economy* (3); *if the country's cultural life is undermined or enriched by immigrants* (4); *whether immigrants make the country a worse or better place to live in* (5); and *if immigrants make the country's crime problems worse or better* (6). These six items together produce a highly reliable scale (Cronbach's α is .84). We calculated the scale score by taking the mean for each respondent with at least three valid answers on the set of six items. A higher score stands for a greater amount of ethnic prejudice.

We measured *interethnic contact* in three ways: with friends, with colleagues at work, and in the neighborhood. Respondents were asked if they have any immigrant friends (1 *yes, several*, 2 *yes, a few*, 3 *no, none at all*); if they have any immigrant colleagues (1 *yes, several*, 2 *yes, a few*, 3 *no, none at all*; 4 *not currently working*); and if there are people of a minority race or ethnic group in their current living area (1 *almost nobody*, 2 *some*, 3 *many*).⁶ For the last two items, it can be argued that we are measuring interethnic exposure, even though the latter is still based on accounts provided by interviewees, rather than 'real' interethnic contact. From the perspective of contact theory, this may be seen as problematic, since previous studies seem to indicate that exposure, as opposed to 'real' interethnic contact, may lead to more instead of less ethnic prejudice (e.g., Laurence 2014; Stolle et al, 2008). However, for our research interest, measuring exposure still seems the most adequate option. Other studies using measurements of 'real' contact typically include subjective evaluations of the contact situation, such as whether the contact has been experienced positively or negatively (e.g., Barlow et al, 2012), or measurements that require some sort of personal initiative, like how frequently you have a talk with your neighbors (e.g., Schmid et al, 2014). Using such subjective or initiative requiring measurements of interethnic contact, even if it concerns restricted choice

⁵ Some authors have used this scale or a similar one as a measurement of 'perceived ethnic threat' (e.g., Schneider, 2008; Scheepers et al, 2002; McLaren, 2003). Others have used such a scale as a measurement for anti-immigrant prejudice (e.g., Quillian, 1995). Both cases match the definition of ethnic prejudice we use here, which is a general negative stance toward ethnic out-groups.

⁶ Similar to our measurement of the dependent variable, the interpretation of 'immigrant' is here left up to the respondent. The measurement therefore cannot account for the possibility that highly skilled immigrants with a strong economic position may be less likely seen as stereotypical immigrants than low-skilled immigrants in a weak economic position. Since contact opportunities are greater between people in equal economic positions, this may lead to an underestimation of 'actual' interethnic contact situations especially among natives with a strong economic position. It is, however, difficult to oversee the possible implications of this shortcoming, since in the end our main interest is in situations when people involved actually qualify these as 'interethnic' themselves.



situations, re-introduces cultural selection to the measurement. This is problematic because it impedes the distinction between contact selection and cultural framing effects. To avoid this problem, measuring exposure, even though this is exposure reported by respondents themselves, seems to be the best indicated alternative when using cross-sectional data. Exposure may then lead to more ethnic prejudice indeed, which is exactly what we expect to happen among those who think in terms of rigid ethnic boundaries.

We recoded all three variables measuring interethnic contact into dichotomous variables, as was done before in other studies (e.g., Schneider, 2008). This is because the responses to the items were right skewed (see for example Savelkoul *et al*, 2011 for a similar statement). The variables measuring three types of interethnic contact are, thus, scored such as to indicate if a respondent does (2) or does not (1) have interethnic contact.

We measured *educational level* in two ways. The first one concerns *formal educational level* (in the results referred to as ‘education’), which stands for the number of years that a respondent has attended full-time schooling. The educational level of the respondents in our sample ranges from three up to 25 years of full-time schooling, the median being 13 years.

The second way of measuring educational level is through an individual’s *occupational educational level*, which does not measure formal education, but ‘on the job training.’⁷ It is measured as a combination of the ISCO-88 occupational groups and the years of full-time education attended (cf. De Graaf and Kalmijn, 1995, 2001; Kalmijn, 1994). The occupational groups have been reduced to the two-digit level. For each group then, the average years of full-time schooling attendance is calculated. A score of 10 on this variable for occupational educational level thus corresponds to an average of 10 years of full-time schooling within the occupational category a respondent belongs to.

We control for *age* (in years, ranging from 15 to 91), *gender* (man = 0, woman = 1), *living environment* (city = 1, village = 0), *income* (as net household income per month), and *labor market insecurity* (ranging from 0 to 3), as previous research has shown these variables to be important for the way people think about ethnic minorities (e.g., Coenders, 2001). It is especially important to control for the economic position of respondents since this enables us to flesh out possible economic mechanisms behind the interpretation of interethnic contacts, based on fears for jobs, housing and the like. In line with the former, controlling for income and labor market insecurity allows us to measure the cultural component of the educational effect that we hypothesized, as was convincingly shown in previous studies (see for example Houtman, 2003; Van der Waal and Houtman, 2011). All variables have been

⁷ Usually, occupational educational level is referred to as a person’s cultural occupational status. We believe our interpretation of the measurement neither violates nor contradicts this original interpretation.

**Table 1:** Regression on ‘ethnic prejudice,’ direct contact effects-model

	<i>Standardized coefficient</i>
(Constant)	5.47***
Contact	
Friends	−.19***
Colleagues	−.05
Neighbors	.03
Education	−.24***
Occupational educational level	−.13**
Control variables	
Age	−.05
Gender (man = ref.)	−.02
Living area (city = 1, village = 0)	.04
Income	−.04
Insecurity	−.03
R^2	.08
N	1,578

Source: author’s calculations using the European Social Survey 2002.

** $p < .01$.

*** $p < .001$.

standardized, allowing for comparison of the coefficients within a model in terms of their respective strength as well as for preventing problems with multicollinearity when calculating interaction terms.

Results

We analyzed our data in two steps: first, we look at the results that would be obtained by the conventional way of testing contact theory. Second, we study the interactions of the three types of interethnic contact with the two measurements of educational level. Table 1 shows the results of the first step in our analysis, which is a linear multiple regression model of the direct effects of the three types of interethnic contact on ethnic prejudice, including the control variables. From this model, one would conclude that only interethnic contact with friends is significantly, and quite strongly, related to ethnic prejudice. This finding corroborates our second hypothesis which expects a negative relationship between interethnic friendship and ethnic prejudice. More importantly to note, however, is that the conclusion based on Table 1 would be that interethnic friendships effectively lead to less ethnic prejudice, while the other forms of interethnic contact do not.⁸ This finding is perfectly congruent

⁸ This finding contradicts a previous study (Stolle *et al*, 2013) in which prejudice-reducing contact effects of neighborhood contact were found. This difference in results could be either attributable to the composition of the samples or to the measurement of interethnic contact. Concerning the latter, Stolle *et al* use the frequencies of talking with someone with a different ethnic background as a

**Table 2:** Regression on 'ethnic prejudice,' interethnic friendship models

	<i>Model 1</i>	<i>Model 2</i>
(Constant)	5.47***	5.47***
Contact		
Friends	-.18***	-.18***
Colleagues	-.05	-.05
Neighbors	.03	.03
Education	-.24***	-.24***
Occupational educational level	-.13**	-.13**
Control variables		
Income	-.04	-.04
Insecurity	-.03	-.03
Age	-.05	-.05
Gender (man = ref.)	-.02	-.02
Living area (city = 1, village = 0)	.04	.04
Interactions		
Education * friends	-.02	
Occupational educ. * friends		-.01
R^2	.08	.08
N	1,578	1,578

Source: author's calculations using the European Social Survey 2002.

Note: all numbers are standardized regression coefficients.

** $p < .01$.

*** $p < .001$.

with the common emphasis in studies on interethnic contact on the importance of interethnic friendships for reducing negative thoughts about ethnic minorities. After testing our remaining hypotheses in the following, it is to be seen whether this conclusion is still supported.

The second step in our analysis entails a test of whether the influence of the three types of interethnic contact on ethnic prejudice differ among educational level. For this purpose, we use multiple linear regression analysis. Table 2 corresponds to our results concerning the influence of interethnic friendships: again, we find a rather strong and negative direct effect of interethnic friendship on ethnic prejudice. More importantly, we do not find a significant influence of interethnic friendship on the relationship of each of both indicators of educational level and ethnic prejudice. This corroborates our third hypothesis, and it implies that the commonly found relationship of interethnic friendship with less negative thinking about ethnic minorities is mainly attributable to contact selection, and not so much to contact effects. Nevertheless, there is one more test we have to perform for this conclusion to be convincible: it should be found that there is a significant relationship between an individual's educational

Footnote 8 continued

measurement of interethnic contact. As argued before, this measurement leaves more room for cultural selection than our measurement which more closely approximates mere interethnic exposure.

**Table 3:** Pearson correlations for cultural indicators with interethnic friendships

	<i>Friends</i>	<i>Education</i>
Education	.14**	
Occupational educational level	.11**	.43**

Source: author's calculations using the European Social Survey 2002.

** $p < .01$.

level and interethnic friendships, as predicted by our first hypothesis, for we would have no empirical evidence for the idea that selection of interethnic friendships is driven by cultural preferences. The correlations in Table 3 indicate that there actually is such a positive relationship between education and interethnic friendship. Together with the lack of a framing effect, this validates our former conclusion that the strong influence of interethnic friendship on ethnic prejudice is mainly attributable to culturally driven contact selection.

Now we know how cultural selection works for interethnic friendships, it is time to turn to interethnic 'socially imposed' contact with colleagues (Table 4) and with neighbors (Table 5). In both cases, a direct relationship between contact and ethnic prejudice is lacking, while we do find a framing effect for

Table 4: Regression on 'ethnic prejudice,' contact with colleagues models

	<i>Model 1</i>	<i>Model 2</i>
(Constant)	5.47***	5.48***
Contact		
Friends	-.19***	-.19***
Colleagues	-.05	-.02
Neighbors	.03	.03
Education	-.24***	-.24***
Occupational educational level	-.13**	-.13***
Control variables		
Income	-.04	-.04
Insecurity	-.03	-.03
Age	-.05	-.05
Gender (man = ref.)	-.02	-.02
Living area (city = 1, village = 0)	.04	.04
Interactions		
Education * colleagues	.00	
Occupational educ. * colleagues		-.08*
R^2	.08	.09
N	1,578	1,578

Source: author's calculations using the European Social Survey 2002.

Note: all numbers are standardized regression coefficients.

* $p < .05$.

** $p < .01$.

*** $p < .001$.



Table 5: Regression on 'ethnic prejudice,' contact with neighbors models

	<i>Model 1</i>	<i>Model 2</i>
(Constant)	5.47***	5.47***
Contact		
Friends	-.19***	-.19***
Colleagues	-.05	-.05
Neighbors	.04	.07
Education	-.24***	-.24***
Occupational educational level	-.13**	-.13**
Control variables		
Income	-.05	-.04
Insecurity	-.03	-.03
Age	-.06	-.06
Gender (man = ref.)	-.02	-.02
Living area (city = 1, village = 0)	.03	.04
Interactions		
Education * neighbors	-.07*	
Occupational educ. * neighbors		-.12***
R^2	.09	.09
N	1,578	1,578

Source: author's calculations using the European Social Survey 2002.

Note: all numbers are standardized regression coefficients.

* $p < .05$.

** $p < .01$.

*** $p < .001$.

both types of contact on the relationship between educational level and ethnic prejudice. Our fourth hypothesis is, therefore, also corroborated, although in the case of contact with colleagues this is only true for occupational educational level. Further research is needed to explain this lack of a framing effect for educational level. Despite the former, our results show that responses to interethnic contact, when such contact is not formed by culturally driven selection processes, are driven by interpretive differences that stem from different cultural understandings of ethnic group boundaries.

A visual representation for one of these interactions, namely for the influence of neighborhood contact on the relationship between occupational educational level and ethnic prejudice, is given in Figure 1. It clearly shows that for individuals with the lowest occupational educational level, more contact is associated with more ethnic prejudice, while the opposite is true for individuals with the highest occupational educational level. A similar picture applies to the interactions with occupational educational level and colleagues and with education and neighborhood contact. This means that interethnic contact that is not prone to contact selection reaffirms individuals' initial ideas about ethnic minorities. Altogether, it leads to the conclusion that more interethnic contact in

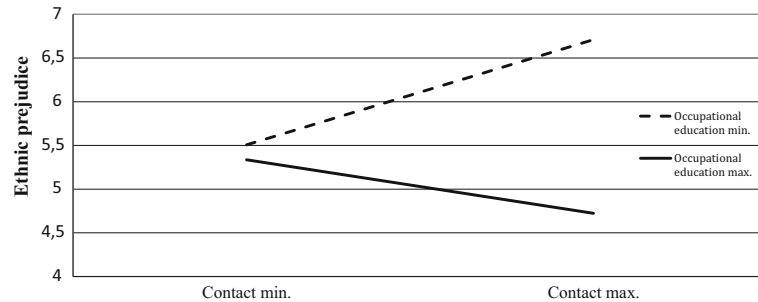


Figure 1: Effect of neighborhood contact on ethnic prejudice under minimum and maximum conditions of occupational educational level.

restricted choice situations leads to greater polarization on ethnic prejudice along the lines of individuals' educational level.

One may, however, argue that these results can be interpreted differently, namely by taking the quality of interethnic contacts into account. Studies that include contact quality typically claim that only 'positive' contacts under optimal conditions work for prejudice reduction (Allport, 1979 [1954]; Semyonov and Glikman, 2009; Kouvo and Lockmer, 2013). It may be true that the contexts in which interethnic contacts take place for lower-educated people are less 'optimal' since these are for example more likely to take place in less better off neighborhoods. From this perspective, the moderation effect of education could also be attributed to quality of contact rather than to cultural framing.

Nevertheless, even if such an unequal distribution of contact quality exists between low and highly educated people, something our measurements cannot account for, this does not necessarily mean that our conclusions on the importance of cultural framing are unwarranted. Since a work situation requires some form of cooperation, one would expect the interaction effect with education to be considerably smaller for colleagues than for neighbors if it is mainly interethnic contact conditions that underlie the interaction effect. This is especially true because ethnic minorities tend to have low-skilled jobs, making it more likely that work-floor interethnic contacts of low-educated natives are of equal status. Considering the former, the fact that we still clearly find a significant interaction with education for contact with colleagues leads us to suggest that even though contact quality may also have a part, cultural framing is indeed at hand here.

Taking all our research findings together leads us to a similar conclusion. Given that low-educated natives have more interethnic contact opportunities than highly educated ones, and while contact opportunities are positively associated with interethnic friendships (Petermann and Schönwälder, 2012), we still find a positive association between educational level and interethnic friendship. This is telling because, based on contact opportunities only, you would expect to find exactly the opposite effect. Could the difference in quality



of interethnic contact between low and highly educated persons be such as to completely flip over the expected association? Following the logic of contact theory, this is not the most plausible option, given that contacts between low-educated natives and ethnic minorities can in some aspects even be seen as more instead of less 'optimal.' Hence, there will be more instances of equal status contact, especially in terms of economic status, and contact in which cooperation is required, especially in the workplace, because immigrants and low-skilled natives often times have similar economic positions. Consequently, the positive association between education and interethnic friendship, together with the other results reported in the former, rather seem to confirm the plausibility of the theoretical rationale we have developed throughout this study: those with lower education tend to be less open to ethnic diversity than the higher educated. This openness is closely related to less thinking in terms of ethnic boundaries. As such, even though we cannot fully assess it with our data, what seems to happen among low-educated natives who think in terms of rigid ethnic boundaries is that their resistance toward ethnic minorities impedes for interethnic exposure to grow into 'genuine' contact, thereby also closing the door to interethnic friendship.

Conclusion and Discussion

In this paper, we have aimed to critically assess whether the marked negative relationship between interethnic friendship and ethnic prejudice confirms the alleged beneficial effects of this particular variety of interethnic contact, or whether this rather stems from a misguided tendency among researchers to relegate ethnic prejudice to the status of a necessarily dependent variable on misconceived a priori grounds. To this means, we have distinguished culturally informed contact selection from 'genuine' contact effects by introducing education as a proxy for capturing both culturally informed contact selection and the culturally driven interpretive differences of interethnic contacts. Our results have shown that selection of interethnic contact when it comes to individual preferences can indeed be understood through an individual's educational level. As such, our results indicate that the relationship between interethnic friendship and the opinion about ethnic minorities is attributable to cultural contact selection. More specifically, as expected it seems to be true that those who are more accepting of ethnic diversity (the higher educated) are more likely to engage in interethnic friendships whereas those who are ethnically prejudiced (the lower educated) are more likely to avoid interethnic friendships. Furthermore, for the types of contact that are less open to contact selection we have found interethnic contact to reinforce individuals' initial ideas about ethnic diversity. Hence, greater polarization in ethnic prejudice was found in such contact situations: individuals with a lower educational level have more ethnic



prejudice when they have many interethnic contacts with neighbors and colleagues, while individuals with a higher educational level have less ethnic prejudice through such contacts.

Even so, some caution is needed when drawing conclusions on our findings. Hence, as discussed before, we could not take into account the quality of the contacts measured. If it is true that non-choice contacts, such as with neighbors and colleagues, are systematically more ‘negative’ for lower-educated people than for higher-educated ones, this may also explain a polarization in ethnic prejudice along the lines of educational level. Our results do not strongly point in this direction, but based on the measurements used here we cannot fully test this. A better setting for doing so would for example be research in mixed classrooms with students of diverse (familial) educational backgrounds, since the conditions of contact in such a setting would be more or less the same for all members of the class.

Despite the former, our findings do show a pattern that is consistent with our expectation that both cultural selection of intimate interethnic contacts, such as friendships, and cultural framing of non-choice contacts, such as with neighbors and colleagues, take place. These findings have implications for three aspects of the contact theory literature. First, our findings indicate that the often found ‘beneficial effect’ of interethnic friendships on the way people think about ethnic minorities may be mostly attributable to the fact that such friendships are chosen by individuals who already think positively about ethnic minorities. Replication of our research using data for other countries is needed before extracting bold conclusions from our results. Nevertheless, we have no theoretical reasons to expect that such replications would lead to fundamentally different results than ours. What could be true, however, is that the results in countries that are less polarized on issues concerning ethnic diversity may be less pronounced than our findings, which are after all obtained from one of the most polarized countries on this issue in Europe. In such a polarized context, at least, it seems safe to object to the idea that ‘especially, close, cross-group friendship, may enable one to take the perspective of outgroup members and empathize with their concerns’ (Pettigrew and Tropp, 2008, p. 923). Our results indicate that those individuals who are already empathetic toward culturally different people are more likely to engage in interethnic contact, which explains the strong, direct, and often-found association between interethnic friendships and positive opinions about ethnic minorities. Therefore, our initial cultural–sociological suspicion toward the emphasis on interethnic friendships as a way of reducing ethnocentrism in contact theory literature seems to be warranted.

Second, our results indicate that interethnic contact reinforces already existing ideas about ethnic minorities. This serves to underline the importance of taking into account the role of cultural frames in shaping interpretations of interethnic contact. What is remarkable is that our results contradict earlier findings on this issue, which showed that interethnic contact especially leads to less-prejudiced



thinking among individuals who have the strongest authoritarian conceptions (Dhont and Van Hiel, 2009; Hodson *et al*, 2009). The results of these studies suggest that interethnic contact leads to an inversion of individuals' initial stance toward ethnic minorities, which is diametrically opposed to our findings. One possible explanation for these contradictory results is that the previous studies are based on a small sample of college students. As mentioned before, college student samples are likely to show greater contact effects than the general population (cf. Pettigrew and Tropp, 2011). Furthermore, given that the sample is composed of higher-educated individuals who are in general already more empathetic toward ethnic minorities, a similar effect as suggested by Pettigrew and Tropp (2011) concerning attitudes toward elderly might be applicable: 'there may be a ceiling effect that makes it more difficult for contact to enhance attitudes that are already largely positive' (Pettigrew and Tropp, 2011, p. 54).

Third and final, we have shown that the method of measuring both causal paths within a cross-sectional dataset as a means to cancel out culture's causal efficacy may not be a sufficient solution to the problem of contact selection. When using the alternative theoretically inspired approach we followed in this paper, it becomes clear that previous research has underestimated the role of culturally informed contact selection. Of course longitudinal data for the general population would be, methodologically speaking, the soundest way of assessing whether the often-found relationship between interethnic contact and individuals' opinion about ethnic minorities is attributable to contact effects or to contact selection. However, given that such longitudinal data are mostly absent, the alternative of inserting a concept through which contact selection and 'genuine' contact effects can be theoretically disentangled in cross-sectional datasets, as presented here, seems to offer a valuable solution to the problem of contact selection in contact research. In this study, at least, the findings obtained through this approach lead to the suggestion that the role of contact selection, especially in interethnic friendships, has been underestimated, whereas the prejudice reducing role of interethnic contact, especially intimate contact, may well have been overestimated in contact theory studies to date.

On a more general note, our study underlines the importance of taking the relative autonomy of culture seriously rather than relegating it to the status of a necessarily dependent variable on a priori grounds. Cultural sociology's refusal to marginalize or play down culture as 'really' or 'actually' a mere reflection of an allegedly 'deeper' or 'more fundamental' and essentially noncultural social reality makes it more than just another specialization in an already overly fragmented discipline. Ironically, especially research fields characterized by survey-based quantitative research and theories that treat the cultural factor in a stepmotherly fashion appear to have much to win from a foregrounding of people's cultural understandings. This is because the cultural-sociological gaze easily gives rise to alternative theoretical interpretations of already known sets of statistical associations, which is indispensable to any researcher interested in



designing critical, competitive tests of established theories. Contact theory as discussed in the current paper is one example of a theory for which there proves to be less-supportive evidence than many think there is. Another example is the theory of class-based voting, for, at a closer and more critical cultural-sociological look, the West has not so much witnessed the often proclaimed decline in class voting, but rather a massive increase in noneconomic cultural voting, systematically misinterpreted as a decline in class voting due to the neglect of cultural voting motives (Houtman and Achterberg, 2016). Cultural sociology is hence not merely a matter of taste, but one of intellectual urgency: its theoretical gaze surely deserves extension to the realm of mainstream quantitative sociological research.

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