Accepted manuscript version (after peer review) of the following article:

Arendt, F., Marquart, P., & Matthes, J. (2015). Effects of Right-Wing Populist Political Advertising on Implicit and Explicit Stereotypes. *Journal of Media Psychology*, 27, 178–189. https://doi.org/10.1027/1864-1105/a000139

© 2015 Hogrefe Publishing

This version of the article may not completely replicate the final version published in the journal. It is not the version of record

The accepted manuscript is subject to the Creative Commons licence CC-BY-NC.



Running Head: Effects of Right-Wing Populist Political Advertising

Effects of Right-Wing Populist Political Advertising on Implicit and Explicit Stereotypes

Florian Arendt, Franziska Marquart, and Jörg Matthes

Department of Communication, University of Vienna, Vienna, Austria

Florian Arendt
Department of Communication
University of Vienna
1080 Vienna
Austria

Tel. +43 1 42774-9342

E-mail florian.arendt@univieac.at

Effects of Right-Wing Populist Political Advertising

2

Abstract. We investigated the effects of antiforeigner political advertisements on implicit and

explicit stereotypes. While stereotypical associations may become automatically activated

(implicit stereotypes), individuals can reject these thoughts and decide not to use them for an

overtly expressed judgment (explicit stereotypes). We hypothesized that even if citizens negated

stereotypical content, advertisements might still affect implicit stereotypes. This hypothesis was

tested using an experiment where participants (N = 186) were exposed to zero, two, four, or six

stereotypical advertisements. The results showed that stereotypical advertisements did not

influence explicit stereotypes but did influence implicit stereotypes, even in critical recipients

who negated the stereotypical content.

Keywords: political advertising, implicit stereotypes, negation, right-wing populism, dose-

response

In 2012, the posting of a political ad by the right-wing populist Austrian Freedom Party (FPÖ) led to cries of public outrage and protest in the media. The poster, accusing Moroccans of being criminals, called for their expulsion from Austria and stated that "patriotism" was to be favored over "Moroccan thieves". Other right-wing populist parties throughout Europe employ similar accusations or calls for action against minorities in their campaigns. Examples include, but are not limited to, the Swiss People's Party (with slogans such as "Maria instead of Sharia") and the German NPD ("Get home well!" accompanied by a photo of Muslim women walking down a street).

The present study investigates the effects of exposure to the mediated "criminal foreigner" stereotype in right-wing populist political advertising. Until now, the measurements implemented have mostly relied on overtly expressed (i.e. explicit) judgments. For example, citizens may be asked whether they perceive foreigners as dangerous, aggressive, or criminal (explicit stereotype; e.g., Dixon, 2007). But stereotypical associations may become automatically activated in memory, irrespective of whether a person considers them to be accurate (e.g. "criminal" when thinking about "foreigners"). These automatically activated stereotypical associations are called *implicit stereotypes* and point to the strength of the automatic associations between a social group and attributes in memory (Greenwald et al., 2002). It is important to note that even if stereotypical associations are activated automatically, individuals can reject these thoughts and decide not to use them in forming an overtly expressed judgment (Devine, 1989). Therefore, if measurements in media effects studies remain restricted to explicit stereotypes, scholars will only detect a subset of possible negative responses. The effects of right-wing populist advertisements likely go beyond such overt effects.

Moreover, previous research has shown that implicit as well as explicit measures predict social behavior. For example, while overtly expressed judgments predict voting, implicit preferences provide added predictive value (for a review, see Glaser & Finn, 2013). This underlines the importance of considering both implicit and explicit stereotypes in political communication research (see Hefner, Rothmund, Klimmt, & Gollwitzer, 2011).

In this paper, we will show that exposure to stereotypical posters of right-wing populist parties, pairing "foreigners" with the "criminal" attribute, can prime the automatic association between both concepts in memory. Most importantly, we will demonstrate that such implicit media stereotyping effects can be documented irrespective of whether effects on explicit stereotypes exist, showing that implicit effects are observable even if individuals negate the stereotypical content during exposure.

The present research is relevant to three research areas: First, this study investigates right-wing populist political advertising effects on implicit stereotypes for the first time, expanding previous research by using implicit cognition in the context of political advertising. Second, this study enriches implicit cognition research by studying the effects of stimuli adopted from real-world advertisements. This is important because the majority of basic implicit cognition research uses highly artificial stimuli. Third, due to the possibly damaging consequences of mediated stereotypes for democracy, this study will inform politicians, critical citizens, and media practitioners about possible effects of stereotypical political advertisements.

Mediated Stereotypes in Political Advertisements and Their Effects

In conveying political information to the electorate, parties' posters are very important, especially in Europe (Kaid, 2012; Seidman, 2008). Given their high visibility in public spaces, it is difficult for the average citizen to avoid them; yet, their omnipresent prominence has to

compete with short spans of attention: While up to approximately 85% of the population is reached by political posters, only few seconds are allocated to their reception (Lessinger, Moke, & Holtz-Bacha, 2003). Due to this short time span, posters focus on short slogans, simple language, and emotional pictures.

Right-Wing Populism and Advertising

Right-wing populist parties make special use of these characteristics in applying emotive language and images to get their message across (e.g. Betz, 2013). During the last decades, they have grown to become relevant electoral forces in several European countries (Bos, 2012; Rydgen, 2005). Although researchers do not always agree on what exactly defines right-wing populist parties, they do concede that parties like the Austrian *FPÖ*, the French *Front National*, or the Belgian *Vlaams Belang* belong to it. "Populism" has often been described as employing a highly emotional and simplistic discourse that is directed at the 'gut feelings' of the people, or even as a distinct ideology that considers society to be separated into "the pure people" versus "the corrupt elite" (Mudde, 2004). In addition to that, the right-wing characteristic of these parties embraces a master frame of ethnonationalist xenophobia (Rydgren, 2005) which fosters anti-immigrant attitudes. Political posters are an important mean to propagate this emotional discourse to the electorate.

In terms of their influence on the public, the utilization of stereotypical accusations in these posters (e.g. the fear of "over-foreignization" within the home country and accusing immigrants of "asylum abuse"; see Ter Wal, 2002) has not gained the attention it deserves. This is troublesome because right-wing populist posters may threaten the peaceful coexistence of a country's inhabitants by nurturing negative stereotypes. More importantly, research has neglected the possible effects of such accusations on implicit stereotypes. For example, findings

by Rieger, Frischlich, and Bente (2013) indicate that extremist propaganda is often rejected by recipients. The authors noted that this might be due to the perception of social undesirability of supporting such political positions. This underlines the importance of considering implicit stereotypes when studying the effects of right-wing populist advertising.

Media Stereotypes

We conceptualize social group stereotypes as cognitive structures that consist of a social group and assigned attributes (Greenwald et al., 2002); they can be understood as simplified mental images that help to interpret the huge diversity of the social world. Because individuals within a society grow up in a shared (mass-mediated) symbolic environment, (cultural) stereotypes are widely shared. When applied to outgroups, these images are often derogatory. Thus, stereotypes (cognitive structures) are central aspects of prejudice (negative attitudes) and discrimination (negative behavior) toward outgroups (Amodio & Devine, 2006; Devine, 1989; Maio, Haddock, Watt, & Hewstone, 2008; Rieger et al., 2013).

Media stereotypes are mass-mediated depictions of social groups that are repeatedly paired with specific attributes (e.g., Brown Givens & Monahan, 2005; Dixon, 2007). Although the mass media can pair virtually any social group with a specific attribute, research has focused on media stereotypes consistent with important cultural stereotypes. Research has shown that regular exposure to media stereotypes may thus contribute to the development (i.e., forming) of stereotypical memory traces; once developed, such traces can be re-activated (i.e. primed) by subsequent, albeit brief, exposure (see Dixon, 2006; Kühne, Schemer, Matthes, & Wirth, 2011). The latter is the focus of the present research.

The process of stereotyping is separated into two stages (Devine, 1989). First, stereotypical associations in memory can become automatically activated regardless of whether

someone considers them as accurate. Thus, the activation stage assumes a high degree of inevitability. In contrast, the second stage, stereotype application, represents the use of these associations in making overt judgments. Although associations are activated automatically, individuals may decide not to use them for an overtly expressed judgment (also see Gawronski & Bodenhausen, 2006; Greenwald et al., 2002; Strack & Deutsch, 2004). In contrast to that, implicit stereotypes are somewhat inescapable.

Implicit Stereotypes

The present study draws upon an implicit social cognition model of media priming (Arendt, 2013a). Implicit stereotypes are conceptualized as the outcomes of associative processes, the latter being defined as the automatic activation of associations in memory (Amodio & Devine, 2006; Gawronski & Bodenhausen, 2006; Strack & Deutsch, 2004). Therefore, implicit stereotypes constitute the strength of the automatic association between a group concept (e.g. foreigners) and an attribute (e.g. criminal). The strength of this automatic association is understood as the potential for one concept to activate another (Greenwald et al., 2002). Political advertising can activate these concepts; for example, viewing a poster that accuses foreigners of being criminal may lead to the activation of both concepts. Activation can spread from encoded concepts like specific words or visuals indicating foreigner and crimerelated concepts such as thieves or drug dealer to associatively related concepts like criminal (for a discussion of spreading activation see McNamara, 2005). Most importantly, the association between concepts can be strengthened if both are activated simultaneously (Greenwald et al., 2002). For example, if the mental concepts foreigner and criminal are activated simultaneously, the strength of the cognitive association between them will increase. Thus, exposure to stereotypical political advertising can prime cognitive associations. When a

corresponding social stimulus is encountered in a situation following exposure to a right-wing populist advertisement, cues activating *foreigner* (e.g. when encountering a person with an accent) will also activate *criminal* with an increased likelihood due to the amplified strength of the automatic association.

The effect of stereotypical media content on implicit stereotypes is under researched. As notable exceptions, studies on community crime alerts (Akalis, Banaji, & Kosslyn, 2008), print news (Arendt, 2012), video games (Burgess, Dill, Stermer, Burgess, & Brown, 2011), and audiovisual fiction (Brown Givens & Monahan, 2005) have shown that exposure to media stereotypes can affect implicit stereotypes. It is important to note that some of these studies could only find an effect on implicit stereotypes, but not on explicit stereotypes (Brown Givens & Monahan, 2005; Burgess et al., 2011). Hence, a reliance on explicit stereotypes only may lead to the (wrong) conclusion that stereotypical content does not have a negative effect.

We argue that a similar implicit-explicit dissociation could be present in the realm of political advertising. Currently, no studies have investigated the effects of right-wing populist posters on implicit stereotypes. Based on the studies reviewed above, we expect the reception of stereotypical political posters to affect implicit stereotypes. Specifically, the pairing of foreigners as criminals should strengthen their automatic association in memory. Although individuals can decide not to read a specific newspaper, play a video game, read a crime alert, or watch a movie, it is difficult for citizens to "escape" political posters in the public space. Thus, studying the effects of political posters is very important as they reach a significant portion of the public. As this is the first study to investigate the priming effects of right-wing populist political advertisements on implicit stereotypes, the following primary hypothesis will guide our project:

H1: Exposure to stereotypical political posters primes implicit stereotypes.

Dose-response account of political communication effects. We utilized a dose response account of media effects (Arendt, 2013b). The goal of a dose-response analysis is to test the effects of different "doses" of the media content (e.g. the number of stereotypic posters participants were exposed to) on an outcome (e.g. implicit stereotypes). Using a dose-response account allows for a more realistic estimation of stimuli-effects relationships. This is especially important in advertising with its central focus on repetition. The dose-factors' values represent ordered categories with metric scaling. Based on previous research (Arendt, 2013b) and consistent with advertising's central focus, we conceptualized the dose as frequency of exposure.

Political posters rely on simple and strongly emotional content (Seidman, 2008) to convey the intended information quickly and effectively. In fact, right-wing populist parties' posters consist primarily of pictures and bold, emotional information, creating a very salient media stereotype (Betz, 2013). Thus, compared to other media channels such as newspapers, media stereotypes are disseminated very blatantly in these advertisements. Therefore, we expect that even a small number of ad exposures will show an implicit effect. Nevertheless, Arendt (2012) showed that media content must have a specific dose to overcome an implicit effect threshold.

It is important to note that media effects may be nonlinear. Unfortunately, research often neglects the importance of nonlinear phenomena. Although nonlinearity is implicitly mentioned in some prominent media effects theories, experimental research generally has been using designs with only two or three conditions (e.g. one control and one treatment group). In such investigations, the dose cannot be sufficiently varied. This is problematic when interpreting results, as we are unable to conclude if different dose levels produce different effects.

Furthermore, given the fact that political parties do not rely on only one poster during a campaign, but try to disseminate their message using different motives (communicating the same general message, but "packed" differently), the question emerges about whether the total number of advertisements citizens are exposed to plays a role in their effect on implicit stereotypes.

According to the implicit social cognition model of media priming (Arendt, 2013a), high dose levels should produce similar effect sizes as low dose levels. Stated differently, we predicted that even a low dose of the media stereotype primes the cognitive association in memory. However, once primed (i.e., re-activated), higher dose levels may not be able to substantially increase the strength of the cognitive association any further. Taken together, association re-activation is assumed to be binary (i.e., all or none) like the synapses of vertebrates (see Higgins, Bargh, & Lombardi, 1985, for this allegory).\(^1\)

H2: The effect of political posters on implicit stereotypes is expected even after exposure to a small number of advertisements (i.e., on a low dose level; H2a) and also emerges with a comparable effect size when exposed to a high number of advertisements (i.e., on a high dose level; H2b).

Damping Effect of Negation

Anti-immigrant statements such as the one applied by the Austrian Freedom Party (accusing Moroccans of being thieves) lead to cries of outrage by the public and media. That is to say that a significant portion of the society negates the content of these ads: Negation refers to an internal attempt to negate the new information (e.g. "No! This is not true!"). It is a propositional process defined as the validation of automatically activated associations (Gawronski & Bodenhausen, 2006): For example, an automatic association between the concepts "foreigners" and "criminal" might be transformed into the proposition: Foreigners *are* criminal.

These propositions are then assessed for their validity. Negation describes a process of reversing the "truth value" of this proposition: Foreigners *are not* criminal (also see Strack & Deutsch, 2004).

Taken together, individuals can easily adjust overtly expressed, explicit stereotypes when attributing low validity to the encoded information. But does the same happen in implicit media effects? The answer is not straightforward, and time is an important variable. On the one hand, associations get automatically activated in a subsequent situation (e.g. after poster exposure) when encountering a social object (e.g. a person with a foreign accent). As research indicates, such automatic activation is somewhat inescapable (Devine, 1989). On the other hand, research has shown that negation at the moment of encoding (and not in a subsequent situation) may reduce a treatment's impact on an implicit measure (Peters & Gawronski, 2011): Validity information can be memorized at the time of encoding. When the associations, activated by external stimuli, are immediately qualified by validity information, a treatment's impact on implicit cognition is reduced. Additionally, analyses revealed that the effect of validity information was reduced when it was presented after a substantial delay. The authors argued that longer delays may allow consolidation of the initially formed associations. Taken together, previous research indicates that it is necessary to negate environmental input stimuli during the moment of encoding. In the context of media stereotype research, this has been called the damping effect of negation (Arendt, 2013a).

It is important to note that time, intention, and cognitive capacity are essential for negation of mass-mediated content (Strack & Deutsch, 2004). If a stereotype is repeated several times (e.g. on posters during an election campaign), individuals have to negate each stereotypical depiction during encoding in order to substantially reduce the poster's implicit effect. Although

they may negate a few stereotypical depictions, it is unlikely that individuals will do so on each occasion as they might simply not have the motivation to do so (Arendt, 2013a). This is the case with political posters, which are often encountered incidentally without a deliberate intention to reflect on their content. We therefore tested if negation partially mediates the effect of political advertisements on implicit stereotypes, dampening the implicit media effect. This is articulated in the third hypothesis:

H3: Negation dampens the effect of stereotypical political posters on implicit stereotypes.

Explicit Stereotypes

As discussed earlier, although the "criminal" attribute may be automatically activated when thinking about "foreigners," individuals can choose not to overtly express it (e.g. due to the goal to act unprejudiced). Indeed, Valentino, Hutchings, and White (2002) established the effectiveness of priming racial cues in political advertisements. They found that the salience of priming in campaign messages reduces the effect, leading recipients to suppress their negative thoughts. This suggests that viewers who are aware of the anti-immigrant attack in the advertisement may refrain from overtly expressing a negative stereotypical judgment.

While the stereotypes in general media are subtle (e.g. newspaper articles where individuals have to read the whole article to encode the biased content), right-wing populist political advertisements portray the stereotypical information in short slogans using straightforward language and emotional pictures (Betz, 2013). These stereotypes are more obtrusive compared to other media channels, allowing individuals to recognize the biased information more easily and possibly increasing the likelihood of a correction process. Indeed, correction theories, like the flexible correction model (Wegener & Petty, 1997), assume that if individuals perceive themselves to be influenced, they attempt to correct for this presumed

impact. A correction process can produce three possible findings: (1) no effect (i.e. the correction process correctly "partials out" the new stereotypic information), (2) effect (i.e. the correction process does not work), (3) boomerang effect (i.e., the correction process works very well—even too good—which lead to an over-correction). Because prior theoretical knowledge did not allow for the formulation of a hypothesis, we decided to phrase this as a research question:

RQ1: Do political posters of right-wing populist parties influence explicit stereotypes?

Despite the fact that individuals may control their automatically activated thoughts (Devine, 1989), research shows that there is a correlation between implicit and explicit stereotypes (Hofmann, Gawronski, Gschwendner, Le, & Schmitt 2005). Theory assumes that explicit judgments are built on the strength of the automatic association between relevant concepts in memory, even in socially sensitive areas like stereotyping (Gawronski & Bodenhausen, 2006). These correlations are typically low (r = 0.17 in Hofmann et al.). Although not central to our research focus, we included a further hypothesis:

H4: Implicit stereotypes predict explicit stereotypes.²

Method

We utilized an experimental design with one manipulated factor (dose level). Participants were randomly allocated to one of four experimental groups (none, two, four, or six stereotypical political poster advertisements). Implicit and explicit stereotypes were measured immediately after exposure. Finally, participants answered a computer-administered survey.

Participants

A total of 186 students (79.1% female) of an Austrian university enrolled in an introductory course on communication research participated in the study. Participants' age ranged from 21 to 50 (M = 25.41, SD = 4.78). Most participants indicated their nationality as

Austrian (67.7%), followed by German (17.7%), and Other (9.7%). Some participants did not answer this question (4.9%). The sample had a rather left political orientation (M = 3.10, SD = 1.07; seven-point scale, $1 = extremely \ left$ to $7 = extremely \ right$), and all participants were fluent in German. They received extra course credit for participation.

Experimental Manipulation

Participants viewed a total of 12 political advertisements in a controlled laboratory experiment. They were allocated to one of four conditions utilizing a dose-response account of media effects where different dose levels of the stereotypical content were used (Arendt, 2013b). In the control condition (n = 44), participants saw no stereotypical advertisements and 12 political control advertisements unrelated to the dependent variables. In the "low dose" treatment group (n = 51), participants viewed two stereotypical posters and 10 control posters. The "moderate dose" treatment group (n = 45) received four stereotypical posters and eight control posters; the "high dose" treatment group (n = 46) had the strongest dose with six political posters and six control posters.

The stereotypical stimuli were constructed from original posters published by the Swiss right-wing populist party SVP. All of these consisted of four elements: (a) one photograph of a male criminal, (b) a censor bar containing one written attribute (fraudster, drug dealer, burglar, murderer, rapist, or panderer) and a typical non-Austrian name, (c) a general slogan ("Drop criminal foreigners"), and (d) a logo of the Austrian right-wing populist party FPÖ (see Appendix for examples). The use of these advertisements allowed for internal (manipulation of the media stereotype dose levels) and external (reference to existing advertisements) validity at the same time.

We tried to keep the dosage of the stereotypical content constant across all posters by depicting one male offender of approximately the same dimensions and a variable but similar vivid criminal act. Additionally, the specific posters were randomly assigned. As a result of this randomization, some differences were eliminated in the stimuli, which otherwise could be problematic for a metric interpretation of the experimental condition variable (i.e. unequal differences between the dose-values; see the dose-response account subsection). Thus it is possible to conclude that the moderate dose condition was twice as strong compared to the low dose condition.³

Measures

Implicit stereotype. The strength of the automatic association between "foreigners" and "criminal" in memory was measured using the computer administered Implicit Association Test (= IAT, Greenwald, McGhee, & Schwartz, 1998). We used the standard seven block procedure as described by Greenwald and colleagues (1998) with a total of 128 combined block trials (first block: 48 trials, second block: 80 trials). Participants had to classify words appearing in the middle of the screen (Mohamed, Achmed, Dejan, Ercan; Michael, Patrick, Stefan, Thomas; steal, kill, rape, murder; run, jump, play, love) into four categories (foreigner, Austrian, criminal, permitted). The stimuli had been used in previous studies and are thus pretested. Two of those categories were concepts (foreigner, Austrian), the other two were attributes (criminal, permitted). Categorization should be faster when the pairing of a concept with an attribute reflects a stronger association in memory A validated scoring algorithm—the *D*-score which incorporates data from all combined blocks, calibrates the metric by each respondent's latency variability, and involves no adjustment beyond the preliminary deletion of latencies over 10 seconds (i.e., "built in" error penalty) as described by Greenwald, Nosek, and Banaji (2003)—

was used, with higher values indicating a stronger automatic association between "foreigners" and "criminal" (M = 0.63, SD = 0.34).

Explicit stereotype. We asked participants to estimate the prevalence of criminal foreigners among both *suspected* (item 1) and *convicted* (item 2) offenders. Participants indicated their answers on a 10-point scale ranging from 1 (0-9%) to 10 (90-100%). The measure was calculated as the mean of both indicators (M = 4.07, SD = 1.74, $\pm = .84$). Participants typically do not know the exact percentages and these judgments are made under uncertainty. According to Tversky and Kahneman (1973), humans rely "on the ease with which instances or associations could be brought to mind" (p. 208) when answering such questions. Such frequency judgments have been successfully used by previous media stereotype priming research (e.g., Arendt, 2012; Dixon, 2007). It is important to note that people can correct for presumed media influences simply by choosing a lower percentage answer option (Wegener & Petty, 1997).

Negation. Participants were asked about their agreement with four statements measuring the negation of stereotypical content on a scale ranging from 1 = I totally disagree to 5 = I totally agree. This scale (M = 4.14, SD = 0.88, $\pm = .88$) includes items constructed according to Peters and Gawronski (2011); for example, "Each time a criminal was described on a FPÖ poster, I thought 'NO!', this description is too stereotypical and prejudiced." Data collection for negation took place after implicit and explicit stereotypes were measured.

Procedure

Participants were welcomed in a waiting room in groups of up to eight. The experimenter took them to another room where each participant sat down in front of a computer in individual research cubicles. They first saw a total of 12 political posters in random order for

10 seconds each. After exposure, participants took the IAT and answered a computeradministered survey before being debriefed and dismissed.

Data analysis

By using a dose-response account of media effects (Arendt, 2013b), the dose-factors' values represent ordered categories with metric scaling. The goal of a dose-response analysis is to reveal a functional relationship between the doses (i.e. the number of stereotypic posters participants were exposed to) and its elicited responses (i.e. on implicit stereotypes). Nonlinear regression analysis can be used to estimate the parameters of these curves. It is important to note that linear regression or ANOVA is not able to reveal nonlinear relationships in the way nonlinear regression can.

Results

Implicit Stereotypes

We hypothesized that exposure to stereotypical posters influences implicit stereotypes (H1), that this effect emerges even after exposure to a small number of advertisements (i.e., on a low dose level; H2a), and that a similar effect size emerges when exposed to a high number of advertisements (i.e., on a high dose level; H2b). Interestingly, all treatment groups showed stronger implicit stereotypes compared to the control condition: The "low dose" (M = 0.67, SD = 0.32), t(93) = 2.37, p = .01, "moderate dose" (M = 0.66, SD = 0.37), t(87) = 2.07, p = .04, and "high dose" treatment group (M = 0.65, SD = 0.37), t(88) = 1.82, p = .02, differed significantly from the control group (M = 0.52, SD = 0.30). This supports H1. More importantly, the data appeared in the form of a monotonic function, that is, a quick onset of the effect which remains at approximately the same level. We used a mathematical model with a threshold because if we had utilized a dose level weaker than the "low dose" condition in this study, it is very likely that

we would have been able to document an effect threshold (Arendt, 2012). The presence of an implicit effect threshold indicates the absence of an effect under a very low dose level. After exceeding this threshold, the effect will emerge. Therefore, we fitted a three parameter dose response curve (a sigmoid function utilizing the standard Hill slope) to the data points, R = .17, $R^2 = .03$, F(1, 176) = 4.90, p = .03: ⁴

Implicit Stereotype =
$$0.52 + \frac{0.67 - 0.52}{1 + 10^{1.36 - Dose}}$$
 (1)

The curve is visualized in Figure 1. The 0.52 value describes the bottom (i.e. baseline of the control condition), whereas the 0.67 value describes the top of the curve; both are in units of implicit stereotypes. Interestingly, even a low dose produced an implicit effect at a rather strong level. The value of 1.36 points to the dose level that gave a response on the implicit measure half way between the bottom and the top. Thus, political poster exposure increased the implicit stereotype by approximately 0.15 units, which is relatively independent of whether someone viewed two, four, or six advertisements. Given the fact that the absolute values of the implicit stereotype measure can be interpreted in terms of the criteria for small (H0.2), medium (H0.5), and large effects (H0.8) similar to the interpretation of Cohen's d (Greenwald et al., 2003), stereotypical advertisements increased the already present moderate implicit bias (control = 0.52) into a comparably larger bias (estimated top of the advertising effect = 0.67). Taken together, H2a and H2b were supported.

Damping Effect of Negation

The third hypothesis predicted that negation would dampen the implicit poster effect. We used path analysis to test this hypothesis. In the first step, the experimental condition variable was dummy-coded, resulting in three dummies. The control condition was set as the reference

group. Thus, each dummy ("low", "moderate", and "high") represents the effect of the respective dose condition compared to the control condition. Second, we modeled negation as a mediator of advertisements' effect on implicit stereotypes. The path model (df = 0; also including explicit stereotypes, which we will discuss below) is illustrated in Figure 2 (see upper half; standardized estimates used).

It was assumed that stereotypical content activates negation, which in turn dampens implicit stereotypes. We found supporting evidence by looking at the unstandardized coefficients. All three dose conditions produced effects on negation, $Coeff_{low dose} = 0.579$, SE = 0.180, p < .01; $Coeff_{moderate dose} = 0.533$, SE = 0.185, p < .01; $Coeff_{high dose} = 0.328$, SE = 0.185, p = .08. Negation significantly reduced implicit stereotypes, Coeff = -0.061, SE = 0.030, p = .04. To formally test the damping effect of negation, we looked at the indirect effects. The indirect effect of the low dose condition, Coeff = -0.035, 95% CI [-0.079, -0.008], as well as the moderate dose condition, Coeff = -0.033, 95% CI [-0.072, -0.007], achieved significance using bootstrapping (bias corrected, 2,000 samples). Although the indirect effect of the high dose condition points in the right direction, Coeff = -0.020, 95% CI [-0.057, 0.001], the confidence interval (slightly) included zero.⁵

The damping effect of negation was quite small compared to the treatment's direct effect. This is illustrated in Figure 2 (lower half). We used the unstandardized coefficients from the path model to illustrate the damping effect. The area between the direct and total effect curves indicate the damping effect of negation, which slightly decreased with increasing dose levels although only on a descriptive level (confidence intervals overlap). The indirect effects are not significantly different from each other. Although hypothesis 3 was supported, the damping effect

of negation is small. This indicates that stereotypical advertisements influenced implicit stereotypes even in critical recipients who negate the stereotypical content during exposure.

Explicit Stereotypes

Research question 1 asked if the treatment influenced explicit stereotypes. This question can be tested with the path model by looking at the total effects of stereotypical ad exposure on explicit stereotypes. None of the dose conditions produced a significant total effect, Coeff_{low dose} = -0.153, 95% CI [-0.727, 0.433]; Coeff_{moderate dose} = 0.595, 95% CI [-0.010, 1.231]; Coeff_{high dose} = 0.106, 95% CI [-0.534, 0.755]. Therefore, exposure to political posters did not influence explicit stereotypes. ⁶

Interestingly, when looking at the direct effects of the media stereotype treatment, the moderate dose level produced a significant effect, Coeff_{moderate dose} = 0.757, 95% CI [0.131, 1.341]. Given the fact that negation significantly reduced explicit stereotypes, the absence of the moderate dose level's significant total effect is attributable to the effect of negation. The effect of negation on explicit stereotypes (standardized Coeff = -.325, p < .01) is higher compared to negation's impact on implicit stereotypes (standardized Coeff = -.155, p = .04). This is not surprising because overtly expressed explicit judgments are easier to adjust compared to implicit stereotypes. Thus, participants who negated the media stereotype more often gave a lower explicit judgment. This indirect effect of ad exposure on implicit and explicit stereotypes through negation holds true for the low (standardized specific indirect effects: Coeff_{explicit} = -.096, Coeff_{implicit} = -.044), moderate (Coeff_{explicit} = -.086, Coeff_{implicit} = -.039), and the high dose condition (Coeff_{explicit} = -.053, Coeff_{implicit} = -.024). All specific indirect effects are statistically significant (all z's > 3.64, p < .01, see Holbert & Stephenson, 2003).

Finally, hypothesis 4 predicted an influence of implicit stereotypes on explicit stereotypes. As can be seen in Figure 2 (upper half), this was supported by the data. Individuals built their explicit judgment in part on implicit stereotypes, Coeff = 1.148, 95% CI [0.608, 1.766]. Although negation mediated the posters' effects on explicit stereotypes (i.e. decrease of explicit stereotypes), there were also significant indirect effects of political advertisements on explicit stereotypes through the posters' effect on implicit stereotypes, i.e., increase of explicit stereotypes low dose condition (standardized indirect effect: Coeff = .053), moderate dose condition (Coeff = .055), and high dose condition (Coeff = .041), all z's > 6.59, p < .01.

Discussion

We found that looking at political advertising from a right-wing populist party, which presented foreigners as criminals, influenced implicit stereotypes. This effect appeared even after viewing just two stereotypic posters. Negation during encoding (Peters & Gawronski, 2009) showed only a very small damping effect. This is consistent with previous research using news content (Arendt, 2013a). Results showed that stereotypical right-wing populist posters influenced implicit stereotypes even in critical recipients who negated the stereotypical content. This finding indicates that recipients seem to be somewhat defenseless against implicit media effects. On the other hand, no effect on explicit stereotypes was found. Thus, even if no effects of political ads on overtly expressed judgments can be detected, there might still be an impact on an implicit level. By using implicit measures, we were able to detect otherwise hidden political communication effects. Therefore, political communication researchers should use implicit measures as a supplement to traditional self-report measures, as they can reveal otherwise hidden media effects.

Limitations

Since we tested the effects of right-wing populist posters of a specific party, it is possible that different posters may show different effects. We already noted that similar motives and slogans are used in several European countries (e.g. Betz, 2013). We, therefore, find it reasonable to conclude that the general effect pattern is the same even if the unique content of the political advertisements differs slightly. The results of the present study indicate that the pairing of a specific social group with negative attributes such as criminal can influence implicit stereotypes. Future research could manipulate the content of the ads and investigate if there are different effects for different posters (e.g., ads with or without visuals, slogans, or candidate images).

Our method of presenting the posters for 10 seconds may be questioned since previous research has shown that the typical time of attention allocated to political posters is shorter (Lessinger et al., 2003). However, since presentation time was held constant in all treatment groups, differences in effects cannot be attributed to viewing time. In addition, negation is initiated only when sufficient time is available (Strack & Deutsch, 2004). Therefore, a shorter duration of poster viewing might lead to *less* negation and inhibit deeper (critical) processing of the advertisement. As our results show, negation during poster reception affects implicit stereotypes. Thus, if less negation takes place in a typical exposure setting, the detrimental consequences of stereotypical advertisements on implicit stereotypes may be even larger. This remains a question for future research, where exposure duration should be manipulated experimentally.

Moreover, our design only included a single treatment session with a maximum of six stereotypical posters. The effects measured in this study might be even larger if an actual campaign was executed with repeated encounters to similar content over a period of several

weeks. We encourage future projects to test the effects of right-wing populist posters from a longitudinal perspective, for example, by using prolonged-exposure experiments or panel designs.

Furthermore, future studies should investigate the consequences of exposure to stereotypic political advertisements on implicit attitudes and behavior, because stereotypes, attitudes (i.e., prejudice), and behavior (i.e., discrimination) are highly interrelated phenomena and are all constitutive for mental and behavioral biases toward specific social groups.

Moreover, we cannot make confident causal inferences pertaining to the relationship between implicit stereotypes and negation. Although our experimental design allows clear causal inferences regarding the treatment (i.e., the treatment causally influenced implicit stereotypes), we cannot exclude the possibility that negation may have causally affected implicit stereotypes. Nevertheless, we based our assumption on good theoretical reasoning and recent empirical evidence (Peters & Gawronski, 2011). Thus, we think that the specified causal order is appropriate. Future research should experimentally manipulate negation, which would lead to more confident causal inferences.

Finally, research should investigate the hypothesized effects with a non-student sample, as general advertising research has given proof for the fact that higher educated people—for several reasons—are more resistant against attempts of influence than citizens with lower formal education (Hodson & Busseri, 2012; Huddy & Gunnthorsdottir, 2000). In these premises, negation presumably is affected by participant's education: Different (non-student) samples may show less negation during exposure and thus could show even *stronger* effects compared to the student sample of the present study. However, this remains subject for future research as well.

Finally, future research should examine if there are more powerful ways to reduce detrimental political communication effects on implicit stereotypes, which operate "under the radar" of recipients. Most important in this regard is whether negation training before encountering stereotypical posters can effectively reduce or even eliminate the impact of advertisements on implicit stereotypes (see Ramasubramanian, 2007).

Conclusions

The discussed limitations notwithstanding, our study is the first to investigate dose-dependent effects of political posters on implicit stereotypes and the damping effect of negation. It clearly expands research on implicit cognition to the study of political advertising. Also, our study further validates implicit cognition research by using externally valid, real-world ads. By doing so, we can deliver a clear message to politicians, citizens, as well as immigrants about the potentially precarious effects of such ads.

Taking into account the growing number and popularity of right-wing populist parties and their excessive use of anti-immigrant slogans, questions about the implications for society and democracy need to be addressed. By trivializing hostile and possibly xenophobic thoughts via means of political advertising, anti-immigrant resentments are presumably more easily adopted by the public, possibly making it socially more acceptable to attack, victimize, and accuse foreigners of crimes and wrongdoing. Against this background, our results seem worrying: We found significant effects of right-wing populist political posters on implicit stereotypes, even for citizens who critically negated the stereotypical information. Because implicit stereotypes are a central aspect of prejudice and discrimination, targeted research effort is undoubtedly needed.

We opened this paper with a recent example of the public protest that resulted from a political advertisement posted by the Austrian right-wing populist FPÖ. This poster accused Moroccans of being criminals and called for their expulsion. The cries of outrage pointed to a critical assessment of the poster content, making it plausible to assume that a large number of citizens negated the stereotypical content of the advertisement. Research that only uses explicit measures would not have been able to reveal such implicit effects. The complementary use of implicit measures is, therefore, indispensable.

References

- Akalis, S., Banaji, M., & Kosslyn, S. (2008). Crime alert! How thinking about a single suspect automatically shifts stereotypes toward an entire group. *Du Bois Review*, *5*, 217-233. doi: 10.1017/S1742058X08080181
- Amodio, D., & Devine, P. (2006). Stereotyping and evaluation in implicit race bias: Evidence for independent constructs and unique effects on behavior. *Journal of Personality and Social Psychology*, *91*, 652-661. doi: 10.1037/0022-3514.91.4.652
- Arendt, F. (2012). A newspaper's effect on the strength of automatic associations in memory.

 **Journal of Media Psychology, 24, 1-8. doi: 10.1027/1864-1105/a000057
- Arendt, F. (2013a). Dose-dependent media priming effects of stereotypic newspaper articles on implicit and explicit stereotypes. *Journal of Communication*, *63*, 830-851. doi: 10.1111/jcom.12056
- Arendt, F. (2013b). Toward a dose-response account of media priming. *Communication Research*. Advance online publication. doi: 10.1177/0093650213482970
- Betz, H.-G. (2013). Mosques, minarets, burqas and other essential threats: The populist right's campaign against Islam in Western Europe. In R. Wodak, M. KhosraviNik & B. Mral (Eds.), *Right-wing populism in Europe. Politics and discourse* (pp. 71-88). London: Bloomsbury.
- Bos, L. (2012). *Public images of right-wing populist leaders: The role of the media* (Doctoral dissertation). University of Amsterdam.
- Brown Givens, S., & Monahan, J. (2005). Priming mammies, jezebels, and other controlling images: An examination of the influence of mediated stereotypes on perceptions of an

- African American woman. *Media Psychology*, *7*, 87-106. doi: 10.1207/S1532785XMEP0701_5
- Burgess, M., Dill, K., Stermer, P., Burgess, S., & Brown, B. (2011). Playing with prejudice: The prevalence and consequences of racial stereotypes in video games. *Media Psychology*, 14, 289-311. doi: 10.1080/15213269.2011.596467
- Devine, P. (1989). Stereotypes and prejudice: Their automatic and controlled components.

 **Journal of Personality and Social Psychology, 56, 5-18. doi: 10.1037/0022-3514.56.1.5
- Dixon, T. (2006). Psychological reactions to crime news portrayals of Black criminals:

 Understanding the moderating roles of prior news viewing and stereotype endorsement. *Communication Monographs*, 73, 162-187. doi:

 10.1080/03637750600690643
- Dixon, T. (2007). Black criminals and white officers: The effects of racially misrepresenting law breakers and law defenders on television news. *Media Psychology*, *10*, 270-291. doi: 10.1080/15213260701375660
- Eveland, W. P. (1997). Interactions and nonlinearity in mass communication: Connecting theory and methodology. *Journalism and Mass Communication Quarterly*, 74, 400-416. doi: 10.1177/107769909707400211
- Gawronski, B. (2009). Ten frequently asked questions about implicit measures and their frequently supposed, but not entirely correct answers. *Canadian Psychology*, *50*, 141-150. doi: 10.1037/a0013848

- Gawronski, B., & Bodenhausen, G. V. (2006). Associative and propositional processes in evaluation: An integrative review of implicit and explicit attitude change.

 *Psychological Bulletin, 132, 692-731. doi: 10.1037/0033-2909.132.5.692
- Glaser, J., & Finn, C. (2013). How and why implicit attitudes should affect voting. *PS: Political Science & Politics*, 46, 537-544. doi: 10.1017/S1049096513000656
- Greenwald, A. G., Banaji, M., Rudman, L., Farnham, S., Nosek, B. & Mellot, D. (2002). A unified theory of implicit attitudes, stereotypes, self-esteem, and self-concept.

 *Psychological Review, 109, 3-25. doi: 10.1037/0033-295X.109.1.3
- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. K. (1998). Measuring individual differences in implicit cognition: The Implicit Association Test. *Journal of Personality and Social Psychology*, 74, 1464-1480. doi: 10.1037/0022-3514.74.6.1464
- Greenwald, A. G., Nosek, B., & Banaji, M. (2003). Understanding and using the Implicit

 Association Test: I. An improved scoring algorithm. *Journal of Personality and Social*Psychology, 85, 197-216. doi: 10.1037/0022-3514.85.2.197
- Hefner, D., Rothmund, T., Klimmt, C. & Gollwitzer, M. (2011). Implicit measures and media effects research: Challenges and opportunities. *Communication Methods and Measures*, *5*(3), 181-202. doi: 10.1080/19312458.2011.597006
- Higgins, E. T., Bargh, J. A., & Lombardi, W. J. (1985). Nature of priming effects on categorization. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 11, 59-69. doi: 10.1037/0278-7393.11.1.59
- Hodson, G., & Busseri, M. a. (2012). Bright minds and dark attitudes: lower cognitive ability predicts greater prejudice through right-wing ideology and low intergroup contact.

 Psychological Science, 23, 187-195. doi:10.1177/0956797611421206

- Holbert, L., & Stephenson, M. (2003). The importance of indirect effects in media effects research: Testing for mediation in structural equation modeling. *Journal of Broadcasting and Electronic Media*, 47, 556-572. doi: 10.1207/s15506878jobem4704_5
- Hofmann, W., Gawronski, B., Gschwendner, T., Le, H., & Schmitt, M. (2005). A meta-analysis on the correlation between the Implicit Association Test and explicit self-report measures. *Personality and Social Psychology Bulletin*, *31*, 1369-1385. doi: 10.1177/0146167205275613
- Huddy, L., & Gunnthorsdottir, A. H. (2000). The persuasive effects of emotive visual imagery: Superficial manipulation or the product of passionate reason? *Political Psychology*, 21, 99-114. doi: 10.1111/0162-895X.00215
- Kaid, L. L. (2012). Political advertising as political marketing: A retro-forward perspective. *Journal of Political Marketing*, 11, 29-53. doi: 10.1080/15377857.2012.642731
- Kühne, R., Schemer, C., Matthes, J. & Wirth, W. (2011). Affective priming in political campaigns. How campaign-induced emotions prime political opinions. *International Journal of Public Opinion Research*, 23, 485-507. doi: 10.1093/ijpor/edr004
- Lessinger, E.-M., Moke, M., & Holtz-Bacha, C. (2003). "Edmund, Essen ist fertig!"

 Plakatwahlkampf 2002 Motive und Strategien [,Edmund, supper is on!' Motives and strategies in the 2002 political poster campaigning]. In C. Holtz-Bacha (Ed.), *Die Massenmedien im Wahlkampf. Die Bundestagswahl 2002* (pp. 216-242). Wiesbaden, Germany: Westdeutscher Verlag. doi: 10.1007/978-3-322-80461-7_11

- Maio, G. R., Haddock, G., Watt, S. E., & Hewstone, M. (2008). Implicit measures and applied contexts: An illustrative examination of antiracism advertising. In: R. Petty, R. Fazio, & P. Brinol (Eds.), *Attitudes: insights from the new wave of implicit measures* (pp. 327-357). New York, NY: Psychology Press.
- McNamara, T. (2005). Semantic priming: Perspectives from memory and word recognition. New York, NY: Psychology Press.
- Mudde, C. (2004). *The populist Zeitgeist*. Government and Opposition, 39, 541-563. doi: 10.1111/j.1477-7053.2004.00135.x
- Peters, K., & Gawronski, B. (2011). Are we puppets on a string? Comparing the impact of contingency and validity on implicit and explicit evaluations. *Personality and Social Psychological Bulletin*, 37, 557-569. doi: 10.1177/0146167211400423
- Ramasubramanian, S. (2007). Media-based strategies to reduce racial stereotypes activated by news stories. *Journalism and Mass Communication Quarterly*, 84, 249–264. doi: 10.1177/107769900708400204
- Rieger, D., Frischlich, L., & Bente, G. (2013). *Propaganda 2.0. Psychological effects of right-wing and Islamic extremist internet videos*. Köln, Germany: Wolters Kluwer.
- Rydgren, J. (2005). Is extreme right-wing populism contagious? Explaining the emergence of a new party family. *European Journal of Political Research*, 44(3), 413-438. doi: 10.1111/j.1475-6765.2005.00233.x
- Seidman, S. A. (2008). Posters, propaganda, and persuasion in election campaigns around the world and through history. New York, NY: Peter Lang.

- Strack, F., & Deutsch, R. (2004). Reflective and impulsive determinants of social behavior.

 *Personality and Social Psychology Review, 8, 220-247. doi:

 10.1207/s15327957pspr0803_1
- Ter Wal, J. (2002). Anti-foreigner campaigns in the Austrian Freedom Party and Italian Northern League: The discursive construction of identity. In R. Wodak & A. Pelinka (Eds.), *The Haider phenomenon in Austria* (pp. 157-176). New Brunswick, NJ: Transaction Publishers.
- Tversky, A., & Kahneman, D. (1973). Availability: A heuristic for judging frequency and probability. *Cognitive Psychology*, *5*, 207-232. doi: 10.1016/0010-0285(73)90033-9
- Valentino, N., Hutchings, V., & White, I. (2002). Cues that matter: How political ads prime racial attitudes during campaigns. *American Political Science Review*, 96, 75-90. doi: 10.1017/S0003055402004240
- Wegener, D. T., & Petty, R. E. (1997). The flexible correction model: The role of naïve theories of bias in bias correction. In M. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 29, pp. 141–208). New York, NY: Academic Press.

Footnotes

¹ We use the term "binary" in an alleviated sense. For example, Arendt (2013a) used a sigmoid function to explain a comparable media effect: Such a function exhibits an increase from small beginnings that accelerates and—after passing an effect threshold—quickly approaches a top. Such media effects are nonlinear, i.e. the strength of the effect is not constant across all dose levels (see Eveland, 1997).

² It is important to note that neither implicit nor explicit stereotypes can be considered as concepts describing the "true self": Response biases on explicit self-reported data, such as social desirability or self-presentation, have the connotation that implicit stereotypes may reveal a person's "true" thoughts. This implies that the "true self" is revealed when intentional control over one's overtly expressed thoughts fails. However, one can also follow the interpretation that the "true self" is reflected in what a person consciously intends to say. The latter builds more upon a deliberate, enlightened human being. Thus, the question of how the stereotype concept defines the "true self" is contingent on the subjectively preferred interpretation. We highly recommend to avoid reference to a "true self" when investigating media effects on implicit and explicit cognition because it is a matter of ideology rather than empirical observation (see Gawronski, 2009, for a similar argumentation).

³ It must be noted that only the treatment posters were FPÖ advertisements. This decision was made based on previous research where it was found that mentioning an associatively related target concept (but not the stereotypical attribute itself) can still prime stereotypes (Dixon, 2006). By utilizing non-FPÖ control posters, we avoided problems regarding the interpretation of our findings.

⁴ We used Prism 6 (GraphPad Software, Inc.) for nonlinear regression analysis.

Unfortunately, this software does not calculate a significance test. Therefore, we calculated multiple R's by regressing the empirically observed values on the estimated values. A significant p-value indicates that the mathematical model significantly predicts the observed values.

⁵ We ran the same path model and additionally controlled for political orientation. This was done because we speculated that this factor may influence the negation process. Indeed, political orientation predicted negation, Coeff = -0.346, SE = 0.054, p < .01, meaning that the more right, the less negation. Political ideology did not predict implicit or explicit stereotypes. None of the other path coefficients reported throughout the manuscript substantially changed when controlling for political orientation. This additional analysis can be obtained upon request.

⁶ We also ran the same dose-response analysis as we did for implicit stereotypes using nonlinear regression analysis; however, no clear pattern emerged.

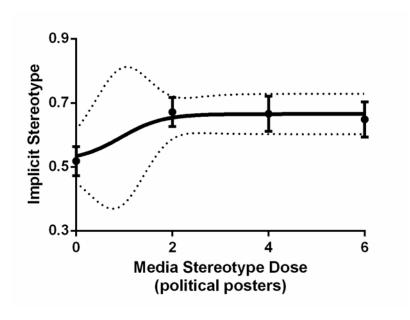


Figure 1. Dose-dependent effects of exposure to stereotypic political posters on implicit stereotypes. The data points represent the means with error bars indicating the standard error. The bold curve represents the fitted function from nonlinear regression analyses. The 95% confidence band (dotted curves) encloses the area that we can be 95% sure that it contains the curve. Note, that the confidence band at the dose values of all treatment conditions does not include the mean of the control group. Dose = absolute amount of stereotypic political poster depicting criminal foreigners. Implicit Stereotype = strength of the automatic association between "foreigners" and "criminal" in memory.

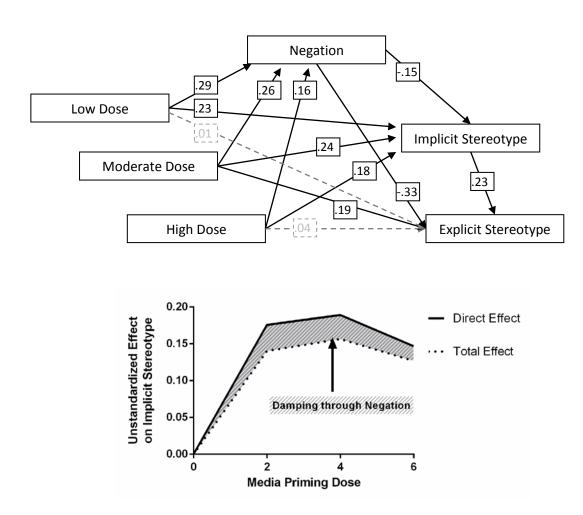


Figure 2. Damping effect of negation. The upper half shows the path model with standardized coefficients. Negation mediated the effect of political posters on implicit stereotypes. All bold paths p < .05, except the path from "high dose" to "negation" (p = .075). The lower half of this figure shows the unstandardized coefficients from the path model (see text). The area between the direct effect and the total effect curves indicates the damping effect of negation.

Appendix







Examples of Posters. Left: Original poster used by the Swiss SVP. Middle and Right: Examples of manipulated FPÖ-posters used in the present study ("Ivan S., rapist/ Tibuk A., drug dealer. Put an end to criminal foreigners.")