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'The world ain't all sunshine': Investigating the relationship between mean world beliefs, conservatism and crime TV exposure

Abstract: Cultivation research argues that mean world beliefs are cultivated through media consumption. Our study expands this notion of cultivation research by integrating approaches from political psychology on conservatism and moral foundation theory, providing complementary explanations for mean world beliefs. Focusing on crime TV exposure and mean world beliefs, we expect both to be rooted in a conservative world view accentuated by the valuing of certain moral foundations. Participants ($N = 455$) took part in a paper-pencil survey design to test three hypotheses regarding the interplay of conservatism, cultivation and mean world beliefs in the context of crime TV exposure. Results indicate evidence for both a significant relationship between conservative moral orientations and mean world beliefs and crime TV choice. Nevertheless, these relationships might suppress the influence of TV crime exposure. Implications for cultivation research are discussed.

Keywords: crime TV, conservatism, cultivation, mean world, moral foundation theory

1 Introduction

"The world ain't all sunshine and rainbows. It's a very mean and nasty place and I don't care how tough you are it will beat you to your knees and keep you there permanently if you let it" (Rocky Balboa, 2006, MGM, quote from IMDB, 2013). Boxer Rocky Balboa is not alone in seeing the world as "mean" or "nasty": Media effects research looks back at a long tradition of analyzing media-

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reinforced negative world perceptions. This is most prominently articulated in cultivation research (Gerbner and Gross, 1976; Gerbner, Gross, Morgan, Signorielli, and Shanahan, 2002). Here, research argues that repeated exposure to media content, particularly TV, shapes the way societies view the world. Cultivation research on the exposure to violent media (Gerbner and Gross, 1976) or crime content (e. g., Bilandzic, 2002; Van den Bulck, 2004) shows that watching this specific content sustains mean world beliefs. We expand this notion of cultivation research by interrogating how far deeply rooted trait-like disposition towards (political) conservatism may both influence crime TV preferences and, at the same time, reinforce mean world perceptions. We do this by complementing cultivation research with findings from the Uncertainty-Threat Model of Conservatism (UTMC) (Jost, Glaser, Kruglanski, and Sulloway, 2003) and Moral Foundations Theory (MFT) (Haidt, 2012; Tamborini, 2013).

1.1 Cultivation research and mean world beliefs

In its origins, cultivation theory can be described as a theory of media influences focusing on the interplay of mass media, society, politics, and the economy from a broader perspective (Gerbner and Gross, 1976; Gerbner et al., 2002; Morgan and Shanahan, 2010), and with a particular focus on "the consequences of growing up and living in a cultural environment dominated by television" (Morgan, Shanahan, and Signorielli, 2009, p. 34).

Derived from this idea, television is seen to have an impact on how viewers form their world view. This also includes their political orientations. Here, empirical work, for instance, illustrates "a convergence and homogenization of heavy viewers across political groups" (Gerbner, Gross, Morgan, and Signorielli, 1982, p. 116), usually towards seemingly moderate political positions, but rarely towards liberal positions (Gerbner, Groos, Morgan, and Signorielli, 1980; 1982). Research in this field concentrates on distinct political orientations but cultivation research also focuses on more general aspects of how to perceive the world. One particularly telling example for such a cultivation of world views through extensive television exposure is labeled the "mean world syndrome" (Gerbner and Gross, 1976). It describes frequent viewers' beliefs of living in a dangerous world, as depicted in television messages (Gerbner et al., 2002). Cultivation is expected to be strongest in a non-selective environment with television acting as an easy-to-consume medium confronting media users with a coherent world view (Morgan et al., 2009), yet we even observe cultivation in today's selective media environment (Romer, Jamieson, and Aday, 2003). Recent empirical findings, for instance, underline that frequent viewers of vio-

lent television content such as crime series or television news develop world perceptions describable as mean world syndromes (Van den Bulck, 2004; Romer et al., 2003).

As cultivation describes processes on the societal level, general interrelations of media, economy, politics, and society, some additional transformations are required to apply the idea of cultivation to individual viewers: Here, real world experiences, motivations, knowledge, or personality traits are interwoven with cultivation. Consequently, as Morgan and Shanahan (2010) describe it with reference to Shrum (2004), the way *individual* viewers estimate social facts such as crime rates ('first-order' cultivation) or the extent of their adoption of attitudes and evaluations ('second-order' cultivation, e.g., mean world syndrome) depends on their traits, states, and their actual context such as real-life experiences (Slater and Elliott, 1982).

For an analysis of the individual level it is necessary to focus not so much on what television exposure in general implies for a given society but to investigate what happens when specific audiences members, characterized by their own experiences (Bilandzic, 2006; Reith, 1987), attitudes, and predispositions (Bilandzic and Busselle, 2008; Bilandzic and Rössler, 2004) are confronted with a particular type of content. Related research has already placed the focus on genre-specific cultivation (Bilandzic and Rössler, 2004). In this respect, cultivation research investigates whether individual viewers are affected by cultivation if they focus on one specific genre, being even more narrow and consistent in its main message. As a consequence of such approaches whereby cultivation processes focus on genre-specific and individual influences on cultivation processes, we assume that television exposure alone is a necessary condition for cultivation on the individual level but not a sufficient one. It is mediated by direct and media-induced experiences and – following the arguments of Bilandzic and Rössler (2004) – shaped by personal motivations to use specific media content. A more recent approach by Bilandzic and Busselle (2008) even argues for blending transportation research and cultivation theory. They see cultivation as the result of "a self-reinforcing interaction between persuasive and motivational aspects of transportation" (p. 508), underlining the assumption that motivational aspects are to be considered when looking for cultivation at an individual level.

We built upon these approaches of cultivation research into the individual by focusing on crime TV as one specific genre. Following the theoretical arguments of Bilandzic and Rössler (2004) and Bilandzic and Busselle (2008) that cultivation research can be complemented with motivational approaches, we hypothesize that such motivational factors impact not only on the reason to select a certain media content but also on the tendency to perceive the world

in a certain cultivated way in the first place. Specifically, we argue that notions of motivated cognition as advocated in the Uncertainty-Threat-Model of Conservatism (UTMC) (Jost et al., 2003) complement findings in cultivation research.

1.2 Seeing the world as a mean place – An Uncertainty-Threat Model of Conservatism

Personal attitudes and motivations shape the way individuals perceive the world. Since approaches that aim to explain how far these personality-based variables lead to certain world perceptions, particular perceptions that are compatible with mean-world perceptions as found in cultivation research are expected to contribute to a better understanding of the underpinnings of cultivation on the individual level. The psychological foundations of conservatism (Duckitt and Fisher, 2003) and, particularly, the Uncertainty-Threat Model of Conservatism (UTMC) (Jost et al., 2003; Jost, Napier, Thorisdottir, Gosling, Palfai, and Ostafin, 2007; Thorisdottir, Jost, Liviatan, and Shrout, 2007) provide a useful theoretical foundation for the origin of these perceptions. The UTMC provides a socio-psychologist approach that sees conservatism and a conservative world view as the consequence of a (motivated) social cognition. Based on an extensive review of existing approaches explaining political conservatism (Greenberg and Jonas, 2003), Jost et al. (2003) argue that the origins of political conservatism are a consequence of two fundamental, motivational principles: resistance to change and acceptance of inequality. As a consequence, conservatives are politically motivated by two principles: a high level of uncertainty avoidance and the assumption of a high threat level to one's personal well-being. Jost et al. (2003) state that "a number of different epistemic motives [...], existential motives [...] and ideological motives [...] are all related to the expression of political conservatism", and they conclude that "virtually all of the above motives originate in psychological attempts to manage uncertainty and fear" and that these "are inherently related to the two core aspects of conservative thought [...] – resistance to change and the endorsement of inequality [...]" (p. 351).

Conservatism is viewed not so much as a political choice but as a consequence of these underlying dispositions to view the world in a certain way, namely that change usually leads to bad outcomes and that even if all people should have the same opportunities, some inequalities in terms of income, wealth etc. are justified. Empirically, Jost et al. (2007) defend the UMTC model against arguments that uncertainty avoidance and threat are not only predic-

tive for political conservatism but also for political rigor and extremism in general, and demonstrate in a series of structure-equation models that uncertainty avoidance and (perceived) threat best explain political conservatism (see also Jost and Amodio, 2012).

Political conservatism as a motivated cognition to see the world in a certain way can be seen as indicative of what in cultivation research has been described as mean-world syndrome. Accounting for media users' general political orientation might as such contribute to explaining potentially media-induced second-order cultivation better. Media experiences, leading to a mean-world syndrome, might support conservatives in their motivated cognition to see the world as a threatening place. Recent theorizing in moral psychology, following the conceptualization of conservatism as a motivated cognition, provides us with the opportunity to actually measure the different world views of political conservatives (and liberals) that encompass more than dispositions towards inequality and change, which demonstrates how some innate moral foundations shape not only people's political ideology (Koleva, Graham, Iyer, Ditto, and Haidt, 2012) but also their media choice (Tamborini, 2011, 2013).

1.3 Different world views of conservatives and liberals – a Moral Foundation Perspective

It is consensus among researchers both following the UMTC model (Jost and Amodio, 2012; Jost et al., 2003) and those critical of its assumptions (Hatemi, McDermott, Eaves, Kendler, and Neale, 2013; Greenberg and Jonas, 2003) that the distinction between liberals and conservatives (in the US), or between left and right (in Europe) is not the only possible political distinction. They also agree that the difference in belief systems between liberals (i.e. left) and conservatives (i.e. right) is a crucial one that "has retained impressive (but by no means perfect) stability for over two centuries" (Jost and Amodio, 2012, p. 56). While the protagonists in this societal struggle have changed over time, the arena of discourse (change vs. stability, inequality vs. equality) in this "Culture War" (Hunter, 1991) has remained rather stable. On an individual level, recently Moral Foundation Theory (Haidt and Joseph, 2007; Haidt, 2012) set out to provide an explanation for the roots of these different world views. As Kovela et al. (2012) argue, MFT follows up on the UMTC model by Jost et al. (2003) but expands it by providing arguments on how the different belief systems and world views of liberals and conservatives are rooted in their innate moral foundations.

MFT argues that people base their (moral) judgments on evolutionary root-ed, innate moral foundations whose salience might differ due to different socio-cultural experiences (Haidt and Graham, 2007). In short, MFT is based on three principles:

First, moral judgments are driven by intuition first, with cognition follow-ing afterwards (cf. Haidt, 2001, 2007). Second, referring to Shweder and col-leagues' cultural analysis of different moral belief systems (Shweder, Much, Mahapatra, and Park, 1997), MFT argues that there is more to morality than harm and fairness considerations. Third, MFT states that morality binds indi-viduals and blinds them (Haidt, 2012; Haidt and Graham, 2007); thus an indi-vidual's perception of, and therefore reactions to, the world are based on their moral belief system. The two latter principles are crucial for explaining the different world views of conservatives and liberals:

MFT (Haidt and Graham, 2007; Haidt and Joseph, 2007; Koleva et al., 2012) argues that morality is constituted of five[1] innate foundations *(Harm/Care; Fair-ness/Reciprocity; Authority/Respect; In-group/Loyalty; Purity/Sanctity)*. These five moral foundations are thought to be innate and universal and might be understood as a first draft of morality that is then shaped by an individual's socio-cultural environment. However, these dimensions are connected to each other so that moral foundations might be subsumed under two latent constructs of morality (Graham, Haidt, and Nosek, 2009): The "individualizing" founda-tions, namely *Harm/Care* and *Fairness/Reciprocity* that concern conceptualiza-tions of morality as not hurting others or not being unfair to them. These are considered the "modern" foundations appreciated by western societies. These foundations stand in relation with the so-called "binding" foundations, which focus on aspects of negotiating hierarchies, feelings of belonging to an in-group and aspects of sanctity usually found in religious practices (Haidt, 2012; Haidt and Graham, 2007).

Liberals and conservatives in western societies both appreciate the "indi-vidualizing foundations" but differ in their binding foundations – only conser-vatives consider them in their morality (Graham et al., 2009; Graham, Nosek, and Haidt, 2012; Koleva et al., 2012). This becomes most apparent in hotly de-bated political issues such as abortion rights or gay rights – viewed by liberals

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1 A recent revision speaks of six foundations. These foundations now read (Haidt, 2012): *Care/Harm; Fairness/Cheating; Loyalty/Betrayal; Authority/Subversion; Sanctity/Degradation*. The new dimension is Liberty/Oppression. Some preliminary findings are published in: Iyer, Koleva, Graham, Ditto, and Haidt (2012). As this dimension is still not yet carved out com-pletely, this study relied on the original five dimensions that have been used in related research (cf. Tamborini et al., 2012; Bowman et al., 2012).

as a matter of *Fairness/Reciprocity* and self-determination, whereas conservatives might argue from a sanctity or in-group based point of view.

1.4 Moral foundation and media choice theory

MFT increasingly gains importance in entertainment research explaining media choices (Bowman, Joeckel, and Dogruel, 2012; Tamborini, 2011, 2013; Tamborini, Eden, Bowman, Grizzard, and Lachlan, 2012). These approaches view different salience patterns mostly as being indicative of different morality subcultures (Tamborini, 2013), expanding Zillmann's (2000) argumentation that different moral evaluations might lead to differences in specific entertainment experiences based on inherent moral foundations and intuitive moral reactions towards morally challenging media content (see MFT principle one, intuitive primacy). On a theoretical level, Tamborini's (2011, 2013) Model of Intuitive Morality and Exemplars (MIME) explains that media choices are based on how far media content provides exemplars for particularly salient moral foundations. Action movies, for example, provide various exemplars of moral transgressions in the *Harm/Care* foundation – potentially leading people with high salience scores in this domain to refrain from being confronted with this type of media. Indeed, Tamborini et al. (2012) empirically found that those individuals with a high salience in *Harm/Care* enjoy violent media less. In a related, survey-based study, Bowman et al. (2012) demonstrated that different salience patterns with respect to 'binding' and 'individualizing' foundations are able to significantly explain a proportion of variance in the appeal of different movie and TV genres to audiences in the US and Germany. For instance, they found that with higher salience of 'individualizing' foundations, preference for TV news increased while a higher salience of 'binding' foundations led to a preference for sports content.

None of these studies have made the connection between the influences of different salience patterns of moral foundations and their link to different world views, namely the liberal and conservative divide and mean-world beliefs. We argue that based on the different salience patterns of moral foundations liberals and conservatives will differ in their preference for morally challenging media content. We see crime TV as such a morally charged content as it usually portrays a society threatened by villains and evildoers. With its focus on law and order we assume crime TV particularly caters to conservative attitudes, for example, for people with stronger 'binding' foundations, namely a focus on *Authority/Respect*.

1.5 Conservatism, crime drama and cultivation

Cultivation occurs not independently of specific genres – at least from an individual view. Several studies have found small to moderate genre-specific influences, especially for crime (Bilandzic, 2002; Van den Bulck, 2004), soap operas, talks shows (Bilandzic and Rössler, 2004) or local news (Cohen and Weimann, 2000; Romer et al., 2003). An initial study by Bilandzic (2002) on the crime genre found that cultivation through crime TV was weaker than the influence of overall TV exposure. Still, we focus on the exposure to fictional crime TV not only because it is considered the archetypical genre for cultivation research (Bilandzic and Rössler, 2004), but also because it is perhaps the most popular genre on TV, especially in Germany, our country of reference, where crime TV series have topped the audience ratings for the last years (Zubayr and Gerhard, 2015). Popular series are US-produced *CSI*, *Navy CIS* or, even more successful in terms of audience rating, German productions *Tatort* (Crime Scene), or *SOKO* (Special Unit). Crime TV is as such a regular part of Germans' TV diet, potentially leading to negative, for instance, mean-world beliefs (Pfeiffer, Windzio, and Kleimann, 2005; Reith, 1987; Van den Bulck, 2004). Fictional crime TV not only contains violence as a reoccurring theme, but also presents criminals' plots and schemes to undermine society. Crime drama can be characterized as presenting amoral and deviant behavior carried out by perpetrators week after week, only countered by a small group of upright investigators. This seems to be particularly relevant not so much for first-order cultivation, such as distorted estimation of crime prevalence, but for second-order cultivation such as mean-world beliefs: fictional crime series provide an abundance of exemplars in which society is threatened. It particularly addresses the uncertainty and threat perception found in conservatives' world views.

Consequently, we expect that extensive exposure to crime TV might lead to viewing the world as a meaner place.

[Cultivation Path H1] The more media users are exposed to crime drama, the more they view the world as a mean place.

Second, against the background of UTMC, we consider an additional explanation for mean-world beliefs. Thus, mean-world beliefs are not (only) rooted in media exposure but are driven by motivated social cognitions that are mainly derived from conservatism as a psychological pre-disposition.

[Cultivation Path H2] The more strongly people follow a conservative belief system, that is, the more salient their 'binding' foundations are, the more they perceive the world as a mean place.
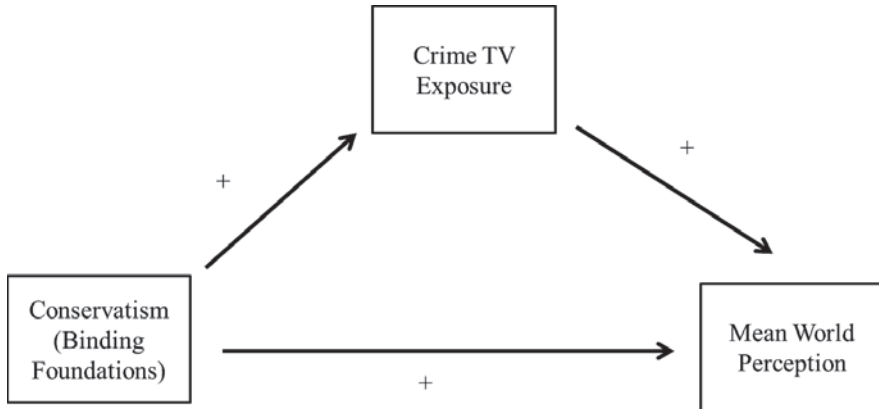
Figure 1: Mediation model: Conservatism – Crime TV exposure – Mean-world perception.

The media selection process as described in MFT-related research (Tamborini, 2011; 2013) now connects both explanations for mean-world perception: The MIME model explains why people chose crime drama in the first place. Consequently, we argue that people chose TV crime based on their inherent moral foundations (Bowman et al., 2012). Crime drama seems to be particularly suited for people valuing 'binding' foundations, namely conservatives. Classical crime series usually uphold traditional societal values : Investigators are legitimized by their authority to use force to capture perpetrators; they follow a code of conduct to not betray society and are usually embedded in strong hierarchies (police force), which they may circumvent occasionally but never break. While crime drama might play with the issue of justice, it is usually a form of justice that is legitimized by an authority. We add a third path to our model:

[Selection Path H3] The more strongly people follow a conservative belief system, that is, the more salient their 'binding' foundations are, the more they prefer crime drama.

We combine these three paths in a mediation model, treating conservatism as a deeply rooted personal pre-disposition that might explain both crime TV exposure and mean-world beliefs. We then ask in how far crime TV exposure might mediate this relationship, expecting that – if cultivation influences remain stable beyond the effects of conservatism – crime drama exposure might lead to an increase of mean-world beliefs.

2 Method

2.1 Procedure

We carried out a paper-and-pencil survey study using a quota sample of the German population. Quota criteria were age (18–34; 34+), gender (male/female), and education (with A-Level/Advanced placement/without A-Level/Advanced Placement), resulting in eight different specifications. We required each of these eight (Age * Gender * Education) specifications to be equally distributed in the sample since we aimed at achieving a rather diverse sample. Questionnaires were distributed with the help of undergraduate students as part of a course assignment. Each student had to find interview partners that qualified for all the eight specifications of our quota plan. After consensual agreement each questionnaire was filled out in private and returned to the cooperating student. Participants did not receive financial compensation.

2.2 Participants

After eliminating incomplete data sets, a total of 455 participants completed the survey. Fifty-two percent of the sample was female. Average age was $M = 39.03$ ($SD = 16.81$, $n = 448$) with 53 % being 35 years or older. Minor problems occurred with the quota for education, as in a few cases ($n = 11$) participants did not provide all information. As a consequence, the quota for education (43 % without A-Level) was not met properly[2]. Even if the sample is skewed for the better educated, we see the sample as sufficiently suitable, as the main reason for employing a quota was to account for a diverse group of participants.

2.3 Measures

Political orientation. Instead of using a liberal vs. conservative scale as employed in related research in the US (Graham et al., 2009), we relied on the West-European version of measuring political orientation by a left-right scale

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[2] For instance, it later turned out that some participants sampled as not having an A-Level indicated having one in the questionnaire. The most underrepresented quota was female, under 35 without A-Level (38 instead of 57). The most overrepresented quota was female, under 35 with A-Level (67 instead of 57).

(Inglehart and Klingemann, 1976). We asked participants to position themselves on a five-point scale ranging from left (= 1) to right (= 5). Results indicate sufficient variance in terms of political orientation, with all five categories chosen by our participants and a mean of $M = 2.71$ ($SD = 0.80$, $n = 435$) (see also Table 2).

Moral foundations. In order to measure a conservative world view, we employed MFT. We measured the specific moral orientation that according to research goes hand in hand with a conservative world view (Graham et al. 2009; Haidt 2012; Haidt and Graham, 2007). We employed an adjusted version of the Moral Foundation Questionnaire (MFQ). The MFQ questionnaire accounts for five moral foundations, namely *Harm/Care*, *Fairness/Reciprocity*, *Authority/Respect*, *In-group/Loyalty and Purity/Sanctity*, each measured with a set of six Likert-type items. All items ask for the evaluation of either a question of moral relevance ("Whether or not someone suffered emotionally") (three items per foundation), or require a moral judgment ("Respect for authority is something all children need to learn") (three items per foundation). While previous research showed problems in replicating the factor structure of the MFQ (Graham et al., 2009; Joeckel, Bowman, and Dogruel, 2012; Tamborini et al. 2012), findings of the latent two-factor structure of 'individualizing' and 'binding' foundations are rather stable (Bowman et al., 2012; Graham et al., 2009). Therefore, we employed the approach taken by Bowman et al. (2012), who had factors analytically condensed by the MFQ into a way to measure an 'individualizing' and a 'binding' moral foundation as latent moral structure. They employed eight items from the MFQ to measure 'individualizing' foundations and nine items for the measurement of 'binding' foundations. Both measures proved to be reliable and were replicated in a German and a US population. For this study, internal consistency for both measures was acceptable with $α = .785$ ($M = 4.85$, $SD = 0.69$, $n = 430$) for the 'individualizing' foundations and $α = .738$ ($M = 3.17$, $SD = 0.82$, $n = 406$) for the 'binding' foundations.

Mean-world index. We employed a tested German translation of Gerbner and Gross' (1976) Mean World Index as developed by Bilandzic (2002) (for details, see also Rössler, 2011). The index consists of three Likert-type items ("When dealing with other people one cannot be careful enough") ranging from 1 (= do not agree at all) to 5 (= fully agree). Items are averaged out to form a combined index. In spite of an internal consistency of over $α = .800$ in the initial study, internal consistency for this study was mediocre with $α = .602$ ($M = 2.76$, $SD = 0.76$, $n = 453$).

Crime TV liking. Each participant's liking of crime content was accessed using a list of eleven popular fictional crime TV series. For each series, participants had to indicate how much they liked to watch it on a five-point scale (1 = not at all, 5 = very much). Series were selected based on audience popularity and in order to account for different broadcasting times (regularly aired from 6pm to 10pm), channels (PSB, private) and origins (US, German). Our list included US series such as *CSI Miami*, *Navy CIS* as well as German programs such as *Tatort*, the most popular German TV program (Zubayr and Gerhardt, 2015), or *Rosenheim Cops* (a pre-prime-time TV show). Additionally, participants could name and rate one other show that did not appear on the list.

Crime drama exposure. Based on the indications of the crime drama (TV) liking scale, we counted the number of series participants had rated with four or five on the above mentioned liking scale. Our measure ranged from 0 to 12 with *M* = 2.33, *SD* = 1.95, *n* = 455.

Socio-demographics. Age, gender and formal education, ranging from 1 = no degree to 6 = Ph.D. was accounted for.

3 Results

3.1 Cultivation

First, we analyze each of the proposed paths individually. This means, for H1, we focus on crime drama exposure and mean-world beliefs. As socio-demo-

Table 1: Hierarchical regression for crime TV exposure predicting mean world (*n* = 441).

	Model 1 $F_{(3, 438)} = 12.31***$			Model 2 $F_{(4, 437)} = 10.10***$		
	T	*β*	*p*	*T*	*β*	*p*
Gender	−1.63	−.075	.104	−1.70	−.078	.091
Education	−5.86	−.271	< .001	−5.61	−.260	< .000
Age	−.04	−.002	.069	−.04	−.002	.966
Crime TV exposure				1.81	.084	.071
$R^2_{(adj.)}$		.071			.076	
F for change in R^2					3.28(*)	

(*)*p* < .1. *p < .05. **p < .01. ***p < .001

graphic variables might impact on cultivation such as mean-world beliefs, we controlled for all socio-demographic variables. We carried out a hierarchical regression using our mean world index as dependent variable and socio-demographic variables as the first block of independent variables and crime TV exposure as the second block.

We can only observe a weak, positive but not significant effect of crime TV exposure on the mean-world index. Thus, we cannot confirm H1 since we find the hypothesized effect, but it is weak and not significant.

3.2 Effects of conservatism on mean-world beliefs

For the next step of the analysis, we have to account for the relationship between conservatism and moral foundations first. Following MFT, we assume that a conservative world view can be differentiated from a liberal world view by the salience of the binding foundations as identified by Moral Foundations Theory. Consequently, we use the salience of 'binding' foundations as a measure for a conservative world view.

Although findings on different moral orientations in the US and other cultural contexts such as the UK are rather consistent (Graham et al., 2009), and previous research has found expected moral foundation patterns in Germany (Bowman et al., 2012; Joeckel et al., 2012), to our knowledge no previous MFT-based research has scrutinized the liberal–conservative distinction and its relevance to moral orientations in a German context. Based on MFT, we expected the 'individualizing' foundations to be valued across the political spectrum but the 'binding' foundations only to be valued by conservatives (i.e. right-wing).

Empirically, we find that while participants do not differ significantly in terms of 'individualizing' foundations (F (4, 409) = 1.77, p = .135), we observe a significant difference between each of the groups based on their political

Table 2: Relation between political orientation and moral foundations (n = 435).

	Left (1)	2	3	4	Right (5)
N	23	147	207	51	7
	M (SD)	M (SD)	M (SD)	M (SD)	M (SD)
Binding*	2.63 (0.71)	2.85 (0.75)	3.35 (0.78)	3.64 (0.59)	4.28 (1.18)
Individualizing*	5.13 (0.56)	4.90 (0.71)	4.78 (0.74)	4.84 (0.57)	5.22 (0.54)

* Scale ranging from 1 (low) to 6 (high)

Table 3: Hierarchical regression for MFT binding predicting mean world ($n = 397$).

	Model 1 $F (3, 394) = 15.12***$			Model 2 $F (4, 394) = 16.75***$		
	T	$β$	p	T	$β$	p
Gender	−1.63	−.079	.104	−1.59	−.074	.113
Education	−6.52	−.313	< .001	−5.00	−.246	< .001
Age	.028	.001	.978	−1.56	−.078	.121
MFT binding				4.41	.228	< .001
$R^2_{(adj.)}$		.096			.137	
F for change in R^2					19.48***	

(*)$p < .1$. *$p < .05$. **$p < .01$. ***$p < .001$

orientation with respect to the 'binding' foundations (F (4, 386) = 18.75, $p < .001$). We also find a moderate positive and significant correlation between the left–right scale and the binding foundations ($r = .397$, $p < .001$, $n = 391$)[3] (see Table 2). As a consequence, we may employ our 'binding' foundation score as a measure for a conservative world view.

If we now repeat our analysis of H1 with the salience of the 'binding' foundations as independent variable in the second block of the hierarchical regression, we find the salience of the 'binding' foundations to be a significant ($p < .001$) and positive predictor for the mean-world index, explaining roughly 4 % of unique variance (see Table 3). The more people follow their 'binding' foundations, the more they perceive the world as a mean place. This supports H2, our conservatism path.

3.3 The selection path – MFT and crime TV exposure

Lastly, we account for the selection path as advocated by the MIME (Tamborini, 2011, 2013) and related research (Bowman et al., 2012). Here, we repeat our analysis procedure (H1, H2). Now, crime TV exposure is our dependent variable and the salience of the 'binding' foundations enters as an independent variable in the second block of the regression.

When controlling for socio-demographic variables, the salience of binding foundations is a significant and positive predictor for TV crime exposure, ex-

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3 At the same time, the correlation between the left–right scale and the individualizing foundations is not significant ($r = −.073$, $p = .137$, $n = 414$).

Table 4: Hierarchical regression for MFT binding predicting crime TV exposure ($n = 397$).

	Model 1 $F (3, 394) = 2.77*$			Model 2 $F (4, 393) = 5.10***$		
	T	β	p	T	β	p
Gender	.34	.017	.734	.41	.020	.683
Education	−2.85	−.143	.005	−1.70	−.088	.089
Age	.52	.026	.601	−.74	−.039	.459
MFT binding				3.36	.188	.001
$R^2_{(adj.)}$		.013			.040	
F for change in R^2					11.87***	

(*)p < .1. *p < .05. **p < .01. ***p < .001

plaining roughly 3% of unique variance. This can be interpreted as confirming H3, the selection path, of our model[4].

3.4 Testing the role of crime TV exposure – mediation analysis

As a final step, we test all our hypothesized paths simultaneously. We do this by relying on mediation analysis as proposed by Preacher and Hayes (2008)[5]. Our analysis builds upon the proposed model in Figure 1. From the individual analysis of our paths, we already expect that the indirect path from crime TV exposure to mean-world perception may not be significant. This – potentially – non-significant relationship is further underlined in our mediation analysis (see Table 5).

Our mediation model explains about 7% of the total variance (F (2, 403) = 16.33; p < .001). The total effect of 'binding' foundations on mean-world beliefs through the reception of crime series is moderate (c = .244; p < .001). The strongest effect is between 'binding' foundations and crime TV series exposure (a = .502; p < .001) (our selection path). It underlines our finding that the more people follow a conservative view, the more they prefer crime TV. We also find a significant direct but rather small effect of 'binding' foundations on mean-

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4 If, as a control, we repeat the same analysis using the salience of the individualizing foundations as a predictor, their salience only has a weak Beta = .089, p = .089. The overall model explains considerably less variance (r^2 = .013 compared to r^2 = .040).

5 We adopt the terminology of Hayes (2013), using a, b and c′ for unstandardized regression coefficients (OLS regressions).

Table 5: Simple mediation of the effect of binding through crime series reception on mean-world beliefs ($N = 406$).

	Coeff.	SE	t	p
IV to mediator (a path)	.502	.117	4.283	.000
Direct effect of mediator on DV (b path)	.029	.019	1.541	.124
Direct effect of IV on DV (c' path)	.230	.045	5.061	.000
Total effect of IV on DV (c path)	.244	.045	5.494	.000

$R^2_{(adj.)} = .070$; $F = 16.33$ (df 2; 403); $p < .000$; Total effect of IV on DV (c path): c = c' + ab.
Indirect effect of IV on DV through M (ab paths; bootstrapped): effect = .0146;
LLCI (95 %) = −.004; ULCI (95 %) = .039.
Number of bootstrap samples for bias corrected bootstrap confidence intervals: 1000.
Note. For mediation analysis we used the INDIRECT-Tool: Preacher and Hayes (2008),
SPSS Macro for Multiple Mediation, written by Andrew F. Hayes; Coeff. = *unstandardized regression coefficients.*

world beliefs (c' = .230; $p < .001$): The more people follow a conservative world view, the more they form a mean-world perception. Nevertheless, we do not find a significant mediation effect since the exposure to crime TV series (mediator; b-path) on mean-world beliefs is not significant; consequently, confidence intervals for the bootstrapping estimates contain zero, suggesting that the indirect effect of binding through crime series reception on mean-world beliefs might be zero (see also Preacher and Hayes, 2008).

4 Discussion

This study aimed at expanding current approaches in cultivation research by accounting for audience members' conservative world view as a further explanation for mean-world beliefs. We therefore take an individual perspective of cultivation research, investigating the impact of cultivation on the individual (Bilandzic, 2006; Van den Bulck, 2004). The Uncertainty-Threat Model of Conservatism (Jost et al., 2003, 2007) provided us with a complementary explanation of audience members' negative world perceptions. We combined these assumptions with research rooted in Moral Foundation Theory (cf. Haidt, 2007; Haidt and Joseph, 2007), which allowed us to conceptualize political conservatism – defined as a motivated cognition by Jost et al. (2003, 2007) – as a world view being based on innate so-called 'binding' moral foundations. According to approaches on media selection (Bowman et al., 2012; Tamborini, 2011, 2013)

these foundations of a conservative outlook on life provided another explanation for the preference of crime TV content.

Empirically, we tested three hypotheses. Our first hypothesis was rooted in cultivation research. We only found weak empirical support for the notion that crime TV consumption leads to mean-world beliefs, contradicting previous research on the cultivation effects of crime series that at least argued for minor cultivation effects (Bilandzic, 2002; Bilandzic and Rössler, 2004; Pfeiffer et al., 2005). This might be explained on a theoretical level, as Appel (2008) argues: While crime series depict acts of crime that might lead to mean-world beliefs, crime-TV aficionados see the world as a place where, in the end, justice prevails, thus leading not so much to mean-world beliefs but to the assumption of a just world. However, we have to note that conservatives not only view the world as negative and mean, they also have a certain notion of justice that is based on the belief that inequalities in the world are justified (cf. Duckitt and Fischer, 2003; Jost et al., 2003, 2007). MFT then demonstrates that authority plays an important role for conservatives as well: We speculate that crime TV series still cultivate a world view that is in line with a conservative world perception: The world is a mean place, but we have strong authorities that make it safe and bring perpetrators to justice.

This assumption is further underlined when we analyze our second hypothesis. We found a significant effect of moral orientations that constitute a conservative world view; that is, the salience of 'binding' foundations on mean-world beliefs.

Our last hypothesis investigated a proposed selection effect as advocated by Tamborini et al. (2012) and Bowman et al. (2012). The higher the salience of 'binding' foundations, the higher the preference for crime TV series. Regarding our results, we may argue with respect to selection effects that a conservative world view, characterized by a higher salience of 'binding' foundations, is connected to both, mean-world beliefs and, at the same time, a heightened preference of crime TV. This assumption is sustained by our mediation model.

At the same time, we have to account for some theoretical and methodological limitations. We focus on three limitations: a) the causal logic of the observed effects and, related, b) the cross-sectional character of our study and c) the potentially problematic nature of some of our measures.

In our model we argue that a conservative orientation will lead to a more intense crime TV exposure. This was rooted in the assumption that conservatism as a motivated-cognition is deeply rooted in the audience member's personality. However, even if this is true, media effects research would point out that – at the same time – repeated TV exposure also re-enforces existing beliefs. Combining both perspectives, Slater (2007) argues for a re-enforcing spiral

model of media selection and media effects. With respect to our study, we interpret our findings so that conservatives watch more crime TV as it provides them with (moral) exemplars that follow their world view. As a consequence, and beyond the scope of our study, this exposure then re-enforces conservative world views as even Tamborini (2013) in his MIME would argue, based on the fact that crime TV provides particular salient exemplars for a conservative world view.

Consequently, it would be better not to model the relationship between conservatism, crime TV exposure and mean-world beliefs as a linear process but as a re-enforcing spiral, where mean-world beliefs re-enforce conservative orientations and vice versa. As we see empirically in our mediation model that our specific causal assumptions are not supported by our data, there is probably still some causal relationship. Based on the available data we can find some co-occurrences that might indicate causal relationships or interaction effects. However, without process data, we cannot answer any questions of causal relationships appropriately in an empirical way (see also Preacher and Hayes, 2004).

This directly relates to the second limitation. A cross-sectional study can be considered a good starting point to expand cultivation research on political conservatism. Nevertheless, it suffers from not being able to account for the self-re-enforcing character of the described phenomenon. What is needed in cultivation research in general is particularly needed here (Gerbner et al., 1980): Longitudinal designs with process data, and not retrospective data (cf. Fredrickson and Kahneman, 1993) to actually describe the dynamic process of motivated cognitions leading to ideological world views that influence, and are influenced by, media content selection.

Such a process measure would require some more precise measures as well. Related, we see some further limitations of our study. We refrained from a direct assessment of crime TV exposure measured as time spent with it and asked for the preference of a broad range of crime TV content to identify crime TV aficionados. This was done to deduce a measure for people's engagement with crime TV (and therefore an indirect measure for crime TV exposure). Although we provided a broad list of popular crime TV content, including the most successful crime drama series in terms of audience figures in Germany, it can be possible that some intense crime viewers simply watched and liked other, more non-mainstream crime drama. As an alternative, a self-report measure on crime exposure, indicating how much time people spent watching crime drama, could have been employed. Still, such a measure requires some abstract thinking on the part of the user to differentiate crime from non-crime content. As a consequence, such a self-report scale might be flawed as well. In absence of an

objective and valid measure as to how engaged – both with respect to involvement and time – media users are with a certain type of content, relying on one or the other self-report measure is still the only viable option. In our case, we voted for a more concrete but indirect exposure measure. Findings could have been different if another measure had been employed. Therefore, we have to put our findings in relation and might only speculate whether some of the missing effects of crime TV exposure on mean-world belief are potentially due to a less than optimal measure of crime TV exposure.

Furthermore, we relied on a tested scale for mean-world beliefs that had previously been translated and employed in Germany (Bilandzic, 2002). However, our reliability was considerably lower than the original study (Rössler, 2011) and even below the common threshold of $\alpha = .7$. We still employed this scale as we could not identify any major flaws in its application. There was no participant group that had a particularly higher or lower reliability. We administered it in the same way as the original study. Some of our findings might be overshadowed by this low internal consistency. On the other hand, we have to state that even in spite of this rather modest reliability we find results that are in line with our theoretical assumptions. A replication of our study could shed some light on why this modest reliability occurred and in how far it had affected our findings.

Overall, in a broader sense, our study follows the tradition of cultivation research by accounting for motivational variables focusing on the effects of cultivation on the individual. Both Bilandzic and Rössler (2004) as well as Bilandzic and Busselle (2008) have already argued for combining cultivation research with a motivational perspective; the latter even argue that viewers' world views are adjusted by repeated exposure to fictional content, which in itself is due to enjoyable transportation experiences, or, adding our perspective to the statement, due to the enjoyable experience of being confronted with fictional content that fits with one's inherent morally (Tamborini, 2013) and politically (Jost et al., 2003) motivated cognitions. We see political conservatism and its psychological underpinnings as a motivated-cognition as one important theoretically complex complement cultivation theory. By this, we hope to not only combine only loosely connected (socio-)psychological approaches to reasons to see the world in a particular way, but also to move cultivation research a step further by underlining its parallels with findings in political psychology.

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