The Role of Abstract Construals in Increasing Public Support for Addressing Local Injustice

by

Katelin Helene Neufeld

A thesis submitted to the Faculty of Graduate Studies of

The University of Manitoba

In partial fulfillment of the requirements of the degree of

MASTER OF ARTS

Department of Psychology

University of Manitoba

Winnipeg

Table of Contents

List of Tables

List of Figures

List of Appendices

Abstract

Resistance to rectifying local injustice and methods of addressing such resistance are often studied in terms of motivational barriers (e.g., system justification, Jost & Banaji, 2004). I propose that a *cognitive* mechanism called *construal level* may also play an important role. Construal level refers to whether people are thinking concretely or abstractly. For example, if considering the act of locking a door, one might construe the behavior as putting a key in a lock (a concrete construal) or as securing a house (an abstract construal). Construal level theory (Liberman & Trope, 1998) states that people think concretely about near events and thinking concretely makes people more concerned about feasibility (e.g., "Is it affordable?"), whereas thinking abstractly makes people more concerned about morality (Eyal, Liberman, & Trope, 2008). Thus, inducing abstract thinking might increase support for addressing local injustice. I assessed this novel proposal in two experimental studies that focused on the lack of adequate water services in First Nations and included measures of social action as dependent variables. In Study 1 (n = 151 White Canadian undergraduates; 44% women), participants thought about either a local or distant injustice. I hypothesized participants would support the local injustice less as they would think more concretely and thus be more concerned with feasibility and less concerned with morality; no differences emerged (p's $\geq$ .36, d's $\leq$ .15). In Study 2 (n = 166 White Canadian undergraduates; 66% women), I directly manipulated construal level and had all participants consider a local injustice. People led to think abstractly (vs. concretely) were more supportive of addressing injustice because they were more morally outraged, experienced more empathy, and thought the problem was easier to solve, 95% CI = [0.22, 0.98]. Thus, the results suggest that induced abstract thinking may be an effective tool for achieving local social change.

Keywords: construal level theory, First Nations, social action, system affirmation, water

Acknowledgements

There are many people to whom I would like to express my sincere gratitude. First, I thank my thesis co-supervisors, Drs. Danielle Gaucher and Katherine Starzyk, for their valued mentorship, time, and help at every stage of the process. I also thank my committee members, Drs. Jacquie Vorauer and Andrew Woolford, for their insight and feedback on this paper. Additionally, I thank research assistants Erin Braun-Janzen, Harrison Oakes, Emilie Shaw, Jiazhou Bi, Tyler Eschenwecker, and Nicola Schaefer, for helping me collect data. Finally, I thank my family and friends for their continued support and encouragement as I pursue my goals.

This research was supported by a Canada Graduate Scholarship from the Social Sciences and Humanities Research Council, a Tri-Council Top-Up Award and a Raymond F. Currie Fellowship from the Faculty of Graduate Studies at the University of Manitoba, and an Aboriginal Student Award from the Aboriginal Section of the Canadian Psychological Association.

The Role of Abstract Construals in Increasing Public Support for Addressing Local Injustice

More often than not, sparking social change is difficult. In addition to the significant practical elements needed to incite social change, such as money, time, and effort, society often punishes people dedicated to the pursuit of social justice (e.g., Buschman & Lenart, 1996; Eagly & Karau, 2002; Kaiser & Miller, 2001; Rudman & Glick, 1999, 2001). Indeed, consider the vehement opposition to and assassinations of prominent activists including Harvey Milk (Pearson, 2005), Martin Luther King, Jr. (Kirk, 2004), and Mohandas Karamachad Gandhi (Cook, 2003). Why is it so difficult to spark social change? Why are there so many barriers along the road to justice and equality—despite virtually all people endorsing values of morality, care, and fairness (Minson & Monin, 2011; Monin & Jordan, 2009)? These questions are of particular relevance to First Nations' water and wastewater issues—the focal injustice of this research.

First Nations' water and wastewater systems are in a dire state. Currently, over 3,000 First Nations homes do not have functional indoor plumbing (Fallding, 2010a) and 92 First Nations are under drinking water advisories (Health Canada, 2014). The situation is worst in Manitoba—it has the highest proportion of First Nations' homes without indoor plumbing and accounts for nearly half the homes in this situation nationwide (Neegan Burnside Ltd., 2011). As a result, some residents of First Nations in Manitoba use less than 10 L of water per day while the average Winnipeg resident uses 180 L per day (Fallding, 2010b). Although the lack of clean running water in First Nations is a human rights violation (United Nations General Assembly Resolution, 2010), some preliminary data suggest that Canadians' support for addressing this injustice is low (Neufeld et al., 2012; Neufeld, Gaucher, & Starzyk, 2013). Moreover, Canadians may in fact be *more* supportive of addressing foreign than local Indigenous water issues. Why

are Canadians more supportive of addressing a foreign injustice than one occurring in their own backyard?

Social Psychological Barriers to Addressing Injustice

Several social-psychological theories, including just world theory (Lerner, 1980; see also Furnham, 2003; Hafer & Bègue, 2005; Lerner & Simmons, 1966), system justification theory (Jost & Banaji, 1994; see also Jost, Banaji, & Nosek, 2004), and social identity theory (Tajfel, 1978; see also Tajfel & Turner, 1979, 1986), provide insight as to why Canadians might be unsupportive of addressing local injustice relative to foreign injustice. Specifically, these theories suggest that injustices are often threatening, and that motivations to assuage such threats play a key role in resistance to social change.

Belief in a Just World

Belief in a just world theory provides one account for resistance to social change. According to this theory, people are motivated to believe in a just world, wherein people—including themselves—get what they deserve. In their formative study, Lerner and Simmons (1966) had participants watch an ostensible innocent female victim receive painful electric shocks. When participants believed they could easily end her suffering, they intervened. When participants believed that they could not easily end her suffering, however, they did not intervene; rather, they derogated her. The authors explained that these seemingly different behaviors were both motivated by a concern for justice. Namely, a victim whose suffering will end must be deserving of freedom, but a victim whose suffering will not end must be deserving of that punishment. This logic is useful in understanding Canadians' relative apathy towards First Nations' water and wastewater issues. It is far less threatening to believe that First Nations

without clean running water—an issue that is not easily fixed—must somehow be responsible and deserving of their fate.

System Justification

In addition to the just world motive, system justification also helps to explain resistance to social change. System justification theory states that people are motivated to believe that existing social arrangements and systems (e.g., governments) are legitimate and just. As the presence of an injustice threatens the legitimacy of a system, people react by rationalizing or denying the injustice to avoid existential anxiety (Kay, Banfield, & Laurin, 2010). Consequently, people are inclined to maintain the status quo rather than engender social change (Gaucher, Kay, & Laurin, 2010; Kay et al., 2009). Thus, non-Indigenous Canadians may become defensive upon learning the government is allowing First Nations' water and wastewater issues to continue, as the presence of this injustice implies that the government systems are unfair and illegitimate. In turn, non-Indigenous Canadians may deny this injustice rather than act to rectify it.

Social Identity

Social identity theory provides another account as to why people resist social change. This theory explains that people often act to protect the social groups they strongly identify with (e.g., White Canadians), as these identifications are often closely tied to a person's self-esteem. When individuals belong to a group that has wronged another group, they often deny or reinterpret the injustice in an effort to protect or bolster their group identities and self-esteem. For example, Gunn and Wilson (2011) found that non-Indigenous Canadians by default accept relatively little responsibility for the mistreatment of Indigenous Canadians, likely because the injustice threatens their Canadian identity.

System justification, social identity, and just world motivations certainly play a role in peoples' low support for addressing local injustice; however, it is likely that other, more cognitively-based processes play a role as well. In the current research, I experimentally test whether people's construal level (i.e., whether they are thinking abstractly or concretely) influences their support for addressing local injustice, and do so in the context of First Nations' water and wastewater issues.

Construal Level Theory

According to construal level theory (Liberman & Trope, 1998), people think differently (i.e., use different construal levels) when considering near and distant events. People tend to process near events at a lower, concrete level where details and context matter. In contrast, people tend to process distant events at a higher, abstract level that is decontextualized. For example, a person sees a forest—the "big picture"— from a distance, but as they draw nearer, his or her focus will shift to the individual trees that make up the forest—the details. This effect also operates in the opposite direction, and is thus bi-directional. For example, people thinking abstractly will perceive an event to be more distant than will those thinking concretely (Agerström & Björklund, 2013). The relationship between construal level and event distance holds across five domains: temporal distance (e.g., Krebs & Rapport, 2012; Trope & Liberman, 2000), spatial distance (e.g., Tversky, 2003, 2005), spatial orientation (i.e., moving towards or away from a place; Maglio & Polman, 2014), personal or social distance (e.g., Fujita et al., 2006; Smith & Trope, 2006), and reality distance or probability (Todorov, Goren, & Trope, 2007; Wakslak & Trope, 2009; Wakslak, Trope, Liberman, & Alony, 2006). These five domains constitute *psychological distance* (Trope & Liberman, 2010) and are interrelated (Bar-Anan, Liberman, Trope, & Algom, 2007; Fiedler, Jung, Wänke, & Alexopoulos, 2012; Maglio &

Polman, 2014). For example, someone thinking about the future is more likely to think about a distant location than a close location, and about a stranger than a dear friend.

Construal level theory has been used to examine a variety of different contexts, including interpersonal power (Smith & Trope, 2006) and quantitative judgments (Henderson, Fujita, Trope, & Liberman, 2006); however, no known research has directly examined the role of construal levels in increasing public support for social change. The question remains: How does construal level affect support for social change generally—and support for rectifying First Nations' water and wastewater issues specifically? Existing construal level literature on the benefits of abstract thinking and the costs of concrete thinking, such as feasibility, provide insight.

The Potential Costs of Thinking About Injustice Concretely

There are many documented costs of thinking concretely, which together suggest that thinking about an injustice concretely may hamper support for social change. As noted above, when people think concretely—whether by experimental manipulation or habit— they are more concerned with an event's details. In particular, people who think concretely are more likely to be concerned with feasibility. Feasibility—practicality in terms of time, money, and effort—involves the means to achieve a desired end state (e.g., clean running water in all First Nations' homes). As such, construal level theorists classify feasibility as a concrete concept; desirability—the end state—is feasibility's counterpart, and is thus an abstract concept. Feasibility concerns are more salient for events in the near future than distant future (Krebs & Rapport, 2012; Liberman & Trope, 1998; Trope & Liberman, 2010), and for more probable than improbable events (Todorov, Goren, & Trope, 2007). In one study, Liberman and Trope (1998) gave students a choice between real-life academic assignments that varied in interest

(desirability) and difficulty (feasibility). Participants were more inclined to choose assignments based on difficulty when the due date was in the near future, but were more inclined to choose assignments based on interest (i.e., desirability) when the due date was in the distant future. Though researchers have only examined feasibility in relation to temporal and probabilistic distances, recall that all five dimensions of psychological distance are related to each other. Thus, the relationship between construal level and feasibility should also apply to spatial distance—the dimension most relevant to the current research. Given that people thinking about a near event think more concretely, and that people thinking concretely are more concerned with feasibility, it seems likely that people will be less supportive of addressing a local injustice because they will think concretely and be concerned with feasibility. In support, on-line comments to news stories detailing First Nations' water and wastewater issues suggest that many Canadians are unsupportive of addressing the issue because they think solutions are too expensive or difficult and would take too long to complete (Fallding, 2010a,b).

The Potential Benefits of Thinking About Injustice Abstractly

Whereas thinking concretely about an injustice may hamper support for addressing injustice, thinking abstractly may increase support. Compared to people thinking concretely, people thinking abstractly—whether by experimental manipulation or habit—tend to ignore situational influences and details (e.g., feasibility) and instead act in accordance with their central values and beliefs (Eyal, Liberman, & Trope, 2008; Eyal et al., 2009). For example, abstract thinking can bridge the ideological divide, leading liberals and conservatives to respond more similarly to otherwise divisive political issues (Yang, Preston, & Hernandez, 2013) and out-group matters (Luguri, Napier, & Dovidio, 2012). Of greater relevance to the present research, abstract thinking is also associated with greater concerns of morality and for others.

Concern for morality. When people think abstractly (vs. concretely), they are generally more concerned with moral principles (e.g., Agerström & Björklund, 2009a, 2009b). For example, people led to think abstractly tend to judge morally offensive actions, such as eating a dead pet, more harshly (Eyal, Liberman, & Trope, 2008, but see Gong & Medin, 2012). Agerström and Björklund (2013) found further evidence of the relationship of abstract thinking and moral concerns by first measuring participants' stable temporal orientations (i.e., how much they typically think about the future) and state construal level (i.e., how abstractly they were thinking at that moment). Participants then imagined that they (Study 1) or someone else (Study 2) committed a morally questionable action, such as passing by an unconscious homeless person. Finally, participants reported judgments of the action's immorality. In both studies, participants who naturally think more abstractly judged the moral actions as more immoral than did those who naturally think more concretely, and state abstract thinking mediated this relationship. In other words, future-oriented, abstract thinkers demonstrated greater moral concern than did present-oriented, concrete thinkers because the former were more sensitive to the moral implications of actions. Arguably, these findings suggest a relation between abstract thinking and moral outrage—a specific form of moral concern that predicts collective action for a social issue (van Zomerman, Postmes, & Spears, 2008).

Concern for others. Perhaps as an extension of having greater moral concerns, both habitual abstract thinkers and those experimentally led to think abstractly consistently demonstrate greater concern for others. In some studies, this heightened concern manifests as a greater willingness to *help* others, including increased monetary donations, volunteer hours, and support for government action on social issues (Levy, Frietas, & Salovey, 2002; Neufeld, Gaucher, & Starzyk, 2013; Rogers & Bazerman, 2008). These benefits of abstract thinking may

in part arise because when people think abstractly, they are more likely to expect that they will accrue emotional benefits from their prosocial efforts (Aknin, Van Boven, & Johnson-Graham, 2014). Another way that the relationship between abstract thinking and heightened concern for others manifests is through greater empathy for others. For instance, habitual abstract thinkers report more empathy towards in-group members and stigmatized out-group members (Levy, Frietas, & Salovey, 2002).

The Current Research

Past research concerning resistance to addressing local injustice typically uses motivational explanations, such as just world belief, system justification, and social identity. In two experimental studies, I explore whether a cognitive mechanism, construal level, also plays a role. Construal level research states that people are likely to be concerned about feasibility when thinking concretely and think concretely about a psychologically near event. Thus, it is plausible that considering a local injustice should lead people to think concretely and be more affected by pragmatic concerns such as feasibility, and therefore less supportive of addressing the issue. In contrast, when considering distant injustices, people should be more affected by abstract ideals, such as moral concerns and concerns for others, and therefore more supportive of addressing the issue. I test these hypotheses in Study 1. Given that abstract thinking is associated with greater empathy and help for others, as well as greater moral concern, it is possible that abstract thinking could overcome the psychological barriers to local social change. For these reasons, I hypothesized that leading people to think abstractly could result in greater support for government action because thinking in this way would cause people to experience greater empathy and moral outrage and think the solution is more feasible; I test these predictions in Study 2.

To determine how well abstract construals increase support for addressing local injustice, I compare the effects of abstract mindsets to those of system affirmation, an established intervention that reduces people's system-justifying tendencies (Kay et al., 2009). Theoretically, system affirmation—reading positive things about the system that bolster its legitimacy—should increase support for addressing First Nations' water and wastewater issues.[1] As stated earlier, people are motivated to believe that their social systems, such as governments, are legitimate and fair. When faced with an injustice that questions the legitimacy of these systems, such as the lack of clean running water in First Nations, they may experience threat and respond defensively (e.g., rationalize, deny) to the injustice to subjectively eliminate said threat; system affirmation can assuage these threats, and presumably increase support for addressing (system-sanctioned) injustice. Thus, in Study 2, I also test whether abstract thinking functions either as well as or better than Kay et al.'s (2009) system affirmation intervention. No known research has examined the relative efficacy of these strategies.

Study 1: Do Local Injustices Cause Concrete Thinking?

I tested whether construal levels influence peoples' support for addressing local injustice. I predicted that, consistent with construal level theory, people would show less support for addressing a relatively local (vs. distant) injustice because they would think more concretely and thus be more concerned with feasibility and less concerned with morality.

[1] Although system affirmation can increase support for addressing injustice, it may not always be an appropriate strategy. For example, by stressing only the progress made by the Canadian government, its shortcomings and wrongdoings, such as those committed against Indigenous Peoples, are ignored. As a result, system affirmation might only provide a short-term, insensitive solution because it encourages people to support addressing the injustice without acknowledging their privilege and taking steps to unpack what it means to be a White settler. Thus, I used system affirmation for comparative purposes only, and do not proscribe its use for advocacy on this or similar issues.

Method

Participants.

Selection criteria. I recruited participants through the introduction to psychology participant pool, and restricted participation to White students who have lived in Manitoba for at least the last five years; 156 students met this criteria. The aim of these selection criteria was to maximize the likelihood that, relative to the distant injustice (occurring in the Yukon, a distant territory), the local injustice (occurring in Northern Manitoba) would seem more socially and proximally near to participants.[2] In addition, these restrictions allowed me to obtain relatively a homogeneous sample and exclude variance due to these participant characteristics as a possible explanation for my results. Indeed, non-Indigenous minority Canadians are more supportive of government aid for Indigenous Canadians than are White Canadians (Starzyk, El-Gabalawy, & Boese, 2011). Given the relative resistance of White Canadians, and that they still constitute the population majority (Statistics Canada, 2006), gaining their support is likely a key to rallying support for First Nations' water and wastewater issues.

Exclusion criteria. I excluded from the analyses five participants who were not White. Thus, the final sample consisted of 151 White Canadian undergraduate students who had lived in Canada for at least the past five years (44% women; M_{age} = 19.5, SD = 2.6). This sample size is sufficient to obtain 80% statistical power to detect a medium effect size (Cohen, 1988), assuming it exists within the population.

Procedure. All participants attended an in-person experimental session and completed a survey on a computer. Participants read about First Nations' water and wastewater issues

[2] I acknowledge that, in a strict sense, Northern Manitoba is not considered local to Winnipeg and *local* is thus not a perfect label. I use the label in a liberal, relative sense throughout this paper as it seems to be the best label.

occurring relatively nearby (i.e., relatively local) or distantly (between-subjects) and completed a task to assess their construal level. Next, participants indicated their support for government action, perceived feasibility, moral outrage, and empathy. Except where otherwise noted, all measures used 7-point scales (1 = *strongly disagree*, 7 = *strongly agree*) that assessed participants' agreement with items.

Passage. In an effort to manipulate social and spatial distance, I randomly assigned participants to read one of two passages: one set in Manitoba and one set in the Yukon (see Appendix A).

Dependent measures.

Construal level. To assess whether participants thought about the injustice concretely or abstractly, participants completed an adapted version of Vallacher and Wegner's (1987) behavioral-identification form; it doubled as a manipulation check. The behavior identification form is one of the most common measures of construal level (Burgoon, Henderson, & Markman, 2013) and has good discriminant and convergent validity (Vallacher & Wegner, 1989). For example, this measure correlates with the tendency to describe oneself in abstract ways, but not with constructs such as cognitive complexity or tolerance for ambiguity. Participants read 13 target behaviors (e.g., "reading a book") and two descriptions of each target behavior: An end result (higher level behavior; e.g., "gaining knowledge") and a means to that end (lower level behavior; e.g., "following lines of print"). Participants selected the description they felt most accurately described the target behavior. I coded preference for lower-level behavior as 0 and higher-level behavior as 1 and computed the "construal level" composite by averaging participants' responses. Scores could therefore range from 0-1, with higher numbers indicating abstract construal levels.

Support for government action. Participants reported how much they felt the government should help First Nations by indicating their agreement with the support for government action scale (Neufeld et al., 2012). The six items were: (a) "The Government should ensure First Nations communities have access to clean running water," (b) "The Government should cover the cost of providing clean running water to First Nations communities," (c) "The Government has a moral responsibility to provide clean running water to First Nations communities," (d) "I support my tax dollars going to help First Nations communities get clean running water," (e) "Providing clean running water to First Nations communities should be one of Canada's top priorities," and (f) "The Government should be doing more to help First Nations communities."

Perceived feasibility. Participants reported the degree to which they felt providing First Nations with clean running water to be feasible by indicating the level of their agreement with the following five statements: (a) "The Government could afford to provide clean running water to these First Nations communities," (b) "There are too many obstacles to providing First Nations communities with clean running water" (reverse-coded), (c) "The Government could easily provide clean running water to First Nations communities," and (d) "Equipping these First Nations communities with clean running water would be too difficult" (reverse-coded). I adapted this scale from previous research (Neufeld et al., 2012).

Moral outrage. Participants reported how much they were morally outraged by First Nations water and wastewater issues by indicating their agreement with the following three statements: (a) "I feel morally outraged that there are First Nations communities in Canada without clean running water," (b) "I feel genuinely angry about the water situation in First Nations communities," and (c) "It's not right that First Nations communities don't have access to clean running water." I adapted this measure from prior research (Neufeld et al., 2012).

Empathy. Participants reported their empathy for First Nations Peoples without clean running water by indicating the extent to which they experienced six emotions when thinking about the community members: (a) "sympathetic," (b) "softhearted," (c) "warm," (d) "compassionate," (e) "tender," and (f) "moved." Participants indicated the extent to which they experienced each emotion on a 7-point scale (1 = *not at all*, 7 = *extremely*). I adapted this measure from Batson et al. (1991).

Belief in a dangerous world. I wanted to assess whether the injustice was system threatening; however, no appropriate, commonly used scale of system threat exists. Indeed, system justification theorists typically manipulate system threat and do not measure system threat per se, but some manifestation of threat (e.g., derogating a female experimenter after learning of systemic gender inequality, Kay et al., 2009; contentment with the status quo, Becker & Wright, 2011). To approximate system threat with an established scale, I used Altemeyer's (1988) belief in a dangerous world scale. I chose this scale because others have used this as a state measure of how much people are threatened by the instability of a social system (Duckitt & Fisher, 2003). Participants self-reported their agreement with 12 statements using a 5-point scale (1 = *strongly disagree*; 5 = *strongly agree*).

Results

Descriptives. See Table 1 for descriptive statistics and Table 2 for intercorrelations. Importantly, there emerged positive relationships between support for government action, perceived feasibility, moral outrage, and empathy; neither abstract thinking nor system threat were related to any variables.

Table 1
Descriptive Statistics for Dependent Measures in Study 1

	α	*M*	*SD*	Range	Skewness (*SE*)	Kurtosis (*SE*)
Construal level	.65	.56	.21	0.08-1.00	-0.11 (0.20)	-0.31 (0.39)
Support	.92	4.98	1.31	1.00-7.00	-0.84 (0.20)	+0.79 (0.39)
Feasibility	.74	4.37	1.03	1.00-6.50	-0.18 (0.20)	-0.12 (0.39)
Moral outrage	.74	4.93	1.23	1.00-7.00	-0.58 (0.20)	+0.42 (0.39)
Empathy	.91	4.06	1.29	1.00-7.00	-0.16 (0.20)	+0.18 (0.39)
BDW	.78	3.81	0.55	2.25-5.00	-0.13 (0.20)	-0.03 (0.39)

Note. Construal level scores ranged from 0-1; BDW (belief in a dangerous world) scores ranged from 1-5; all other measures used a 1-7 scale.

Table 2
Zero-Order Correlations Between Dependent Measures in Study 1

	1	2	3	4	5	6
1. Construal level	--	.02	.00	.08	-.01	.12
2. Support		--	.53**	.75**	.67**	-.06
3. Feasibility			--	.49**	.32**	-.02
4. Moral outrage				--	.65**	-.01
5. Empathy					--	-.04
6. BDW						--

Note. Numbers on the diagonal represent internal consistency; numbers off the diagonal represent Spearman's correlation coefficients; BDW = belief in a dangerous world.
** $p < .001$.

Primary analyses. Contrary to my hypothesis, injustice location did not affect construal level (M_{near}= .57, *SD* = .20; $M_{distant}$ = .55, *SD* = .21), $t(149) = 0.55$, $p = .58$, $d = 0.09$, suggesting a failed manipulation. Further, injustice location did not affect any of the remaining dependent variables (see Table 3).

Table 3
Effects of Injustice Location on Dependent Measures in Study 1

	M_{near}(*SD*)	$M_{distant}$ (*SD*)	*t*	*p*	*d*
Support	4.59(1.22)	4.77(1.18)	+0.91	.36	+0.15
Feasibility	4.33(0.96)	4.40(1.10)	+0.46	.64	+0.08
Moral outrage	4.91(1.34)	4.95(1.12)	+0.17	.86	+0.03
Empathy	4.07(1.43)	4.04(1.14)	-0.12	.91	-0.02
BDW	3.83(0.57)	3.79(0.54)	-0.46	.65	-0.07

Note. BDW = belief in a dangerous world. All measures used 1-7 scales.

Discussion

The goal of Study 1 was to understand whether construal levels influence how people respond to local injustice. Based on construal level theory, I expected that people would be less supportive of addressing a local (i.e., relatively near; vs. distant) injustice because they would be thinking more concretely and thus be more concerned with feasibility and less concerned with morality and others. This prediction was not supported: Injustice location did not affect construal level or support, or any of the other dependent variables. There are several possible explanations as to why the injustice location manipulation failed. The first relates to the distinction between objective and subjective distance. The distant injustice location used in this study (the Yukon) is *objectively* further away from participants than is the local injustice location (Island Lake, a northern region of their home province)—a difference of approximately 2,200 km. Nevertheless, it is possible that participants do not *subjectively* perceive there to be a difference in the location of these injustices: People may feel that Island Lake is far away, and as far away as the Yukon. In support, past research shows that psychological distance reduces sensitivity to any further psychological distance (Maglio, Trope, & Liberman, 2012). Relatedly, a second explanation for the manipulation failure—and the absence of an effect of construal level—is that the manipulation was simply not strong enough. Future research should use stronger manipulations, such as stressing the nearness of the local injustice and farness of the distant injustice, or using a local injustice that is nearer to participants than the one used in this study (e.g., one occurring in the participant's city); manipulating other dimensions of psychological distance (e.g., whether an injustice will be addressed tomorrow or in fifty years) may also prove fruitful.

An alternative explanation for this null finding is perceived system interdependence, or the belief that change in one system (e.g., governments, economies) will likely lead to similar change in the second system. If people believe that the systems of the Yukon and Manitoba are interdependent, then they might not be more supportive of change in the Yukon because they fear similar changes would consequently occur in Manitoba—changes that may require a redistribution of resources at their expense (e.g., remedying First Nations water and wastewater issues means less money for fixing potholes). On one hand, this explanation seems unlikely given that a pretest demonstrated that Manitobans feel the Yukon and Manitoba are minimally interdependent systems. On the other hand, people might have said the systems were more interdependent if the question wording was issue-specific.

Study 2: Abstract Construals Increase Support for Addressing Local Injustice

In Study 1, I manipulated spatial distance—arguably a proxy for construal level—to understand how construal level influences support for addressing local injustice; however, the manipulation failed. In Study 2, I employed a more direct approach by using a standard construal level manipulation. As in Study 1, the main goal of Study 2 was to determine whether construal level influences support for addressing a local injustice. Specifically, I hypothesized that abstract thinking would increase support for addressing injustice because it would make people less concerned about concrete details, such as feasibility and more concerned about abstract principles, such as morality (moral outrage) and care (empathy). A secondary goal of Study 2 was to determine whether abstract thinking is effective enough to be considered an intervention for addressing local injustice—that is, whether it could overcome the barriers to support for social change. I thus manipulated system affirmation—an established paradigm that

should improve attitudes towards a local injustice—so I could test whether abstract construals work as well as or better than system affirmation.

Method

Participants.

Selection criteria. I recruited participants through the introduction to psychology participant pool, and restricted participation to White students who have lived in Manitoba for at least the last five years; 182 students met this criteria. The rationale for these criteria was the same as in Study 1.

Exclusion criteria. I excluded from the analyses four participants who were not White and one who had lived in Manitoba for less than five years. As these exclusions exacerbated the already unequal sample sizes, I excluded the 11 most recent completions. Thus, the final sample consisted of 166 White undergraduate students (M_{age} = 20.7, SD = 5.1; 66% women) who had lived in Manitoba for at least the past five years. This sample size is sufficient to obtain 80% statistical power to detect a medium effect size (Cohen, 1988), assuming it exists within the population.

Procedure. In a 2(Construal Level: Concrete, Abstract) × 2(System Affirmation: Control, System Affirmation) between-subjects design, participants began an online, at home study by completing a two-part construal level manipulation. They first read a passage about First Nations water and wastewater issues while focusing on either how the issue should be fixed (concrete condition) or why the issue should be fixed (abstract condition). After the passage, they completed a how/why priming task—one of the most common methods of manipulating construal level (Burgoon, Henderson, & Markman, 2013). Participants then completed the system affirmation manipulation by reading a passage that either affirmed Canadian systems

(system affirmation condition) or one that described the history of photography (control condition). Finally, participants reported their support for government action, perceived feasibility, moral outrage, and empathy.

Construal manipulation, part 1. Participants were randomly instructed to think concretely or abstractly while reading the passage. Specifically, the instructions read (abstract manipulation in brackets):

> "We are interested in people's evaluations of events happening in Manitoba. The following paragraphs describe the running water issues of **First Nations communities in Manitoba.** Please read the article carefully - you will be tested on it later. As you read, think about arguments for **how** the issues should be solved - it's ok if you don't agree with the arguments. [As you read, think about arguments for **why** the issues should be solved- it's ok if you don't agree with the arguments.]"

Construal level manipulation, part 2. After reading the First Nations' water and wastewater issues passage, participants completed a how/why priming task (e.g., Freitas, Gollwitzer, & Trope, 2004; Trautmann & van de Kuilen, 2012; Wakslak, 2012). Whereas traditional how/why priming tasks ask participants to consider health behaviors, I adapted an issue-specific task used by Yogeeswaran and Dasgupta (2014). In the concrete condition, participants listed three *strategies* for addressing First Nations' water and wastewater issues. Participants were then presented with a text box and asked to explain *how* to achieve the first strategy. A second text box appeared and asked participants to explain how to achieve the step they had listed in the last text box. This process continued until participants had filled in four text boxes, and repeated for the two remaining strategies. The procedure for the abstract

condition was identical, except participants listed three *reasons* for addressing First Nations' water and wastewater issues, and explained *why* the reasons were important.

First Nations' water passage. This passage was identical to the one used in Study 2's local injustice condition (see Appendix A).

System affirmation manipulation. Participants were randomly assigned to read a short passage: either one that affirmed Canadian systems (Kay et al., 2009) or one that described the history of photography.

Dependent measures. The dependent measures used in Study 2 are identical to those in Study 1 (with the exception of belief in a dangerous world, which was not assessed here).

Results

Descriptives. See Table 4 for a summary of descriptive statistics for each dependent measure, both overall and within conditions.

Directly replicating Study 1, support for government action, perceived feasibility, moral outrage, and empathy were positively related to each other (see Table 5).

Table 4
Zero-Order Correlations Between Dependent Measures in Study 2

	1	2	3	4
1. Support	--	.59**	.73**	.64**
2. Feasibility		--	.51**	.46**
3. Moral outrage			--	.67**
4. Empathy				--

Note. All correlations given are Spearman's correlation coefficients.
** $p < .001$.

Table 5
Descriptive Statistics for Dependent Measures in Study 2

	α	*M*	*SD*	Range	Skewness (*SE*)	Kurtosis (*SE*)
Support	.91	4.74	1.20	1.00-7.00	-0.58 (0.19)	+0.29 (0.38)
Feasibility	.76	4.48	1.10	1.50-7.00	+0.25 (0.19)	-0.05 (0.38)
Moral outrage	.90	4.98	1.42	1.00-7.00	-0.77 (0.19)	+0.54 (0.38)
Empathy	.92	4.17	1.35	1.00-7.00	-0.41 (0.19)	-0.09 (0.38)

Note. All measures used a 1-7 scale.

Thinking abstractly increases support for addressing local injustice. As predicted, people led to think abstractly were more supportive of government action than people who were led to think concretely ($M_{abstract} = 4.96$, $SD = 1.09$; $M_{concrete} = 4.53$, $SD = 1.27$), $F(1, 158) = 5.78$, $p = .02$, $\eta^2 = .04$ (see Figure 1). System affirmation did not increase support for government action, $F(1, 158) = 0.74$, $p = .40$, $\eta^2 = .01$. There was not a construal level by system affirmation interaction, $F(1, 158) = 1.33$, $p = .25$, $\eta^2 = .01$.

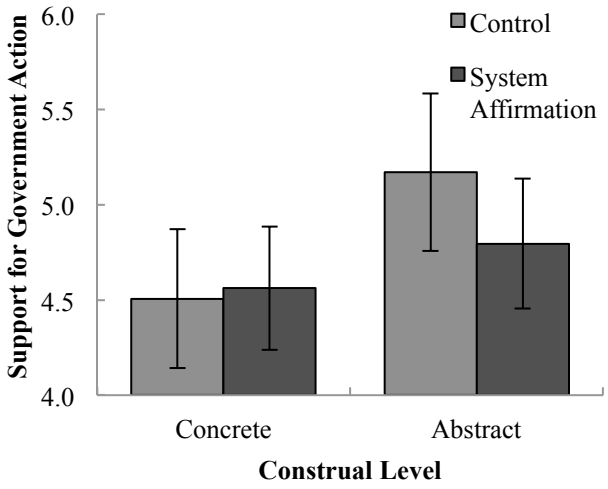

Figure 1. Effects of construal level and system affirmation on support for government action. Error bars represent 95% confidence intervals. Support for government action scores ranged from 1-7.

The remaining dependent measures followed a similar pattern, such that abstract thinking led to more favorable responding to the injustice (though not always significantly so), and no main effect of system affirmation or interaction of system affirmation and construal level emerged (see Table 6).

To better understand the effects of construal level—that is, the effects of construal level uninfluenced by the effects of system affirmation—I performed planned *t*-tests within the control condition. As above, participants led to think abstractly were more supportive of addressing a

local injustice ($M_{abstract}$ = 5.17, SD = 0.97; $M_{concrete}$ = 4.51, SD = 1.24), $t(78) = 2.60$, $p = .01$, d = 0.60. A multiple mediation model using Preacher and Hayes' (2008) "indirect" macro revealed that moral outrage, empathy, and perceived feasibility together mediated this relationship, 95% CI = [0.22, 0.98] (see Figure 2). Moral outrage, empathy, and perceived feasibility also independently mediated the relationship between abstract construals and support for government action, 95% CIs = [0.10, .57], [0.00, 0.31], and [.05, .42], respectively. Pairwise comparisons revealed that each mediator was as important as the other mediators.

Planned follow-up *t*-tests also revealed that thinking abstractly increased perceptions of feasibility, moral outrage, and empathy (all *d*s > .55; see Table 6).

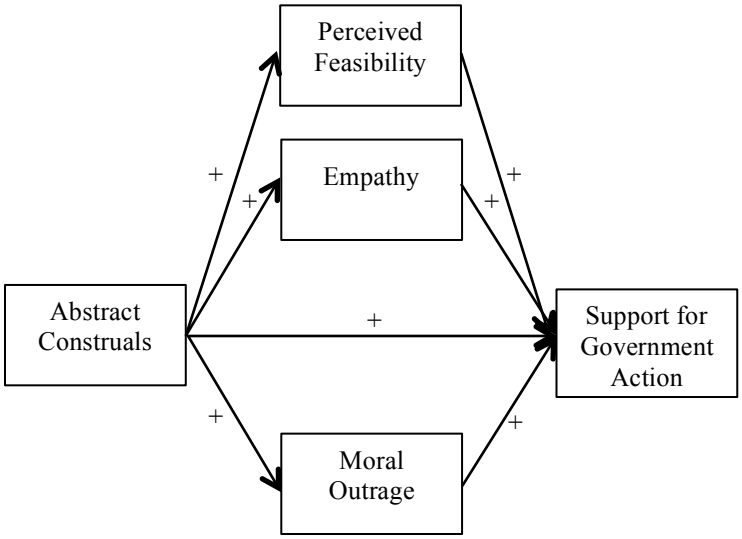

Figure 2. Multiple mediation model for the relation between abstract construals and support for government action.

Table 6

Effects of Construal Level on Dependent Measures in Study 2

	Effect			Condition			
	Construal Level	System affirmation	Construal Level x System Affirmation	Control, Concrete	Control, Abstract	Affirmation, Concrete	Affirmation, Abstract
Variable		*F* Values		*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)
Support	5.78*	0.74	1.33	4.51 (1.24)^{a}	5.17 (0.97)^{ad}	4.56 (1.32)^{d}	4.80 (1.16)
Feasibility	1.98	0.00	3.76†	4.21 (1.03)^{a}	4.79 (1.07)^{a}	4.54 (1.11)	4.45 (1.14)
Moral outrage	6.56*	0.19	1.10	4.65 (1.34)^{a}	5.45 (1.10)^{ad}	4.79 (1.57)^{d}	5.12 (1.48)
Empathy	2.50	1.30	0.70	3.80 (1.40)$_{ac}$	4.31 (1.10)$_{a}$	4.22 (1.25)	4.38 (1.52)$_{c}$

Note. Means within a row that share the same superscript differ significantly from each other ($p < .05$), whereas means within a row that share the same subscript marginally differ ($p < .10$). All variables used a 1-7 scale.

$\dagger$ $p < .10$, *$p < .05$.

Discussion

People led to think abstractly (vs. concretely) about Canadian First Nations' water and wastewater issues were more supportive of addressing this injustice because they were more morally outraged by the issue, felt more empathy, and perceived remedying the situation as more feasible. These findings suggest that abstract thinking may overcome the psychological barriers associated with local social change (e.g., system justification, belief in a just world, social identity). Because the system affirmation manipulation failed, I could not compare the effects of the two strategies to determine whether abstract thinking worked as well as or better than system affirmation.

Throughout this study runs the implicit assumption that the observed effects of concrete thinking are the default responses to a local injustice. This assumption is arguably inaccurate as the manipulation was quite involved. For instance, participants in the concrete condition learnt about an issue while focusing on steps to remedy the issue and later listed up to 12 such steps. This manipulation may have led participants to think more concretely—or simply think more—about the issue than they would normally. Thus, it is unclear precisely where baseline construals and support lie in relation to those observed in the concrete condition. Regardless of where the true baselines lie, people led to think more abstractly showed greater support for government action of First Nation water and wastewater issues than people lead to think concretely.

General Discussion

The goal of the current studies was to understand how construal level influences support for addressing local injustice, here assessed in the context of First Nations' water and wastewater issues. Study 1 yielded null effects, and thus did not provide information about the proposed relationship. Study 2, however, established that people led to think abstractly (vs. concretely)

were more supportive of addressing injustice because they were more morally outraged, experienced more empathy, and thought the problem was easier to solve. These findings suggest that inducing abstract thought may serve as an effective cognitive mechanism to overcome the motivational barriers often associated with local social change. As such, the current research has important implications for construal level theory and for advocates of social change.

Implications for Construal Level Theory

By using construal level theory to study support for addressing injustice, I have contributed to and extended the theory in several ways. First and perhaps most importantly, although abstract thinking has various positive effects (see above), no prior research has used abstract thinking as a means to increase support for addressing injustice. Similarly, although abstract thinking is related to greater concerns of morality (e.g., Agerström, Björklund, & Allwood, 2010; Eyal, Liberman, & Trope, 2008), no prior research has investigated the relationship between abstract thinking and moral outrage. This relationship is especially important in the context of support for addressing an issue, as moral outrage is considered an important predictor of collective action (van Zomerman, Postmes, & Spears, 2008).

Implications for Advocates

In providing novel empirical evidence suggesting abstract thinking can increase support for addressing injustice, the current research has important implications for advocates of social change. For instance, advocates might better garner support for their cause if they take care to use abstract language and frames in their advocacy messages and appeals for donations. Before doing so, however, it is important to gain a better understanding of the effects of construal levels and address the limitations of the current research.

Other Effects of Abstract and Concrete Thinking

Although abstract thinking resulted in only favorable effects in this study, this does not mean that abstract thinking is a silver bullet for addressing injustice; In fact, some of its effects may impede social change. By leading people to ignore details and instead focus on the bigger picture, abstract thinking can lead to seeing others as similar to each other and similar to the self (Levy, Freitas, & Salovey, 2002) and increase the use of stereotypes (McCrea, Webber, & Myer, 2012). Thus, relying solely on abstract construals when crafting advocacy messages for issues affecting stigmatized minority groups, such as First Nations Peoples, might be problematic: They could trigger and reinforce negative and false stereotypes and detract from wishes to be respected (vs. liked; Bergsieker, Richardson, & Shelton, 2010). One potential solution is to use abstract construals in conjunction with other strategies, such as multicultural ideologies. Multicultural ideologies stress that groups have important and unique differences, and their use often results in positive intergroup interactions (e.g., Vorauer, Gangon, & Sasaki, 2009). Indeed, people who were presented with abstract descriptions of multiculturalism (vs. concrete descriptions or no descriptions) later reported less prejudice towards a stigmatized minority group (Yogeeswaran & Dasgupta, 2014).

In addition to leading people to rely on stereotypes, another potential cost of abstract thinking is that it might not be sufficient to achieve social change. Presumably, even a publically-endorsed social movement could fail if its leaders focused only on the abstract end goal and ignored the concrete details needed to achieve it, such as creating a budget or drafting step-by-step plans. Thus, it seems that both abstract and concrete thinking are needed to achieve social change. Abstract thinking might be most useful in the beginning stages of a movement when support for change is low. Once enough people are supportive, however, concrete thinking

might be necessary to take action for social change. In support, Gilead, Liberman, and Maril (2014) found that concrete thinking activates fronto-parietal regions implicated in goal-directed action. Indeed, it seems that there are sometimes benefits to thinking concretely.

Another potential benefit of concrete thinking is that people might be more supportive of addressing injustice if they are led to focus on the feasible (vs. unfeasible) elements of its solution, or if details make its solution appear feasible. In support, Neufeld and colleagues (2012) presented participants with the injustice of the lack of clean running water in First Nations and told all participants the estimated initial cost of the solution ($1.2 billion; Neegan Burnside Ltd., 2010). In addition, half of participants also learned that the government spends substantially more money on foreign aid each year ($5.1 billion). Participants who learnt of this cost comparison (i.e., received feasibility assurance) were more supportive of addressing the injustice—as supportive as people who learnt about an identical injustice that was ostensibly occurring in a foreign country (i.e., system-irrelevant and thus non system-threatening). Taken together, these findings suggest that, if framed properly, concrete details can in fact increase support for addressing injustice. Conceivably, providing the feasibility assurance overcame threat—a proposal to explore in future research. Future research should also address the limitations of the current research.

Limitations

A potential limitation of the current research is its generalizability. I only tested the effects of abstract construals within the context of one specific social injustice. Thus, it is unclear whether any observed effects might generalize to other injustices. Recall, however, that abstract thinking is associated with increased moral concern and concern for others across a variety of contexts. Further, the manipulation of construal level was not issue-specific. Thus, it

seems likely that the results of the current study may indeed have broad implications for social change.

A second potential limitation of the current research relates to the support measure. I measured support for government action by averaging participants' agreement with seven statements, and used this average as a proxy for support for addressing injustice. Although gaining majority support for government action is likely key in addressing this injustice, this support for government action scale is not the only way to gauge support for the government addressing this injustice. For example, future research could test whether leading people to think abstractly leads them to be more likely to take action in support of government action, such as lobbying the government through participation in a letter writing campaign or a protest. Relatedly, government action is not the only solution to social issues—sometimes change can or must come from another source, such as a grassroots group. Future research could thus also assess support for non-government solutions.

A further potential limitation of the current research is its ethnocentrism. I acknowledge that the current research is ethnocentric, from its research questions to its methods to its conclusions. For example, I used an experimental survey to understand whether thinking abstractly can make White Canadians more supportive of government action; I did not use Indigenous research methods or sample the non-White Canadian population. Nevertheless, I feel this research has important decolonizing elements. For example, every participant is now aware of First Nations' water and wastewater issues and, through the debriefing form, is equipped with a list of resources about the issue and about deconstructing privilege; I see these elements as part of my answer to Regan's (2010) call for settler allies to create a culture of peace. In light of its ethnocentrism and other limitations, is important to note that the current research is not an end

but a beginning. Future studies of construal level and support for First Nations' water rights can—and should—use a broader, culturally inclusive approach.

Conclusion

Although garnering public support for local social change is typically difficult, the current research suggests abstract thinking is a promising tool to ease the process. By leading people to think abstractly about a local issue, they may become more supportive of addressing the issue because their concerns shift from contextual details (e.g., feasibility) to concerns for others and moral principles. Thinking about the *how* of achieving change is certainly important, but in order for those details to matter, people must first be compelled by the *why*.

References

Agerström, J., & Björklund, F. (2009a). Moral concerns are greater for temporally distant events and are moderated by value strength. *Social Cognition, 27*, 260–281. doi:10.1521/soco.2009.27.2.261

Agerström, J., & Björklund, F. (2009b). Temporal distance and moral concerns: Future immoral behavior is perceived as more wrong and evokes stronger prosocial intentions. *Basic and Applied Social Psychology, 31*, 1–11. doi:10.1080/01973530802659885

Agerström, J., & Björklund, F. (2013). Why people with an eye toward the future are more moral: The role of abstract thinking. *Basic and Applied Social Psychology, 35*, 373-381, doi:10.1080/01973533.2013.803967

Agerström, J., & Björklund, F., & Allwood, C. M. (2010). The influence of temporal distance on justice and care morality. *Scandanavian Journal of Psychology, 51*, 46-55. doi:10.1111/j.1467-9450.2009.00724.x

Altemeyer, B. (1998). *Enemies of freedom: Understanding right-wing authoritarianism*. San Francisco, CA: Jossey-Bass.

Aknin, L., B. Van Boven, L. & Johnson-Graham, L. (2014). Abstract construals make the emotional rewards of prosocial behavior more salient. *Unpublished manuscript.*

Bar-Anan, Y., Liberman, N., Trope, Y., & Algom, D. (2007). Automatic processing of psychological distance: Evidence from a Stroop task. *Journal of Experimental Psychology: General, 136,* 610–622. doi:10.1037/0096-3445.136.4.610

Batson, C. D., Batson, J. G., Slingsby, J. K., Harrell, K. L., Peekna, H. M., & Todd, R. M. (1991). Empathic Joy and the Empathy-Altruism Hypothesis. *Journal of Personality and Social Psychology, 61*, 413-426.

Becker, J. C., & Wright, S. C. (2011). Yet another dark side of chivalry: Benevolent sexism undermines and hostile sexism motivates collective action for social change. *Journal of Personality and Social Psychology, 101*, 62–77. doi:10.1037/a0022615

Bergsieker, H. B., Shelton, J. N., & Richeson, J. A. (2010). To be liked versus respected: Divergent goals in interracial interactions. *Journal of Personality and Social Psychology, 99*, 248-264.

Burgoon, E. M., Henderson, M. D., & Markman, A. B. (2013). There are many ways to see the forest for the trees: A tour guide for abstraction. *Perspectives for Psychological Science, 8*, 501-519. doi:10.1177/1745691613497964

Buschman, J. K., & Lenart, S. (1996). ‘‘I am not a feminist, but . . .’’: College women, feminism, and negative experiences. *Political Psychology, 17*, 59–75.

Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). New York: Academic Press.

Cook, D. (2003). *Gandhi*. Mason Crest Publishers.

Duckitt, J., & Fisher, K. (2003). The impact of social threat on world view and ideological attitudes. *Political Psychology, 24*, 199-222. doi:10.1111/0162-895X.00322

Eagly, A. H., & Karau, S. J. (2002). Role congruity theory of prejudice toward female leaders. *Psychological Review, 109*, 573-598. doi:10.1037/0033-295X.109.3.573

Eyal, T., Liberman, N., & Trope, Y. (2008). Judging near and distant virtue and vice. Journal of *Experimental Social Psychology, 44*, 1204–1209. doi:10.1016/j.jesp.2008.03.012

Eyal, T., Sagristano, M., Trope, Y., Liberman, N., & Chaiken, S. (2009). When values matter: Expressing values in behavioral intentions for the near vs. distant future. *Journal of Experimental Social Psychology, 45*, 35-43. doi:10.1016/j.jesp.2008.07.023

Fallding, H. (2010a, July 30). High and dry: First Nations an hour from Winnipeg face Third World Conditions. *Winnipeg Free Press*, p. A6.

Fallding, H. (2010b, October 30). Less water than a refugee camp. *Winnipeg Free Press.* Retrieved from http://www.winnipegfreepress.com/no-running-water/without/Less-water-than-a-refugee-camp-106368574.html

Fiedler, K., Jung, J., Wänke, M., & Alexopoulos, T. (2012). On the relations between distinct aspects of psychological distance: An ecological basis of construal-level theory. *Journal of Experimental Social Psychology, 48*, 1014-1021. doi:10.1016/j.jesp.2004.04.003 doi:dx.doi.org/10.1016/j.jesp.2012.03.013

Freitas, A. L., Gollwitzer, P., & Trope, Y. (2004). The influence of abstract and concrete mindsets on anticipating and guiding others' self-regulatory efforts. *Journal of Experimental Social Psychology 40*, 739–752. doi:10.1016/j.jesp.2004.04.003

Fujita, K., Henderson, M. D., Eng, J, Trope, Y., & Liberman, N. (2006). Spatial distance and mental construal of social events. *Psychological Science, 17*, 278-282. doi:10.1111/j.1467-9280.2006.01698.x

Furnham, A. (2003). Belief in a just world: Research progress over the past decade. *Personality and Individual Differences, 34,* 795–817.

Gaucher, D., Kay, A. C., & Laurin, K. (2010). The power of the status quo: Consequences for maintaining and perpetuating inequality. In R. Bobocel, A. C. Kay, M. P. Zanna, & J. M. Olson (Eds.), *The Psychology of Justice and Legitimacy: The Ontario Symposium* (pp. 109-118). Philadelphia: Psychology Press.

Gilead, M., Liberman, N., & Maril, A. (2014). From mind to matter: Neural correlates of abstract and concrete mindsets. *Social Cognitive Affective Neuroscience, 9*, 638-645. doi:10.1093/scan/nst031

Gong, H., & Medin, D. L. (2012). Construal levels and moral judgment: Some complications. *Judgment and Decision Making, 7*, 628-638.

Gunn, G. R., & Wilson, A. E. (2011). Acknowledging the skeletons in our closet: The effect of group affirmation on collective guilt, collective shame, and reparatory attitudes. *Personality and Social Psychology Bulletin, 37*, 1474-1487.

Hafer, C. L. & Bégue, L. (2005). Experimental research on just-world theory: Problems, developments, and future challenges. *Psychological Bulletin, 131*, 128-167. doi:10.1037/0033-2909.131.1.128

Health Canada (2014, February 28). *Drinking water and wastewater.* Retrieved from http://www.hc-sc.gc.ca/fniah-spnia/promotion/public-publique/water-eau-eng.php

Henderson, M. D., Fujita, K., Trope, Y., & Liberman, N. (2006). Transcending the "here": The effect of spatial distance on social judgment. *Journal of Personality and Social Psychology, 91*, 845-856. doi:10.1037/0022-3514.91.5.845

Jost, J. T., & Banaji, M. R. (1994). The role of stereotyping in system-justification and the production of false consciousness. *British Journal of Social Psychology, 33*, 1-27. doi:10.1111/j.2044-8309.1994.tb01008.x

Jost, J. T., & Banaji, M. R., & Nosek, B. A. (2004). A decade of system justification theory: Accumulated evidence of conscious and unconscious bolstering of the status quo. *Political Psychology, 25*, 881-919.

Kaiser, C. R., & Miller, C. T. (2001). Stop complaining! The social costs of making attributions to discrimination. *Personality and Social Psychology Bulletin, 27*, 254-263. doi: 10.1177/0146167201272010

Kay, A. C., Banfield, J. C., & Laurin, K. (2010). The system justification motive and the maintenance of social power. In A. Guinote & T. K. Vescio (Eds.), *The social psychology of power* (pp. 313-340). New York: Guilford Press.

Kay, A. C., Gaucher, D., Peach, J. M., Friesen, J., Laurin, K., Zanna, M. P., & Spencer, S. J. (2009). Inequality, discrimination, and the power of the status quo: Direct evidence for a motivation to view what is as what should be. *Journal of Personality and Social Psychology, 97*, 421-434. doi:10.1037/a0015997

Kirk, J. A. (2004). State of the Art: Martin Luther King, Jr. *Journal of American Studies, 38*, 329-347. doi:10.1017/S002187580400846

Krebs, R. R., & Rapport, A. (2012). International relations and the psychology of time horizons. *International Studies Quarterly*, 56, 3. doi:0.1111/j.1468-2478.2012.00726.x

Lerner, M. (1980). *The belief in a just world*. New York: Plenum Press.

Lerner, M. J., & Simmons, C. H. (1966). Observer's reaction to the "innocent victim": Compassion or rejection? *Journal of Personality and Social Psychology, 4*, 203-210. doi:10.1037/h0023562

Levy, S. R., Freitas, A. L., & Salovey, P. (2002). Construing action abstractly and blurring social distinctions: Implications for perceiving homogeneity among, but also empathizing with and helping, others. *Journal of Personality and Social Psychology, 83*, 1224-1238. doi: 10.1037/0022-3514.83.5.1224

Liberman, N., and Trope, Y. (1998). The role of feasibility and desirability considerations in near and distant future decisions: A test of temporal construal theory. *Journal of Personality and Social Psychology*, *75*, 5-18.

Luguri, J. B., Napier, J. L., & Dovidio, J. F. (2012). Reconstruing intolerance: Abstract thinking reduces conservatives' prejudice against non-normative groups. *Psychological Science,* 23, 756-63. doi:10.1177/0956797611433877

Maglio, S. J., & Polman, E. (2014). Spatial orientation shrinks and expands psychological distance. *Psychological Science. Online First.* doi:10.1177/0956797614530571

Maglio, S. J., Trope, Y., & Liberman, N. (2013). Distance from a distance: Psychological distance reducdes any further psychological distance. *Journal of Experimental Psychology: General, 142*, 644-657. doi:10.1037/a0030258

McCrea, S., Wieber, F, & Myer, A. L. (2011). Construal level mind-sets moderate self- and social stereotypes. *Journal of Personality and Social Psychology, 102*, 51-68. doi:10.1037/a0026108

Minson, J. A. & Monin, B. (2012). Do-gooder derogation: Disparaging morally motivated minorities to defuse anticipated reproach. *Social Psychological and Personality Science, 3*, 200-207. doi:10.1177/1948550611415695

Monin, B., & Jordan, A. H. (2009). The dynamic moral self: A social psychological perspective. In D. Narvaez &D. Lapsley (Eds.), *Personality, identity, and character: Explorations in moral psychology* (pp. 341-354). New York, NY: Cambridge University Press.

Neegan Burnside Ltd. (2011). *National assessment of First Nations water and wastewater systems*. Report prepared for Indian and Northern Affairs Canada. Retrieved from http://www.aadnc-aandc.gc.ca/DAM/DAM-INTER-HQ/STAGING/texte-text/enr_wtr_nawws_rurnat_rurnat_1313761126676_eng.pdfs

Neufeld, K. H., Starzyk, K. B., Gaucher, D., & Boese, G. B. D. (2012). *Unpublished data.*

Neufeld, K. H., Gaucher, D., & Starzyk, K. B. (2013). *Unpublished data.*

Pearson, J. (2005). Harvey Milk. *Harvey Milk*, 1.

Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, *40*, 879-891.

Regan, P. (2010). *Unsettling the settler within: Indian residential schools, truth telling, and reconciliation in Canada.* Vancouver, Canada: UBC Press.

Rogers, T., & Bazerman, M. H. (2008). Future lock-in: Future implementation increases selection of 'should' choices. *Organizational Behavior and Human Decision Processes, 106*, 1–20. doi:10.1016/j.obhdp.2007.08.001

Rudman, L. A., Moss-Racusin, C. A., Glick, P., & Phelan, J. E. (2012). Reactions to vanguards: Advances in backlash theory. In Devine, P. G., & Plant, E. A. (Eds.), Advances in Experimental Social Psychology, 45, 167-227.

Smith, P. K., & Trope, Y. (2006). You focus on the forest when you're in charge of the trees: Power priming and abstract information processing. *Journal of Personality and Social Psychology, 90*, 578-596. doi:10.1037/0022-3514.90.4.578

Starzyk, K. B., El-Gabalawy, R., & Boese, G. D. B. (2011). The times they are a-changin': Racial/ethnic diversity increases public support for reparations. *Unpublished manuscript.*

Statistics Canada. (2006). Population by selected ethnic origins, by province and territory. Retrieved from http://www40.statcan.gc.ca/l01/cst01/demo26a-eng.htm

Tajfel, H. (1978). *Differentiation between social groups: Studies in the social psychology of intergroup relations.* London: Academic Press

Tajfel, H., & Turner, J. (1979). An integrative theory of intergroup conflict. In W. Austin & S. Worchel (Eds.), *The Social Psychology of Intergroup Relations* (pp. 33-47). Monterey, CA: Brooks/Cole.

Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *The psychology of intergroup relations* (pp. 7–24). Chicago: Nelson-Hall.

Todorov, A., Goren, A., & Trope, Y. (2007). Probability as a psychological distance: Construal and preferences. *Journal of Experimental Social Psychology, 43*, 473-482. doi:10.1016/j.jesp.2006.04.002

Torres-Harding, S. R., Siers, B., & Olson, B. D. (2011). Development and psychometric evaluation of the social justice scale. *American Journal of Community Psychology*, *50*, 77-88. doi:10.1007/s10464-011-9478-2

Trautmann, S. T., & van de Kuilen, G. (2012). Prospect theory or construal level theory?: Diminishing sensitivity vs. psychological distance in risky decisions. *Acta Psychologica, 139*, 254-260. doi:10.1016/j.actpsy.2011.08.006

Trope, Y., & Liberman, N. (2000). Temporal construal and time-dependent changes in preference. *Journal of Personality and Social Psychology*, *79*, 876-889. doi:10.1037/0022-3514.79.6.876

Trope, Y., & Liberman, N. (2010). Construal-level theory of psychological distance. *Psychological Review*, *117*, 440-463. doi:10.1037/a0018963

Trope, Y., Liberman, N., & Wakslak, C. (2007). Construal levels and psychological distance: Effects on prediction, evaluation, and behavior. *Journal of Consumer Psychology, 17*, 83–95. doi:10.1016/S1057-7408(07)70013-X

Tversky, B. (2003). Structures of mental spaces: How people think about space. *Environment and Behavior, 35*, 66–80. doi:10.1.1.201.9997

Tversky, B. (2005). Functional significance of visuospatial representations. In P. Shah & A. Miyake (Eds.), *Handbook of Higher-Level Visuospatial Thinking* (pp. 1–70). Cambridge, England: Cambridge University Press.

United Nations General Assembly Resolution. (2010). Ref. A/64/L.63/Rev.1

van Zomeren, M., Postmes, T., & Spears, R. (2008). Toward an integrative social identity model of collective action: A quantitative research synthesis of three socio-psychological perspectives. *Psychological Bulletin, 134,* 504-535. doi: 10.1037/0033-2909.134.4.504

Vallacher, R. R., Wegner, D. M., & Frederick, J. (1987). The presentation of self through action identification. *Social Cognition, 5*, 301-322.

Vallacher, R. R., & Wegner, D. M. (1989). Levels of personal agency: Individual variation in action identification. *Journal of Personality and Social Psychology*, *57*, 660-671.

Vorauer, J. D., Gagnon, A., & Sasaki, S. J. (2009). Salient intergroup ideology and intergroup interaction. *Psychological Science, 20*(7), 838-845. doi:10.1111/j.1467-9280.2009.02369.x

Wakslak, C. J. (2012). The experience of cognitive dissonance in important and trivial domains: A construal-level theory approach. *Journal of Experimental Social Psychology, 48*, 1361-1364. doi:10.1016/j.jesp.2012.05.011

Wakslak, C. J., & Trope, Y. (2009). The effect of construal level on subjective probability estimates. *Psychological Science*, *20*, 52-58. doi: 10.1111/j.1467-9280.2008.02250.x

Wakslak C. J., Trope, Y., Liberman, N., & Alony, R. (2006). Seeing the forest when entry is unlikely: Probability and the mental representation of events. *Journal of Experimental Psychology, 135,* 641–653. doi:10.1037/0096-3445.135.4.641

Yang, D. Y. J., Preston, J. L., & Hernandez, I. (2013). Polarized attitudes toward the ground zero mosque are reduced by high-level construal. *Social Psychological and Personality Science, 4*, 244-250. doi:10.1177/1948550612446973

Yogeeswaran, K., & Dasgupta, N. (2014). The devil is in the details: Abstract versus concrete construals of multiculturalism differentially impact intergroup relations. *Journal of Personality and Social Psychology, 106*, 772-789. doi:10.1037/a0035830

Appendix A

Passage Text

Note: Text for the distant injustice location appears in brackets.

First Nations' Water Woes Boil Over in Manitoba [the Yukon]

Minister of Aboriginal Affairs and Northern Development John Duncan recently released the findings of *The National Assessment of First Nations' Water and Wastewater Systems*. Conducted across 571 First Nations' communities, this report describes the state of these communities' water systems in both regional and national contexts. With 4,000 water and wastewater systems inspected, it is the largest and most rigorous assessment of its kind ever conducted in Canada. The results provide a detailed record of the various types of water and wastewater systems used in First Nations' communities across the country along with detailed evaluations of the systems using a risk rating developed by the Department.

According to the report, 28% of homes in Canadian First Nations' communities do not have running water.[3] The situation is the perhaps worst in Manitoba [the Yukon], which has the highest proportion of First Nations' communities without indoor plumbing, accounting for nearly half the homes in that situation nationwide. For example, in the Island Lake [Isle Lake] region of Northern Manitoba [Yukon], half of the 100,000 residents do not have running water in their homes and are forced to haul treated water from communal taps that are sometimes up to a couple of kilometres away. Water for household tasks must be collected from surrounding lakes and residents must use buckets as indoor toilets – and dump the contents outdoors – or use outhouses.

As *Winnipeg Free Press* discovered during a recent investigative effort, many people in this region survive on a mere 15 liters per day, often coming from untreated lakes and contaminated rivers.

In communities that do not have running water, personal hygiene and health suffer. Being unable to wash has contributed to the high prevalence of diarrhea and skin infections, and can also lead to more serious health consequences, as the residents discovered when H1N1 flu exploded in spring 2009. "Lack of access to water and overcrowding facilitate the spread of these viruses," a Health Canada media spokeswoman acknowledged.

The initial cost to provide clean running water to all homes in these First Nations' communities is estimated to be $1.2 billion (Canadian). It is unclear whether the government can afford this.

[3] This estimate may be incorrect. A more accurate estimate is approximately 3,000 homes (H. Fallding, personal communication, June 24, 2014).