Paradoxical thinking as a paradigm of attitude change in the context of intractable conflict

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Abstract

The chapter introduces a new approach to attitude change, termed paradoxical thinking. It suggests that messages that are consistent with an individual’s view, but formulated in an amplified, exaggerated, or even absurd manner, lead to an extended process of deliberative thinking and arouse lower levels of resistance compared to conventional persuasive approaches that use attitude-inconsistent messages. We argue that attitude-inconsistent messages are often automatically rejected among highly involved individuals with extreme views. The paradoxical thinking approach is intended to lead individuals to perceive their held societal beliefs or the current situation as farfetched and implausible, and ultimately, to lead to unfreezing and reevaluation of held attitudes. Eventually, unfreezing may lead to openness to alternative, more
moderate viewpoints that may then be adopted. We introduce four variables that are part of the process (i.e., threat to identity, surprise, disagreement with the message, and unfreezing) and present empirical evidence supporting this conception with studies conducted mostly vis-à-vis conflict-supporting attitudes in the context of an intractable conflict.

1. Introduction

The challenge of changing people’s beliefs and attitudes has intrigued social psychology from the initial stages of its emergence over 100 years ago (Allport, 1935; McDougall, 1908). Indeed, for over a century, different theoretical and conceptual frameworks have been proposed and thousands of empirical studies have been carried out, aiming to address this goal. For practical reasons, many of these studies were conducted within the domain of consumer behavior, marketing and business; but perhaps more importantly, some were performed to improve the quality of life for individuals and collectives and build peace, equality, security, justice and prosperity around the world.

Violent conflicts, poverty, waves of international migration, and global warming are only some salient examples of major social problems that plague the world. Solutions to these problems not only require tangible resources, but importantly, often demand changes in beliefs and attitudes of society members. For example, the first condition of any substantial action to slow global warming is to persuade people that it is actually taking place, that it is harmful, and that it is caused by human activity. While in 2013, the Intergovernmental Panel on Climate Change’s (IPCC) Fifth Assessment Report concluded that “human influence has been the dominant cause” of global warming, various organizations, groups and individuals dispute this conclusion and do not attribute global warming to human actions (see Bliuc et al., 2015; McCright & Dunlap, 2000). In this case as well as in others, leaders who serve as epistemic authorities to their supporters and have the power to initiate policies and carry actions are of special importance. Nevertheless, in some cases they have detrimental influences on the well-being of their societies and even on the world because of their held attitudes, as in the case of the President of the United States Donald Trump who denies that humans being contribute greatly to the global warming.

A similar, but perhaps even greater challenge exists in cases of intractable conflicts, which are often devastating for the involved societies. Intractable conflicts, which are positioned at one extreme of the tractable-intractable
spectrum, resist peaceful resolution and have the following characteristics: They are fought over goals viewed as existential, are violent, perceived as being of zero-sum nature and unsolvable, occupy a central position in the lives of the involved societies, require immense investments of material and psychological resources, and last for at least 25 years (Bar-Tal, 2007a,b, 2013; Kriesberg, 1998). Thus, a peaceful solution to intractable conflicts first of all requires a dramatic change of conflict supporting societal beliefs and attitudes by participating parties, and especially by leaders (Bar-Tal, 2013; Kelman, 2007). Those are human beings who initiate bloody conflicts on the basis of their formed beliefs and attitudes and thus they need to end them by changing their beliefs and attitudes to bring peace and prosperity to their society. This challenge is critical among society members who hold their positions with great confidence and involvement, mainly due to socialization processes they have experienced throughout the years of living in the conflict context.

Through the years, various proposed interventions, based on different theories of attitude change, have proved only partially successful in opening the minds of society members (e.g., Hameiri, Bar-Tal, & Halperin, 2014). Most of these interventions have attempted to provide knowledge or information countering people’s predisposed beliefs about the particular issue. One of the main reasons for their partial failure is attributed to individuals’ strong adherence to their societal beliefs and attitudes, leading to an automatic disregard of alternative knowledge or an activation of a variety of defense mechanisms that allow a rejection of information contradicting their views (see Kruglanski, 2004; Kunda, 1990).

In view of the shortcomings characterizing many of the existing attitude change interventions, we introduce a new approach to attitude change termed paradoxical thinking (Hameiri, Nabet, Bar-Tal, & Halperin, 2018; Hameiri, Porat, Bar-Tal, & Halperin, 2016; Hameiri, Porat, Bar-Tal, Bieler, & Halperin, 2014; see also Swann, Pelham, & Chidester, 1988). It is based on the classic debating technique reductio ad absurdum (Rescher, 2005). It suggests that when individuals with well anchored extreme views are exposed to consistent messages that are formulated in an amplified, exaggerated, or even absurd manner, their level of disagreement, resistance and/or psychological defenses are not fully triggered and they embark on a deliberative

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1 Societal beliefs are defined as shared cognitions by the society members that address themes and issues that the society members are particularly occupied with, and which contribute to their sense of uniqueness (Bar-Tal, 2000).
thinking process. This is in comparison to when they are exposed to messages that contradict their views. Furthermore, such paradoxical messages, we suggest, raise threats to the identity of the message recipient, instigating a re-evaluation process of the held beliefs and attitudes that in turn may stimulate their unfreezing. Eventually, unfreezing may lead to openness to alternative viewpoints that may be adopted. Specifically, the paradoxical thinking message is intended to lead individuals to perceive their currently held societal beliefs or the current situation as implausible and farfetched and then eventually move them toward more moderate positions (Hameiri et al., 2016, 2018; Hameiri, Porat, et al., 2014; Swann et al., 1988). To make this definition more vivid, an example of a paradoxical thinking message for individuals who dispute the notion that global warming is caused by human beings might be that “as owners of this earth we have the right to pollute it. No one can put restrictions on human behaviors even if it leads to the destruction of the globe.”

The current chapter presents the paradoxical thinking paradigm of attitude change with its assumptions and processes, as well as with supporting empirical evidence, mostly in the context of intractable conflict. As we elaborate below, this context, in which most of our studies have been carried out thus far, has long term negative effects on the participating societies, leading to great involvement of society members and deep freezing of conflict-supporting beliefs (Bar-Tal, 2013). Therefore, it can be considered as one of the most challenging missions for attitude change. Thus, we will begin this chapter with describing the context of intractable conflicts, with their evolved, often frozen socio-psychological repertoires (i.e., beliefs, attitudes, and emotions) supporting conflict continuation. Then we will briefly present extant approaches to attitude change used primarily in the context of intractable conflicts that have focused on the contents of the messages. It is beyond the scope of the present chapter to review in details the constantly growing literature on attitude change and persuasion (Ajzen, 2001; Albarracín & Shavitt, 2018; Bohner & Dickel, 2011; Eagly & Chaiken, 1993; Forgas, Cooper, & Crano, 2010; Prislin & Wood, 2005). Finally, we will reach the heart of this chapter and elaborate on the paradoxical thinking conceptual framework, followed by descriptions of studies that demonstrate its effectiveness, and several aspects of its underlying psychological mechanism.

It is important to note that, in spite of the fact that we mostly describe studies carried out in the context of intractable conflict, we argue wholeheartedly that the paradoxical thinking approach can be used with regard
to other issues and in other contexts, as demonstrated in preliminary research that we review. Moreover, we contend that the results obtained in our studies have only strengthened this argument, because in the context of intractable conflict society members often prefer to die for their frozen extreme beliefs and attitudes rather than change them and embark on the road of peace. Thus, the attitudes held in the context of intractable conflict should be regarded as an example of a very extreme, challenging, case for changing these attitudes. If the intervention is successful in this case, then it should work also in other easier cases. Therefore, we will begin by describing this harsh and violent context in which the repertoire of conflict-supporting beliefs and attitudes develops.

2. The context of intractable conflict

The very harsh conditions in the context of intractable conflicts have received much scholarly attention through the years. This is because of the persistent difficulty in ending them peacefully, and their severe and costly implications for the societies involved, as well as for the international community (see Azar, 1990; Bar-Tal, 2013; Coleman, 2003; Kriesberg, 1998; Vallacher, Coleman, Nowak, & Bui-Wrzosinska, 2010). The ongoing conflicts in Kashmir, Turkey, and the Middle East, for example, constitute prototypical cases of intractable conflicts. They center on disagreements regarding contradictory goals and interests in different domains, such as territories, natural resources, economic wealth, self-determination, and/or basic values. These disagreements must be addressed in conflict resolution. Though these disagreements could potentially be resolved through negotiation, mediation, or arbitration, intractable conflicts, which are fought over goals that are perceived as being existential, are especially resistant to peaceful conflict resolution. They often last for decades, even centuries, with high levels of violence that cause immense suffering to the societies involved. Even if one side militarily succeeds overcoming the rival, the conflict often does not end because rivals stand up in arms time after time, even after defeats, until they achieve their goals, as viewed by at least the majority of the society members. Examples of such cases can be seen in the history of Poland, India, Hungary, Slovenia, Basque country, or Ireland.

One of the major reasons for the perpetuation of intractable conflicts is the evolvement of a socio-psychological conflict-related repertoire that maintains them and feeds their continuation. This repertoire includes conflict-supporting societal beliefs and attitudes that are organized into coherent
collective narratives of collective conflict memory and ethos (Bar-Tal, 2007a, 2013; Oren, 2019). These narratives are functional for meeting the challenges of intractable conflicts, because they satisfy basic needs of the individuals and the collective, such as the need for meaningful understanding of the conflict situation, feeling secure, maintaining a positive self-collective view, feeling just, and so on (see Burton, 1990; Lavi & Bar-Tal, 2015; Staub, 2011). It is thus not surprising that in all societies involved in intractable conflicts, a significant proportion of society members retain this repertoire, with its system of societal beliefs, narratives of collective memories, and ethos of conflict, that become hegemonic pillars of the culture of conflict (Bar-Tal, 2013). Many society members hold these beliefs with high confidence, as a central part of their identity (for an analysis of the Israeli society as an example, see Bar-Tal, 2007b; Bar-Tal, Halperin, & Oren, 2010; Bar-Tal & Raviv, in press; Oren, 2019).

As long as there is no light at the end of the tunnel, the repertoire plays a functional role in the life of the society involved in the intractable conflict, fulfilling many of its individual and collective needs (Bar-Tal, 2013). But when a light appears, and possibilities of resolving the conflict peacefully emerge, the same conflict-supporting repertoire becomes a powerful barrier that inhibits progress toward a peaceful settlement (Bar-Tal & Halperin, 2011). This barrier leads to selective information processing that obstructs the penetration of new counter information, which is one of the necessary conditions for changing beliefs and attitudes favoring the development of a peace process. In many cases, individuals are not even interested in exposure to alternative information that may contradict their held societal beliefs and attitudes (Bar-Tal, 2013; Halperin & Bar-Tal, 2011; Hameiri, Bar-Tal, & Halperin, 2017). The unwillingness to absorb or even listen to alternative information stems from the freezing of societal beliefs, which fuels the continuation of the conflict and prevents openness to new views and information that contradict the held knowledge (Kruglanski, 2004; Kruglanski & Webster, 1996; Kunda, 1990).

Beliefs and attitudes are considered to be frozen when they are subjected to top-down processing. In other words, information that confirms the held beliefs and attitudes is accepted as valid. Alternative information that is inconsistent with the held beliefs and attitudes, however, is likely to be ignored, rejected, and/or misinterpreted (Kruglanski, 2004; Kunda, 1990). Freezing leads to continued reliance on existing societal beliefs and attitudes that support the conflict, and facilitate resistance to persuasive arguments that may contradict these narratives (see Bar-Tal & Halperin, 2011). Thus, the
major challenge researchers and practitioners face is to change the fundamental societal beliefs and attitudes about the conflict, the goals, the rivals and the relationship with them, and about one’s own group and its past. Changing these well-anchored, central, and long-lasting attitudes with one message or even with a series of messages in a short time, is extremely challenging. However, as we will show, there are messages that can provide information with the potential to lead people to deliberative, more thoughtful reasoning, which may eventually be followed by the moderation of their beliefs (Bar-Tal & Halperin, 2009; Evans, 2008; Kahneman, 2003; Kruglanski, 1989). Thus, we argue that if we were able to observe that paradoxical thinking messages change the beliefs and attitudes of hardliners in the context of an intractable conflict, it serves as a validation of the effectiveness of the new approach, as well as its potential effectiveness with regard to other issues. Before describing the paradoxical thinking conceptual framework, the next section briefly describes several major points regarding attitude change with a focus on the context of intractable conflict.

3. Attitude change

Understanding change of beliefs and attitudes is based on the accumulated knowledge, mostly in social psychology, about persuasion or attitude change (Ajzen, 2001; Eagly & Chaiken, 1993; Forgas et al., 2010; Prislin & Wood, 2005). In 1953, a Yale group led by Hovland, Janis, and Kelley (1953) offered a seminal contribution to attitude change that has served as the general framework for this research, including in the context of intractable conflict. It directed attention to at least four factors to be considered in every attempt to elicit attitude change: messenger, message, target audience, and context. Aiming to analyze paradoxical thinking, we focus solely on messages as one major means to change attitudes in the particular context of intractable conflict.

Messages have been considered by many students of attitude change as a focal factor, containing the arguments and their scope, the relevant and irrelevant stimuli, the basis of the arousal of specific discrete emotions and a general affective state, and behavioral guidance. This observation applies similarly to messages presented on central or peripheral routes, as proposed by different scholars (Chaiken, Wood, & Eagly, 1996; Crano & Prislin, 2006; Petty, 1995; Petty & Cacioppo, 1986). In this vein, Crano and Prislin (2006) noted that “[t]he standard models of change, which continue to garner considerable attention, take a number of different forms, but their
basic understandings of the cause-effect patterns of attitude change are limited. In the classical models, messages are presented, processed, and if successful, move recipients’ attitudes toward the advocated position” (p. 348). The vast literature about messages has especially focused on their types, position, style, structure, quality and quantity of the information provided, characteristics, and spacing, but much less on the use of message contents supporting or negating the attitude (Albarracín, 2002; Maio & Haddock, 2015; McGuire, 1969; Mutz, Sniderman, & Brody, 1996). Messages may fall into different categories, representing different types of approaches, with different epistemic bases, but all, if absorbed and understood, are supposed to lead to at least some cognitive processing that may result in reevaluation and then modification of initial attitudes.

Through the years, a number of methods have been used, including attempting to change attitudes held by society members in the context of intractable conflict (Bar-Tal & Hameiri, 2020; Blumberg, Hare, & Costin, 2006; McGlynn, Zembylas, Bekerman, & Gallagher, 2009; Paluck, 2012). These methods are based on the general theoretical assumption that individuals will accept a message inconsistent with their held knowledge, if it sheds new light on the object in question and is more persuasive, accurate, correct, and truthful than the previously held beliefs and attitudes. Whether the message is absorbed, understood, and accepted is argued to be contingent upon the message recipients’ cognitive response to the persuasive attempt (Greenwald, 1968). This model generally argues that message recipients tend to accept persuasive messages as valid if their conclusions are consistent with their held beliefs and attitudes, and reject or resist them when they are inconsistent. Thus, according to this traditional and well-established approach, when individuals invest cognitive resources to process messages, they are persuaded by convincing, reliable, and credible messages (e.g., Petty & Cacioppo, 1986) because of an epistemic fear of invalidity, which leads to a motivation to avoid inaccuracies and mistakes in their knowledge (Kruglanski, 1989). A number of theories account for this kind of motivation as an attitude change approach, though other motivations have also been suggested to underlie attitude change, such as affirmation of personal value and defense of self-concept (see Chaiken et al., 1996).

Most notably, the theories of inconsistency propose that exposure to a message that is inconsistent with the held belief or attitude arouses an unpleasant psychological state, leading to behaviors designed to regain consistency (Cooper & Fazio, 1984; Festinger, 1957; Osgood & Tannenbaum, 1955; but see Kruglanski et al., 2018). The theories propose that one way to
achieve consistency is to change the held belief or attitude to be consistent with the received message. Nevertheless, the theories of inconsistency also realize that this is not necessarily the only way to achieve consistency, which can also be achieved by rejection of the new message (Festinger, 1957). Individuals may reject the new message by using various psychological mechanisms, including defense mechanisms suggested originally by Freud (1915/1961) and later adapted by social psychologists (see Baumeister, Dale, & Sommer, 1998), especially when the information conveyed in the messages starkly negates the held beliefs and attitudes (Sherif & Hovland, 1961). In addition, Kruglanski (1989; see also Kruglanski et al., 2018) proposed that beliefs and attitudes are motivated by epistemic needs, and that the extent and nature of the motivation determines whether they will change, and under what conditions change will happen (see Kunda, 1990). This means that individuals who receive attitude-inconsistent information, but are motivated to reach a specific closure as they are inclined to adhere to their held beliefs and attitudes and consider them valid, will reject this information even if the information is valid and truthful.

Another theory relevant to our approach is the social judgment theory proposed by Sherif and Hovland (1961). It describes how people relate their personal attitudes to messages that they encounter, rendering which information will be accepted and assimilated and which will be rejected. According to the theory, individuals hold, in addition to their own personal attitude, latitudes of what they think about the attitudes expressed in the messages: how acceptable or unacceptable these messages are. Sherif and Hovland (1961) conceptualized the personal space related to attitudes as an amalgam of three latitudes: (1) the latitude of acceptance, which is the range of attitudes that a person sees as reasonable or worthy of consideration; (2) the latitude of rejection, which is the range of attitudes that a person sees as unreasonable or objectionable; and (3) the latitude of non-commitment, which is the range of attitudes that a person sees as neither acceptable nor questionable. Another factor in the theory is ego involvement, which denotes the importance or centrality of an issue to a person’s life, i.e., how extreme a person feels on an issue, which is often reflected in the group membership with a known position. Religion and politics are examples that typically result in highly involved attitudes as they contribute to one’s self-identity.

People who are highly involved in their attitudes, often having extreme opinions, have large latitude of rejection because they already have formed their strong opinions and usually are not willing to change them. They also
have more restricted latitude of acceptance and thus it is harder to persuade them with attitude-inconsistent information. In contrast, individuals who care less about an issue or have less ego involvement are likely to have a large latitude of acceptance and, as a result, are more likely to accept new opinions about an issue. Consequently, when a message does not diverge greatly from the latitude of acceptance, it will be accepted (or assimilated), and the person will shift toward the position expressed in the message (e.g., Atkins, Deaux, & Bieri, 1967; Peterson & Koulack, 1969). There are some indications that this is true only for individuals with wide latitude of acceptance, such that for individuals with a narrower latitude attitude-inconsistent messages are not persuasive in any case (see Eagly & Telaak, 1972).

Furthermore, in line with others (Albarracín & Shavitt, 2018; Bohner & Dickel, 2011; Martin & Hewstone, 2008), we suggest that any model of attitude change must take into account the context in which it takes place, because the person’s conception of the situation (or environment) highly determines their behavioral possibilities and eventually the chosen routes of action (Lewin, 1951). In our view, the significance of the collective context lies in its dictation of society members’ needs and goals, and the challenges they must meet to satisfy them. It also provides opportunities and limitations, stimulations and inhibitions, as well as spaces and boundaries for human behavior (Bar-Tal & Halperin, 2013; Wood, 2000). Indeed, while various interventions were found to be effective in particular contexts, when used in contexts that are characterized by intense competition, well-entrenched mistrust, and hostility such as intractable conflicts, they suffer from serious limitations as we elaborate below (Bar-Tal & Hameiri, 2020; Bekerman & Maoz, 2005; Nadler & Liviatan, 2006; Tropp, 2015; Vorauer & Sasaki, 2009).

In the context of intractable conflict, it should be noted that there are at least two ways to present an attitude-inconsistent message about the conflict. First, the most common way is to provide accurate and validated direct information that sheds new light on the held beliefs. In essence, the contradicting information is supposed to be more credible, accurate, based on validated knowledge and even undisputable for the dissonance to be resolved in its favor. In this vein, the information can be provided through mass media or through educational systems. Media can be used to transmit information to a wide public about the new peaceful goals, the rival group, one’s own group, and the developing relations (Wolfsfeld, 2004). In schools, pupils can be exposed to new knowledge about the conflict, the rival and even their own group (Bar-Tal, Rosen, & Nets-Zehngut, 2010;
Deutsch, 2005; McGlynn et al., 2009). To illustrate, Papadakis (2008) presented an example from the Cypriot educational system, where, in spite of the continuous conflict, the schoolbooks began to provide new information about the history of the conflict that negated its mainstream national collective memory.

Second, contradicting messages can be induced indirectly by enabling experiences from which a person can infer a conclusion that is different from her held beliefs and attitudes. In these interventions, instead of presenting information that explicitly contradicts held societal beliefs and attitudes, the aim is to facilitate attitude change by enabling an experience that is only implicitly contradictory to held societal beliefs. This may involve, for example, creating a situation in which members of two groups who are in conflict and initially have mutual negative repertoires toward each other come in contact (Allport, 1954; Pettigrew, 1998). In a typical contact intervention (e.g., intergroup contact, Pettigrew & Tropp, 2006, 2008; and dialog groups, Halabi, 2004; Nagda, Yealkley, Gurin, & Sorensen, 2012; Wagner & Hewstone, 2012), the basic premise, dating back to Allport (1954), is that a normative interaction with equals that promotes cooperation should reduce prejudice and animosity between adversaries, as they get to know each other personally and on human terms (for a review of contact interventions in contexts of intergroup conflict, see Al Ramiah & Hewstone, 2013).

The line of research about the effects of contact on intergroup relations in situations of conflict is probably one of the most extensive in social sciences. Providing just a few illustrations: large-scale interventions in Northern Ireland sought to facilitate cross-community contact between Catholics and Protestants to promote values of tolerance and acceptance of cultural and political differences among local communities (Cairns, Dunn, & Giles, 1992); Malhotra and Liyanage (2005) organized a four-day peace camp in Sri Lanka between Tamil and Sinhalese young adults to increase empathy between the two rival groups; and in the context of the Israeli–Palestinian conflict, dozens of planned contact programs between Israeli Jews and Palestinians have been conducted each year since the mid-1980s. They have ranged from one-time meetings to long-term continuous series of meetings, typically including 8–12 participants from each nationality and facilitated by a Jewish and an Arab facilitator. They have been undertaken within a diverse range of demographic groups, including youths, university students, university professors, and other professionals (Adwan & Bar-On, 2000; Maoz, 2004, 2011; Yablon, 2012).
4. Limitations of traditional approaches in the context of intractable conflict

The presented approaches for interventions have yielded noteworthy results in intergroup relations in various contexts and with different outcome variables. Nevertheless, we argue that they are generally less effective in harsh, prolonged, and bloody conflictive settings, or in well anchored cases of prejudice and discrimination against minority groups, given basic mistrust between the groups that characterizes these cases (e.g., Bekerman & Maoz, 2005; Tropp, 2015; Vorauer & Sasaki, 2009).

First, in situations like intractable conflicts, many interventions may be ineffective: when the repertoire is central, held with great confidence, and with high involvement (Bar-Tal, Raviv, & Freund, 1994; Eagly & Chaiken, 1993; see also Petty & Krosnick, 1995); when this repertoire, and especially the conflict-related beliefs, constitute a coherent interrelated structure that forms an ideology (Bar-Tal, Sharvit, Halperin, & Zafran, 2012; Tetlock, 1989); when this repertoire fulfills important functions for the individual (Eagly & Chaiken, 1993); and when the beliefs of this repertoire are underlined by a motivational factor, i.e., specific closure needs (Kruglanski, 1989, 2004). Sometimes the frozen beliefs and attitudes result from prolonged socialization and indoctrination that impart, disseminate, and reinforce them continuously (Bar-Tal, Diamond, & Nasie, 2017; Persianis, 2017; Vered & Bar–Tal, 2016). As such, society members view their knowledge as truthful and valid and therefore it is very difficult to change. They not only often refuse to be exposed to the alternative information, but also when exposed to it, they tend to reject it automatically, without trying to process it deliberately (Kahneman, 2003, 2011; Sloman, 2002).

Second, in many cases society members are not motivated to change their beliefs and attitudes (for example, a conflict-supporting repertoire) and are not interested in taking part in situations that might expose them to new alternative information. Thus, they use various defense mechanisms to protect their convictions, feeling secure with them in the situation of conflict (Mitzen, 2006). For example, living in the context of culture of conflict with its routinization, society members become desensitized to threats and dangers, on the one hand, and habituated to the context of conflict on the other (Bar-Tal, Abutbul-Selinger, & Raviv, 2014). In this psychological state, contradictory information may even lead to stress fed by feelings of uncertainty and risk taking. As a result, individuals who hold societal beliefs
supporting the conflict are more inclined to reject possibilities of exposure to contradictory information (Bar-Tal & Raviv, in press). It is even suggested that the continuation of the conflict becomes a need by itself, because the conflict supporting beliefs and attitudes fulfill well the needs of the society members and any change of the situation brings stress, uncertainty and insecurity. Society members thus rest in the “comfort zone” of the conflict. All this pending that the violence is manageable and does not cause much troubles (see Bar-Tal & Raviv, in press).

Finally, some of the interventions require specific conditions, such as opportunities to make contact with the rival or being in a context where the alternative information is permitted, or in a culture where alternative information is easily accessible. This means that, in principle, the interventions can either be used only in particular contexts, or that they will be more or less effective depending on the context, as they have their limitations and restrictions, related to freedom of information flow, freedom of movement, and so on. For example, not in every conflict situation do possibilities for contact between representatives of the two rival groups exist. Thus, interventions must consider the parameters of the context (Bar-Tal & Hameiri, 2020; Bekerman & Maoz, 2005; Hammack, 2009).

In sum, considering the limitations of using attitude-inconsistent messages, we sought to develop a new paradigm of attitude change based on a different principle: a paradigm that (1) does not provide counter information to induce inconsistency; (2) does not raise strong defensive reactions; (3) motivates the individual to re-evaluate the held societal beliefs and attitudes via a reasoning process; and (4) is easy to implement, without requiring special conditions such as contact between the parties in conflict, thereby eliminating logistical constraints and potential reprisals. The most important challenge and requisite is to prevent automatic information processing and instead instigate a slow, deliberative process of reasoning (Kahneman, 2011) that causes an individual to raise an epistemic question following exposure to the message (Kruglanski, 1989). We will now describe the paradoxical thinking paradigm that fits these criteria, suggesting a different conception of attitude change.

5. Paradoxical thinking

In presenting the paradoxical thinking paradigm for changing attitudes, we propose a method that is based on using a new nonjudgmental relevant message that is consistent with the held beliefs and attitudes but is
provided with an amplified, exaggerated or even absurd content. The presented message is first meant to be understood and then is expected to arouse surprise, or a sense of absurdity when compared to the held beliefs and attitudes or the current situation. Instead of eliciting inconsistency using counter-attitudinal information, the consistent paradoxical thinking message, is first supposed to surprise the individual, and then induce a deliberative examination of the held beliefs and attitudes. In turn, the deliberation may lead to the realization that something in the individual’s beliefs is perhaps wrong, nonsensical, improbable, unacceptable or strange. This realization could, in our view, motivate individuals to ask epistemic questions, which then possibly can stimulate unfreezing of held beliefs and attitudes, reflected in openness and readiness to change them (see Bar-Tal & Halperin, 2009; Kruglanski, 1989). Indeed, much like the traditional approach, the effectiveness of the paradoxical thinking approach is based on the message recipients’ cognitive response to the message (Greenwald, 1968). However, within the framework of Sherif and Hovland (1961), while attitude-inconsistent messages that fall within the message recipients’ latitude of acceptance are assimilated; recipients exposed to consistent, far-fetched, messages reject them, and then move away from the attitudes conveyed in these messages, which means that a moderating effect is taking place. Ultimately, “changes in the direction opposite to the advocated by communication will be more frequent when the discrepancy between the stands taken in communication and by the subject is large” (Sherif & Hovland, 1961, p. 157).

Let us examine each part of the definition in detail. First, paradoxical thinking messages are consistent with held beliefs and attitudes, but are provided in an amplified, exaggerated or even absurd manner. This means that the messages have to fall within the supporting range of the held beliefs and attitudes of the person, but are very discrepant, expressing very extreme content that is viewed even as absurd. They, thus, fall within the latitude of rejection.

Second, paradoxical thinking uses nonjudgmental messages without directly providing their evaluations or implications. Paradoxical thinking messages do not contradict or negate the held attitude, but provide content that takes the held attitude to the extreme. This means that the messages approve of the held belief and attitude, and indicate that their scope may be broadened a great deal, even to an absurdity. This is a crucial point in the paradoxical thinking framework and has two potential implications: (1) Using nonjudgmental messages leaves the intention of the message source or their stance on the issue ambiguous, and thus reduces any social pressure that might be implied in the communication, as well as defensive reactions. This leads
the message recipients to process the message more thoroughly and to come to a conclusion on their own (Arieli, Grant, & Sagiv, 2014; Perloff, 2010; Petty & Cacioppo, 1986). (2) In some cases, expressing extreme messages without judging them as extreme, or without expressing emotions that signal them as extreme, may lead to an attempt to compensate for what is perceived as an inappropriate response to the implausible content, which may facilitate a process of attitude change (cf. Goldenberg, Saguy, & Halperin, 2014). Nevertheless, we argue that it is crucial that the paradoxical message is not perceived as intending to ridicule the recipient or to manipulate him/her or as aiming to change his/her beliefs and attitudes. Such attribution and understanding of the purpose by the recipient may hinder the whole process by triggering an automatic rejection of the message (see Frankl, 1975; Miller & Rollnick, 2002).

Third, the blatant extremism of paradoxical thinking messages or the subtle extrapolation of absurd conclusions from the recipient’s own beliefs and attitudes is meant to elicit surprise, as well as sense of absurdity regarding the held attitudes or the current situation. This notion is the essence of the paradoxical thinking approach, building on the classic debating technique *reductio ad absurdum* (Rescher, 2005). A sense of surprise should lead to epistemic questions that begin a deliberative-cognitive process. This may bring about cognitive change when the former way of thinking is short-circuited and the deliberative process derails resistance, allowing the individuals to ask themselves new questions, or open themselves to new information, even when their own attitudes are extreme and well-entrenched.

Surprise, as a psychological instigator of attitude change, has received extensive attention in the social psychological literature (e.g., Davis & Knowles, 1999; Itti & Baldi, 2009; Kahneman & Miller, 1986; Maguire, Maguire, & Keane, 2011; Petty, Fleming, Priester, & Feinstein, 2001; Vanhamme, 2000; Ziegler, Diehl, & Ruther, 2002). Surprise takes place when an observed expectancy-incongruent event causes a coherent cognition or schema to break down, leading to an urgent process of sense-making to restore coherence (Itti & Baldi, 2009; Kahneman & Miller, 1986; Maguire et al., 2011). When a stimulus or a message is surprising, it prompts individuals to focus their attention at it, heightens processing and in-depth exploration, and eventually it may also make the message more persuasive (e.g., Meyer, Reisenzein, & Schützwohl, 1997; Petty et al., 2001; Ziegler et al., 2002). We argue that paradoxical thinking messages are surprising because they are unexpected and novel to the message recipients, due to the blatantly extreme statements, or the exaggerated, absurd conclusions
that are drawn from the message recipients’ held beliefs and attitudes. In other words, the recipient of the message did not think that the views he/she holds could be extended to such an extreme expression. Attitude-inconsistent messages, however, are generally less surprising as individuals that live in contexts of intractable conflict are accustomed to, and expect, persuasive attempts with attitude-inconsistent information about the enemy or the conflict (see e.g., Hameiri et al., 2018).

The notion that surprise can help circumvent resistance to persuasion has been the basis of at least one social influence technique, termed disrupt-then-reframe (DTR; Davis & Knowles, 1999; see also Kardes, Fennis, Hirt, Tormala, & Bullington, 2007). This technique, that includes a small distraction (e.g., stating a price in pennies rather than in dollars), and then reframing the situation (e.g., arguing that what you are selling is a bargain) was found to be an effective technique for gaining compliance. While DTR shares the element of surprise with the paradoxical thinking approach, we argue that their differences would most likely make it ineffective in contexts in which beliefs and attitudes are more entrenched, and resistance levels are high. Specifically, in DTR, as opposed to the paradoxical thinking approach, the disruption, or the surprising effect, is in fact intended to lead to lower levels of message processing (Fennis, Das, & Pruyn, 2004). Additionally, it includes a direct persuasive phrase or request that follows the disruption. In general, DTR has been examined almost exclusively in different negotiation scenarios where resistance levels were generally minimal. Still, in a meta-analysis, it was found that even in these contexts, DTR was more effective in a nonprofit fund-raising context compared to a sales context (Carpenter & Boster, 2009). Arguably, this is because individuals are more alert and critical, and engage in a more thorough processing of the message in a sales context than in a nonprofit one (Fennis et al., 2004). Ultimately, these negotiation scenarios are quite different from contexts such as intractable conflicts, where society members are constantly socialized with conflict-related beliefs and attitudes, as discussed above (e.g., Bar-Tal, 2013; Bar-Tal et al., 2017; Bar-Tal, Oren, & Nets-Zehngut, 2014).

Furthermore, based on classic persuasion theories (Chaiken, Liberman, & Eagly, 1989; Kruglanski & Thompson, 1999; Petty & Cacioppo, 1986), it seems that individuals invest great effort when processing the paradoxical thinking message because it creates a sense of ambiguity, uncertainty and/or improbability. Kruglanski, Dechesne, Orehek, and Pierro (2009) proposed that the greater the demands of the task (e.g., more surprising and puzzling),
the greater the processing resources that must be used. In this vein, Petty, Tormala, and Rucker (2004), in their model of attempted resistance, suggest that if individuals are trying to counter-argue against a persuasive appeal, but their attempts are unsuccessful, it will make them less confident in the beliefs and attitudes they have been trying to defend (see also Tormala, Clarkson, & Petty, 2006). Specifically, we propose that the paradoxical thinking messages are weird and farfetched, but not counter-attitudinal (or pro-attitudinal) per se. Therefore, they do not allow the creation of what is perceived as effective counter-arguments, even after a great deal of invested effort, and consequently, they lead to the weakening of the held beliefs and attitudes.

Another basic tenet of paradoxical thinking is that it leaves space for the message recipients to reach a conclusion by themselves. The literature does not have a clear recommendation regarding whether a persuasive message should have an implicit or explicit conclusion, even though it seems that the general tendency is to recommend implicit conclusions when facing a knowledgeable audience (Linder & Worchel, 1970; Perloff, 2010; Petty & Cacioppo, 1986; but see McGuire, 1969; O’Keefe, 2015). In addition, there are some indications that having the recipients come to a conclusion on their own will have a more persuasive effect than giving it to them on a silver platter, and that they are especially effective with hostile message recipients. Implicit conclusions often prevent the arousal of reactance, psychological defenses, and immediate rejection of the message (Perloff, 2010).

Finally, paradoxical thinking is expected to be especially effective with those who are more (vs. less) extreme as the paradoxical thinking extreme and exaggerated messages fall within their latitude of rejection, and they then try to differentiate themselves from these messages, therefore moderating their views. Indeed, there is growing evidence that using paradoxical thinking techniques can be particularly effective with resistant individuals with more extreme views. This notion is quite evident in the clinical psychological literature (e.g., Erickson & Rossi, 1975; Frankl, 1975; Haley, 1973; Miller & Rollnick, 2002). The literature on motivational interviewing, a counseling approach developed for treating problem drinkers and other behavioral problems (e.g., Miller & Rollnick, 2002; Rollnick & Miller, 1995), indicates that it is particularly effective with angry and defensive patients who show the greatest resistance to change (Allen et al., 1997). For example, one of the basic tenets of motivational interviewing is that in order to persuade particularly resistant or ambivalent patients, direct counter-arguments
are counterproductive and only lead to more resistance. Therefore, they suggest using psychological judo, i.e., a metaphor for overcoming resistance by slightly turning or reframing the resistance that a person offers, in order to create new momentum toward change.

We find that the social judgment theory (Sherif & Hovland, 1961) illuminates our paradoxical thinking conception, and supplies additional empirical observations. As mentioned above, individuals with low involvement that receive a consistent message that falls within (or in proximity to) their latitude of acceptance will likely accept this message and be persuaded by it (e.g., Atkins et al., 1967; Peterson & Koulack, 1969). More relevant to the paradoxical thinking conceptual framework, when the message advocates a position far removed from the latitude of acceptance, that falls within the latitude of rejection, a contrast effect occurs and the communication is evaluated as “unfair,” “biased,” or “farfetched” (Sherif & Hovland, 1961). In these cases, we suggest that a boomerang effect will take place; that is, the person’s attitude is likely to shift away from the attitude expressed in the message by moderating it. The person does not want to be perceived as holding such an absurd belief or to be associated with a group that holds it (Bar-Tal, 1990). A study about prohibition, conducted by Hovland, Harvey, and Sherif (1957), demonstrated this moderation effect that occurred when messages fell within the participants’ latitude of rejection, due to the discrepancy between the conveyed messages and their held beliefs.

In our framework, we focus only on consistent messages whose content is discrepant from the held beliefs and attitudes and therefore fall within the latitude of rejection, which renders a moderating effect. In contrast, when the message is inconsistent with the held beliefs and attitudes and falls within the latitude of rejection, a person with high involvement ignores the content, activating automatic thinking and defense mechanisms (Eagly & Telaak, 1972). In a similar vein, research by Swann et al. (1988), which we will describe more in detail in the next section, found that consistent, but extreme messages (as opposed to more moderate or attitude-inconsistent messages) were more effective with participants who were more certain in their attitudes, and as a consequence showed more general disagreement with the attitude-inconsistent messages. Last, in the research we conducted (i.e., Hameiri et al., 2016, 2018; Hameiri, Porat, et al., 2014), on which we will also elaborate later in the chapter, we found clear evidence that a paradoxical thinking intervention was particularly effective with individuals who were adamant in their views and resistant to attitude change in the
context of an intergroup conflict: Hawkish\(^2\) participants in these studies tended to express more conciliatory attitudes to Palestinians and to the Israeli–Palestinian conflict after being exposed to paradoxical thinking messages.

In sum, we argue that the paradoxical thinking messages aim to instigate an intra-individual cognitive process of questioning the person’s held beliefs and attitudes. In other words, the message, in spite of being ultimately rejected, is supposed to arouse motivation to reevaluate long-held beliefs and attitudes, to search for new ideas and information, to consider this information, and eventually to moderate held beliefs and attitudes. In the present case, the provided message is meant to arouse surprise, which in turn should motivate individuals to examine and reevaluate their held beliefs and attitudes, and raise self-created new counter ideas. This hypothesis is based on the key premise of the paradoxical thinking paradigm, suggesting that the message, which is consistent (but amplified or exaggerated) with the held beliefs and attitudes, though being rejected, does not lead to a short thinking process (automatic rejection) and does not raise psychological defenses, but opens a way for deliberative thinking and thus to possible unfreezing (see Kruglanski, 1989). In order for this to happen, and as we elaborate below, one crucial aspect of the paradoxical thinking approach is that it also challenges the most central aspects of the message recipient’s identity.

5.1 Indications of paradoxical thinking in psychological literature

Most of the early evidence on techniques using the strategy of paradoxical thinking comes from the clinical psychological literature. These pieces of evidence (e.g., Frankl, 1975; Miller & Rollnick, 2002; Watzlawick, Weakland, & Fisch, 1974; for a review see Riebel, 1984) suggest that individuals who are provided with amplified or exaggerated information or instructions that are in line with their held beliefs, attitudes, or behavior may change these, even when they are extremely negative and well entrenched. Using a similar line of thought, Frankl (1975), for example,\(^2\) in Israel, society members are identified by their approach to the most important issue that challenges Israeli society, i.e., views of the Israeli–Arab/Palestinian conflict. Rightists, also termed hawks, tend to believe in the necessity to retain at least major parts of the territories occupied in the 1967 war, do not trust Arabs, do not view Palestinians as partners to peacemaking, support aggressive measures against Palestinians, and support Jewish settlement of the West Bank. Leftists, or doves, tend to believe that it is necessary to end the occupation, support a peaceful solution, such as the two-state solution, oppose Jewish settlement, and believe that Palestinians are partners to the peace process. Centrists tend to fall between these two views (Arian, 1995; Bar–Tal et al., 1994).
advised his patients instead of avoiding the fear-arousing stimulus, to think about very fearful cases, or in his words, “to do, or wish to happen, the very things [they fear]” (Frankl, 1975, p. 227). Using this method, that is still regarded as having much to offer for clinical psychologists (e.g., Schulenberg, Hutzell, Nassif, & Rogina, 2008), Frankl successfully treated difficult cases of obsessive-compulsive disorder and phobia (see also Frankl, 2004).

Another example is a technique termed amplified reflection, derived from the literature on motivational interviewing; (e.g., Miller & Rollnick, 2002; Rollnick & Miller, 1995). One of the basic tenets of motivational interviewing is that, in order to persuade resistant or ambivalent patients, direct counter-arguments are counterproductive as individuals tend to reject, or resist them by denying them or rationalizing their meaning. Therefore, and as mentioned above, the use of psychological judo is suggested, i.e., overcoming resistance by altering or reframing the provided messages in order to overcome the resistance and create a new momentum toward a change of behavior (Miller & Rollnick, 2002). For example, if a client, who is a heavy smoker, argues that “studies about cancer do not prove anything,” the therapist or interviewer can reply, “Indeed, lung cancer has nothing to do with smoking. It just happens” (Miller & Rollnick, 2002). This response is an amplified or exaggerated version of the patient’s beliefs, which is achieved by extrapolating an absurd conclusion from the patient’s own words. According to the motivational interviewing approach, this will circumvent possible resistance and will help the patient question his or her original views. Put differently, similar to reductio ad absurdum, when using the technique of amplified reflection, the therapist, in essence, is instructed to reflect a subtle exaggeration or amplification, or an absurd conclusion that is extrapolated from the patient’s own resistance, attitudes and beliefs.

Searching through social psychological literature, we found a single piece of evidence for what we call the use of paradoxical thinking in an attempt to change attitudes. A study conducted by Swann and colleagues in 1988 aimed to investigate the effects of paradoxical self-verification in order to change participants’ conservative attitudes about gender (specifically women’s) roles. Based on Watzlawick et al.’s (1974) ideas, they developed a strategy in which participants were presented with leading questions that encouraged them to answer with statements that were consistent, but were more extreme, than their prior attitudes. Specifically, participants with conservative beliefs about gender roles were recruited for the experiment and then randomly assigned to one of two conditions. In the conventional-strategy condition, participants were asked to answer a series of 10 leading questions that were inconsistent with their beliefs (i.e., liberal; e.g., “Why do you
think women make better bosses than men?”). In the paradoxical-strategy condition, participants were asked to answer a series of 10 leading questions that encouraged them to make statements that were consistent with their conservative beliefs, but blatantly more extreme (i.e., extremely conservative; e.g., “Why do you sympathize with the feelings of some men that women are better kept barefoot and pregnant?”). Results from their studies indicated that participants who were highly certain of their conservative views of gender roles showed the greatest moderation of their views when they were presented with leading questions in the paradoxical-strategy condition.

In Swann et al.’s (1988) view, based on the self-verification theory (Swann, 1983, 1987), individuals who are highly certain in their beliefs are invested in bringing others to see them as they see themselves. Therefore, they resist persuasive efforts of others. The authors argue that similarly, high-certain individuals also resist the paradoxical messages, thus making statements inconsistent with their initial positions and changing their beliefs in line with these statements. Importantly, Swann et al. (1988) argued that high-certain individuals changed their beliefs because they resisted (operationalized as general disagreement with the leading questions) the paradoxical leading questions. After describing paradoxical thinking as a conception of attitude change, the next section will present empirical evidence for its existence, mostly in the very challenging context of intractable conflict.

5.2 Establishing the paradoxical thinking phenomenon

The development of the paradoxical thinking paradigm began with a study by Hameiri, Porat, et al. (2014), carried out in the context of the Israeli-Palestinian conflict. In this study, Jewish-Israeli participants were randomly assigned to one of two conditions. In the paradoxical thinking condition, they viewed a video campaign with messages relating to the Israeli–Palestinian conflict. Participants watched five-minute videos containing, in counterbalanced order, three generic television commercials, completely unrelated to the Israeli-Palestinian conflict, and three paradoxical thinking videos with different themes related to the conflict. In the control condition, participants were exposed to a video-clip of similar length, containing six television commercials unrelated to the Israeli-Palestinian conflict. Participants were exposed to these materials in six waves, with three to four days between each exposure.

The paradoxical thinking campaign included YouTube video clips expressing ideas that were consistent with the shared conflict-supporting societal beliefs of Jews in Israel, but in an amplified, exaggerated manner,
by extrapolating absurd conclusions. These 30-s video clips emphasized how Jewish-Israelis construe their identity based on their conflict-related experiences. Each video clip presented one core Jewish-Israeli identity theme—a conflict-supporting belief of ethos of conflict, shared by the majority of the Jewish Israeli population (e.g., belief in self-glorification, unity, or victimhood; see Bar-Tal, 2013; Bar-Tal et al., 2012)—and ended by suggesting that Israelis cannot afford to peacefully end the Israeli–Palestinian conflict, as its continuation helps maintain these societal beliefs of the ethos of conflict. Importantly, the clips did not refute the core conflict-supporting beliefs, but rather amplified them to extrapolate an absurd conclusion, such as that in order for them to be moral, Jewish-Israelis probably need the conflict.

As expected, the results showed that the paradoxical thinking intervention, compared to the control condition, led participants to show more cognitive unfreezing, namely, an increased willingness to reevaluate their beliefs. It also led centrist and (marginally significantly) rightist participants to express increased support for conciliatory statements toward the Palestinians, indicating that Palestinians were perceived as less responsible for the continuation of the conflict (see Fig. 1). The paradoxical thinking intervention effects were long lasting as, when reassessed a year later,
participants in the intervention condition (vs. the control condition) expressed more willingness to compromise in order to promote a peaceful conflict resolution. Finally, the intervention even influenced participants’ actual voting patterns in the 2013 Israeli general elections: Participants who were exposed to the paradoxical intervention, which took place in proximity to the general elections, reported that they tended to vote more for dovish parties which advocated a peaceful resolution to the conflict (see Fig. 2).

Following these promising results, we next sought to examine the paradoxical thinking intervention in a more naturalistic environment among individuals who are not necessarily aware of their participation in an experiment. In order to do so, Hameiri et al. (2016) designed a multi-channeled campaign based on the intervention materials used in Hameiri, Porat, et al. (2014). This campaign included three channels of dissemination: online video-clips and banners, billboard posters, and fieldwork in which t-shirts, balloons and brochures were handed out. The campaign was administered in a small city in the center of Israel during a period of 6 weeks.

![Proportion of participants' voting among the seven largest Israeli political parties in the 2013 general elections (not including sectoral parties) arranged with the most dovish party on the left, and the most hawkish party on the right, as a function of experimental condition (paradoxical thinking intervention vs. neutral control). Reprinted from Hameiri, B., Porat, R., Bar-Tal, D., Bieler, A., & Halperin, E. (2014). Paradoxical thinking as a new avenue of intervention to promote peace. Proceedings of the National Academy of Sciences, 111, 10996–11001. https://doi.org/10.1073/pnas.1407055111.](image)
In order to assess the campaign’s effectiveness, the study used a pre-post field experiment design. The paradoxical thinking condition was compared to a control condition in which participants were sampled from the area surrounding the targeted city and were matched to those sampled in the city in terms of their socio-political parameters. Results showed that the intervention led rightist participants to decrease their adherence to conflict-supporting beliefs across time, while the levels remained constant for the participants in the control condition (see Fig. 3). These effects were obtained despite the fact that shortly after the campaign began the Israeli-Palestinian conflict re-escalated and violence erupted throughout Israel and the West Bank. In Israel, escalation of violence causes the hardening of the conflict supporting beliefs and attitudes (Canetti, Lavi, Elad-Strenger, Guy, & Bar-Tal, 2017). Furthermore, compared to participants in the control condition, rightist participants in the paradoxical thinking condition expressed less support for aggressive policies (see Fig. 4) and more support for conciliatory policies (see Fig. 5) by the Israeli government in the face of the eruption of violence.


To summarize, in two large-scale studies, we established the paradoxical thinking paradigm as an effective means to moderate attitudes in the context of the Israeli-Palestinian conflict, which is a prototypical intractable conflict. This held true in both an online field experiment with long-lasting behavioral manifestations and in a real-world campaign. Importantly, these effects were more pronounced among the more rightist, or hawkish, participants who tend to adhere to more conflict-supporting beliefs and attitudes in this context. These encouraging results led us to expand the scope of the paradigm by examining its mechanism and by testing it in different contexts, populations, and operationalizations.

5.3 Extending the scope of the paradigm

At first, to extend the paradigm’s validity to other populations and issues, Hameiri, Nabet, Idan, Bar-Tal, and Halperin (2017) examined the potential of the paradoxical thinking paradigm to induce attitude change among more liberal participants, who tend to lean to the political left. This study was also conducted in Israel, but this time in the context of another divisive issue, namely, attitudes toward African refugees who had entered Israel illegally. In the first phase of the study, conducted among Israeli Jews, participants were asked to read an opinion editorial piece arguing that the National Health Insurance Law in Israel should be applied to cover the refugees’ health needs, not only for humane, just, and moral reasons, but also because it was prescribed by law. Then, participants were asked to indicate the degree of their agreement with this editorial. A week later, those who tended to agree with the opinion editorial were invited to take part in the second part of the study. Participants were randomly assigned to read a response letter to the opinion editorial that was presented in one of three versions (conditions): a paradoxical thinking condition, in which the letter was consistent with what was argued in the original editorial, but blatantly more exaggerated or amplified; an attitude-inconsistent condition, in which the response letter text opposed the original editorial (providing contradictory information); and a control condition, in which the response letter text only moderately agreed with the original editorial. This study also provided an opportunity to directly compare presenting an attitude-inconsistent message (i.e., the traditional approach) and a paradoxical thinking message.

In this study, the researchers used a measure of moral conviction, i.e., “a strong and absolute belief that something is right or wrong, moral or immoral” (Skitka, Bauman, & Sargis, 2005, p. 896) as a moderator,
assuming that it was a good indicator for the extent to which participants will be willing to thoroughly process different messages (regarding, in this case, African refugees). In the terminology of the social judgment theory, we argue that moral conviction would be a good indicator for the range and width of position tolerable by participants (Eagly & Telaak, 1972). The results replicated previous findings in terms of unfreezing, such that the high morally convicted participants showed more unfreezing in the paradoxical thinking condition, compared to the attitude–inconsistent condition and (marginally significantly) compared to the control condition. Furthermore, it seems that the degree of unfreezing was associated with the realistic and symbolic threats (e.g., Stephan, Ybarra, & Bachman, 1999) participants perceived the refugees pose. The analysis indicated that only for the high morally convicted participants in the paradoxical thinking condition there was a marginally significant increase in perceived threat across time, while for all other participants in the three conditions, the levels remained constant.

Recently, Knab and Steffens (2020) adapted the paradoxical thinking leading questions paradigm (Hameiri et al., 2018; Swann et al., 1988) to the intergroup context of Germans regarding the issue of refugees, and examined this approach in three studies, with samples of German citizens and German politicians who held anti-refugee beliefs. The researchers found direct effects of the paradoxical thinking manipulation (e.g., “Why do you think we will never ever celebrate Christmas again due to the high increase of refugees?”), compared to an attitude–inconsistent and neutral control conditions, on more information seeking and on willingness to compromise on their anti-refugee beliefs. These direct effects in turn led to indirect effects on participants’ willingness to meet a refugee and support less violence against refugees. Finally, the paradoxical thinking intervention also had an effect on commonly known determinants of prejudice against refugees (e.g., symbolic and realistic threats).

The paradoxical thinking leading questions paradigm (Hameiri et al., 2018; Swann et al., 1988) was recently examined by Shnabel, Blumberger, Bistritz, and Bialer (2019) in the context of relations between vegans and vegetarians on the one hand and omnivores on the other. Shnabel et al.’s aim was to moderate negative views, prejudice and bias that some individuals from each group have toward the other group (e.g., (MacInnis & Hodson, 2017). The paradoxical thinking manipulation was tailored for omnivores (e.g., “Why vegans and vegetarians are completely oblivious to the needs and welfare of human beings, and only care about the needs and welfare of animals?”) and for the vegans and vegetarians group.
paradoxical thinking intervention led participants to show more positive views toward the outgroup, and openness to the outgroup’s viewpoint. Importantly, these effects were not moderated by participants’ diet (i.e., whether they received the questions tailored to the omnivores or to the vegans and vegetarians), suggesting that the manipulation was equally effective for both groups (Shnabel et al., 2019). In summary, the studies reviewed in this section, conducted in Israel and Germany and with different operationalizations, showed that both anti- and pro-immigration individuals, as well as vegans, vegetarians, and omnivores, moderated their views regarding targeted issues and outgroups, thus extending the scope of the paradoxical thinking paradigm to different populations and contexts.

5.4 Paradoxical thinking mechanisms

In the next stage of the theory development, we decided to open the black box of the paradoxical thinking paradigm. In other words, we attempted to reveal the psychological mechanism underlying the obtained effects by elucidating the mediating variables (see Fig. 6). This line of thought is based on the assumption that the paradoxical thinking message effectiveness is based on the message recipients’ cognitive responses (Greenwald, 1968), such that it tends to evoke a slow deliberative-cognitive processing rather than a fast, automatic, intuitive processing that usually ends with rejection of the message (Evans, 2008; Kahneman, 2011; Sloman, 2002). The former process often succeeds in leading to unfreezing because a paradoxical thinking message tends to be absorbed deliberatively, with less disagreement, as well as with fewer psychological defenses. This occurs because the message is consistent with the recipient’s beliefs and attitudes in spite of the fact that it falls within his/her latitude of rejection. In contrast, the fast and automatic process often indicates a continuation of belief and attitude freezing.

Nevertheless, exposure to the paradoxical thinking message does not necessarily mean that the message recipients will embark on in-depth slow processing. Slow processing is dependent on whether the message is relevant to the recipients, and what kind of epistemic motivation guides it (Bar-Tal, Kishon-Rabin, & Tabak, 1997; Kruglanski, Erb, Pierro, Mannetti, & Chun, 2006; Petty & Cacioppo, 1986). Furthermore, Sherif and Hovland (1961) considered high ego-involvement with the attitude (i.e., its centrality and
importance) as an important variable for the evaluation of the message (see also Hovland et al., 1957). An additional crucial factor that determines whether the message will lead to in-depth processing is whether its content is perceived as absurd, and has aroused a surprise reaction. The surprising or absurd nature of the message, when relevant, raises motivation for its further processing in order to defend the provoked threat to the individuals’ identity, on which we will elaborate next, and restore their need for coherence.

Fig. 6 Processing paradoxical thinking messages.
and meaning (Farrelly & Brandsma, 1974; Itti & Baldi, 2009; Maguire et al., 2011; Petty et al., 2001). This is an indispensable step that triggers the deliberating process, as without it individuals would most likely reject the information automatically. This assumption is based on Kahneman’s (2003, 2011) observation that the deliberative process overrides the automatic one when competing considerations become accessible and the person at least becomes aware of possible bias, which is our case in point. The paradoxical thinking message opens up the possibility of considering competing thoughts and they may lead to awareness of possible bias of own beliefs and attitudes through threat to identity.

Looking at the whole deliberative process, we argue that it begins with raising epistemic questions (Kruglanski, 1989). We suggest that after exposure to the surprising paradoxical thinking message, individuals ask themselves at least two epistemic questions: What is this message? And how do I relate to it? These questions reflect wonder at how to view the message and how it relates to one’s own beliefs, attitudes, and perceptions of self-identity. These may be detailed with other specific questions, such as: What is the goal of the message? What is the goal of the message source? Are my attitudes and beliefs under attack? Should I defend them? Is the information different from what I think? Is the message extreme? Compared to what? (Reference group? Self-perception? Basic morality? Ought self?) Is the message legitimate? Who else shares the same beliefs, attitudes, or conclusions raised in the message? (Individuals from my group? From a different group?) Are the individuals/groups, who are the source of the message, a positive or negative reference group? Is the person who expresses the message legitimate? After raising these epistemic questions, we assume that individuals go through a phase of reflection and information gathering. This deeper cognitive process is based on the individual’s stored knowledge and, if possible, on a gathering of external information, if available (Kruglanski et al., 2005, 2009).

The next phase involves construction of hypotheses based on the epistemic questions and testing them vis-à-vis the gathered evidence (Kruglanski et al., 2009). The hypotheses evoke the key motivations to possible unfreezing. In our case, all motivations originate from the psychological threat to the person’s individual or social identity. We suggest that the constructed hypotheses can be divided into three categories, which lead to different kinds of threat to the individual’s identity. First, people may construct a hypothesis regarding a comparison between the extreme nature of the paradoxical thinking message and their own beliefs and attitudes. Such a
hypothesis enables testing a view that differentiates between the actual and ought self (see Higgins, 1989). In this case, individuals may identify some resemblance between their own beliefs and the paradoxical thinking message. This may cause a sense of threat to personal identity because individuals may think that their position is viewed by others as too extreme (Brown, Ryan, Creswell, & Niemiec, 2008). Thus, in order to eliminate, or at least minimize the resemblance, individuals may moderate their beliefs.

Second, people may construct a hypothesis regarding a comparison between positive and negative reference groups, that allows for differentiation between groups that they want to be associated with and groups that they reject (Branscombe, Ellemers, Spears, & Doosje, 1999). A paradoxical thinking message associated with the negative reference groups may lead to a threat to social identity because individuals do not want any association with negatively evaluated groups. In this case, individuals will try to differentiate between the extreme beliefs of the negative reference groups and their own beliefs and adopt more moderate beliefs (Jetten & Hornsey, 2014; Swann et al., 1988; see also Monin, Sawyer, & Marquez, 2008). Third, in some cases individuals may raise a hypothesis regarding the validity of sources (or epistemic authorities; see Kruglanski et al., 2005) on which they can potentially rely when forming their beliefs and attitudes. A hypothesis about the relationship between the senseless paradoxical thinking message and the source (leader, expert, journalist and so on) who expressed it, may cause individuals to distance themselves from the message and its source by moderating their own repertoire, after experiencing a threat to personal identity.

In conclusion, the hypothesized process described above identifies four major mediating variables that operate once individuals are exposed to the paradoxical thinking message: disagreement with the message, surprise, threat to identity, and then unfreezing that leads to moderation of beliefs and attitudes. In our view, as explained, all four mediating variables are necessary for activating and facilitating the process of attitude change. To the extent that the paradoxical thinking message does not lead directly to strong disagreement and complete rejection because it is consistent with the held attitude, surprise is probably the first reaction to the identification of the absurdity of the message. The epistemic questions come next. The hypotheses raised by the message recipients may lead them to experience a threat to either personal and/or social identity, and to wish to avoid resemblance between their own attitudes and the attitudes expressed in the message (a contrast effect, in Sherif & Hovland’s, 1961, terminology).
The threat to the individuals’ identity should be seen as the key instigator to unfreezing of the beliefs and attitudes by thoughtful reflection. This sense of threat may result, eventually, in attitude change to avoid an unpleasant self-perception as extremists (Brown et al., 2008). Unfreezing may first be manifested in actual open-mindedness and a search for new and alternative information (Bar-Tal & Halperin, 2009; Kruglanski, 1989; Nasie, Bar-Tal, Pliskin, Nahhas, & Halperin, 2014; Saguy & Halperin, 2014). It may also be driven by epistemic motivation of fear of invalidity, arising when individuals do not want to err or to reach wrong conclusions, but wish to achieve valid and truthful knowledge (see Freund, Kruglanski, & Shpitzajzen, 1985; Kruglanski & Freund, 1983; Kruglanski & Webster, 1996). As presented, individuals may unfreeze their beliefs and attitudes and moderate them, trying to move away and to differentiate themselves from the nonsensical, farfetched or implausible message (Bem, 1972; Harmon-Jones & Mills, 1999; Sherif & Hovland, 1961). As we describe next, all four variables play a mediating role. Nevertheless, we are aware that at present the majority of the proposed model is more theoretical, as the outlined psychological process still has not been fully empirically validated. Future studies will need to shed more light on this process.

5.4.1 Initial empirical evidence in support of the hypothesized mechanisms

In the first stage, Hameiri et al. (2018) attempted to elucidate the identified psychological mechanisms, focusing on the hypothesized role of the four variables that were thought to serve as necessary conditions: specifically, the surprised reaction, general disagreement with the paradoxical thinking messages, a perceived threat to the individuals’ identities, and unfreezing. Thus, we conducted two studies in the context of the Israeli-Palestinian conflict. The first was a conceptual replication of the study conducted by Swann et al. (1988). Participants who held conflict-supporting beliefs observed in a pretest, conducted a few weeks prior to the manipulation, were invited to the lab for an interview. The interviews were introduced as if we wanted to better understand the views expressed in the pretest questionnaire participants were requested to fill out. Participants were then asked 10 leading questions that were either paradoxical, encouraging them to respond with statements that were consistent, but blatantly more extreme than their own conflict-supporting beliefs (e.g., “Why do you think that the real and only goal the Palestinians have in mind is to annihilate us, in a manner that transcends their basic needs such as food and health?”); or attitude-inconsistent, encouraging participants to respond with statements
that negated their held beliefs (e.g., “Why do you think the real goal of the Palestinians is ultimately to live with us in peace?”).

These interviews were coded by two trained judges, blind to participants’ political orientation and the research hypothesis, who rated the participants’ levels of surprise and general disagreement. Hameiri et al. (2018) found that levels of surprise among participants in the paradoxical condition were higher than those of participants in the attitude-inconsistent condition and that this effect was not moderated by the participants’ political orientation. The researchers also found, as expected, an interaction on general disagreement, such that while rightist participants showed lower levels of disagreement with the questions they were asked in the paradoxical thinking condition (that were consistent with their conflict-supporting beliefs), they showed higher levels of disagreement in the attitude-inconsistent condition. Furthermore, also as expected, rightist participants showed more unfreezing and openness to alternative information in the paradoxical thinking condition, compared to the attitude-inconsistent condition. There were no significant effects for the more centrist participants.

In the second study, Hameiri et al. (2018) aimed to add another layer to the hypothesized mechanism and examined participants’ sense of identity threat following exposure to the paradoxical thinking messages. We also wanted to provide a comprehensive account of the examined psychological mechanism. This study conceptually replicated the study conducted by Hameiri, Porat, et al. (2014), but this time we added a third, attitude-inconsistent, condition. In the attitude-inconsistent condition, participants were presented with an inconsistent campaign arguing that, contrary to what most Jewish-Israelis believe, Palestinians are credible partners for peace (see Halperin & Bar-Tal, 2007). The results replicated and extended those found in the previous study, indicating that the paradoxical thinking intervention was more effective in promoting unfreezing and openness to alternative information with the rightist participants, compared to both the attitude-inconsistent and the control conditions. Furthermore, replicating the results from the previous study, the paradoxical thinking intervention (vs. the attitude-inconsistent intervention) led the rightist participants to show more surprise and less disagreement with the message, as it was consistent, or in essence pro-attitudinal, with the message recipient’s held conflict-supporting beliefs. Importantly, the results also indicated that participants in the paradoxical thinking condition sensed more threat to their identities compared to those in the attitude-inconsistent and control conditions. These psychological mechanisms mediated the effect of the
The paradoxical thinking intervention (compared to both attitude-inconsistent and control conditions) on unfreezing and openness to alternative information (see Fig. 7).

The results outlined above indicate that the paradoxical thinking intervention was mostly effective with the more rightist participants in leading to more unfreezing, openness to alternative information, and conciliatory attitudes in general. That is, the paradoxical thinking messages that are consistent with the attitudes held by the participants, led to the deliberative process and to a sense of identity threat. This instigated unfreezing and attitude moderation as a reflection of the motivation to move away and hold an attitude that is different from the one expressed in the message. Additionally, Hameiri et al. (2018) examined the delicate interplay and possible interrelations among identity threat, surprise, and general disagreement across time only among the rightist participants. We were also able to examine how these processes affect and are affected by participants’ levels of unfreezing across time. This was examined with a cross-lagged panel model, developed using structural equation modeling (SEM). We found that, at first, identity threat led to more unfreezing, but then, the more participants unfroze, the less it led to identity threat. General disagreement predicted lower levels of unfreezing across time, and surprise did not predict
unfreezing across time, but was positively correlated with unfreezing measured at the same wave (see Fig. 8). These results correspond with the overall pattern of additional longitudinal analysis Hameiri et al. (2018) conducted (provided in Hameiri et al., 2018, online supplementary materials), in which, most notably, rightist participants in the paradoxical thinking condition showed a decrease in identity threat across time, while at the same time, they showed an increase in unfreezing.

Using a somewhat different operationalization, Peled, Dado, and Hameiri (2017) aimed to examine whether indeed, as hypothesized above, paradoxical thinking manipulations lead individuals to question the epistemic authorities on which they relied when they formed their views regarding the Israeli–Palestinian conflict. Modeled after Swann et al. (1988) and Hameiri et al.’s (2018) adaptation to the Israeli–Palestinian conflict, Jewish-Israeli participants were asked to respond to several questionnaires pertaining to the Israeli–Palestinian conflict, including their degree of conflict-related attitude strength and moral convictions (Skitka et al., 2005), as well as assessment of their reliance on epistemic authorities (Raviv, Bar-Tal, Raviv, & Abin, 1993). They then received bogus feedback that was ostensibly based on their responses and comparison with the responses of previous participants who had taken part in the survey.

![Fig. 8 Cross-lagged model of rightist participants. Panel model showing autoregressive (in gray) and cross-lagged (in black) paths for rightist participants (n = 308). Unstandardized coefficients are reported; only significant paths are shown. The model controls for the manipulation, age, and gender. \(^{1}P < 0.10; ^{*}P < 0.05. Reprinted from Hameiri, B., Nabet, E., Bar-Tal, D., & Halperin, E. (2018). Paradoxical thinking as a conflict resolution intervention: Comparison to alternative interventions and examination of psychological mechanisms. Personality and Social Psychology Bulletin, 44, 122–139. https://doi.org/10.1177/0146167217736048.](image-url)
In the paradoxical thinking condition, this bogus feedback indicated that they hold conflict-related attitudes very strongly, and that in fact they are considered to be fanatics and radicals, resembling other members of radical groups (from both the left and right of the political spectrum). Then, as part of the evaluation, they were asked to answer a series of 10 questions that supposedly assessed their degree of radicalism (e.g., “When called upon, I will be ready to sacrifice my life and/or my family members’ lives to protect my views”). Importantly, the ratings for these questions were already made, or ostensibly predicted, for the participants, based on previous participants who had received the same feedback, such that all ratings were between 7 and 10, on a 10-point scale ranging from 1 = Completely disagree to 10 = Agree completely. Participants in the control condition received bogus feedback indicating that they resemble the norm in Israel, and the ratings the researchers supposedly predicted for them ranged from 1 to 3.

Replicating previous findings, participants in the paradoxical thinking condition (vs. the control condition) were more surprised and sensed more threat to their identities. Not surprisingly, it also led participants to show more disagreement with the bogus feedback. Unlike the research outlined above, the paradoxical thinking condition was compared to a control rather than to a condition that was based on the inconsistency-based approach, which might account for this finding. The analysis also showed that the paradoxical thinking manipulation led to more unfreezing, compared to the control condition. Finally, Peled et al. (2017) found that there was an interaction between the time of measurement and the condition (see Fig. 9),

![Fig. 9](image-url)  
**Fig. 9** Reliance on epistemic authorities as a function of time of measurement and condition (paradoxical thinking vs. moderate control). Error bars represent standard errors.
such that participants in the paradoxical thinking condition showed a significant decrease across time in their reliance on epistemic authorities; while for participants in the control condition, the level of reliance on epistemic authorities remained constant across time. It should be noted that, apart from identifying an additional part of the psychological mechanism underlying the unfreezing process following a paradoxical thinking intervention, this study also showed that such interventions can be effective with participants holding different political views, in the context of an intractable conflict, and it really depends on what is being targeted by the intervention.

In sum, the studies outlined above show that the suggested psychological mediating mechanisms appear saliently as part of the paradoxical thinking psychological process. The results indicate that paradoxical thinking messages lead to a sense of surprise, low levels of general disagreement, and a sense of identity threat, compared with interventions that are based on providing inconsistent information. Future research should determine the order and causality of the psychological mechanisms. Moreover, the outlined research also showed that surprise, general disagreement and identity threat led to unfreezing of conflict-supporting beliefs and to reduced reliance on epistemic authorities.

5.4.2 Ramifications of the paradigm

As noted above, we argue that one of the reasons that the paradoxical thinking paradigm works is because paradoxical thinking messages are consistent with the held attitudes despite their extreme content (e.g., Sherif & Hovland, 1961). The value of the attitude reflected in paradoxical thinking messages does not lead to high levels of disagreement, and as a consequence, it does not provoke strong psychological defenses. This aspect was examined in a study by Hameiri, Idan, Nabet, Bar-Tal, and Halperin (2020). The study also examined whether paradoxical thinking messages can be so blatantly extreme that they will lead to strong disagreement and psychological defenses, rejected automatically, without deliberation. This will render the messages less effective in moderating message recipients’ beliefs and attitudes. Participants who tended to disagree with an opinion editorial that argued that the National Health Insurance Law in Israel should be applied to African refugees in Israel (see Hameiri, Nabet, et al., 2017) were sampled to participate in the present study. They were asked to read a second opinion editorial that was ostensibly written by a rightist Knesset member as a response to the original editorial. Participants were randomly assigned to one of four conditions that differed in the extremity and absurdity of the message. All texts had the same underlying message, consistent with their
own views, that Israel should not grant free health care to the refugees, but rather make an effort to expel them from Israel. The difference between the conditions was in the way the text was written, such that the first condition, i.e., Text 1, was moderate, Texts 2 and 3 were increasingly more extreme, and Text 4 was very extreme. The materials were pilot tested and found to vary in the degree to which they were perceived as extreme and absurd.

Results generally replicated previous studies, in that the more the texts were extreme, the more they surprised participants. We also found some indications that the more the texts were extreme, the more participants sensed a threat to their identities, particularly among participants who were high morally convicted (high ego-involvement, in Sherif & Hovland’s, 1961, terminology). Importantly, Text 4, with its outrageous linguistic extremity, rendered the text so outlandish (at least for some of the participants) that, even though it was consistent with the participants’ views, they immediately dismissed it and processed it in a fast and automatic manner. This was manifested in high levels of disagreement with the opinion editorial, compared to all other conditions, assessed in questionnaires and in content analysis of comments written by the participants to respond the editorial writer. In contrast, Text 3, which was less extreme, was considered consistent with the participants’ attitude, and while it was also eventually rejected, it still evoked the deliberative cognitive process described earlier, as was found in other studies.

Furthermore, Hameiri et al. (2020) found a significant interaction between the manipulation and (immigration-related) moral convictions on unfreezing (see Fig. 10). Interestingly, this analysis generally indicated that, for the low morally convicted (low ego-involved) participants, it was Text 1, the most moderate condition, that, to some extent, led to more unfreezing. At the same time, as hypothesized, for the high morally convicted (high ego-involved) participants it was Text 3, the extreme, but not very extreme, condition that led to the highest levels of unfreezing. To summarize, it seems that for the low morally convicted participants, the text had to be only slightly exaggerated or amplified in order to lead to more unfreezing. While for the high morally convicted participants, the text had to be substantially more extreme, to obtain these effects. When the text was very extreme it led to disagreement and defensive reactions regardless of participants’ levels of moral conviction.

We have argued above that paradoxical thinking messages also raise epistemic questions, such as who else shares the same beliefs, attitudes, or
conclusions raised in the messages. (Individuals from my group? From a different group? Are these individuals/groups a positive or negative frame of reference?) Individuals may conclude that this social comparison threatens their identities, as it identifies them as extremists, similar to extremists from their reference group. This, in turn, could motivate them to distance themselves from this threat. Trachtingot, Sborovsky, and Hameiri (2017) aimed to examine this process. Religious and rightist Jewish-Israeli participants, all identified as religious Zionists, read an extremely incendiary text against the LGBT community in Israel which in one condition was presented as a direct quote by one of the leading religious Zionist rabbis in Israel, uttered as part of his weekly lessons. In the second condition, it was added to this description that the rabbi was also a known follower of Rabbi Meir Kahana, an extremely radical rightist religious leader who propagated ethnic cleansing of the Palestinians.3

3 Rabbi Meir Kahana was elected to the Knesset in the 1984 elections after an aggressive campaign. In 1988, he was disqualified from running for the Knesset as it was determined that his agenda was racist. In 1990, he was assassinated by an Al-Qaeda assassin after giving a speech in Manhattan.
Results indicated that when the rabbi was identified as a follower of Rabbi Kahana, compared to the ambiguous condition, participants distanced themselves from religious Zionism (a Zionist stream which characterized both the rabbi and the participants). This was manifested in expressing less pride in their affiliation with religious Zionism and in showing less identification with this group. Affiliation was assessed by asking the participants to choose one of seven pairs of circles with different degrees of overlap, ranging from \(1 = \text{complete overlap}\) to \(7 = \text{full separation}\), where one circle in each pair represented the self and the other represented “Religious Zionism” (see Hameiri & Nadler, 2017). Participants in the “Rabbi Kahana” condition also showed more positive attitudes toward the LGBT community (Kite & Deaux, 1986), and lower levels of moral conviction regarding these attitudes.

Relatedly, Knab, Hameiri, and Steffens (2019) recently examined a similar line of reasoning in the context of attitudes toward refugees in Germany. Specifically, Knab et al. sampled German participants, who affiliate themselves with the biggest center-right political party in Germany, the Christian Democratic/Social Union of Germany, or CDU/CSU. Then participants were exposed to a mock article that included an interview with a politician who was described as either a member of the CDU/CSU, or a member of a far-right political party, Alternative for Germany, or AfD. In both conditions, the article participants read was identical and included negative views regarding refugees, based on the materials developed by Knab and Steffens (2020). These included, for example, statements by the politician that refugees only come to Germany to rob German citizens, and that there would soon be mosques everywhere. Similar to the results outlined above of the study conducted by Trachtingot et al. (2017), when the extreme message was conveyed by a member of the far-right political party, the AfD, participants sensed more threat to their identities, which was also reflected in them showing less identification with CDU/CSU following the manipulation. Participants also showed more openness to information regarding refugees and their current state in Germany, and supported more pro-refugee policies.

As a final piece of evidence, a recent study provides initial indications that the paradoxical thinking approach not only facilitates unfreezing that is directly related to the targeted issue (e.g., intergroup conflict, attitudes toward refugees and asylum seekers), but that it can also lead to a complete mindset shift. Specifically, Knab, Winter, and Steffens (in press) conducted a study in the context of attitudes toward refugees among a general population.
sample of Germans. They found that, compared to an attitude-inconsistent and neutral control conditions, a paradoxical thinking leading questions intervention (Knab & Steffens, 2020; see also Hameiri et al., 2018; Swann et al., 1988) led participants to use broader categories in an unrelated categorization task (Rosch, 1975), which is an indicator of cognitive flexibility (e.g., Rietzschel, De Dreu, & Nijstad, 2007). Importantly, these effects were more pronounced the more participants were rightists, thus replicating previous effects in other contexts we reviewed above (e.g., Hameiri et al., 2016, 2018). Although these findings are preliminary, they suggest that the absurdity and surprised reaction that leads to more in depth deliberative processing might have a broader cognitive effect—a mindset shift—than on the issue at stake. Additional research should examine this possibility further.

In these additional studies, specific components of the hypothesized conceptual framework were examined. First, it was found that paradoxical thinking messages had to hit a “sweet spot” to be effective, and that this was dependent on the degree of extremism of the message, as well as the message recipients’ characteristics. Furthermore, first indications were found for the social comparisons that take place as part of the paradoxical thinking process. These initial studies suggest that these social comparisons take place when the extreme message is conveyed by an extreme source, who is a member of a group that reflects badly on the message recipient (i.e., follower of Rabbi Meir Kahana, or a member of the German far-right party, AfD), while the source also shares a common identity with the message recipient (i.e., religious Zionists, or German rightists). Finally, these studies provided initial indications that the paradoxical thinking interventions lead to a mindset shift, i.e., enhanced cognitive flexibility.

Nevertheless, the reviewed research sparks additional important questions, which call for further research in order to fully understand the practical and ethical ramifications and limitations of the paradoxical thinking conceptual framework. First, future research should examine systematically what happens when the paradoxical thinking messages do not hit the ‘sweet spot’ in that they are not extreme enough. The research conducted thus far on the paradoxical thinking conceptual framework has shown consistent effects on the more extreme (e.g., hawkish, morally convicted) participants (e.g., Hameiri et al., 2016, 2018, 2020). At the same time, the effects on the more moderate individuals varied, and at least in one case the paradoxical thinking intervention had a deleterious effect among these participants (Hameiri et al., 2016). One possible explanation for this effect is that the paradoxical
thinking messages were less relevant for the more moderate individuals (perhaps falling in their latitude of non-commitment, in social judgment theory terminology; Sherif & Hovland, 1961), and thus they did not process the messages thoroughly, as opposed to the more extreme participants. Such superficial processing might have led, at least for some of, these individuals to understand the messages in the literal sense, rather than paradoxically. Because paradoxical thinking messages are by definition an extreme and exaggerated version of the message recipients’ beliefs and attitudes, literal understanding of the messages might have in fact only bolstered these held beliefs and attitudes. Understanding these messages literally can give message recipients the erroneous impression that their views are held by others, and thus are more normative. This is an important avenue for future research.

Furthermore, the research reviewed above was almost exclusively conducted among members of high-power groups (e.g., Jewish-Israelis, Germans). This raises two important possible limitations that should be addressed in future research. First, to extend the external validity of the conceptual framework, it is pivotal to examine whether the paradoxical thinking intervention is effective among low-power groups in contexts of intergroup conflicts or relations. Previous research established that power plays a pivotal role in the effectiveness of well-known and thoroughly researched interventions (e.g., Bruneau & Saxe, 2012; Saguy, Tausch, Dovidio, & Pratto, 2009). Thus, a future study might test, for example, whether a paradoxical thinking intervention among low-power group members might reduce legitimacy appraisals that play an important role in accepting and even sometimes supporting extreme versions of violence and inequality in intergroup contexts (Jost & Major, 2001). Second, ethically speaking, it is also important to examine how paradoxical thinking interventions affect the adversarial outgroup (which, in most cases, is also a low-power group) that is being negatively portrayed in an extreme and exaggerated manner in the intervention (see Vollhardt & Twali, 2016). Given that, in some cases, the messages exaggerate held negative beliefs and attitudes regarding the outgroup, such exaggeration might portray the outgroup extremely negatively and even include blatantly hostile, racist, or chauvinistic sentiments (see e.g., Hameiri et al., 2018, 2020; Knab & Steffens, 2020; Swann et al., 1988). We believe that it is crucial to examine these effects in order to fully understand the potential side effects of an application of a large scale real-world paradoxical thinking intervention.

As mentioned above, an important aspect of the paradoxical thinking definition is that the messages are nonjudgmental and leave the message
source’s intentions and stance on the issue ambiguous. Furthermore, in the research that was conducted thus far, the source was either unknown, or completely nonjudgmental (e.g., Hameiri et al., 2016, 2018; Hameiri, Porat, et al., 2014) or fabricated (e.g., Hameiri et al., 2020; Knab et al., in press). Thus, future research should first and foremost examine the effects of the message source on the effectiveness of paradoxical thinking interventions systematically. Some preliminary anecdotal evidence suggests that maintaining the source unknown and nonjudgmental might not be as crucial as hypothesized. For example, after participants went through the leading question intervention in Hameiri et al. (2018, Study 1), we interviewed them and asked whether they were aware of the goal of the intervention and the interviewer’s personal stance on the Israeli–Palestinian conflict. Several participants responded that at some point they realized what the goal of the intervention was, but that they still sensed a threat to their identity (see also Knab et al., in press). These findings are only suggestive, and as reviewed above there were some cases in which the research indicated that the source does shape the effectiveness of the paradoxical thinking interventions (e.g., Knab et al., 2019; Trachingot et al., 2017). However, in these cases there were only ostensible sources, and not the actual sources of the messages (i.e., the researchers). Additionally, there is quite a substantive body of research that shows that people resist persuasive appeals from out-groups (e.g., Cohen, 2003; Mackie, Worth, & Asuncion, 1990; Maoz, Ward, Katz, & Ross, 2002), which highlights the necessity of additional research.

Relatedly, it is important to note that, in the studies presented, the paradoxical thinking messages were perceived as genuine expressions of views. We argue that their perception by the recipients as manipulative, and/or cynical and/or ridiculous may cause the whole process to fail. We argue that perceiving the paradoxical thinking messages as candid and sincere is a necessary condition for their effectiveness. It is crucial that the paradoxical message will not be perceived as intending to ridicule the recipients or to manipulate them, or as being designed to change their beliefs and attitudes. Such attribution and understanding by the recipients may lead to automatic rejection of the message (see Frankl, 1975; Miller & Rollnick, 2002; but see Farrelly & Brandsma, 1974). These important questions should be examined in future research.

If indeed future research indicates that the source has to remain ambiguous for effective paradoxical thinking interventions, this raises important ethical considerations that should be taken into account—especially when
designing large scale real-world paradoxical thinking interventions. Such interventions would have to be based, at least to some degree, on deception in order for the interventions to be effective. As mentioned above, members of societies that are immersed in intractable conflicts tend to resist attitude-inconsistent information (e.g., Bar-Tal & Halperin, 2011; Hameiri, Bar-Tal, & Halperin, 2014). Thus, some sort of deception might be necessary if we want to appeal to those who are the most extreme and hold the most entrenched conflict-supporting beliefs and attitudes. This can undoubtedly lead to positive outcomes, such as promoting better intergroup relations and conflict resolution. Yet, some might argue that it also bares similarities to highly criticized recent attempts of foreign governments to influence elections in other countries, such as the U.S., using, for example, bots and fake social media accounts (Broniatowski et al., 2018; Linvill, Boatwright, Grant, & Warren, 2019; Walter, Ophir, & Jamieson, 2020). Furthermore, as with any persuasion approach, there is also the concern that individuals with nefarious intentions will use the paradoxical thinking conceptual framework to promote hatred, bigotry, political discord, and so on (see Erceg et al., 2018).

In sum, we argue that there are important considerations, practical and ethical, that should be taken into account when designing and implementing paradoxical thinking intervention, particularly in the field. Some of these considerations, such as the deleterious effects of missing the ‘sweet spot’ can be addressed with rigorous pilot testing (Hameiri et al., 2020). Other considerations necessitate additional research in order to fully understand them. Importantly, we would like to emphasize that while there are potential detrimental effects to the use of paradoxical thinking interventions, we think that these should not discourage researchers and practitioners from studying and utilizing this paradigm; on the contrary. We believe that conducting responsible and ethical research in order to develop a complete understanding of the paradoxical thinking conceptual framework, with its positive and negative consequences, will only make it a more useful and effective approach for future endeavors.

6. Conclusions

In the present chapter, we introduced a new conception to attitude change based on the classic debating technique of reductio ad absurdum (Rescher, 2005) and on the social judgment theory (Sherif & Hovland, 1961). It suggests that when individuals with extreme positions are exposed
to messages that are consistent with the direction of their beliefs and attitudes but: (a) the messages appear to be exaggerated or even absurd, and (b) the individuals process these messages deliberately, they may moderate their held beliefs and attitudes. This approach, which we termed paradoxical thinking, is in contrast to the often-used traditional social psychological method of presenting messages that provide valid and enlightening information, but that contradict the beliefs and attitudes held by the individual. The theories of inconsistency provide one of the well-established epistemic bases for this approach (e.g., Abelson et al., 1968). Here, we suggest a different (and somewhat opposite) approach that has been found to be especially successful with individuals who are well anchored in their attitudes, hold them as central, with great confidence, conviction, and involvement.

At present, a number of studies performed in various settings with different populations have validated the approach. In the reviewed studies, it was found that when individuals, who were extremists in their attitudes, received a paradoxical thinking message that was consistent with their position, but was expressed in an exaggerated, amplified, or even an absurd manner, their attitudes were moderated. Most of these findings were obtained in the very difficult context of intractable conflict, in which individuals acquire their conflict-supporting beliefs and attitudes at a very early age and these are often reinforced and maintained by socialization agents, societal institutions, cultural products, leaders and mass media (Bar-Tal, 2013). It may be argued that this context is one of the most discouraging for attitude change, as we have seen in the cases of Cyprus, Rwanda, Turkey, Sri Lanka or the Middle East. People tend to adhere to their conflict supporting beliefs and attitudes and reject contradictory information (Bar-Tal & Halperin, 2011). In contrast, the results of the reviewed studies that were conducted in the context of an intractable conflict, show successful attitude change with extreme individuals.

We suggest that the reason paradoxical thinking has an effect on attitude change is rooted in the combination of (1) a strategy that renders it hard to produce sound counter-arguments; (2) a strategy that makes an effort to avoid resistance; and (3) a strategy that instigates a deliberative reasoning process that raises epistemic questions and prevents automatic thinking. This leads the individuals themselves to question the validity of their beliefs and attitudes, engage in the longer process of cognitive reflection, and realize that perhaps these attitudes are nonsensical and farfetched. Such reasoning may elicit unfreezing, openness to alternative information, and eventually cause a change in these beliefs and attitudes.
Trying to unravel the process that results in attitude moderation, four mediating variables have been investigated: surprise, disagreement with the message, threat to identity, and unfreezing. In our and others’ research there were indications that they all are part of the psychological process. We argue that surprise is the primary emotional reaction to the exposure of the paradoxical thinking message and is responsible for instigating the deliberative, effortful, and reflective process. This process begins with epistemic questions that a person asks him/herself and leads to feelings of threat to personal and/or social identity. Threat to identity is, in our view, a key mechanism, responsible for the motivation to eliminate it. Identity is a central component of the self, and individuals strive to achieve and maintain positive identity (Brewer, 1991; Simon, 2004; Tajfel, 1978; Turner, 1999; Woodward, 2002). Individuals do not want to be considered as holding senseless, implausible and absurd beliefs and attitudes, and therefore feel the need to liberate themselves from the threatening feeling by moderating their beliefs and attitudes, away from the views expressed in the paradoxical thinking message. Individuals also do not want to be associated with a group or with a source of information which holds senseless, farfetched and absurd beliefs and attitudes. Being motivated by fear of invalidity, these conclusions are responsible for the unfreezing of the held beliefs and attitudes, reflected in openness and readiness to change them (see Bar-Tal & Halperin, 2009; Kruglanski, 1989).

This delineated conception offers a new approach to attitude change that overcomes some salient limitations of other approaches, especially the use of attitude-inconsistent messages that shed new light on reality. It suggests a way to sidestep resistance to attitude-inconsistent messages. This resistance may have different sources, such as various defense mechanisms, heuristic thinking or motivational biases. Once this resistance is overcome, the deliberative process may begin. This deliberative process is crucial in processing the information and ultimately accepting the need to moderate beliefs and attitudes. Admittedly, at this point we do not have definitive understanding of whether individuals are aware of this process and its results, and this should be further investigated.

There are still many issues for future investigation, some of which we discussed above, and we see the present endeavor as only the beginning of a long research journey. For example, further investigation of the deliberative process is needed to establish its sequence and identify various conditional factors. We hope that the present chapter will promote the journey by presenting a comprehensive account of the paradoxical thinking
conceptual framework, and the empirical findings that corroborate it. These findings, we argue, establish the existence of the paradoxical thinking approach within the field of attitude change. Nevertheless, it is important to note that the paradoxical thinking approach should not be seen as a decisive method for the attitude change, but rather as an addition to the arsenal of attitude change approaches and methods. Each of these has their strengths and weaknesses and their effectiveness depends on different conditions, characteristics of the message targets, and the context in which they are tested.

We realize that an important advantage of this approach is that it reduces defensive reactions and automatic rejection. We believe that this advantage is very promising in developing new interventions approaches. At present, our team has engaged in two directions of developing new interventions based in this advantage. The first one suggests that raising individuals’ awareness that their well-anchored attitudes are based on unconscious, biased, selective, and distortive cognitive and motivational thinking, leads to unfreezing. Three studies by Nasie et al. (2014) showed that raising awareness of the naïve realism as prevalent psychological bias leads to greater openness to alternative information, including increased perceived legitimacy and understanding of the adversary’s conflict-related narrative. The second one, called informative process model (IPM), being in the development now, proposes that attitude change can also occur by informing individuals about the socio-psychological processes through which they form and maintain their beliefs and attitudes in the context of intractable conflict. The model based on the theory of culture of conflict proposed by Bar-Tal (2013) demonstrated already its effectiveness in two studies (see Bar-Tal & Hameiri, 2020). Individuals who were exposed to the IPM videos (vs. control condition) showed more understanding of the socio-psychological processes that lead to the development of conflict-supporting narratives in contexts of prolonged and violent conflicts, and more support for conflict resolution policies.

In general, we argue that the paradoxical thinking approach is not only relevant to the present efforts to extend scientific knowledge about attitude change in the domain of intractable conflict. Rather, it is also relevant to practical attempts to change what are arguably destructive beliefs and attitudes that individuals and groups hold with confidence about various issues. These issues focus on how individuals, groups and even societies think, feel and behave with regard to racism, global warming, continuation of bloody conflicts, exploitation of groups, harassment of women and more
The present approach provides a conceptual basis for developing real life interventions that can be applied to key leaders and public campaigns as some of the reviewed studies demonstrated.

We detected the roots of the paradoxical thinking model in the clinical practices (e.g., Allen et al., 1997; Farrelly & Brandsma, 1974; Frankl, 1975; Haley, 1973; Miller & Rollnick, 2002; Riebel, 1984; Watzlawick et al., 1974). A number of clinical psychological approaches argue that, in the paradoxical treatment, a sense of surprise is the driving motivator, when the patient is put off balance. This can be done either blatantly, and even in a manner that is intended to shock the person (e.g., Farrelly & Brandsma, 1974), or more subtly in order to lead to less resistance and psychological defenses, but eventually leading to the same realization that the current situation is perhaps senseless (e.g., Frankl, 1975; Watzlawick et al., 1974). Yet other treatments put greater emphasis on the paradoxical aspect, suggesting that when patients are confronted with the extreme version of themselves, they formulate counter-arguments against their own behavior and beliefs, which eventually lead to the realization that these are nonsensical or absurd. This was termed by motivational interviewing theoreticians as psychological judo (e.g., Miller & Rollnick, 2002; see also Frankl, 1975). The clinical psychological approaches share the main underlying thrust of not opposing patients’ behaviors, attitudes, beliefs, but rather using consistent but amplified, exaggerated, or extreme, information to lead to change, even with the most resistant clinical psychological patients. However, each of the clinical theories emphasizes a different aspect in this process, or argues that what is driving the desired change is different (Riebel, 1984). Our developed conception and validated line of research moved the paradoxical thinking model from the micro clinical setting to the macro societal reality. We demonstrated that the developed approach of attitude change can be applied to various political, societal, economic, environmental and other areas that are of great importance for improving the life of human beings.

In sum, the main theoretical contribution of the present endeavor is to the literature on attitude change, by integrating different psychological literatures, clinical and social, to develop a single, comprehensive, and testable attitude change conceptual framework. This novel paradoxical thinking conceptual framework highlights a process of attitude change that has not received much attention. Indeed, until the work we reviewed here and that was recently published, it seemed that the social psychological literature had neglected this process, and focused mostly on attitude change using either
attitude-inconsistent information, or techniques that bypass or derail resistance (e.g., Cialdini, 2009; Knowles & Linn, 2004). However, the principle that is developed in the present research asserts that one can use this resistance, or these counter-arguments as the force that can drive the change—a principle that has been known for thousands of years in philosophy (Rescher, 2005), and several decades in clinical psychology (e.g., Frankl, 1975; Watzlawick et al., 1974)—but neither broadly developed nor thoroughly examined empirically. We are confident that our contribution provides a new outlook that may support the effort to create a better world.

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