Minority influence

Butera, Fabrizio; Falomir Pichastor, Juan Manuel; Mugny, Gabriel; Quiamzade, Alain

How to cite

BUTERA, Fabrizio et al. Minority influence. In: The Oxford Handbook of Social Influence. [s.l.] : Oxford University Press, 2016. doi: 10.1093/oxfordhb/9780199859870.013.11

This publication URL: https://archive-ouverte.unige.ch/unige:164688
Publication DOI: 10.1093/oxfordhb/9780199859870.013.11

Oxford Handbooks Online

Minority Influence

Fabrizio Butera, Juan Manuel Falomir-Pichastor, Gabriel Mugny, and Alain Quiamzade

The Oxford Handbook of Social Influence
Edited by Stephen G. Harkins, Kipling D. Williams, and Jerry Burger

Subject: Psychology, Personality and Social Psychology Online Publication Date: Aug 2016
DOI: 10.1093/oxfordhb/9780199859870.013.11

Abstract and Keywords

The aim of the present chapter is to explain the processes through which minority points of view may, or may not, diffuse in society at large. The first section presents the rise in the 1970s of a new stream of research, that of minority influence, and summarizes early conceptions and the initial experimental works that allowed differentiating minority from majority influence. The second part reviews the subsequent criticism to early minority influence research, in particular as regards its differences from majority influence. The third section examines the various models that attempted to reconcile previous controversies, and it organizes the great diversity in results observed over the years in studies on majority and minority influence. The final section points to the liveliness of this area of investigation by reviewing some recent extensions and applications of minority influence research.

Keywords: minorities, conflict, consistency, attitude change, conversion, manifest influence, latent influence, information processing

What do Hong Kong’s Umbrella Revolution, USA’s Occupy Wall Street protest, the Spanish Indignados, and the Slow Food movement have in common? They, as well as many other social movements around the globe, consist of minority groups who have the firm conviction that their action and claims will eventually promote some political, economic, or cultural innovation. In all realms of ideas, beliefs, attitudes, knowledge, or behaviors, innovation implies the emergence of a new point of view almost necessarily held by individuals or groups that represent a minority faction in society. The present chapter presents the various lines of research that have attempted to explain the processes through which such minority points of view may, or may not, diffuse in society at large.

The Rise of Minority Influence Research

The story began with a question about science (for an historical account, see Moscovici, 1996) that was generalized to society at large: How is it possible that an individual or a school of thought that has no authority and no credibility can sometimes succeed in convincing other people? From Galileo's revolution in science to the suffragettes' role in promoting vote for women, history is full of examples of isolated individuals or minority groups that brought about great changes. Yet minorities lack the numerical strength that would allow them to exert either informational or normative influences (Deutsch & Gerard, 1955); moreover, they are at first believed to be wrong and do not represent a real possibility to attain a consensus in defining social reality. They instead challenge the prevailing positions and impede the establishment of an undisputable consensual view in their field. Moscovici (1976) was the first to theorize when and why minority influence can arise; his main assumption was that all influence attempts create a conflict, no matter what their origin, and thus minorities too should have an impact because they create a conflict and refuse whatever compromise is proposed to them (Moscovici, 1980; but see the section on "Negotiating Conflict"). History of science suggested the key to such an impact: a rhetoric of tenacity (or consistency).

Explaining Innovation and Social Change

In Moscovici's (1976) analysis, classical works on social influence and communication did not help understand influence in the direction of innovation: The dominant functionalist approach in social psychology had focused researchers on the reproduction and maintenance of social relations, the status quo. The advocates of this approach were considered as looking essentially at the processes through which social systems become long lasting and protect themselves against social change. Moscovici (1976) criticized the implicit assumption of this line of thought that there is only one correct, ahistorical, and somehow predetermined view of the world and its values. Whenever a norm is defined in such absolute terms, research amounts to searching for the conditions and mechanisms through which individuals and groups adapt to that norm. For the most part, social psychological studies between the 1940s and the 1960s dealt with the mechanisms of conformity and obedience, in short, with social control and its internalization (see Hodges—conformity, and Burger—obedience, this volume). These mechanisms were seen as the constituents of majorities and dominant entities considered to be responsible for maintaining uniformity and consensus. Moscovici proposed instead that norms should be considered as relative (i.e., to be the outcome of compromise or submission) and that

emphasis be focused on the mechanisms underlying the spread of innovation, viewed as fundamental to social and historical evolution. At the root of such change are minorities, be they individuals or groups.

As concerns social influence dynamics, Moscovici proposed that minority influence follows a logic that is quite different from majority influence. Majority influence is the consequence of informational and normative pressures that force or motivate people to yield. Conversely, people do not feel compelled by informational and normative pressures when facing minorities and are free to oppose minority's ideas and refuse to adopt them. This does not mean that minorities have no effect: They do not leave their opponents indifferent. They create conflict in presenting their positions as an alternative to existing positions in the field. They gain attention from the majority members, since they attract more communication toward them, even if it is mainly in order to restore the consensus (Schachter, 1951). They are perceived as committed to their position because they resist social pressures to conform and may even foster courage to resist (Nemeth & Chiles, 1988). Finally, when minorities obtain some influence, it is at the end of a long and painful process, and it takes the form of a hidden, latent internalization that Moscovici (1980) called conversion (hence, the name of conversion theory given to Moscovici's theory). The notion of conversion was introduced to highlight that the change following minority influence consists of—for example, in religious conversion—a profound restructuring of opinions, values, and behaviors.

From Compliance to Conversion

To conceptualize the distinct dynamics of majority versus minority influence, Moscovici (1976) insisted on the importance to distinguish two general forms of influence, namely manifest versus latent, that is, influence behaviors, beliefs, and attitudes explicitly linked to the responses given by a source versus indirectly linked to the explicit responses. This claim has given rise to methodological innovations in the area of minority influence, because the issue was to measure if influence appears when, for instance, responses are given in public or in private, following the principle that the displacement of influence to a private level is proof of the social costs that influence targets would incur if they explicitly joined up with a minority source. Along the same lines, it appeared important to detect influence either immediately or after a certain delay, having in mind that influence targets might be more prone to change when the relationship with the minority source has become less salient. Yet another method consisted of measuring to what extent an influence source can affect judgments upon which that source has explicitly taken a stand (direct influence) or not (indirect influence). Other developments have led to consider still other forms of indirect influence, such as the greater level of creativity underlying

the responses of the target following the influence attempt, the more elaborated level of reasoning, the depth of information processing of the influence content, or even the resistance to counterpersuasion attempts.

Moscovici (1980) argued that, in general, majorities induce a pattern of manifest influence without private acceptance, whereas minorities induce a pattern of latent influence despite a weak or null manifest influence (i.e., a pattern of influences that characterizes conversion)—a dual perspective whose critical examination will be at the core of this chapter. The reasoning is as follows. When the divergence of judgments is the result of a majority—a source believed to be legitimate and to provide valid shared information about reality—individuals compare their own judgment to that proposed by the source without necessarily reconsidering the contents of the divergence. They focus on the relation with the source in an attempt to reduce the disagreement and focus on the respective explicit responses. When required to express their views without further exposure to the majority, their personal judgments then remain unchanged. In this case, a compliance pattern of influence (Kelman, 1958), that is, mostly public submissiveness without private acceptance, would prevail (Moscovici & Personnaz, 1980).

In contrast, the nature of conflict is not the same when divergence of judgment is introduced by a minority. Through its consistency in front of the majority views, the source demonstrates that it is strongly committed to a diverging view of reality and is unwilling to compromise. It then generates both a social conflict and a cognitive conflict that lasts as long as targets consider the minority positions as reflecting an alternative to their own position. The minority's views are considered illegitimate and contrary to reality, and targets most often avoid adopting the minority's responses, since to do so would mean becoming themselves openly deviant. However, when active minorities consistently maintain the social conflict, which they usually do, majority members engage in a validation process by considering that the deviant view might contain some truth and confront minority judgments with the corresponding object, leading to a careful examination of arguments and facts. This conflict triggers an intense cognitive processing in order to assess the adequacy of the minority's judgments to reality, that is, to verify or falsify them, and leads to their internalization.

Initial Evidence for Minority Influence

In a study using blue slides varying only in luminosity (Moscovici, Lage, & Naffrechoux, 1969), groups of six persons first took a color test showing that everyone had normal vision. Then, four participants were exposed to two confederates who gave a unanimous "green" response (such synchronic consistency was kept constant). Diachronic consistency was manipulated through the proportion of incorrect unanimous answers of

the two confederates. In the consistent condition, they always said the color to be green. In the inconsistent condition, they answered green to two thirds of the trials and blue to the remaining ones. In a control condition, six participants responded privately. In the consistent minority condition, 8.42 percent of green responses were observed compared to 0.25 percent in the control condition, which represents a weak but significant manifest influence. The inconsistent minority induced only 1.25 percent of green responses, which did not differ from the control condition. As for latent influence, after the experimental phase, participants individually took part in a color discrimination test to determine the threshold at which they would give the green response when presented with colors changing gradually from evidently blue to evidently green. Participants exposed to the consistent minority perceived green earlier than participants in the control group, which was not the case for participants in the inconsistent minority condition.

These results suggested that through the systematic repetition of the very same answer the minority manifests a clear-cut recognizable system of responses. However, it should be noted that it is perceived consistency and not repetition in itself that is theorized to be the key element. This was demonstrated in a study (Nemeth, Swedlund, & Kanki, 1974) in which bright blue slides and dim slides were presented at random and participants were instructed to answer all the colors they saw, if they saw more than one color. In a straight green condition, the two confederates always repeated the green response. In two patterned conditions, confederates responded green (versus green-blue) to the bright slides and green-blue (versus green) to the dim slides. Compared to the straight green condition, the confederates in both patterned conditions—where an organizing principle was introduced—were perceived more confident in their judgments and superior in their perception to the naïve participants, and induced more green responses. Mere repetition may sometimes be perceived as rigidity (see later), and the patterning of responses as a function of a salient property of the slides preserved the attribution of consistency.

A critical test showed that this influence pattern was specific to a consistent minority (Moscovici & Lage, 1976). Using the same paradigm, in the majority conditions four confederates were opposed to two participants, whereas in the minority conditions two confederates were opposed to four participants, with a control group without influence. The source was either consistent or inconsistent, as in Moscovici et al.’s (1969) experiment. Results showed that manifest influence varied as a function of both faction size and consistency. The consistent minority induced 10.07 percent of green responses, significantly more than the inconsistent minority (0.75 percent) that did not differ from the control condition (1.22 percent). Manifest influence was much higher for majority, with the unanimous consistent majority inducing 40.16 percent of green responses, more so than the inconsistent majority (12.07 percent). However, as for latent influence, the color discrimination posttest revealed that only the consistent minority condition differed

from the control condition. The pattern of conversion (latent but no manifest influence) then appeared to be more typical of a consistent minority, and compliance (manifest but no latent influence) more typical of majorities.

Beyond Consistency: Negotiating Conflict

If consistency plays a central role in minority influence, it was also evident from the beginning that the minority's intransigence that characterizes consistency may lead to the mere rejection of the deviate (e.g., Schachter, 1951). Indeed, consistent deviates have been shown to obtain less influence in cohesive groups, especially when they can be easily rejected by the group (Wolf, 1979). To solve this problem, Mugny (1982) suggested the need to understand the effect of consistency in terms of negotiation strategies within a more general social context in which *power* and *population* are two distinct actors of the so-called majority position (Mugny, 1982). Contemplating the important controversial social issues in which social change takes place (e.g., ecology, women rights, immigration, and antimilitarism) led to the consideration that, instead of opposing a minority to a unique majority counterpart, a minority influence model should separate *power* and *population* as two distinct components of the majority. On one side there are powerful subgroups or individuals who dictate norms and rules, whereas on the other side there is the population that is submitted to this dominant ideology because it is socialized to do so in various institutions (e.g., family, school, work). A consistent minority then represents a third party that introduces a point of view that is necessarily conflictual in the *antagonistic relation* with power, and in this respect must be intransigent to be recognized as an alternative by the population. However, a consistent minority also generates a conflict in the *influence relation* with the population, and this conflict needs to be negotiated in order to counter the population's resistances. Accordingly, a flexible negotiation style with the population, while maintaining consistency and opposition to power, would be more appropriate for the minority in order to influence the population.

In a series of experiments about significant social issues (Mugny, 1982), participants were exposed to minority positions endorsed by different minority groups (e.g., ecologist, antimilitarist, and xenophobic groups) that were consistent in their counternormative contents. Negotiation was manipulated through the use of slogans inserted in the text: In the rigid minority conditions the source accentuated the conflict with the population (for instance, by declaring itself "absolutely" in favor of an extreme position on all themes) whereas in the flexible minority conditions it attenuated it (for instance, by declaring itself "rather" in favor on some themes). When the image of the minorities was assessed, both sources appeared to be equally consistent, whereas they differed in perceived

flexibility/rigidity. Importantly, more manifest influence was generally observed after exposure to the flexible than to the rigid minorities. Indirect measures, however, showed in general the same influence for rigid and flexible minorities. In some studies, rigid minorities obtained less influence when disagreement with the minority was particularly salient and rigidity could be attributed to specific peculiarities of the minority (e.g., the psychological traits of its members; Mugny & Papastamou, 1980). This model has proven useful for social psychological analyses of the influence strategies used by historical minorities, for instance in Marx and Engels's *Communist Manifesto* (Chryssochoou & Volpato, 2004) or in the evolution of the feminist movement in Italy (Crespi & Mucchi Faina, 1988).

Evidence for Dual Process

These lines of early research set the stage for a more systematic validation of conversion theory. Indeed, several further studies tested the theory's main hypotheses, in particular that majorities and minorities obtain their influence at different levels, through different focuses of attention, and with different forms of cognitive processing. As far as level of influence is concerned, stringent evidence of the conversion pattern was observed using a sophisticated measure of latent influence. In two studies (Moscovici & Personnaz, 1980), participants first answered a private pretest. In a dark room they had to judge the color of blue slides and the chromatic afterimage that is automatically perceived when the projection of the blue slide is stopped. In a second phase, participants were informed that 81.8 percent of previous participants had seen a green slide and 18.2 percent a blue slide (majority condition), or 18.2 percent and 81.8 percent, respectively (minority condition). Then, they were exposed to the influence of one confederate consistently answering that the slide was green and gave their response publicly. In a control condition (study 1), the participant and the confederate responded privately. The third and fourth phases were similar to the pretest: Participants judged the color of the slide and the chromatic afterimage privately in presence of the source (phase 3) and in its absence (phase 4). Manifest influence was near zero, and experimental conditions did not differ from one another, probably because of the low pressure exerted by the 1:1 faction size. The chromatic afterimage was used to measure latent influence. Given that the color perceived after exposure to a colored stimulus is its complementary color, participants should see the yellow-orange range of the spectrum after a blue slide and the red-purple one after a green slide. If validation of the minority claim (green) changes the majority's perception of the original stimulus, then participants should indicate an afterimage closer to red-purple, the complementary color of green. Such a change was significant for phases 3 and 4 in the minority condition but not in the majority condition (studies 1 and 2), nor for the control conditions (study 1).

More recently, Tafani, Souchet, Codaccioni, and Mugny (2003) compared the influence of a consistent majority and a consistent minority in a series of studies on the social representation of drug consumption. Majority versus minority factions advocated a diverging definition of what drugs are and were manipulated as in Moscovici and Lage (1976), and a control condition without any source was introduced. Manifest influence concerned the number of participants who followed the source at least once. Latent influence concerned the extent of change between individual pretest and posttest measures of the central core of the representation of drugs. In a first study, manifest majority influence was significantly higher than minority influence, but both sources induced influence compared to the control condition. Latent influence was significantly higher in the minority condition than in the other two conditions that did not differ from one another. In a second study the superiority of majority manifest influence was replicated, as was the superiority of minority latent influence. Additionally, minority latent influence was also observed 10 days later, showing a delayed effect of the minority on the latent measure, an effect that was not significant for the majority. Consistent with these findings, the meta-analysis by Wood, Lundgren, Ouellette, Busceme, and Blackstone (1994) concluded that minorities in general obtain more latent influence (i.e., in private and indirect measures) than manifest influence. However, the prediction according to which majorities only induce manifest influence was not supported.

Moving to focus of attention, conversion theory (Moscovici, 1980) proposes that majority influence proceeds from enhanced focus on social relationships (a social comparison process), whereas minority influence proceeds from enhanced focus on content (a validation process). Evidence for this dual process is reported in Personnaz and Guillon (1985). In a study on abortion, one pro-abortion participant had to discuss with three anti-abortion confederates (majority condition), or three pro-abortion participants were opposed to one anti-abortion confederate (minority condition). The content of the arguments advanced by the confederate(s) was predetermined. The entire discussion was recorded and later presented to the participants who had to express what they thought and felt during the discussion. The thoughts and feelings expressed were coded as either positive or negative, and as referring either to the content advocated by the confederate(s) or to the relation with the confederate(s). The results for the negative thoughts and feelings showed that, when confronted with a minority, participants focused increasingly more, in the course of the discussion, on the content of the confrontation and less on the relational dimension (validation). Confronted with a majority, they increasingly focused more on the relation and less on the content (social comparison).

Indirect evidence for the validation process of minority views may be found in other studies employing alternative methodologies. For instance, ambivalence, that is, the coexistence of positive and negative evaluations, may be a useful construct to study the

role of validation, to the extent that validation was conceived as requiring consideration of negative and positive features of a minority's message (Moscovici, 1980). Mucchi Faina and Pagliaro (2008) confronted their participants (university students) with a counterattitudinal minority that proposed the introduction of a final comprehensive exam. Participants were to write either positive outcomes that might follow a meeting with that minority (univalent arguments), negative outcomes (univalent arguments), or both positive and negative outcomes (ambivalent arguments). Direct influence was measured through the attitude toward the introduction of the final comprehensive exam, and indirect influence through attitude toward the introduction of other measures that made the curriculum more difficult. Results showed that the minority message elicited more indirect, but not direct, influence in the ambivalent condition, as compared with the two univalent conditions. This study thus brings support to conversion theory by providing a characterization of the kind of cognitive processes that might occur during the validation process, and an indication that they are linked with indirect influence.

In an experiment using an Asch-like paradigm, the procedure was modified in order to allow for the measurement of latent influence (Mugny, 1984). Compared to a control condition without influence, manifest influence was observed in a majority condition but not in a minority condition. Conversely, latent influence appeared in the minority condition but not in the majority condition. These results are congruent with Moscovici's hypotheses, but, importantly for the present contention, they were observed only in conditions that replicated the usual influence paradigm in which participants are exposed to a dissenting majority or minority without any other specification. Interestingly, the study was also run after informing participants that the task involved optical illusions. Participants were shown optical illusions, using a ruler to demonstrate that apparently different lines were in fact the same length. Under this specification, the influence dynamics were quite different: The majority induced both manifest and latent influence, whereas the minority induced neither manifest nor latent influence. These results suggest that when the divergence may lead to the interpretation that one of the dissenting factions is in error, the majority prevails because the participants can believe that the majority is right (Nemeth, 1986) and they are victims of illusions, allowing for a true informational dependence dynamic to replace the usual relational processing leading to compliance. More important, in such circumstances the minority loses any possibility to achieve influence because it appears as most probably in error, thus impeding the validation process and the conversion dynamic to take place. In other words, validation is necessary for the minority influence to appear.

In more recent studies, Falomir-Pichastor and his colleagues integrated Moscovici's conversion theory and regulatory focus theory (Higgins, 1997) by examining the motivations underlying attitudes with majority (88 percent) versus minority (12 percent)

support. Regulatory focus theory holds that goal-directed behavior is regulated by two different tendencies, namely a prevention focus and a promotion focus. Prevention focus is concerned with the fulfillment of security needs and the respect of duties and obligations. Promotion focus is concerned with the attainment of an ideal and the pursuit of aspirations. Falomir-Pichastor and colleagues reasoned that group members should mainly perceive majority positions as personal duties and responsibilities, and they should be more concerned with the presence or absence of negative outcomes such as punishment; in other words, people holding a majority position should concentrate on a social comparison process with a focus on deviance in Moscovici's (1976) terms. Conversely, minority positions are less constraining, and group members endorsing these positions may therefore consider the need to promote them, that is, a proxy of a validation process. Two studies (Falomir-Pichastor, Mugny, Quiamzade, & Gabarrot, 2008) showed that positive attitudes toward foreigners were more strongly related to prevention-related emotions (i.e., agitation versus relaxation) when supported by a majority of the population, and to promotion-related emotions (i.e., dejection versus cheerfulness) when supported by a minority of the population. Furthermore, three additional studies (Falomir-Pichastor, Mugny, Gabarrot, & Quiamzade, 2011) showed that among participants with prior positive attitudes toward homosexuality, prevention-focused participants were more influenced by a majority (i.e., increased their positive attitude toward homosexuality), whereas promotion-focused participants were more influenced by a minority. Overall these findings suggest that majority positions primarily influence people on the basis of their motivation to comply with normative standards, whereas minority positions succeed on the basis of their motivation to provide social validity for valued albeit minority positions.

Beyond Conversion: Convergent and Divergent Thinking

Nemeth (1986) proposed that differential thought processes characterize majority and minority impact, and they have distinct consequences on the quality of problem solving and decision making. People exposed to a dissenting majority would focus on aspects of the task that are associated with the position of the majority, think in a convergent way with the dominant position, and adopt the solutions proposed by the majority while neglecting potential alternative ones. Their solutions and decisions are thus tied to the correctness or appropriateness of the majority's views. By contrast, people exposed to a diverging minority would attend to more aspects of the task, think in a divergent way, and detect new solutions that can be more correct even if the minority is wrong. The rationale for these hypotheses is as follows.

If one is confronted with a dissenting majority, more stress would ensue than if one is confronted with a dissenting minority: Targets assume that the majority is correct and

that they themselves might be wrong, and also experience negative arousal because they fear disapproval from the majority if they maintain their own deviant judgments. Because arousal leads to a narrower focus of attention, the induced stress would increase the focus on the dominant responses, that is, those of the majority, which may be detrimental in particular in complex tasks. Conversely, arousal induced by dissenting minorities is lower, because these are considered to be wrong and are less able to retaliate. Targets then widen their perspective and consider more dimensions and alternative ways of resolving the task. Thus, whereas Moscovici hypothesized that people think more about a minority's position, Nemeth suggested that scrutiny of source position or message-relevant thoughts are more characteristic of the convergent thinking activated by majorities (Nemeth, 2003). The active thought processing stimulated by opposing minority viewpoints is more issue relevant: Targets think divergently by considering more viewpoints than simply the one proposed. The quality of the solution thus would tend to be better because more alternatives are considered and allow novel correct solutions to be detected.

As a direct test of this conceptualization, a study using an embedded figures test illustrates part of these dynamics (Nemeth & Wachtler, 1983). Participants were shown a series of slides comprising a standard figure along with six comparison figures, and had to identify all the comparison figures that contained the standard. Three comparison figures contained the standard and three did not. One comparison figure was rather evident, whereas the others were more difficult. In groups of six persons, a majority (four confederates unanimously giving the same answer) or a minority (two confederates; a control condition was run with only naïve participants) judged the standard as embedded in the easy comparison figure and in one of the difficult comparison figures; depending on a second independent variable, the confederates were either correct or incorrect in identifying the difficult figure. Independent of the correctness of the source, participants showed more manifest influence, that is, more mere imitation (the same two answers as the confederates) when exposed to the majority than to the minority. However, participants exposed to the minority gave more novel responses (i.e., not given by the confederates) than those exposed to the majority. This effect was not due to a mere differentiation process, since this effect was observed for correct novel responses only, and not for new incorrect ones. In other experiments (for a review, see Nemeth, 2012), as compared to majorities, minorities were also shown to induce more original associations, to allow better recall of tape-recorded lists of words, to promote the consideration of more of the possible strategies and their use in finding more overall solutions, and to stimulate the search for information and facts for all sides of an issue; also, previous exposure to a consistent minority fostered courage in front of a dissenting majority.

In sum, the early research on minority influence demonstrated that whereas minorities might exert some direct influence, they would induce primarily latent influence, more so

than the majorities. The role of behavioral styles in these dynamics (consistency/inconsistency and flexibility/rigidity in particular) was emphasized, as well as the importance of social comparison processes in the emergence of majority influence and validation processes in the emergence of minority influence. It should be noted that this research is concerned with minority influence conceived of as change (or lack thereof) toward the minority position. There is, however, a small set of studies that show that minority influence can induce a boomerang effect, that is, change away from the minority position; it has been shown that this is the case when the minority adopts a rigid negotiation style and is construed as dogmatic (Mugny, 1975; Papastamou & Mugny, 1985). As the vast majority of the studies in the minority influence literature investigated influence toward the source's position, we have focused on this approach in the present chapter. The evidence presented here notwithstanding, minority influence research raised critical reactions, and the question then turned to be when and why minorities and majorities induce one pattern of influence or another.

Controversies About Dual Process

Moscovici's and Nemeth's models relegated majority influence to, at best, the social reproduction of extant and dominant views and convergent ways of thinking, and they rejected the possibility for majorities to induce innovation and social change. As a consequence, these models, and in particular Moscovici's claims regarding the majority being limited to manifest influence, boosted strong negative reactions.

Looking for the Afterimage Effect

A number of authors questioned Moscovici's conversion theory by undermining the results obtained in the line of research using the chromatic afterimage paradigm (see section "The Rise of Minority Influence Research"). Two immediate replications using exactly the same research paradigm as Moscovici and Personnaz (1980) were published in the same issue of the *Journal of Experimental Social Psychology*. Doms and Van Avermaet (1980) observed that both majority and minority sources produced conversion as assessed by the afterimage effect. In contradiction with the idea that majorities and minorities induce distinct forms of influence, this finding rather suggested an overall improved perception that could have resulted from a heightened level of attention to the stimulus arising from the confederate's deviant response, regardless of its majority or minority status. Sorrentino, King, and Leo (1980) focused on minority influence, and observed the predicted conversion effect only for participants who were suspicious about

the experiment. They interpreted this effect in terms of the suspicion that arises when a minority provides a deviant response, which led to a heightened attention to the stimulus.

Martin (1995) also conducted replications of Moscovici and Personnaz's studies and examined several methodological issues. The Moscovici and Personnaz original blue slide had a large portion of its wavelength within the green spectrum, and Martin reasoned that, if afterimages shifted toward the complementary color of green because of the participants' heightened attention to the original slide, afterimages should shift in the opposite direction (i.e., toward the complementary color of blue) when the slide was a pure blue slide. Results confirmed this prediction, again regardless of the numerical support for the source. In five supplementary studies, Martin (1998) examined influence effects in the different posttest phases, as well as the role of the participants' suspiciousness. Afterimage effects in the direction of the green's complementary color were observed for both majority and minority sources, consistently with Doms and Van Avermaet's (1980) findings, and were stronger for participants who were high in suspicion, consistently with Sorrentino et al.'s (1980) findings. Finally, Martin observed consistent within-phase afterimage effects in those studies with more posttest than pretest trials: Judgments shifted toward the complementary color of green over progressive within-phase trials.

In sum, whereas Moscovici and Personnaz's studies using the afterimage paradigm provided findings in support of the conversion effect, replications of their work suggested that the afterimage effect was prompted by the increased attention to the slide after exposure to a deviant view, regardless of its numerical status. Importantly, these findings not only raised questions about the validity of the afterimage paradigm but also challenged the contribution of the emerging field of minority influence (see section "The Rise of Minority Influence Research") that insisted on different influence patterns and different processes for majority and minority sources. This challenge also came from theories suggesting that influence proceeds from one single process.

Mathematical Models

Several models consider that minority influence is governed by the same principles and mediated by the same processes as majority influence (Latané & Wolf, 1981; Tanford & Penrod, 1984). Accordingly, social influence is theorized as the result of social forces that apply in a social field and therefore depends, among other quantifiable attributes (source's power and immediacy), on the number of people composing the source of influence (and the target). In particular, each additional source member is expected to add some impact, but less than the preceding one, and each added target in the social field reduces the source's impact, but less than the preceding co-target. Thus, these

theories predict a curvilinear function for social influence (a power function in the case of Latané and Wolf, 1981). As a consequence, when the numerical minority target is confronted by a numerical majority source, the source's influence should be greater than when the target is in the majority and confronted by a minority source. Similarly, Mullen (1983) proposed that the larger the source group (and the smaller the co-target group), the greater the source's influence. However, Mullen added that influence proceeds from a focus on the self, which increases as the size of the group decreases, producing an increase of correspondence between behavior and behavioral standards (like values or group norms). The result is that, in heterogeneous group contexts like those with majorities and minorities, the members of the smaller subgroups would match their behavior to the dominant norms to a greater extent, which implies that the larger groups would get more influence. The formal interest of these models notwithstanding, it is important to note that later research has questioned the generalizability of such models, by showing that curvilinear models did not provide a better fit than a linear model, except for studies with very specific features (Bond, 2005).

Objective Consensus Approach

Another challenge to the idea that minority influence is qualitatively different from majority influence came from research based on the principle of social proof. This principle contends that the greater the number of people who find any idea correct, the more that idea will be considered correct (Cialdini, 1984). Indeed, according to an attributional analysis of source numeracy, consensual views are perceived as more correct because, as long as the different sources are perceived as independent, their agreement is less likely the result of personal biases or contextual factors. However, some discrepancies exist about the nature of consensus effects. On the one hand, and consistent with conversion theory, research showed that consensus can work as a heuristic cue (i.e., as a proof of validity), increasing the acceptance of majority views without further elaboration and private change. On the other hand, consensus can increase people's motivation to scrutinize the relevant arguments because the fact that multiple sources converge on the same position may indicate that such a position is valid notwithstanding the diversity of perspectives (Harkins & Petty, 1987).

As a consequence, some scholars argued that disagreement with majority views, as compared to minority views, not only elicits more manifest influence toward the majority position, as suggested by Moscovici, but also more elaboration of relevant information and consequent latent influence. Mackie (1987) was the first to provide support to this argument. In the standard procedure, participants who were initially mildly or strongly supportive of the proposition that the United States of America should maintain a military

balance in the Western hemisphere listened to a tape-recorded discussion by two confederates in which one stated four supportive arguments and the other stated four equally persuasive arguments opposing this position. Participants were then informed that a majority of the students either supported this position (and a minority opposed it) or opposed this position (and a minority supported it). Attitude change was assessed in private through the pretest/posttest differences on a direct item (reproducing the core proposition) and on an indirect item (indirectly related to that proposition). In addition, posttest attitudes were assessed both immediately and 1 week later. Moreover, in order to assess the amount of cognitive elaboration, participants had to write down anything they could recall about the discussion, and two independent judges coded whether participants' responses expressed favorable or unfavorable reactions to the majority or minority position. Across four experiments, results showed that participants opposing a majority position showed greater immediate change toward the statement directly related to the majority position, as well as greater change toward the statement indirectly related to the majority position. Furthermore, this attitude change persisted 1 week later and was associated with participants' cognitive elaboration of majority arguments.

Overall, Mackie's findings provided support for the idea that opposition to majority positions (but not to minority positions) produces attitude change associated with a greater cognitive activity (i.e., internalization). Disagreement with a majority would be likely to provoke systematic processing of the majority's positions because it violates the expectation that opinions are held widely. Conversely, pro-attitudinal messages should be more scrutinized when associated with minority endorsement. Baker and Petty (1994) provided evidence in support of this explanation. They found that the persuasive strength of a counterattitudinal message (i.e., a tuition increase) had a greater impact on students' attitudes when associated with a majority, whereas the strength of a pro-attitudinal message (i.e., a tuition break) had a greater impact on attitudes when associated with a minority. Furthermore, attitude change in the predicted expectancy-violation conditions was positively associated with the issue-relevant thoughts generated while reading the message.

Despite the consistent pattern of findings obtained by Mackie and Baker and Petty as a function of whether the source's position was counter- or pro-attitudinal, a considerable number of studies have observed the opposite pattern of findings (e.g., Martin & Hewstone, 2001). Martin and Hewstone (2003) proposed an integration of these conflicting findings as a function of participants' self-interest. They highlighted that a pattern consistent with conversion theory emerged in paradigms using topics that were not against the participants' self-interest (Erb, Bohner, Rank, & Einwiller, 2002; Martin & Hewstone, 2001), whereas studies showing a greater processing of majority views employed topics against participants' interests (e.g., Baker & Petty, 1994; Mackie, 1987).

In two experiments, Martin and Hewstone (2003) provided empirical support to this integration. For instance, when the message argued for a negative personal outcome for participants (at that time, the introduction of a single currency in Europe), a majority source led to more message elaboration, whereas when the message did not argue for a negative personal outcome (i.e., the legalization of voluntary euthanasia), a minority source led to more message elaboration. Accordingly, what seems to be counterintuitive and leads to cognitive elaboration of the message is a majority arguing for a negative personal outcome, and not merely a majority counterattitudinal position. Further evidence in support to this conclusion comes from studies conducted by Erb et al. (2002) in which the topic was relatively relevant for participants and did not introduce any negative personal outcome. In two experiments, these authors distinguished opposing or moderate premessage attitudes toward the topic, exposed the participants to a majority versus minority message, and assessed the extent of message processing by measuring the differential impact of strong versus weak arguments. A pattern of results consistent with conversion theory appeared when participants held conflicting prior attitudes (i.e., the minority message was processed more extensively than the majority message), whereas a pattern consistent with the objective consensus approach was observed when participants held moderate prior attitudes (i.e., the majority message was processed more extensively than the minority message).

Finally, and importantly, the use of a definition of minority in exclusively numerical terms, as in the objective consensus approach, also appears somewhat controversial, because it reduces the relevance of influence processes that are related to the typical social attributes that characterize minorities. Indeed, Wood et al. (1994) showed in their meta-analysis that studies that defined minorities through membership in a particular, typically deviant social group as related to the broader society, produced stronger conversion patterns (greater indirect than direct effects) than studies defining minorities as statistically infrequent (mere consensus). In other words, an exclusive focus on numerical support when studying minority influence may fail to detect the phenomenon of minority conversion because this phenomenon is also related to the conflict that active minorities elicit in the social space.

Self-Categorization Theory

Self-categorization theory (Turner, 1991; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) offers a single explanation of social influence. This theory makes the unambiguous assumption that influence is based on shared social identity (i.e., the categorization of others as similar to the self) and results in individuals shifting their attitudes and behaviors toward those of ingroup members. One only expects to agree with people

categorized as similar to self on a relevant dimension, and only disagreement with similar people produces uncertainty (Festinger, 1950). Therefore, people's uncertainty about the validity of their opinions is a direct consequence of the degree of perceived discrepancy between their own views and those of the members of the ingroup. Conversely, discrepancy between one's opinions and opinions of members of an outgroup does not create uncertainty, given that social categorization suffices to explain disagreement. Furthermore, uncertainty can be reduced either by recategorizing the ingroup as an outgroup or by reducing existing discrepancies through social influence. On the one hand, the categorization of dissenting others as members of an outgroup constitutes an alternative to social influence, as rejecting and disqualifying others as different implies that no uncertainty has to be resolved. On the other hand, social influence can entail either attempts to influence other ingroup members or a shift toward their positions.

Applied to majority/minority influence, self-categorization theory explicitly states that both sources can influence only if targets perceive them as an ingroup. Accordingly, self-categorization theory assumes that both majority and minority influence proceed from the same process (target-source similarity). In two studies, David and Turner (1996) employed an ingroup versus outgroup categorization on a dimension related to the influence message (participants' initial attitudes were consistent with an ingroup source's message and in conflict with an outgroup source's message) and showed majority compliance and minority conversion effects only for ingroup sources. Targets strongly rejected messages from outgroup (either majority or minority) sources at the public/immediate and private/delayed levels. Conversely, ingroup majorities obtained more public and immediate than private and delayed influence, whereas ingroup minorities induced exactly the reverse pattern. In a follow-up study, David and Turner (1999) presented their participants with the message from an extreme minority of their group (feminists) and made an intragroup context salient to facilitate the categorization of the minority as outgroup, versus an intergroup context in order to facilitate the categorization of the minority as ingroup. The minority conversion pattern (no immediate but delayed influence) was observed in particular when the minority was expected to be perceived as ingroup, but not when it was expected to be perceived as outgroup.

In sum, David and Turner's findings consistently showed minority conversion only when the source is categorized as an ingroup. Despite the fact that this pattern is consistent with both self-categorization theory and conversion theory, self-categorization theory challenges conversion theory's assumptions in several ways. First, self-categorization theory assumes that both majority and minority influences are affected by the same process (i.e., target-source similarity). Second, self-categorization theory takes issue with the assumption that conversion results from explicitly rejecting the minority message and subsequently validating it. Rather, it assumes that ingroup minority messages are given

attention that results in private/delayed influence. However, the reason why this attention results in a conversion pattern specifically for the minority (and not the majority) conditions remains unclear within this framework, and it does not help to integrate past findings showing that outgroup minorities can result in considerable, and sometimes even greater, conversion (see Martin, Hewstone, Martin, & Gardikiotis, 2008; see also the next section).

Integrative Models of Majority and Minority Influence

In this section, we present models that attempted to integrate previous controversies and demonstrate the existence of dual processing in majority and minority influence, although specific processes are not viewed as strictly paired with each kind of source. For these models it is the context that determines what kind of process each source will elicit.

Heuristic and Systematic Processing in Majority and Minority Influence

De Vries, De Dreu, Gordijn, and Schuurman (1996) took issue with the contention that minorities always elicit a deeper processing of the message and more private influence than majorities. They proposed that both majority and minority could elicit such a processing depending on specific circumstances. To study the nature of processing, these authors relied on the heuristic-systematic model of persuasion (HSM; Eagly & Chaiken, 1993). According to this model—and to the elaboration likelihood model of persuasion (ELM; Petty & Cacioppo, 1986), persuasion may follow two routes, namely systematic versus heuristic processing (called central versus peripheral routes by ELM). On the one hand, systematic processing is an analytical form of information processing in which targets judge the validity of a message by scrutinizing the arguments. On the other hand, heuristic processing is a more superficial way to process the information in which targets use simple rules to judge the validity of the message. Majority (versus minority) support may serve as such a rule, since consensus is a cue that easily allows inferring correctness.

De Vries et al. (1996) thus proposed that a majority most often elicits a systematic processing of the message, but not a minority. Indeed, discrepancy with a majority's message would reduce the target's confidence level (a key to elicit systematic processing) more than discrepancy with a minority's message. A majority is thus more likely to lower

the confidence below a sufficient threshold, leading to a higher motivation to process the message systematically. Schuurman, Siero, De Dreu, and Buunk (1995) manipulated the availability of cognitive resources by distracting half the participants (i.e., a supplementary task to carry out) that would impede systematic processing. They showed that persuasive arguments produced more attitude change with majority than with minority support, but only when the targets had enough available cognitive resources to process the message. The authors interpreted these results as supporting the proposition that majority sources induce systematic processing.

The discrepancy with a minority is most often insufficient to reduce the target's confidence, and thus would elicit a heuristic processing that leads to the rejection of the minority's position, as minorities suffer from a negative image. However, a minority can elicit more systematic processing than a majority when circumstances make its arguments difficult to neglect. De Vries et al. (1996) suggested that the dimensions that have been found responsible for minority influence—consistency, conflict, threat, ingroup nature of the source—might reduce the target's confidence level enough to elicit systematic processing. In that case, a minority might get more attitude change than a majority.

De Vries et al. (1996) also assumed that majority influence should produce convergent thinking (Nemeth, 1986) mainly on focal issues, whereas minority influence should produce divergent thinking on related issues, when the context asks for systematic processing. De Dreu and De Vries (1993, experiment 2) confronted a sample of students to a majority or a minority, arguing in favor of introducing an admission exam at university. They also manipulated the strength of arguments (strong vs. weak) as well as the mode of evaluation of the source's and own judgments: They used a comparative evaluation of judgments (to distribute a total of 100 points to the source's and own position) to increase motivation to process the source's position, and a noncomparative evaluation of judgments (to distribute 100 points to the source's and 100 points to one's own position) to decrease motivation to process the source's position. Finally, they measured pre/posttest attitude change on the focal issue (the admission exam) and on a related issue (the relation between students' academic achievement and the grant provided to them by the government). They found that attitude change on a focal issue was influenced by quality of arguments (a sign of systematic processing) more for the majority than for the minority under noncomparative evaluations. In other words, they found similar results to those found by Baker and Petty (1994), but specifically on a focal issue. As regards the related issue, they found more influence for the minority than for the majority source under comparative evaluation, thus when the source's position could not be simply neglected.

Source-Context Elaboration Model

Martin and Hewstone (2008) extended the parallel between dual processing in persuasion and majority/minority influence. Relying on HSM as well as ELM, they distinguished elaborative from nonelaborative processing. Elaborative processing involves attending to the content of the source's argument, generating pro- and counterarguments, evaluating the arguments in the light of preexisting attitudes, assimilating the arguments into attitudes, and being aware of the consequences to identity and group membership. Nonelaborative processing relies more on heuristics cues.

These authors first proposed that the reason why some studies show influence and systematic processing for both majority and minority sources, while others show these effects for minority sources only, is that the effect of the source's status varies along an elaboration continuum, that is, the extent to which the context demands elaboration of the source's message. When the elaboration demand is low (when the topic is of low personal relevance), targets do not process the message and attitudes depend on heuristics; the majority is then expected to obtain more attitude change, but mainly at a manifest level. When the elaboration demand is high (when the topic is of high personal relevance), the target will systematically process a majority's as well as a minority's message, leading to a change in attitude. These authors focused on standard situations in which the elaboration demand is intermediate, based on Petty, Fleming, and White's (1999) statement that "when thinking is not constrained to be high or low by other variables … source variables can determine the extent of thinking" (p. 20). They hypothesized that it is at this intermediate level that a minority source will elicit more processing of its message than a majority source, leading to Moscovici's conversion pattern. Results supported these predictions (Martin, Hewstone, & Martin, 2007).

The second set of predictions concerns the strength of attitudes following majority and minority influence. Influence through heuristic processing is expected to result in weaker attitudes, whereas systematic processing should lead to stronger attitudes. At the most common level of elaboration demand, the intermediate one, differences in message processing induced by minority and majority sources should lead to disparities in attitude strength. Compared to majority influence, attitudes following minority influence were shown to be more resistant to counterpersuasion (Martin, Hewstone, & Martin, 2003), more persistent over time (Martin, Hewstone, & Martin, 2010), and more predictive of behavior (Martin, Martin, Smith, & Hewstone, 2007), three patterns indicating a stronger attitude.

Dissociation Theory

Dissociation theory (for a review, see Mugny & Pérez, 1991) aimed to address questions resulting from the aforementioned dissenting views about the very existence of minority influence, in particular the problem that some studies revealed conversion effects, while others showed no influence at all. To take both sets of results into account, Mugny and Pérez reconsidered Moscovici's distinction between social comparison and validation processes. Whereas Moscovici considered these processes as mutually exclusive and specific to, respectively, majorities and minorities, dissociation theory suggests that both processes may characterize minority influence. However, they can operate either in a dissociated way (validation and social comparison are processed separately) or in a nondissociated way (namely, when social comparison contaminates validation).

Dissociation theory states that the social comparison process often results in targets' increased motivation to psychologically distance themselves from the minority source, given that minorities carry negative connotations with them and may be rejected. Accepting minority views implicitly means the self-attribution of minority's negative characteristics, which results in an identity threat that prevents the processing of minority views (Mugny, Kaiser, Papastamou, & Pérez, 1984). In this context, targets are, most of all, preoccupied by the threatening social comparison, and validation processes work in a nondissociated way: The processing of the conflict with a minority is dominated by resistance, and a search for dissimilation is activated to protect social identity. Lack of dissociation is then the consequence of an identification conflict, and it increases when targets focus on a threatening social comparison (Pérez & Mugny, 1989). This explains why minorities may induce no influence at all. As a corollary, dissociation theory assumes that minority influence only occurs when social comparison is nonthreatening and the related self-attribution process does not disrupt the processing of the minority's position —that is, social comparison and validation processes work in a dissociated way—thus allowing for latent influence to take place.

Dissociation theory also contends that a threatening social comparison process mainly occurs within the ingroup boundaries. Ingroup minorities are more threatening because the shared social category suggests a common identity and thus a facilitated self-attribution of the ingroup minority's characteristics. As a consequence, social comparison interrupts the validation of the minority views (i.e., nondissociation), in particular when the source is an ingroup minority opposing the ingroup majority. Conversely, outgroup minorities are often paradoxically less threatening because people do not need to attribute the outgroup minority's characteristics to themselves. Thus, as compared to threatening ingroup minorities, less threatening outgroup minorities are expected to facilitate to a greater extent dissociation between social comparison and validation, and

therefore to obtain as much influence as ingroup minorities (e.g., Martin, 1988), or even more (e.g., Pérez & Mugny, 1985). For instance, Mugny, Kaiser, and Papastamou (1983) found that an ingroup minority obtained more influence than an outgroup minority, but only when it was not associated with negative connotations. Pérez and Mugny (1985) found that if an ingroup minority was associated with negative connotations, an outgroup minority obtained more influence than an ingroup minority. Likewise, although it has been shown that increasing the impression of belonging to a common group with a minority leads to more influence (Mugny & Papastamou, 1982), common membership disrupts conversion when symbolic costs of identification are emphasized (e.g., Mugny, Ibáñez, Elejabarrieta, Iniguez, & Pérez, 1986; Souchet, Tafani, Codaccioni, & Mugny, 2006).

These findings are in apparent conflict with self-categorization theory, which predicts greater influence of ingroup minorities, as compared to outgroup minorities (see section "Controversies About Dual Process"). However, an integration of self-categorization theory and dissociation theory seems possible when considering identity threat (Quiamzade, Mugny, Falomir-Pichastor, & Pérez, in press). Indeed, ingroup minorities appear to obtain more influence than outgroup minorities when the identity threat resulting from the endorsement of the minority position is relatively low, which is congruent with self-categorization and social identity theory (this was the case with the endorsement of an extreme feminist position by feminist participants; David & Turner, 1999). On the contrary, outgroup minorities obtain more influence when such identity threat is relatively high, which is consistent with dissociation theory (this was the case with the endorsement of a minority stance in favor of legalizing abortion by pupils from an all-girls Spanish school; Pérez & Mugny, 1985).

Context/Comparison Model and Leniency-Contract

The context/comparison model was developed to make predictions about majority and minority influence based on the distinction between weak and central attitudes, source categorization, and the nature of task (Crano & Alvaro, 1998). When attitudes are *weak or unvested*, there is little resistance given the unvested nature of the attitude. An ingroup minority is more distinctive than an ingroup majority and therefore attracts more attention, which stimulates divergent thinking and message elaboration in particular when the task is objective. When attitudes are *central or vested*, the ingroup majority should obtain more influence, in particular in subjective tasks, because shared identity calls for conformity (Alvaro & Crano, 1997, Study 3). However, given that the group serves an important social identity function, when the ingroup minority does not threaten the existence of the group, a tacit *leniency contract* allows targets to be open-minded

toward the minority and keep considering it as ingroup (Crano, 2010). Although targets are reluctant to be identified with the minority, they are also reluctant to reject an ingroup and therefore elaborate upon minority views, which results in indirect influence, in particular when the persuasive arguments are strong and the nature of the task is subjective (Alvaro & Crano, 1997, Study 1). Finally, this model contends that outgroups are generally derogated and will not have any influence. However, if the outgroup is viewed positively or at least nonnegatively and its message is strong, it may have an effect, albeit a delayed one (Crano, 2000).

Conflict Elaboration Theory

Conflict elaboration theory (CET; Pérez & Mugny, 1993, 1996) is a metatheory that focuses on an integrative notion referring to the meaning of divergence in different tasks: *conflict elaboration*. It distinguishes four kinds of tasks depending on underlying lay epistemic knowledge. In *objective nonambiguous tasks* (as in Asch's or Moscovici's paradigms), in which error relevance predominates, targets expect unanimity. CET predicts that mere yielding will follow from a divergence with a majority because it is the easiest way to restore consensus; conversely, the impossibility to yield to a minority leaves unresolved the question why consensus is not reached and calls for object processing. However—and this is an original prediction of this theory—as unanimity is an epistemic requirement, if yielding is impeded (e.g., the source is derogated and presented as victim of optical illusions), divergence is elaborated at a latent level to produce the necessary unanimity (majority conversion), whereas conversion is no longer observed with minorities (Brandstätter et al., 1991; for a review, see Quiamzade, Mugny, Falomir-Pichastor, & Butera, 2010).

Aptitudes tasks are tasks in which correct solutions exist but are not easily identified among the various incorrect answers (e.g., problem solving). Uncertainty is then high and dissent most plausible. Personal identity stakes are high because the main concern is one's level of competence, with wrong answers indicating incompetence. The main factors affecting conflict elaboration are the source's as well as the target's competence level, and the salience of identity threat (Quiamzade, Mugny, & Butera, 2014). Dissent with competent sources (as majorities or experts are believed to be) is often threatening for incompetent targets and resolved through mere imitation, unless the threat is relieved by contextual factors (Buchs, Butera, Mugny, & Darnon, 2004). It is also threatening for competent targets, whose competence is challenged by the source's equal competence and impedes influence; however, the reduction of threat (e.g., through self-affirmation) allows influence to appear (Quiamzade & Mugny, 2009). The divergence with incompetent sources (as minorities or nonexperts are expected to be) leads most

probably to the overt rejection of its a priori wrong answers. However, for incompetent targets, fear of self-invalidity is increased, resulting in deep task processing, divergent thinking, and constructivism, specifically when task representation calls for decentering, a context that is favorable to minority (Butera, Mugny, Legrenzi, & Pérez, 1996) and nonexpert sources (Quiamzade, Mugny, & Darnon, 2009).

Opinions tasks include values and ideologies and are more akin to Moscovici's general model of social change (see section "The Rise of Minority Influence Research"). Conflict elaboration is shaped by the concern to maintain ingroup agreement and outgroup disagreement (Turner, 1991), and avoidance of negative attributes to the self (Tajfel & Turner, 1986). Majorities here induce dynamics based on positive identification, whereas minority influence follows the logic described in dissociation theory. Finally, in *socially nonimplicating* tasks, error relevance and social anchoring are the lowest. Social interactions would then be guided by conflict avoidance and by the use of available heuristics attached to source characteristics.

Extensions and Applications

In this section, we report a series of studies that have contributed to research on minority influence by extending the work conducted on some specific mechanisms or studying specific minority groups.

Specific Mechanisms

Several studies have attempted to uncover specific mechanisms that may enrich minority influence research. We present them as a function of whether they address intraindividual, intragroup, or intergroup mechanisms (Doise, 1986).

Intraindividual Mechanisms

Tormala, DeSensi, and Petty (2007) proposed a metacognitive perspective to explain minority conversion. They suggested that immediate, direct, and public opposition to minority influence may result in targets' negative appraisals of their resistance when they perceive they have resisted simply because of the source's minority status. In this case, targets would conceive their resistance as illegitimate, which may decrease attitude certainty. For instance, undergraduate students were led to believe that either a large majority (86 percent) or a small minority (14 percent) of students supported a new policy under consideration at their university. Results showed more agreement with this policy in the majority condition but a lower attitude certainty in the minority condition (Study

1), a pattern specific to conditions in which participants perceived they had resisted because of the minority source status and believed this was illegitimate (Study 2). Moreover, participants who perceived their resistance as illegitimate showed reduced attitude certainty and were more vulnerable to subsequent persuasion attempts.

Follow-up studies addressed this issue from an expectancy-violation approach (Tormala & DeSensi, 2009) and demonstrated that attitude certainty increases when source status (majority or minority) matches rather than mismatches perceived argument quality. Regarding minority sources, they reasoned that resistance to influence should decrease attitude certainty, in particular when the minority presents strong arguments, against expectations. Conversely, a minority source that presents, as expected, weak arguments, increases attitude certainty. Similarly, attitude certainty decreases with a majority when persuasive arguments are unexpectedly weak.

Finally, Horcajo, Petty, and Briñol (2010) examined the possibility that the majority versus minority source status can not only influence traditional influence outcomes but also the confidence with which people hold their thoughts in response to the persuasive message. Indeed, source status would validate source position when source information precedes the message, whereas source status would validate recipients' cognitive response when source information follows the message. Accordingly, when source information was presented before the persuasive message, a pattern consistent with conversion was observed: Participants' cognitive elaboration of persuasive information was higher (i.e., an argument quality effect) in the minority condition than in the majority condition (Study 2). This finding suggests that the majority status provided anticipatory validity to the source's position, which decreased the need for further information processing, whereas minority status did not validate the source's position, and participants had to engage in effortful thinking in order to validate it (i.e., a conversion effect). A different pattern emerged when source status was induced after the persuasive message (Study 1), where participants' cognitive elaboration of persuasive information was higher in the majority condition than in the minority condition (see also Horcajo, Briñol, & Petty, 2014).

Intragroup Mechanisms

Two lines of research represent an extension of minority influence research in that they study the change occurring within the minority group, as opposed to previous research that focused on the change occurring in the targets of minority influence. Prislin and her colleagues (see Prislin & Christensen, 2009, for a review) studied the minority's reactions to gained majority status in terms of identification to the group. In a series of five studies, a participant was part of one of two interacting groups, a majority or a minority, in which the others members were confederates. The two groups debated important social issues, and either all confederates maintained their initial positions—leaving the majority-

minority composition unaltered—or some confederates moved to the opposite position—turning the majority group into minority, and the minority into majority. Results revealed that when group composition remained stable, group identification (operationalized as attraction to the group and self-group similarity) was higher for participants in the majority than for those in the minority group. When group composition changed, participants who were in the majority and found themselves in the minority at the end of the debate logically displayed lower group identification than participants in the stable majority condition. However, and most interestingly, although it is assumed that minority groups strive to gain new members and become majorities, participants who were in the minority and found themselves in the majority at the end of the debate did not display any increased group identification. Prislin, Levine, and Christensen (2006) explained this paradox by showing that, even if the minority's goal is to convert their targets, new converts remain suspect, as their reliability needs to be proven.

A complementary line of research, also concerned with changes in group processes following minority influence, studied the effects of the lack of recognition of the minority's role in social change, a phenomenon called "social cryptomnesia" that frequently occurs after the successful influence of minority groups (Mugny & Pérez, 1989). Although this phenomenon has been documented, Butera, Levine, and Vernet (2009) remarked that it was not known what the consequences are for minority groups: Are they satisfied by their success, even if they are not recognized, or, on the contrary, are they motivated to continue the struggle?

In an experimental study, these authors confronted two participants with four confederates who fiercely opposed their point of view in a political debate, and measured the participants' attitudes before, during, and after the interaction. At the end of the discussion, in a first condition the four confederates remained an opposing majority; in a second condition, they changed their point of view and adopted that of the minority, and the experimenter praised the minority for changing the majority's attitude; in a third condition, which corresponds to social cryptomnesia, the confederates changed their point of view and adopted that of the minority, but the experimenter praised the majority for their interesting ideas. The results revealed that the social cryptomnesia condition led the minority members to a more pronounced tendency to prepare for more action than the two other conditions. Participants in the social cryptomnesia condition displayed higher attitudinal consistency and maintained their attitude strength high across the three measurement points, whereas participants in the two other conditions at the end lowered their attitude level with the topic they had been defending. In sum, minorities' goal is not only to convert the majority but also to be gratified for this conversion as a group. When their contribution is overlooked, minorities are motivated to remain active.

Intergroup Mechanisms

Active minorities have been the focus of research on minority influence since its inception, as discussed in the first part of this chapter. However, Moscovici and Pérez (2009) noted that in the past 20 years intergroup relations between minorities and majorities have changed. Whereas until the 1990s minorities used to be in a relationship of antagonism with majorities and presented themselves as a source of counterpower (Mugny, 1982), according to the historical analysis of Moscovici and Pérez, in more recent times minorities have turned to a different strategy in their claims: They present themselves as victims and aim at inducing some level of social guilt in the majority. Thus, these authors devised a line of research that allows moving from the study of political relations between majorities and minorities to the study of ethical relations.

In their experiments (Moscovici & Pérez, 2007), participants read a text on the persecutions that Gypsies had to endure in the course of the centuries. In the victimized minority condition, the text was attributed to a Gypsy association and ended with a request for compensation from the State in recognition of past sufferings; in the active minority condition, the text was attributed to a Gypsy political party and ended with a call to mobilize and fight to change society. A thought-listing task revealed that indeed the victimized minority elicited more thoughts related to compensation, suffering, and injustice, whereas the active minority elicited more thoughts related to struggle, conflict, and courage. Finally, two scales measured manifest influence (overt items requesting compensations and resources for Gypsies) as well as latent influence (with items referring to latent racism toward Gypsies). Results revealed that victimized minorities elicited more positive manifest attitudes (in terms of compensation), whereas active minorities elicited more latent influence. In sum, although these findings replicate the classic effect that an active minority may produce latent change, they also reveal that the effect of victimized minorities may be limited to manifest influence.

These results have been extended by a line of research that has studied social guilt through the “guilt for social cryptomnesia,” with a view to improving the attitudes toward militant active minorities. In a first experiment, Vernet, Vala, Amâncio, and Butera (2009) asked female participants to express their attitudes toward women’s rights and feminist militant groups. Then, participants had to compare their responses to the two scales and —as all of them had a much higher score for women’s rights than for feminist groups, that is, the social cryptomnesia effect—the experimenter induced collective guilt: He reminded that feminist militant groups were in fact the very movements that allowed women’s rights to gradually penetrate society, and he pointed out that the lack of recognition that the participants just displayed was unfair. Such a conscientization procedure (building some consciousness about social problems; Vernet et al., 2009) thus consisted in making the participants aware of the unjust treatment that they exerted on

minority groups. However, creating a conflict may be threatening and block attitude change, and the conscientization came in two kinds, either threatening (the participants' social cryptomnesia was attributed to discrimination) or nonthreatening (it was attributed to mere forgetting), plus a control condition without conscientization. The results showed that in the nonthreatening condition, the conscientization procedure (eliciting guilt for social cryptomnesia) resulted in a more positive change in manifest attitudes toward feminist groups than in the two other conditions. In sum, this research corroborates Moscovici and Pérez's (2009) idea that guilt may be used to induce majority members to grant the minority some resources (in the present research, symbolic recognition); moreover, it specifies that the induction of guilt is a double-edged sword that may hinder social influence when it is too threatening.

Specific Minority Groups

Several authors have directly or indirectly applied the knowledge derived from minority influence research to study specific minority groups or social phenomena in which minorities intervene. Although many studies have emerged in recent years (see Butera & Levine, 2009), the majority of them are in the domains of politics and work.

Political Groups

A direct application of minority influence to an important phenomenon is Chen and Kruglanski's (2009) essay on "terrorism as a tactic of minority influence." These authors propose that the framework of minority influence may be useful to understand what gives power to terrorist movements and at which conditions such movements may fulfill their goals. The first element of their analysis is that terrorism provides some power to an otherwise powerless minority. As argued for pacific minorities (Mugny, 1982), minorities may find ways to exert a certain power. Terrorism, with its ability to create great damage with small means, affords such power to minority groups. Second, terrorism may be considered a form of innovation, another crucial factor in minority influence (Moscovici, 1980). Over the last decades, terrorist groups have displayed a certain level of "innovativeness" in the forms of violence they exert, in the type of targets they choose, and in the norms and taboos that they violate, which contributed to creating an atmosphere of terror. The parallel with minority influence also helps to understand under which conditions terrorist groups may reach their goals. Chen and Kruglanski's analysis first points to consistency and internal coherence (Moscovici & Lage, 1976), as they "convey the image that the minority is committed, undeterred, unwavering, and resolute. These features are part and parcel of the terrorist strategy" (Chen & Kruglanski, 2009, p. 209). As for the zeitgeist, although Pérez, Papastamou, and Mugny (1994) have noted that minorities are most effective when their claims are congruent with the majority's values,

norms, and goals, Chen and Kruglanski note that terrorist actions may be in stark contrast with the zeitgeist of the ruling majority, but aligned with that of a dominated minority, such as in the case of groups fighting for oppressed populations. Although classic minority influence research has provided a key to analyze the action of pacific, albeit conflictual minority groups, this essay proves to be useful to understand the action of extreme and violent groups, a particularly valuable endeavor in recent times.

Another line of research investigated an interesting phenomenon that previous minority influence research had not considered: schisms (Sani, 2005). Indeed, a strong emphasis on attitude and behavioral change has led scholars in this area to focus on the minority's success and failure in changing the majority, concluding that change indicated influence and no change the absence of influence. However, it is possible that a failure in minority influence results nevertheless in social change. This phenomenon appears when a minority faction, after attempting in vain to convert the majority, decides to secede from the larger group and create an autonomous and distinct group. Sani (2005) has worked on two historically important schisms, namely that of the Italian Communist Party and that of the Church of England, and has developed a model that identifies the important factors regulating such a phenomenon. When a faction in a group develops the perception that the group's social identity has been subverted by new rules, practices, or norms, then negative emotions emerge, group entitativity decreases, and identification to the group is reduced. As negative emotions increase and identification decreases, schismatic intentions increase. In other words, the impossibility to influence the majority leads the minority to lose a sense of belonging to the larger group as well as a discomfort with membership, which in turn heightens the likelihood for this faction to leave the group.

Work Groups

Another area in which minority influence research has been applied is work and organizational psychology, in particular with the aim to understand team innovation. In their seminal article, Schulz-Hardt, Frey, Lüthgens, and Moscovici (2000) had shown that introducing a dissenting minority within work groups (among which groups of managers) resulted in the reduction of confirmation bias in exposure to information. Interestingly, this was the case when the minority remained consistent in its dissent throughout the task in accordance with early work on minority influence. Along the same lines, De Dreu and West (2001) showed that teams benefit from minority dissent in terms of emergence of innovative ideas, when participation in decision making is high and allows implementation of ideas.

Among these streams of research, Choi and Levine (2004) proposed that a very common event in the life of teams, namely the arrival of a newcomer, can be interpreted as a form of minority influence. In their experiment, a three-person team either chose or was

assigned a task strategy, and either succeeded at its task or failed. At the end of the work shift, one member was replaced by a newcomer (in fact, a confederate) who proposed a new strategy. Results showed that the newcomer influenced the team, especially when the members were assigned their strategy and had failed. Interestingly, in another experiment with a similar paradigm, Hansen and Levine (2009) showed that a newcomer is particularly influential when his or her behavioral style is consistent and assertive, in line with early minority influence research.

Conclusion

The present chapter has begun with an historical journey through the rise and development of minority influence research. We have discussed the societal and theoretical interest of conceiving that minorities may achieve some social change, as well as the mechanisms that facilitate and hinder such change. This research has been highly controversial and has elicited fierce opposition. We have shown, however, that most of the controversies that have animated this field can be reconciled by building predictive models that integrate the relevant factors accounting for when and why (and at which level) minority influence may occur. The result is an extremely rich theoretical corpus that allows a fine-grained analysis of the social contexts that allow, or not, the emergence of minority and majority influence, and of the mechanisms involved in multiple influence processes. With such a corpus, minority influence researchers are today well equipped to engage in at least two categories of future directions.

First, minority influence has blossomed at the end of the 1960s, in times of great social unrest, when active minorities were concerned with social justice and social rights issues, when ideals such as gender equality, antiracism, peace, and ecology were some of the driving forces of those minorities. The work conducted on minority influence is today sufficiently refined to apply its findings to emerging minority phenomena. A wealth of movements are currently asking for change in the domain of culture (e.g., the lesbian, gay, bisexual, and transgender movement), economy (e.g., the Tobin Tax initiative), and politics (e.g., antifascist movements in several European countries), fighting with the traditional toolbox of minority movements, that is, with conflict and consistency. However, drawing on Moscovici and Pérez's (2007) distinction between active and victimized minorities, other movements, even if their tactics rely on inducing guilt in the majority (e.g., the movements that oppose or facilitate the unprecedented wave of immigration that Europe is facing as we write), may be worth investigating within the framework of minority influence. In sum, minority influence research is "mature" enough to take up the challenge of studying new forms of minority influence.

Second, it should be acknowledged that in recent years, the analysis of the diversity of social movements has been conducted by sociology, political sciences, geography, and demography; social psychology might profit from joining forces with the other disciplines in an interdisciplinary effort to understand the new trends in minority action. Some attempts have already been made to articulate social psychology with other disciplines to reach a more elaborate understanding of social movements, such as the edited volume by Klandermans and Roggeband (2007); it is now time for minority influence research to integrate the knowledge derived by other disciplines directly into its models and to realize the interconnection of levels of explanation called upon by Doise (1986). This call for more interdisciplinarity in the study of minority influence is not only aimed at encompassing a greater range of phenomena but also at probing the existing models against a wider variety of minorities, which may result in bringing researchers to study new dynamics and mechanisms.

Acknowledgments

This work was supported by the Swiss National Science Foundation.

References

Alvaro, E. M., & Crano, W. D. (1997). Indirect minority influence: Evidence for leniency in source evaluation and counterargumentation. *Journal of Personality and Social Psychology*, *72*, 949–964.

Baker, S. M., & Petty, R. E. (1994). Majority and minority influence: Source–position imbalance as a determinant of message scrutiny. *Journal of Personality and Social Psychology*, *67*, 5–19.

Bond, R. (2005). Group size and conformity. *Group Processes & Intergroup Relations*, *8*, 331–354.

Brandstätter, V., Ellemers, N., Gaviria, E., Giosue, F., Huguet, P., Kroon, M., … Pérez, J. A. (1991). Indirect majority and minority influence: An exploratory study. *European Journal of Social Psychology*, *21*, 199–211.

Buchs, C., Butera, F., Mugny, G., & Darnon, C. (2004). Conflict elaboration and cognitive outcomes. *Theory into practice*, *43*, 23–30.

Butera, F., & Levine, J. M. (Eds.). (2009). *Coping with minority status: Responses to exclusion and inclusion*. New York, NY: Cambridge University Press.

Butera F., Levine, J. M., & Vernet, J. P. (2009). Influence without credit: How successful minorities respond to social cyptomnesia. In F. Butera & J. M. Levine (Eds.), *Coping with minority status: Responses to exclusion and inclusion* (pp. 311–332). New York, NY: Cambridge University Press.

Butera, F., Mugny, G., Legrenzi, P., & Pérez, J. A. (1996). Majority and minority influence, task representation and inductive reasoning. *British Journal of Social Psychology*, *35*, 123–136.

Chen, X., & Kruglanski, A. W. (2009). Terrorism as a tactic of minority influence. In F. Butera & J. M. Levine (Eds.), *Coping with minority status: Responses to exclusion and inclusion* (pp. 202–221). New York, NY: Cambridge University Press.

Choi, H. S., & Levine, J. M. (2004). Minority influence in work teams: The impact of newcomers. *Journal of Experimental Social Psychology*, *40*, 273–280.

Chryssochoou, X., & Volpato, C. (2004). Social influence and the power of minorities: An analysis of the Communist Manifesto. *Social Justice Research*, *17*, 257–388.

Cialdini, R. B., (1984). *Influence: How and why people agree to things*. New York, NY: Morrow.

Crano, W. D. (2000). Social influence: Effects of leniency on majority- and minority-induced focal and indirect attitude change. *Revue Internationale de Psychologie Sociale*, *15*, 89–121.

Crano, W. D. (2010). Majority and minority influence in attitude formation and attitude change: Context/categorization—leniency contract theory. In R. Martin & M. Hewstone (Eds.), *Minority influence and innovation: Antecedents, processes and consequences* (pp. 53–77). Hove, England: Psychology press.

Crano, W. D., & Alvaro, E. M. (1998). The context/comparison model of social influence: Mechanisms, structure, and linkages that underlie indirect attitude change. In W. Stroebe, M. Hewstone, W. Stroebe, & M. Hewstone (Eds.), *European review of social psychology* (Vol. *8*, pp. 175–202). Hoboken, NJ: John Wiley & Sons Inc.

Crespi, F., & Mucchi-Faina, A. (1988). *Le strategie delle minoranze attive*. Napoli: Liguori.

David, B., & Turner, J. C. (1996). Studies in self-categorization and minority conversion: Is being a member of the outgroup an advantage? *British Journal of Social Psychology, 35*, 179–199.

David, B., & Turner, J. C. (1999). Studies in self-categorization and minority conversion: The ingroup minority in intragroup and intergroup contexts. *British Journal of Social Psychology*, *38*, 115–134.

De Dreu, C. K. W., & De Vries, N. K. (1993). Numerical support, information processing and attitude change. *European Journal of Social Psychology*, *23*, 647–663.

De Dreu, C. K. W., & West, M. A. (2001). Minority dissent and team innovation: The importance of participation in decision making. *Journal of Applied Psychology*, *86*, 1191–1201.

De Vries, N. K., De Dreu, C. K. W., Gordijn, E., & Schuurman, M. (1996). Majority and minority influence: A dual role interpretation. In W. Stroebe & M. Hewstone (Eds.), *European review of social psychology* (Vol. 7, pp 145–172). Chichester, England: John Wiley and Sons.

Deutsch, M., & Gerard, H. B. (1955). A study of normative and informational social influence upon individual judgment. *Journal of Abnormal and Social Psychology*, *51*, 629–636.

Doise, W. (1986). *Levels of explanation in social psychology*. Cambridge, England: Cambridge University Press.

Doms, M., & Van Avermaet, E. (1980). Majority influence, minority influence and conversion behavior: A replication. *Journal of Experimental Social Psychology*, *16*, 283–292.

Eagly, A. H., & Chaiken, S. (1993). *The psychology of attitudes*. Fort Worth, TX: Harcourt Brace Jovanovitch.

Erb, H.-P., Bohner, G., Rank, S., & Einwiller, S. (2002). Processing minority and majority communications: The role of conflict with prior attitudes. *Personality and Social Psychology Bulletin*, *28*, 1172–1182.

Falomir-Pichastor, J. M., Mugny, G., Gabarrot, F., & Quiamzade, A. (2011). A regulatory fit perspective in majority versus minority support to attitudes towards homosexuals. *Group Processes and Intergroup Relations*, *14*, 45–62.

Falomir-Pichastor, J. M., Mugny, G., Quiamzade, A., & Gabarrot, F. (2008). Motivations underlying attitudes: Regulatory focus and majority versus minority support. *European Journal of Social Psychology*, *38*, 587–600.

Festinger, L. (1950). Informal social communication. *Psychological Review*, *57*, 71–282.

Hansen, T., & Levine, J. M. (2009). Newcomers as change agents: Effects of newcomers' behavioral style and teams' performance optimism. *Social Influence*, *4*, 46–61.

Harkins, S. G., & Petty, R. E. (1987). Information utility and the multiple source effect. *Journal of Personality and Social Psychology*, *52*, 260–268.

Higgins, E. T. (1997). Beyond pleasure and pain. *American Psychologist*, *52*, 1280–1300.

Horcajo, J., Briñol, P., & Petty, R. E. (2014). Multiple roles for majority versus minority source status on persuasion when source status follows the message. *Social Influence*, *9*, 37–51.

Horcajo, J., Petty, R. E., & Briñol, P. (2010). The effects of majority versus minority source status on persuasion: A self-validation analysis. *Journal of Personality and Social Psychology*, *99*, 498–512.

Kelman, H. C. (1958). Compliance, identification and internalisation: Three processes of opinion change. *Journal of Conflict Resolution*, *2*, 51–60.

Klandermans, B., & Roggeband, C. (Eds.) (2007). *Handbook of social movements across disciplines*. New York, NY: Springer.

Latané, B., & Wolf, S. (1981). The social impact of majorities and minorities. *Psychological Review*, *88*, 438–453.

Mackie, D. M. (1987). Systematic and nonsystematic processing of majority and minority persuasive communications. *Journal of Personality and Social Psychology*, *53*, 41–52.

Martin, R. (1988). Minority influence and social categorization: A replication. *European Journal of Social Psychology*, *18*, 369–373.

Martin, R. (1995). Majority and minority influence using the afterimage paradigm: A replication with an unambiguous blue slide. *European Journal of Social Psychology*, *25*, 373–381.

Martin, R. (1998). Majority and minority influence using the afterimage paradigm: A series of attempted replications. *Journal of Experimental Social Psychology*, *34*, 1–26.

Martin, R., & Hewstone, M. (2001). Afterthought on afterimages: A review of the afterimage paradigm in majority and minority influence research. In C. K. W. De Dreu & N. K. De Vries (Eds.), *Group Consensus and Minority Influence: Implications for Innovation* (pp. 15–39). Oxford, England: Blackwell.

Martin, R., & Hewstone, M. (2003). Majority versus minority influence: When, not whether, source status instigates heuristic or systematic processing. *European Journal of Social Psychology*, *33*, 313–330.

Martin, R., & Hewstone, M. (2008). Majority versus minority influence, message processing and attitude change: The source-context-elaboration model. In M. P. Zanna & M. P. Zanna (Eds.), *Advances in experimental social psychology* (Vol. *40*, pp. 237–326). San Diego, CA: Elsevier Academic Press.

Martin, R., Hewstone, M., & Martin, P. Y. (2003). Resistance to persuasive messages as a function of majority and minority source status. *Journal of Experimental Social Psychology*, *39*, 585–593.

Martin, R., Hewstone, M., & Martin, P. Y. (2007). Systematic and heuristic processing of majority- and minority-endorsed messages: The effects of varying outcome relevance and levels of orientation on attitude and message processing. *Personality and Social Psychology Bulletin*, *33*, 43–56.

Martin, R., Hewstone M., & Martin, P. Y. (2010). Consequences of attitudes changed by minority influence. In R. Martin & M. Hewstone (Eds.), *Minority influence. Antecedents, processes and consequences* (pp. 175–200). New York, NY: Psychology Press.

Martin, R., Hewstone, M., Martin, P. Y., & Gardikiotis, A. (2008). Persuasion from majority and minority groups. In W. Crano & R. Prislin (Eds.), *Attitudes and Attitude Change* (pp. 361–384). New York, NY: Psychology Press.

Martin, R., Martin, P. Y., Smith, J. R., & Hewstone, M. (2007). Majority versus minority influence and prediction of behavioral intentions and behavior. *Journal of Experimental Social Psychology*, *43*, 763–771.

Moscovici, S. (1976). *Social influence and social change*. London: Academic Press.

Moscovici, S. (1980). Toward a theory of conversion behaviour. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. *13*, pp. 209–239). New York, NY: Academic Press.

Moscovici, S. (1996). Foreword: Just remembering. *British Journal of Social Psychology*, *35*, 5–14.

Moscovici, S., & Lage, E. (1976). Studies in social influence III: Majority versus minority influence in a group. *European Journal of Social Psychology*, *6*, 149–174.

Moscovici, S., Lage, E., & Naffrechoux, M. (1969). Influence of a consistent minority on the responses of a majority in a color perception task. *Sociometry*, *32*, 365–380.

Moscovici, S., & Pérez, J. A. (2007). A study of minorities as victims. *European Journal of Social Psychology*, *37*, 725–746.

Moscovici, S., & Pérez, J. A. (2009). A new representation of minorities as victims. In F. Butera & J. M. Levine (Eds.), *Coping with minority status: Responses to exclusion and inclusion* (pp. 311–332). New York, NY: Cambridge University Press.

Moscovici, S., & Personnaz, B. (1980). Studies in social influence V: Minority influence and conversion behavior in a perceptual task. *Journal of Experimental Social Psychology*, *16*, 270–282.

Mucchi Faina, A., & Pagliaro, S. (2008). Minority influence: The role of ambivalence toward the source. *European Journal of Social Psychology*, *38*, 612–623.

Mugny, G. (1975). Negotiations, image of the other and the process of minority influence. *European Journal of Social Psychology*, *5*, 209–228.

Mugny, G. (1982). *The power of minorities*. London, England: Academic Press.

Mugny, G. (1984). Compliance, conversion and the Asch paradigm. *European Journal of Social Psychology*, *14*, 353–368.

Mugny, G., Ibáñez, T., Elejabarrieta, F., Iniguez, L., & Pérez, J. A. (1986). Conflicto, identificacion y poder en la influencia minoritaria. *Revista de Psicologia Social*, *1*, 39–56.

Mugny, G., Kaiser, C., & Papastamou, S. (1983). Influence minoritaire, identification et relations entre groupes: étude expérimentale autour d’une votation. *Cahiers de Psychologie Sociale*, *19*, 1–30.

Mugny, G., Kaiser, C., Papastamou, S., & Pérez, J. A. (1984). Intergroup relations, identification and social influence. *British Journal of Social Psychology*, *23*, 317–322.

Mugny, G., & Papastamou, S. (1980). When rigidity does not fail: Individualization and psychologization as resistances to the diffusion of minority innovations. *European Journal of Social Psychology*, *10*, 43–61.

Mugny, G., & Papastamou, S. (1982). Minority influence and psycho-social identity. *European Journal of Social Psychology*, *12*, 379–394.

Mugny, G., & Pérez, J. A. (1989). L’influence sociale comme processus de changement. *Hermès*, *5–6*, 227–236.

Mugny, G., & Pérez, J. A. (1991). *The social psychology of minority influence*. Cambridge, England: Cambridge University Press.

Mullen, B. (1983). Operationalizing the effect of the group on the individual: A self-attention perspective. *Journal of Experimental Social Psychology*, *19*, 295–322.

Nemeth, C. J. (1986). Differential contributions of majority and minority influence. *Psychological Review*, *93*, 23–32.

Nemeth, C. J. (2003). Minority dissent and its « hidden » benefits. *New Review of Social Psychology*, *2*, 21–28.

Nemeth, C. J. (2012) Minority influence theory. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories in social psychology* (Vol *2*, pp. 362–378). New York, NY: Sage.

Nemeth, C., & Chiles, C. (1988). Modelling courage: The role of dissent in fostering independence. *European Journal of Social Psychology*, *18*, 275–280.

Nemeth, C., Swedlund, M., & Kanki, B. (1974). Patterning of the minority´s responses and their influence on the majority. *European Journal of Social Psychology*, *4*, 53–64.

Nemeth, C. J., & Wachtler, J. (1983). Creative problem solving as a result of majority vs minority influence. *European Journal of Social Psychology*, *13*, 45–55.

Papastamou, S., & Mugny, G. (1985). Rigidity and minority influence: The influence of the social in social influence. In S. Moscovici, G. Mugny, & E. van Avermaet (Eds.), *Perspectives on minority influence* (pp. 113–136). Cambridge, England: Cambridge University Press.

Pérez, J. A., & Mugny, G. (1985). Influencia minoritaria sobre las opiniones frente al aborto y los anticonceptivos. *Estudios de Psicologia*, *23/24*, 29–54.

Pérez, J. A., & Mugny, G. (1989). Discrimination et conversion dans l’influence minoritaire. In J.-L. Beauvois, R.-V. Joule, & J.-M. Monteil (Eds.), *Perspectives cognitives et conduites sociales* (Vol. *2*, pp. 47–66). Cousset: Delval.

Pérez, J. A., & Mugny, G. (1993). *Influences sociales: la théorie de l'élaboration du conflit*. Neuchâtel, Paris: Delachaux et Niestlé.

Pérez, J. A., & Mugny, G. (1996). The conflict elaboration theory of social influence. In E. Witte & J. Davis (Eds.), *Understanding group behavior, Small group processes and interpersonal relations* (Vol. *2*, pp. 191–210). Mahwah, NJ: Lawrence Erlbaum.

Pérez, J. A., Papastamou, S., & Mugny, G. (1994). Zeitgeist and minority influence—where is the causality: A comment on Clark. *European Journal of Social Psychology*, *25*, 703–710.

Personnaz, B., & Guillon, M. (1985). Conflict and conversion. In S. Moscovici, G. Mugny, & E. Van Avermaet (Eds.), *Perspectives on minority influence*. Cambridge, England: Cambridge University Press.

Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (Vol. *19*, pp. 123–205). New York, NY: Academic Press.

Petty, R. E., Fleming, M. A., & White, P. H. (1999). Stigmatized sources and persuasion: Prejudice as a determinant of argument scrutiny. *Journal of Personality and Social Psychology*, *76*, 19–34.

Prislin, R., & Christensen, P. N. (2009). Influence and its aftermath: Motives for agreement among minorities and majorities. In F. Butera & J. M. Levine (Eds.), *Coping with Minority Status: Responses to exclusion and inclusion* (pp. 82–103). New York, NY: Cambridge University Press.

Prislin, R., Levine, J. M., & Christensen, P. N. (2006). When reasons matter: Quality of support affects reactions to increasing and consistent agreement. *Journal of Experimental Social Psychology*, *42*, 593–601.

Quiamzade, A., & Mugny, G. (2009). Social influence and threat in confrontations between competent peers. *Journal of Personality and Social Psychology*, *97*, 652–666.

Quiamzade, A., Mugny, G., & Butera, F. (2014). *Psychologie sociale de la connaissance. Etayage expérimental*. Grenoble: Presses Universitaires de Grenoble.

Quiamzade, A., Mugny, G., & Darnon, C. (2009). The coordination of problem solving strategies: When low competence sources exert more influence than high competence sources. *British Journal of Social Psychology*, *48*, 159–182.

Quiamzade, A., Mugny, G., Falomir-Pichastor, J. M., & Butera, F. (2010). The complexity of majority and minority influence processes. In R. Martin & M. Hewstone (Eds.), *Minority influence and innovation: Antecedents, processes and consequences* (pp. 21–52). Hove, England: Psychology Press.

Quiamzade, A., Mugny, G., Falomir-Pichastor, J. M., & Pérez, J. A. (in press). Multiple categorizations and minority influence: An integration of dissociation and self-categorization theories. In S. Papastamou, A. Gardikiotis, & G. Prodromitis (Eds.). *Majority and minority influence: Societal meaning and cognitive elaboration.* Abingdon, England: Routledge.

Sani, F. (2005). When subgroups secede: Extending and refining the social psychological model of schisms in groups. *Personality and Social Psychology Bulletin*, *31*, 1074–1086.

Schachter, S. (1951). Deviation, rejection, and communication. *Journal of Abnormal and Social Psychology*, *46*, 190–207.

Schulz-Hardt, S., Frey, D., Lüthgens, C., & Moscovici, S. (2000). Biased information search in group decision making. *Journal of Personality and Social Psychology*, *78*, 655–669.

Schuurman, M., Siero, F. W., De Dreu, C. K. W., & Buunk, A. P. (1995). Differentiële verwerking van numerieke steun. In N. K. De Vries, N. E. Ellemers, R. Vonk, & C. K. W. De Dreu (Eds.), *Fundamentele sociale psychologie* (Vol. *9*, pp. 1–9). Tilburg, The Netherlands: Tilburg University Press.

Sorrentino, R. M., King, G., & Leo, G. (1980). The influence of the minority on perception: Anote on a possible alternative explanation. *Journal of Experimental Social Psychology*, *16*, 293–301.

Souchet, L., Tafani, E., Codaccioni, C., & Mugny, G. (2006). Influence sociale selon le statut numérique et l'appartenance de la source: auto-catégorisation et élaboration du conflit. *Revue Internationale de Psychologie Sociale*, *19*, 35–67.

Tafani, E., Souchet, L., Codaccioni, C., & Mugny, G. (2003). Influences majoritaire et minoritaire sur la représentation sociale de la drogue. *Nouvelle Revue de Psychologie Sociale*, *2*, 343–354.

Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behaviour. In S. Worchel & W. G. Austin (Eds.), *Psychology of intergroup relations* (*2nd ed.*, pp. 7–24). Chicago, IL: Nelson-Hall.

Tanford, S., & Penrod, S. (1984). Social Influence Model: A formal integration of research on majority and minority influence processes. *Psychological Bulletin*, *95*, 189–225. doi: 10.1037/0033-2909.95.2.189.

Tormala, Z. L., & DeSensi, V. L. (2009). The effects of minority/majority source status on attitude certainty: A matching perspective. *Personality and Social Psychology Bulletin*, *35*, 114–125.

Tormala, Z. L., DeSensi, V. L., & Petty, R. E. (2007). Resisting persuasion by illegitimate means: A metacognitive perspective on minority influence. *Personality and Social Psychology Bulletin*, *33*, 354–367.

Turner, J. C. (1991). *Social influence*. Pacific Grove, CA: Brooks Cole.

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford: Blackwell.

Vernet, J. P., Vala, J., Amâncio, L., & Butera, F. (2009). Conscientization of social cryptomnesia reduces hostile sexism and rejection of feminists. *Social Psychology*, *40*, 130–137.

Wolf, S. (1979). Behavioural style and group cohesiveness as sources of minority influence. *European Journal of Social Psychology*, *9*, 381–395.

Wood, W., Lundgren, S., Ouellette, J. A., Busceme, S., & Blackstone, T. (1994). Minority influence: A meta-analytic review of social influence processes. *Psychological Bulletin*, *115*, 323–345.

Fabrizio Butera

University of Lausanne

Juan Manuel Falomir-Pichastor

University of Geneva

Gabriel Mugny

University of Geneva

Alain Quiamzade

University of Geneva