Social Sharing of Emotion:

New Evidence and New Questions

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Abstract

Rimé, Philippot, Boca, and Mesquita (1992) showed that most emotional experiences are shared with others shortly after they occurred. They proposed that social sharing represents an integral part of emotional experiences. The present chapter examines the generalizability of the phenomenon across various research procedures that overcome the limits of previous studies. Existing findings are extended to children and older populations, and individual and cultural differences are considered. Furthermore, the role of the intensity of the emotion and its relation with extent of social sharing is investigated. The chapter then addresses the contribution of social sharing to emotional recovery. Given that findings were generally not consistent with the view that sharing alleviates the memory of the shared emotional experience, the chapter discusses alternative potential effects and functions of social sharing.

Introduction

In a previous chapter of the European Review of Social Psychology, Rimé, Philippot, Boca, and Mesquita (1992) stressed that traumatic situations (such as catastrophes, war, or torture) and major negative life events (such as the sudden death of a close person, a serious accident, sudden illness, or invalidity) usually elicit mental reminiscences. These reminiscences typically consist of so-called mental ruminations in which thoughts, memories, or mental images related to the event repetitively surface into consciousness, even if the individual tries to avoid them (Martin & Tesser, 1989; Tait & Silver, 1989). Mental rumination is generally considered as resulting from the sudden disruption that such events bring about in the person's subjective world. According to some (Martin & Tesser, 1989), mental rumination originates in the disruption of goal-oriented processes. According to others (Tait & Silver, 1989), mental rumination should rather be attributed to a sudden invalidation of the individual's basic beliefs and to a threat to the self-concept. Rimé et al. (1992) pointed out that these intrapersonal reminiscences are generally paralleled by interpersonal phenomena, equally likely to result from the disruptive character of the event. Indeed, people who have been exposed to traumatic situations or to major negative life events strongly incline to speak about their experience and related feelings with their social environment (e.g., Lehman, Wortman, & Williams, 1987; Mitchell & Glickman, 1977; Schoenberg, Carr, Peretz, Kutscher, & Cherico, 1975). These social reminiscences have been called social sharing of emotions and involve (1) the evocation of the emotion in a socially-shared language, and (2) at least at the symbolic level, some addressee (Rimé, 1987; Rimé, Mesquita, Philippot, & Boca, 1991). In its most common form, social sharing of emotion occurs in the course of conversations in which individuals openly communicate about the emotional circumstances and their feelings and reactions.

Elaborating on these premises, Rimé et al. (1992) argued that the phenomena studied by the psychology of emotion--joy, anger, fear, sadness, shame, and the like--are also characterised by a sudden disruption of people's subjective world. Thus, the cognitive and social reminiscences commonly observed after trauma and major life events should also be observed after everyday life emotional experiences. Emotions were therefore predicted to

generate long-lasting mnemonic recurrences as well as an enduring urge for social sharing. The chapter by Rimé et al. (1992) then consisted of a large review of the initial evidence collected in support of these predictions. This review led to consider that social sharing could play a major role in the processing of the emotional information and hence, in resolving psychological impact of the emotional or stressful event. Five arguments were advanced in favour of such a view. They can briefly be summarised as follows:

(1) Emotions elicit ambiguous sensations. Festinger's (1954) theory of social comparison predicts that when confronted with ambiguous sensations, people search for clarifying information in their social environment. Thus, the ambiguous and often confusing sensations elicited by emotion (Schachter, 1959, 1964) are likely to be clarified and resolved if people share them with members of their social environment.

(2) Emotions are dense and diffuse experiences in need of cognitive articulation. By using language and by talking to someone, people may "unfold" the emotional material, label it, and organise it into sequences conforming to the rules of logical thinking (Rimé, 1983, 1987; Werner & Kaplan, 1967). In this manner, people are able to distance themselves from the emotional event.

(3) Emotions generally challenge the beliefs people hold about themselves, others, and the world (Janoff-Bulman, 1985; Marris, 1958; Parkes, 1972; Tait & Silver, 1989). Social sharing would allow people to work through the emotional experience, facilitating the restoration of beliefs as well as the search for acceptable meaning to the event (e.g. Silver, Boon & Stones, 1983; Silver & Wortman, 1980; Tait & Silver, 1989).

(4) When beliefs are challenged, the basic feeling of security is undermined and people are likely to search for social support and coping assistance. By sharing the emotion with significant members of their social environment, people are able to find external support for their emotional work, facilitating and strengthening their coping attempts (e.g. Thoits, 1984).

(5) Emotions can elicit excessive self-focused attention, and can thus dissociate the person from the social environment. Through the sharing of the emotion, the social environment can acknowledge and understand a state that has been privately experienced, and

can propose socially accepted ways of defining the experience and culturally prescribed forms of management and expression of emotions.

To sum up, our research evolved from the postulate that everyday life emotion and traumatic experiences are not two distinct phenomena. We conceive of trauma as the extremity of a continuum on which emotion is located on a more intermediate position (Philippot & Rimé, in press). Although differing in intensity, we propose that the processes at work in emotion and in trauma are similar in nature and would simply differ in intensity or in extent. This led us to investigate intra- and interpersonal manifestations of information processing commonly observed in trauma in emotion. Our social psychology perspective led us to develop a particular interest for social sharing and for the potential role played by interpersonal processes in coping with emotion. Lay persons widely assume that after emotion, "talking helps" and in clinical psychology one would hardly find an intervention technique which would not consider the verbalisation of emotion in a social framework as beneficial and essential. The review chapter by Rimé et al. (1992) thus concluded that the future task would be to examine the five processes considered above in order to specify their respective contribution to the recovery from the emotional experience. Reporting on these new developments of research on social sharing of emotion should have been the purpose of the present chapter. The vicissitudes of scientific investigation decided otherwise. It is obvious that the project relied entirely upon the presupposition that socially sharing an emotion would contribute to emotional recovery, which means a significant alleviation of the impact the memory of the episode had for the person. However, as will become evident hereafter, this presupposition was generally not supported by our empirical findings.

The new purpose of this chapter is thus to review the developments of the research conducted on the social sharing of emotion since the first chapter was written. We briefly recall the early findings described by Rimé and his colleagues (1992) and review new evidence collected in order to overcome limitations inherent to this early research. The generality of the prediction that an emotion elicits social sharing is then examined in the light of new empirical findings. Subsequently, social sharing of extreme intensity or traumatic emotion is addressed. This will lead us to examine the general question of the relation

between intensity of an emotion and the extent of the related social sharing. Finally, we concentrate on the effects of socially sharing an emotion.

Before closing this introduction, an important caveat should be formulated. This chapter is not the place for a discussion on the role played by emotion in adaptation. Nevertheless, we want to stress that in no way are the views expressed above to be taken as implying that emotion is a "trouble," a "disease," or a "disturbance" of any kind. Emotions play their role in the vicissitudes of adaptation. We view them as essential moments of evolution and growth in the human life span.

Early findings

Data reviewed by Rimé et al. (1992) in support of the prediction that emotion would be socially shared essentially relied upon a "recall" procedure. Respondents were instructed to recall and briefly describe an emotional episode corresponding to a specified basic emotion (e.g., joy, anger, fear...). They then answered questions about their sharing of this episode: Did they talk about the episode with others? With whom? How long after the emotion? How often? (Mesquita, 1993; Rimé, Mesquita, et al., 1991; Rimé, Noël & Philippot, 1991; Vergara, 1993). Eight independent studies based on this procedure (involving 1384 emotional episodes, reported by 913 respondents ranging in age from 12 to 72 years) were reviewed by Rimé et al. (1992) and their findings can be summarised as follows.

Emotional experiences were shared in 88 to 96% of the cases. These proportions were independent of age, gender, or culture -- collected data comprised samples of Belgian, southern French, Dutch, Surinamese, Spanish Basque, and Italian respondents. Moreover, neither the type of basic emotion (fear, anger, joy, sadness) nor the valence of the emotional experience (positive or negative) elicited differences in the proportion of shared episodes. The modal pattern was for an emotion sharing to be initiated early after the episode. It occurred during the day the episode happened in about 60% of the cases across studies. It was repetitive and involved several recipients. Extent of sharing (i.e., number of repetitions, number of recipients) was positively related to the intensity of emotional disruptiveness elicited by the episode. Recipients were essentially intimates. In 89 to 99% of the cases, they

included parents or close family members, best friends, and/or spouse or companion. People not belonging to this circle of intimates were rarely mentioned. The type of recipients varied as a function of age and gender. For adolescents, parents were by far the most frequent recipients for both males and females. Among young adults (18-33 years), the role of family decreased markedly, especially among males. For both genders, spouses or companions as well as best friends emerged as frequent recipients. Among adults (40-60 years), females showed a heterogeneous sharing network privileging the spouse or companion while males often reported the spouse/companion as exclusive sharing recipient. In a large majority of cases (70 to 100%), sharing was accompanied by (a) mental images, (b) bodily sensations, and (c) subjective experience, suggesting that sharing itself elicits an emotion. Paradoxically, people wanted to share their emotions in spite of the negative aspects that may be involved in reactivation. In fact, sharing a negative emotion was usually not labelled as unpleasant. Finally, no correlation was found between extent of sharing and reported recovery from the emotional experience.

Overall thus, the evidence supported the prediction that the vast majority of emotions are socially shared. However, the retrospective character of the recall procedure raises two types of problems. On the one hand, it is vulnerable to selective memory biases. Respondents may have selectively recalled particularly intense or distinct emotional episodes which may have elicited more sharing. Also, shared episodes may be more easily recalled. Thus, findings on the extent and frequency of social sharing of emotions may be unduly inflated. On the other hand, as personal recall is an active constructive and schema-guided process (e.g., Ross, 1989), retrospective reports are particularly vulnerable to reconstruction biases: The longer the interval between the episode and its recall, the greater the risk of reconstruction.

Further studies were aimed at replicating the previous findings with research procedures that decrease memory biases. They involved both naturalistic observations and experimental studies.

Emotions are socially shared:

Further evidence

Three types of research procedures were adopted. Two of them investigated social sharing of emotions in real life. In the "follow-up" procedure, people were contacted immediately after an emotional situation, such as traffic accidents, child birth, or bereavement, and were subsequently recontacted on several occasions. At each follow-up session, they rated items assessing social sharing. Because the emotional event was preselected by the investigators, selective memory biases were eliminated. In the "diary" procedure, participants reported daily about the most important emotional episode of the day. They briefly described the event and then rated event-related social sharing. In this procedure, the interval between the emotional event and its recall was no longer than one day, while in the recall procedure, this interval involved weeks, months, or even years. The diary method thereby considerably reduced the potential impact of reconstructive memory biases. Finally, a laboratory procedure involving the experimental induction of emotion was designed. This procedure obviously avoids both selective and reconstructive memory biases. The following sections will review the procedures as well as their findings.

Follow-up studies

In a first study, victims of traffic, domestic, or work accidents were contacted when first receiving treatment at the hospital and were recontacted six weeks later (Boca, Rimé, & Arcuri, 1992). At this follow-up, they answered questions about event-related social sharing. Consistent with findings based on the recall procedure, participants (1) shared the accident episode in 93% of the cases, (2) did so in the course of the first day (60%), and (3) shared the episode in a repetitive manner--more than twice for 83% and about everyday for no less than 35%.

Six other studies were conducted using this procedure. The target emotional episodes involved (1) child birth (Rimé, Philippot, et al., 1994, study 4), (2) bereavement (Zech, 1994), (3) academic exam, (4) first blood donation, (5) attended dissection of a human corpse, and (6) performed dissection (Rimé, Finkenauer, Luminet, & Lombardo, 1993). In each of these studies, respondents were contacted immediately after the event. Follow-ups assessed the

occurrence of social sharing at various intervals (see Figure 1, for more details). As can be seen in Figure 1, independent of the type of emotional episode, social sharing occurred during the week following the episode at rates closely matching those in the recall studies. With the exception of blood donation, which is a relatively minor emotional episode, the proportion of episodes which still elicited sharing during the second week was virtually the same as during the first week. Marked decreases were then generally observed in the following weeks or months. Altogether, these data in which selective memory biases are precluded confirmed the findings of the recall studies.

<u>Diary studies</u>

In a first diary study, 53 participants completed a questionnaire every night before going to bed for about one month (Rimé, Philippot, et al., 1994, study 1). They briefly described the event that had affected them most that day. They then answered a number of questions about the described event, including questions concerning social sharing. In total the sharing of 1046 everyday emotional events was assessed. The events were later classified by the investigators as daily hassles or uplifts (Kanner, Coyne, Schaefer, & Lazarus, 1981). Because questionnaires were filled in on the evening of the day the event occurred, sharing had little time to develop. In spite of this, social sharing was reported for 59% of daily hassles and for 69% of uplifts. Again, these findings clearly confirmed those from recall studies in which sharing occurred during the day the emotion happened in about 60% of the cases.

To extend the observations to specific emotions, two subsequent diary studies were conducted. In one of them, we collected 461 daily episodes from 34 participants (Rimé, Philippot, et al., 1994, study 2). Consistent with previous studies, 58% of the 461 emotional episodes were shared the day that they had happened, a result which did not vary as a function of specific emotions. However, a marked trend indicated less sharing for the rare cases of shame, a fact that will be discussed later in this chapter. A last diary study based on 354 emotional events replicated previous findings showing that social sharing does not vary as a function of the primary emotion involved (Rimé, Philippot, et al., 1994, study 3).

To conclude, findings from diary studies in which the interval between the episode and its recall is at maximum one day replicated those from recall studies involving intervals of weeks, months, or even years. Thus, it does not seem that findings from recall studies can be explained by reconstructive memory biases.

<u>Experimental studies</u>

Obviously, more reliable support for the hypothesis that emotion elicits social sharing would come from laboratory research. Three experimental investigations were recently conducted (Luminet, Bouts, Delie, Manstead, & Rimé, 1996). In the first, students participated together with a friend in a "co-operation study." On arrival at the laboratory, one member of each pair was randomly assigned to one of three emotion-inducing conditions (i.e., high, moderate, and low emotional films), whereas the other participant was instructed to complete an irrelevant task. Ratings by participants exposed to the movie confirmed that the three films were significantly different for intensity of negative emotions. After the movie, which lasted 3-minutes, target-participant and friend were brought together in a waiting room and left alone. Their conversation was unobtrusively tape-recorded. Independent judges later rated the recordings for time talked about the movie and proportion of words referring to the movie. Results revealed that compared to participants in the two other conditions, those exposed to the highly emotional movie talked more about their experience. To illustrate, nearly 40% of words spoken by these participants referred to the movie, as compared to less than 5% of the words spoken by those in the two other conditions. It thus seems that viewing a 3-minute emotional movie is sufficient to elicit a process of social sharing. Unexpectedly, however, the moderately intense movie failed to elicit more social sharing than the non-emotional control movie. In a second experiment using the same design and movie conditions with a larger sample of participants, the results of the first experiment were perfectly replicated. First, the three conditions were significantly different for intensity of negative emotions. Second, for amount of social sharing, the high emotional movie differed significantly from both the low and the moderate emotional movie. Again, the latter two conditions failed to differ from each other. This study used additional measures to assess induced emotions. First, the target participant's face while viewing the movie was coverly

videorecorded and later rated for intensity of facial expression and duration of gaze aversion. The same pattern of results was found for these two variables: Both the mild and the moderate conditions differed significantly from the strong condition, but not from each other. These results perfectly matched those observed for social sharing. This suggests that nonverbal expression of emotion is a better predictor of social sharing than self-reported emotion.

Overall, these two laboratory investigations offered support for the general notion that emotions elicit social sharing. A third experiment was conducted to control for a number of alternative explanations and to verify in how far the effect of exposure to the movie would generalise beyond the laboratory situation. It could be argued that the high emotional movie instigated more sharing because (1) it elicited greater interest and attention, (2) it triggered more mental images, and/or (3) was easier to verbalise. Sixty volunteer students were randomly assigned to view one of the movies in individual sessions. Immediately after, they rated the movie for interest, attention elicited, and they rated themselves for their capacity to visualise the movie and to verbally report on its content. None of these variables was found to differentiate between the three movie conditions. In support of the ecological validity of the previous observations, participants' ratings of their sharing during the two days following the experiment paralleled the waiting room findings: The mild and moderate intensity movie did not differ from each other but both differed from the high intensity movie.

These experimental investigations suggest that a high intensity emotional condition induces more sharing than a moderate or a low intensity one. It remains to be explained why a moderate intensity condition did not elicit more sharing than a low one. It is possible that emotional intensity needs to exceed a certain threshold to elicit social sharing. This question will be examined in more detail later in this chapter.

Generality and differences in the social sharing of emotion

In the following, we examine in how far the prediction that emotion elicits sharing can be generalised. In other words, do the reviewed findings extend to children and elderly? Are these findings qualified by individual and cultural differences?

Do children share their emotions?

Most emotions experienced by adults develop in the course of the first three years of life (e.g., Lewis, 1993). Verbal abilities with regard to felt emotions also seem to develop early. Studies conducted by Dunn and colleagues (Dunn, Bretherton, & Munn, 1987; Dunn, Brown, & Beardsall, 1991) suggest that when interacting with family members, children at the age of 2 years are already able to use a large range of emotion-related words. Equally, Wellman, Harris, Banerjee, and Sinclair (1995) found that by the age of 2 years children were able to use terms for basic emotions (i.e., happiness, sadness, anger, and fear) as well as terms for emotional expression such as crying or hurting. In a three years longitudinal observations of these children, emotion vocabulary expanded and the complexity of the emotion utterances increased.

In line with the present perspective, these observations lead to the prediction that social sharing of emotion should be manifested among children. As no data were available in this respect, two studies were conducted (Rimé, Dozier, Vandenplas, & Declercq, 1996). One of them induced emotion experimentally. The second adopted the follow-up procedure with children who had participated in an emotionally-involving scout game. Very basic questions were addressed: (1) Do children share their emotions? If they do, (2) does their sharing evolve with age? and (3) who are their sharing targets?

In the first study, participants were school children, aged 6 and 8 years. Each child was told either a high or a low emotion narrative. Immediately after, the child was brought to a playroom where two peers were playing. For 15 minutes, social sharing was monitored. Sharing occurred infrequently with no difference between emotion conditions, nor between age groups. This observation suggested either that children at this age range do not yet share their emotions, or that peers do not represent appropriate sharing targets for them. Further data argued in favour of the latter explanation. Parents, who were blind to the experimental

conditions, rated their child's behaviour during the evening following the narrative session. These ratings revealed that 42% of the children who heard the low emotion narrative and 71% of the children who heard the high emotion narrative had shared the narrative with their parents. The latter rate is consistent with the diary data from adults showing that some 60% of emotional experiences were shared during the day they occurred. As with adults, social sharing tended to be more repetitive among children who heard the high emotion narrative. Finally, as compared to children who were exposed to the low emotion narrative, children who heard the high emotion narrative were also rated by their parents as more emotional during the sharing. It thus seems that sharing occurs among children in a way that does not basically differ from what is observed among adults. However, it did not seem that children shared with targets other than parents.

A second study was conducted with boys aged 8 to 12 who attended a scout camp and took part in a "night game." After the game, children rated their game-related emotionality on a 20 degrees "emotion thermometer." The data suggested that a moderate intensity emotion was induced. The boys went back home on the next day. Three days later, parents rated their child's sharing since the camp. Consistent with all the findings reviewed above, these ratings showed that children shared the night game in 97% of the cases. Six days after the game, parents again rated their child's sharing. Sharing rates amounted to 39%, thus showing a sharp decline over time. Children's self-reports one week after the game revealed that sharing had occurred for 87% of the sample. Children also reported their sharing to be recurrent, with a modal answer approaching three repetitions. Parents clearly emerged as the privileged sharing targets in this age group--mother in 93% and father in 89%. Siblings served as recipients in 48% of the cases, best friends in 33%, peers in 37%, and grandparents in only 5%.

Altogether, social sharing was found to be manifested among children in basically the same manner as in adults. Yet, important differences were found regarding sharing targets.
Are emotions still shared among the elderly?

Old age is often described as a time when emotions are diminished in intensity and become rigid in expression (Banham, 1951). Old age is considered to be characterised by

affective quiescence (Cumming & Henry, 1961). This would lead to the prediction that the process of sharing emotions would progressively vanish with age. However, in sharp contrast with traditional perspectives, recent theoretical advances have proposed that age is associated with positive emotional development. To illustrate, Labouvie-Vief and colleagues stressed that greater age involves higher levels of ego development. As a consequence, older persons show greater emotional complexity, enhanced self-regulation of emotion, and a superior understanding of emotions when compared with younger persons (e.g. Labouvie-Vief & Blanchard, 1982; Labouvie-Vief & Devoe, 1991). A comparable accent on the role of emotional life in older age is found in socioemotional selectivity theory (Carstensen, 1987, 1991, 1993). This theory proposes that as people approach the end of their life, emotional quality of social encounters becomes more important than the acquisition of information or basic survival functions (e.g., reproduction) which predominated before. Thus, the two theoretical views consider that with older age, people become "experts" on emotions. This leads us to expect that sharing of emotion does not vanish among elderly. On the contrary, older persons should share even more than younger persons.

A diary study was conducted in order to test this prediction (Rimé, Finkenauer, & Sevrin, 1995). Older adults (60 to 75 years) and elderly adults (76 to 94 years) were compared to a group of younger adults (25 to 40 years). Participants completed a questionnaire on the most emotional event of the day for five successive evenings. Items assessed emotional feelings and responses as well as the sharing of the emotional event. The proportion of emotional events which were shared the day of their occurrence amounted to 64% among younger adults, a figure close to the 60% found among students in former diary studies. Confirming the second prediction, the corresponding figures were significantly higher among elderly respondents, with 77% among the older adults and 85% among the elderly adults.

Thus, rate of social sharing increased with age. This was also the case for the number of times that each event was shared. These findings are not easily reconciled with traditional stereotypes stressing the poverty of affective life in the elderly. Conversely, they fit the recent theoretical views proposed by Labouvie-Vief (e.g. Labouvie-Vief & Blanchard, 1982;

Labouvie-Vief & Devoe, 1991) and by Carstensen (1987, 1991, 1993). It is possible that the three groups differ in other variables that mediate the observed relationship between extent of social sharing and age (e.g., time to share, availability of sharing targets, mobility). Future studies should aim to examine the antecedents, consequences, and mediating variables of the increased sharing observed among the two older age groups.

<u>Is there a sharing-prone personality?</u>

To what extent is social sharing of emotion accounted for by personality traits? Factorial studies suggested that five factors account for most variations in general personality--Neuroticism, Extraversion, Openness, Agreeableness, and Conscientiousness. These factors are known as the "Big Five" (e.g., Digman, 1990; Goldberg, 1990). Also, a more specific personality dimension called "alexithymia" can be hypothesised to be directly related to social sharing of emotion. Alexithymia (Sifneos, 1973) derived from the assumption that psychosomatic illnesses have their roots in disorders related to emotional experience and expression (e.g., Alexander, 1950; Deutsch, 1959). The concept addresses traits supposed to characterise psychosomatic patients. It involves (a) a difficulty in verbalising emotions and (b) constricted imaginative processes (Taylor, Bagby, & Parker, 1997). It was thus predicted that people scoring high on alexithymia would show less sharing than people scoring low on alexithymia.

Two studies conducted by Luminet, Zech, Rimé, and Wagner (1996) examined this hypothesis. In the first one, 99 French-speaking Belgian undergraduate students were asked to report the most negative emotional episode they had experienced during the three previous months. They gave a full account of the event, described their emotional reactions, and rated the extent and content of event-related social sharing. Subsequently, they completed two personality questionnaires: (1) the NEO PI-R which covers the Big Five and (2) the Bermond-Vorst Alexithymia Questionnaire, which assesses among others dimensions "Poor verbalization" and "Poor fantasy life." Hierarchical regression analyses revealed that none of the Big Five dimensions was related to extent of sharing. Consistent with the assumption underlying the concept of alexithymia, Poor verbalization was negatively related to extent of social sharing. Poor fantasy life was found to be unrelated. A second study was conducted

on a sample of 101 British students. This time, participants were asked to recall both a recent positive and a recent negative emotional episode from their life and to rate their emotional reaction and social sharing for both. They also answered the NEO PI-R and the Alexithymia questionnaires. With regard to negative events, again none of the NEO PI-R dimensions was associated with extent of sharing. Poor verbalization was again negatively related to extent of sharing. This time, the second alexithymia dimension Poor fantasy life was also negatively related to extent of sharing. For positive emotional episodes, none of the 7 examined dimensions predicted extent of sharing.

To conclude, general personality dimensions such as the Big Five have no predictive value for the social sharing of emotion. However, alexithymia, a very specific personality dimension concerned with verbal expression of emotion, was shown to be a consistent predictor of social sharing, at least for negative events.

Does the social sharing of emotion hold across cultures?

Data from countries differing in language and/or culture--Belgium, The Netherlands, Southern France, the Basque country in Spain--were already examined by Rimé et al. (1992). Because the samples were comparable for rate, frequency, and delay of sharing, it was concluded that sharing of emotion is a widespread phenomenon. Comparing Dutch, Surinamese and Turkish respondents living in The Netherlands, Mesquita (1993) also observed very high rates of sharing in each sample but found differences in shared content. This leads to the hypothesis that sharing is common among human beings, but that sharing modalities vary across cultures. Yet, all the available evidence has been limited to people living in Western European countries.

Rimé, Yogo, and Pennebaker (1996) collected new data from students of social sciences or humanities in six different locations: Four in Asia and two in the Western world. Participants all completed a brief recall questionnaire. They first recalled their most recent, important, unpleasant emotion and then answered items assessing the experience and its sharing. The samples did not vary in important respects for intensity of reported emotion, nor for degree of emotional recovery. As can be seen in Figure 2a, emotions were shared by a high proportion of people in all six locations. This confirms the cross-cultural generality of

the phenomenon. Yet, samples from Asian locations generally reported slightly lower rates of emotion sharing than did samples from Western locations. To illustrate, in the Korean sample, more than 20% of the emotional episodes were reported as never shared while in the American sample, this was the case for only 5%. Further cross-cultural variations emerged for sharing modalities. As shown in Figure 2b, sharing was repetitive in every culture. Yet, the number of repetitions was markedly higher in Western samples than in Asian ones. The delay between the emotional event and its first sharing also varied across cultures and again contrasted Asian and Western samples, with shorter delays for the latter and a particularly long delay for the sample collected in Singapore (Figure 2c). Data on sharing targets further revealed important cross-cultural generalities and cross-cultural variations. In all six samples, best friends were mentioned with equal frequency and were by far the most important sharing targets. Strangers were rarely mentioned in the six groups. With respect to family members, marked contrasts existed between Asian and Western cultures. Indeed, the former reported less sharing with their spouse or partner, parents, and siblings than the latter. In all six groups, sharing only rarely involved grandparents. Yet, they were more often referred to by both the American and French samples than by the Asian ones. The data thus reliably suggest that, in this age group at least, Asian and Western cultures do contrast in their degree of inclusion of the nuclear family members in the social sharing of their emotions.

These data allow us to conclude that social sharing of emotion is not limited to Western cultures. It is observed in the Oriental world as well. Yet, although they were based on a very brief questionnaire, the collected data revealed an abundance of cultural differences in sharing modalities, suggesting that this is a particularly promising avenue for future investigation.

<u>Social sharing of emotion elicits secondary social sharing</u>

Some data suggest that the sharing of an emotion markedly impacts on the listener (Archer & Berg, 1978; Lazarus, Opton, Monikos, & Rankin, 1965; Shortt & Pennebaker, 1992; Strack & Coyne, 1983). To illustrate, Pennebaker, Barger and Tiebout (1987) videotaped volunteer Holocaust survivors talking about their traumatic past experiences. They assessed the extent to which survivors disclosed their traumas by monitoring their skin

conductance levels throughout the narrative. In a subsequent study, Shortt and Pennebaker (1992) showed these videotapes to college students. Skin conductance measurements from listeners indicated that the more the survivors revealed emotions, the more emotionally aroused were the listeners.

If listening to emotion narratives induces emotion in the target, then a puzzling implication follows. In line with the general prediction that emotion elicits social sharing, a person exposed to the sharing of an emotion would be expected to later share the listened narrative with a third person. In other words, a process of "secondary social sharing" should develop. This prediction is opposed to common sense in two ways. First, an emotional experience is often implicitly considered as a personal matter presupposing confidentiality. Second, sharing usually occurs with close confidants who, given the intimate nature of the relationship, are not expected to disclose what they heard. Nevertheless, the rationale followed above leads one to predict the contrary. Once an emotion is shared, secrecy would rather be the exception.

The prediction was first tested using a modified version of the recall procedure. Christophe and Rimé (1997) asked 134 students to recall an episode in which someone had shared an emotional experience with them. Participants briefly described what had happened to this person. They then reported whether they later told others about what they had heard. Findings clearly confirmed the prediction that shared emotional episodes are not kept confidential. Although listeners were intimates of the sharing person in 85% of the cases, 66% acknowledged having talked about the shared episode to one or more persons. Despite the common sense view of emotion as a personal and intimate matter, secondary social sharing occurred twice or more in 53% of all cases. The extent of secondary social sharing and the number of persons with whom it occurred varied as a function of the emotional intensity felt by the listener in the initial sharing situation.

A second study (Christophe & Rimé, 1997) examined the relation between the intensity of the shared emotion and secondary social sharing. Three lists of 20 events varying in emotional intensity were constructed. The low intensity list included events from the lower end of the life events scale developed by Holmes and Rahe (1967) (e.g., quarrel with a friend,

death of a pet, unhappy love affair). The moderate intensity list included events from the higher end of this scale (e.g., abortion, divorce, academic or professional failure). The high intensity list included situations likely to elicit post traumatic stress disorder (Green, 1990) (e.g., sudden death of a close one, rape, exposure to disaster). A total of 121 persons aged between 18 and 55 years were randomly assigned to one of the three lists. They were asked to recall a situation in which someone had shared with them an experience resembling those in the list. They briefly described the emotional episode so that its correspondence with the list could later be verified by the investigators. They then completed the questionnaire covering the dependent measures.

Consistent with our prediction, observed rates of secondary social sharing were again high and amounted to 78% of the cases across conditions. Frequency of secondary sharing and number of persons with whom secondary sharing occurred varied significantly with conditions of emotional intensity of the shared episode. Those who listened to a highly emotional sharing manifested secondary sharing more often than those who had listened to either a moderate or a low intensity sharing, these latter two groups failed to differ significantly.

We stressed that people--especially intimates--are not expected to tell others about emotional events confided in them. The reviewed studies show that this implicit social norm is widely transgressed. At the very least people would be expected to preserve the anonymity of the original source in the process of secondary social sharing. Christophe and Di Giacomo (1995), however, found evidence to the contrary. Respondents in their study reported having revealed the identity of the source in 73% of the investigated cases. Petronio and Bantz (1991) found that people are aware of the receivers' urge to tell confidential information to others. Commonly disclosers therefore use a prior restraint phrase such as "Don't tell anybody..." in order to minimise the ramifications of disclosure of private information. Nevertheless, the study showed that when information was highly or moderately private, receivers were more likely to tell it than disclosers expected, regardless of the restraint phrase.

To conclude, the collected data confirmed our paradoxical hypothesis that, because social sharing elicits emotions in the listener, listeners themselves engage in secondary social sharing. It seems wise to recommend that if one does not want one's emotional experience to be spread around, one should better not share it at all.

<div align="center">

The relation between intensity of emotion

and extent of social sharing

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Studies reviewed so far support the general idea that most emotions are socially shared. Yet, the question arises whether this prediction holds for extreme intensity emotions. One of the criteria for Post-Traumatic Stress Disorder (PTSD) (DSM-IV, American Psychiatric Association, 1994) involves avoidance of cues associated with the trauma. Avoidance may interfere with the propensity to share emotions. Does this mean that extremely intense emotional experiences are not shared? In the following, we will first review studies examining this question. Second, we will address the more general question of the relation between emotional intensity and extent of social sharing.

<u>Extreme intensity emotions, social sharing, and secrecy</u>

A first way to document the question just raised would consist in assessing social sharing among people who were recently exposed to an emotion of extreme intensity (i.e., a potential trauma). Our investigations of Belgian overseas volunteers who lived through the Rwandan genocide of 1994 provide data in this respect (Sydor & Philippot, 1996). In one of these studies, 300 persons were randomly selected among the 954 Belgian civilians who had been rescued from Rwanda by a military operation in April 1994. Three months after the rescue operation a questionnaire was mailed to this sample and 104 (35%) responded. Respondents were between 19 and 78 years old, with an average age of 44 years. The questionnaire assessed the intensity of the events to which subjects were exposed, PTSD symptoms, social sharing, and social support. Attesting the severity of the events to which they were exposed, 6.7% of the sample were presenting a diagnosis of PTSD. When questioned about their need to share the most disruptive event they had experienced during the genocide, two thirds of the sample reported feeling the need to share it often or very often.

Only 4% never felt such a need. Ninety-eight percent of the sample did actually share the event at least once, the modal response (64%) being 5 to 6 times. Most of them started to do so the same day (71%) or the same week (18%) as the occurrence of the event, with many different persons (more than 6 sharing partners for 69% of the sample). When asked if they were still sharing it (3 to 5 months after the event), most people (90%) answered positively with 36% of them even sharing frequently or very frequently.

The question of extreme intensity emotions and their sharing was addressed in a second way. Even though about 90% of emotions are shared (Rimé et al., 1992), a small but consistent proportion of these episodes are not shared. Are non-shared emotions more extreme in intensity? Two studies compared emotional memories that were socially shared and emotional memories that were kept secret (Finkenauer & Rimé, in press a). Investigating matters that people do not want to talk about represents a challenge. Yet, it was assumed that participants would actually be willing to provide information about their secret if two conditions were met. First, absolute anonymity should be guaranteed. Second, participants should in no way be asked to reveal their secret. By adopting procedures respecting these two conditions, high participation rates were obtained.

In the first study, students recalled both a shared and a non-shared emotional event and rated each event on various dimensions of the emotional experience. Results showed that neither the intensity of the emotion felt when the event occurred, nor the intensity of the emotion still felt at the time of responding discriminated shared from non-shared episodes. Also, non-shared emotional experiences were no more no less negatively valenced than shared ones. A second study was conducted on a large sample of respondents whose age ranged from 16 to 70 years. This time, a between-subjects design was used and additional dependent variables were included to assess event-related stress and traumatic impact. None of the results supported the hypothesis that non-shared events were more traumatic than shared ones. As in the first study, both types of events were equally negative.

Overall, these results again suggest that high intensity of emotion or trauma is not a necessary precursor to emotional secrecy. This is consistent with anecdotal evidence showing that victims of catastrophes or accidents are eager to talk about their experience (e.g., Janoff-

Bulman & Wortman, 1977; Pennebaker & Harber, 1993). Empirical studies which considered this question are rare. However, the few existing data consistently found that about 80% of victims of trauma manifested the need to share their experience (Ersland, Weisaeth, & Sund, 1989; Mitchell & Glickman, 1977).

If emotional intensity and valence do not predict emotional secrecy, are there other characteristics of the emotional experience which do? The two studies on emotional secrecy examined this question. Both revealed that non-shared emotional episodes elicited more intense feelings of shame and guilt than shared ones. Also, emotional appraisal ratings revealed that emotional experiences kept secret involved greater personal responsibility for the event than shared experiences. Finally, data revealed that non-shared experiences were initially associated with attempts to hide one's feelings or emotions, an action tendency typical of ashamed persons (e.g., Tangney, 1991). These findings support the view that social emotions like shame and guilt are central factors in emotional secrecy.

In conclusion, the studies on traumatic events and emotional secrecy suggest that high emotional intensity does not preclude social sharing. However, emotional experiences that involve shame and guilt are more likely to be kept secret.

What is the relation between intensity of emotion and social sharing?

The prediction that emotion elicits sharing implies that the more an event is emotionally intense, the more it should be shared. In other words, a positive linear relation can be expected between the intensity of the emotion and the extent of sharing. However, results reviewed earlier in this chapter were not always consistent with such a hypothesis. As mentioned above, in the experimental studies conducted by Luminet, Bouts, et al. (1996), the high emotion movie elicited more sharing than the low and the moderate ones, but the latter two failed to differ in this respect. Similarly, listeners who heard a highly emotional episode shared it more often than listeners who heard either a moderate or a low intensity episode. Again, these latter two conditions did not differ significantly (Christophe & Rimé, 1997). The lack of differentiation in effects of the low and moderate emotional intensity on social sharing opens the possibility that frequent social sharing occurs only when a threshold of intensity is

exceeded. It thus seemed necessary to have a closer look at the relation between intensity of emotion and sharing in the data available from the studies reviewed so far.

Table 1 summarises findings from recall and laboratory studies for which the correlation between the two variables could be calculated. Data from recall procedures were collected on nine independent samples from eight nationalities. In general, respondents recalled a recent emotional event. They rated among others (1) the intensity of disruptiveness or emotion felt at the time they experienced the event, and (2) the frequency with which they had shared this event. Table 1 shows that all the Pearson correlations for these two variables were positive, with 6 of them being significant, 2 approaching significance, and 1 being nonsignificant. Yet, the significant correlations were low, ranging from .21 to .35. Another ten correlations were available from eight laboratory studies in which participants were exposed to an emotional stimulus--narratives or movies. In seven of the studies, participants rated their emotional reaction immediately after exposure. In one, this reaction was assessed from both self-reports and nonverbal behaviours displayed by participants during the movie, as described above (Luminet, Bouts, et al., 1996, study 2). The extent of sharing was assessed from self-reports at a follow-up session either one day, two days, or 7 days later, except in three studies in which sharing was observed in a waiting room situation immediately after the exposure (see Table 1, for details). All ten coefficients collected in these laboratory induction studies were positive, and eight of them were significant. They were considerably higher than those issued from the recall studies, ranging from .30 to .63. This may be due to the fact that "recalled" emotions were caused by personal events, whereas emotions induced in the laboratory are not. When personal events are involved, the relation between emotional intensity and frequency of sharing is likely to be moderated by a variety of variables--event characteristics such as importance, consequentiality, type of emotions involved, or, characteristics of the sharing targets such as number, availability, state of the relationships, etc. By contrast, an upsetting movie that the person watched in a laboratory would be less affected by such constraints, thus allowing emotional intensity to determine a larger proportion of the variance of extent of sharing.

The data reviewed lead to the conclusion that the relation between emotional intensity and extent of sharing is generally positive but modest in size. The results presented in Figure 3 may shed more light on this relation. The data derive from a "recall" study (Luminet, Zech, et al., 1996) in which British students reported their most positive and their most negative emotional experience of previous months. Ratings included the intensity of the emotion at the time the event happened as well as the extent to which they shared it. Correlations were modest--respectively .18, p < .10 for positive events and .21, p < .05 for negative ones (see also Table 1). Figure 3 has two features that merit attention. First, extent of sharing increases at moderate levels of emotionality, especially for positive events. Second, at higher levels of emotional intensity, extent of sharing remains constant and oscillates around four to five repetitions.

How can we interpret these two observations? Regarding the first one, the relation between emotional intensity and extent of social sharing may be more a "step-function" rather than a linear one. At low intensity levels, sharing would be infrequent, while at higher levels, typically four to five repetitions would take place. The suggested step-function may account for the fact that sharing failed to discriminate the low and the moderate emotional intensity conditions in our studies discussed above (Christophe & Rimé, 1997; Luminet, Bouts et al., 1996), assuming that in neither case the critical threshold of intensity was exceeded. Regarding the second observation, why is there a ceiling effect at higher emotional intensities? Measures of sharing generally consisted of rating the number of times the respondent had shared the event. Yet, partners with whom one can share a personal emotion are probably few, and the number of times one can tell each of them about a same episode is likely to be restricted. These limitations can explain why, whatever the specific degree of emotionality involved, the modal number of repetitions observed for intense emotions always amounts to four or five on average. As will be suggested next, assessing both actual sharing and the need to share would be relevant in such investigations.

To conclude, consistent with the prediction, a positive relation is observed between emotional intensity and extent of sharing. However, this relation is qualified by observations suggesting (1) a step-function (i.e., emotions at all levels of intensity are shared but when

intensity reaches a certain level, sharing increases) and (2) a ceiling effect in extent of sharing at high levels of intensity of emotion.

Residual intensity of an emotion, residual sharing, and need to share

Follow-up data reviewed above suggested that sharing decreases during the weeks or months following the emotional experience. What happens when the memory of an event still affects the person in the long run? Our assumption that emotion elicits sharing leads to the prediction that in such cases social sharing would not be extinguished.

In Table 2, we summarise data from studies we conducted or on which we collaborated. In each of these studies, people rated, at some time after an emotional episode, the emotional intensity felt when remembering it ("residual emotional intensity") and the extent to which they (a) still felt the need to talk about it, and (b) still talked about it ("residual social sharing"). The delay between the target emotional event and follow-up assessments varied from a week (Zech & Rimé, 1996b) to several months (e.g., Luminet, Zech et al., 1996), or even several years (e.g., Rimé, Finkenauer, & Sangsue, 1994). Correlations were computed between residual emotional intensity and residual sharing for each data set. All sixteen coefficients were positive--ranging from .20 to .64--and significant. How can we interpret this relation? On the one hand, talking about an emotional memory can reactivate event-related emotional feelings. On the other hand, it is likely that residual event-related feelings elicit residual sharing. To illustrate, in a study on bereaved persons (Zech, 1994) extent of sharing assessed 10 days after the death did not predict emotional recovery assessed at a 1-month follow-up, $r(22) = -.23$, $p < .01$. However, emotional recovery observed at the 1-month follow-up predicted the residual sharing observed at a final three months follow-up, $r(18) = -.59$, $p < .01$.

Does this mean that people who failed to recover from an emotion keep talking about it without limits? The relation between residual emotion and residual sharing is depicted in Figure 4, based on Belgian respondents who rated the most negative emotional episode of previous months (Luminet, Zech et al., 1996). The observed correlation is $r(127) = .24$, $p < .01$. The figure shows that residual sharing increases at the lower levels of residual emotionality. However, a ceiling effect occurs at higher levels of residual emotionality, as was

observed earlier for the relation between initial emotional intensity and initial sharing. Also, sharing never occurred more than once or twice on average, even at extreme levels of residual emotionality. Examining the size of the correlations in Table 2 reveals that in a large majority of the data--six out of eight studies--residual emotional intensity is linked more closely to the need for sharing than to actual residual sharing.

It should thus be concluded that when people fail to recover from an emotional episode, they feel the need to talk about it and they actually do so to some extent. However, constraints are likely to moderate the relation between residual emotionality and actual residual sharing, whereas they are less influential in the relation between residual emotionality and need to share. In other words, as long as a memory elicits emotions, people feel the need to talk about it. This would suggest that sharing the emotion may help the person who shares. Rimé et al. (1992) stressed that the urge to share is paradoxical, at least as far as negative emotions are concerned. Sharing reactivates components of the emotional experience which in the case of negative emotions should be experienced as aversive. It seems reasonable to speculate that if individuals are manifesting the willingness to expose themselves to an aversive reactivation, they are expecting some important benefit from this exposure.

Does it help to socially share an emotion?

There is a strong assumption that "talking helps." After the sharing of an emotion, laypersons often report that they feel better, that they feel relieved, or liberated from some weight they carried since the emotional event. Conversely, restraining oneself from sharing an emotion is commonly associated with increased psychological and physiological tension and, as a consequence, with enhanced risks of developing stress-related physical disease. Numerous current psychological concepts are consistent with the general view that sharing would bring about emotional relief. Two different and seemingly complementary ideas seem to be implied by the assumption. On one hand, sharing emotions secures physical health and psychological well-being in the long run. On the other hand, sharing emotions diminishes the intensity of the emotional upset elicited by the emotional memory, and thus contributes to

emotional recovery or relief. Hereafter, we examine the current empirical status of each of these two views successively.

<u>Health and Subjective well-being</u>

In his theory of inhibition, Pennebaker (e.g., Pennebaker, 1985, 1989) proposed that the conscious efforts exerted in order to inhibit thoughts, feelings, or behaviour require physiological work. When such efforts are exerted chronically, the probability of stress-related physical and psychological problems increases.

A first prediction which follows from this theory is that putting stress or trauma into words reduces the physiological work and is thus beneficial to health. Various studies tested this idea and generally confirmed that expression of trauma-related feelings and thoughts impacts positively on health indicators (e.g., Esterling, Antoni, Fletcher, Margulies, & Schneiderman, 1994; Pennebaker, Barger, & Tiebout, 1989; Pennebaker & Beall, 1986; Pennebaker, Colder, & Sharp, 1990; Pennebaker & O'Heeron, 1984). To illustrate, Pennebaker and Beall (1986) asked students to write about their deepest thoughts and feelings surrounding a past personal trauma. They were compared with students who merely reported facts surrounding their trauma or who, in a control condition, wrote about trivial topics. In a 6-month follow-up, students in the first condition showed less frequent visits to the campus health centre and fewer self-reported illnesses than students in the two other conditions.

A second prediction which follows from the inhibition theory is that not talking about a trauma is associated with health problems in the long run. Investigations addressing this prediction are scarce (for exceptions, see Pennebaker & O'Heeron, 1984; Pennebaker & Susman, 1988). Finkenauer and Rimé (in press b) recently tested it in the context of non-shared emotions. They also examined to what extent inhibiting an emotional memory would affect well-being. Additionally, by assessing Negative Affectivity (Tellegen, 1982), they tested an important alternative explanation which could account for the relation between inhibition of emotional memories and physical illness predicted by the theory of inhibition. Indeed, Negative Affectivity (i.e., the propensity to experience negative emotions, see Watson & Clark, 1984) correlates positively both with the repression of affective memories (Costa &

McCrae, 1987) and with somatic complaints (e.g., Watson & Pennebaker, 1989).
Participants rated in anonymous conditions scales assessing physical illnesses experienced
in the course of the last year, satisfaction with current life, and Negative Affectivity. They
were also asked if they could recall an important emotional life event which they kept secret.
Among 377 respondents, 42% answered positively and 56% negatively. The remaining
participants returned the questionnaire without answering this question. Consistent with
Pennebaker's (e.g., 1985, 1989) prediction, data revealed that participants who had the
memory of a non-shared emotion reported a higher number of illnesses than those who did
not have such a memory. Confirming the authors' extension of this view to subjective well-
being, it was found that the former scored lower in several respects for satisfaction with
current life. This was the case for love life, physical appearance, financial situation, public
self, and current life situation. Negative Affectivity scores did not differentiate the two
compared groups, and thus could not explain these findings.

To conclude, available data support the view that sharing emotions is associated with
less physical illness and greater subjective well-being. Our findings extend these findings by
showing that emotional secrecy is related to more physical illness and lower subjective well-
being. We now turn to the next question. Does sharing lead to a reduction in the emotionality
elicited by the memory of the shared emotional episode? Whereas this question was
generally ignored by previous research, it represents an important focus in studies on social
sharing. A first way to address this question consisted of examining the extent to which
sharing developed spontaneously after an emotion contributes to emotional recovery.

Spontaneous social sharing and emotional recovery

We examined this question in most of our studies on social sharing involving a
correlational design. Specifically, we tested the hypothesis of a positive correlation between
the amount of social sharing developed spontaneously after the emotional event and the
degree of emotional recovery. The latter variable was usually assessed by the "recovery
index" obtained from the difference between the initial and the residual intensity of the
emotion elicited by the event or its recall.

This correlational hypothesis was first considered in one of the recall investigations conducted by Rimé, Mesquita, et al. (1991, Study 6). Neither the amount of social sharing, nor the delay of social sharing were related to emotional recovery. Equally, in both studies on emotional secrecy reviewed above (Finkenauer & Rimé, in press a), emotional recovery did not discriminate between shared and non-shared emotional memories. Assessments of stressfulness and traumatic impact in one of these studies also failed to support the prediction that secret events would be less recovered from than shared ones. Overall, our studies on emotional secrecy suggested that talking about an emotional experience does not contribute to emotional recovery. Additionally, in one of the diary studies mentioned above (Rimé, Philippot, et al., 1994, Study 3), recovery was assessed by the difference between the impact each daily event had when it occurred and its residual impact as rated several weeks later, at a follow-up. Again no significant relation was observed between this recovery index and extent of social sharing manifested when the event happened.

Similar tests were conducted in many other correlational studies of social sharing. They consistently yielded the same non-relationship. One notable exception occurred for the study in which we followed up boys aged 8 to 12 years after their participation in a night game (Rimé, Dozier, et al., 1996). In this study, the recovery index was established from the boys' emotion thermometer ratings obtained (a) immediately after the game and (b) at a 1 week follow-up. Parental ratings of the boys' sharing were found marginally predictive of the boys' recovery when these ratings were collected three days after the game, r (28) = .32, p < .08, and significantly so when these ratings were collected six days after the game, r (28) = .40, p < .05. Although it may be speculated that sharing in a parent-child relationship involves specificities that are not found in later interpersonal relationships, this positive result requires replication in future studies.

Should we thus conclude from these generally negative data that social sharing of emotion has no effect on emotional recovery? Pennebaker and colleagues (see Pennebaker, 1989, for a review) suggested that qualitative aspects of sharing should be considered. In the study by Pennebaker and Beall (1986) mentioned earlier, writing about factual aspects of an emotional episode did not affect health variables, while writing about feeling aspects did.

Emphasising the feeling dimension may thus be critical for social sharing to have some impact. However, assessing qualitative aspects of spontaneous social sharing in survey research raises difficulties. In general, respondents do not seem to be able to specify what they related in their previous social sharing, nor which aspect--fact or feeling--they emphasised. As an example, items assessing respectively to what extent "facts" and "feelings" were shared usually yield high correlations, suggesting that they did not really tap distinct elements. Therefore, subsequent studies were conducted using the experimental induction of social sharing of emotion.

Induced sharing and emotional recovery

We conducted a study in which young mothers were interviewed in the days following childbirth (Rimé, Philippot, et al., 1994, study 4). Mothers in an experimental condition received a list of standard emotions and verbalised the extent to which they experienced each of them during the delivery. They expressed in depth all related feelings, thoughts, and physical sensations. Mothers in a control condition used the list in a comparable manner, but referred to the impact of their pregnancy on their everyday life. Weekly ratings of delivery-related rumination and sharing were obtained during the 5 following weeks. The data suggested that sharing an emotion impacts positively on emotional relief. Compared with mothers in the control condition, those in the experimental condition reported less mental rumination, and also tended to share the delivery less often and with fewer people. Although the two groups did not differ in their ratings of the emotionality of the delivery at the time they returned home, they differed in emotional recovery when assessed 6 weeks later.

We then tried to replicate these positive findings, using past emotions as a focus for sharing. In these studies, several types of sharing were compared. Rimé, Zech, Finkenauer, Luminet, & Dozier (1996) had 127 psychology students interviewing one person each about a recent negative emotion. Four types of sharing were created by emphasising respectively (1) factual aspects, (2) feelings and emotions, (3) meanings elicited by the event, while in a fourth condition, no specific emphasis was adopted. The emotional impact of the event was assessed on seven indices before the sharing interview, and again one week after. No effect

of sharing type was found for these indices, nor was it found for extent of sharing in the following week. Zech and Rimé (1996a) attempted another replication in a more controlled laboratory study. Interviews with three conditions of sharing were conducted by the same person. In two of them, participants talked about the most upsetting event of their lives, with a focus on felt emotions in one and with a focus on facts in the other. In a control condition, they talked about a trivial topic. Dependent variables were collected before sharing, immediately after, at a one week, and at a two months follow-up. No significant effects of type of sharing were found. However, at the final follow-up, participants in the felt emotions condition rated the sharing as more meaningful, more interesting, and higher in overall subjective impact than participants in the other two conditions.

In the study just reviewed, indices of recovery did not show effects of our sharing conditions. However, participants uniformly reported that the experimental social sharing had been beneficial to them. Therefore, we wondered whether the notion of emotional recovery on which our studies relied made sense at all. Rimé, Hayward, and Pennebaker (1996) addressed this question. Students were asked to recall one emotional experience they had recovered from and one they had not recovered from. For each, they rated initial and residual emotional impact, as well as initial and residual sharing. The results showed that the two types of episodes initially elicited a comparable emotional impact. Consistent with our previous studies, they failed to differ for initial sharing. However, confirming that the notion of "recovery" makes sense, the two types of episodes differed markedly in their residual emotional impact and thus yielded marked differences in the recovery index. This index was indeed much lower for non-recovered emotional memories than for recovered emotional memories. Also consistent with data reviewed so far, episodes not recovered elicited more residual sharing than recovered ones.

Questions about social sharing and recovery

Although the "child birth study" offered data consistent with the view that sharing an emotion would contribute to emotional recovery, this was not the case for several other investigations we conducted. In the latter, recovery indices were neither related to natural social sharing nor to experimentally induced social sharing.

These negative observations contrast with our data showing that people are eager to share their emotional experiences. They also contrast with the finding that unrecovered emotional experiences elicit more sharing than recovered ones. They finally contrast with the literature showing that emotional expression is beneficial to physical health (e.g., Pennebaker & Beall, 1986; Pennebaker & al., 1988). These contrasts elicit three questions. First, is there some generality to our negative results? Second, is it conceivable that sharing an emotion would impact positively on physical health, but has no effect on emotional recovery? Third, why would people be willing to share their emotion if not to gain relief from their emotionally-laden memories? The first two questions will be addressed hereafter. The third one will be the topic of the final section of this chapter.

Our first question is documented by recent research conducted about Critical incident stress debriefing (CISD), a group intervention technique developed for implementation immediately after a potentially traumatising event in order to prevent post-traumatic stress among exposed individuals (see Mitchell & Everly, 1995, for an overview). Participants each describe what happened from their perspective, then express their prominent thoughts concerning the event, and they verbalise "what was the worst thing for them in this situation." The use of this technique has been growing rapidly in the last decade. However, several studies have recently assessed its effects and yielded negative results (e.g., Deahl, Gilham, Thomas, Searle, & Srinivasan, 1994; Griffiths & Watts, 1992; Kenardy, et al., 1996). To illustrate, Kenardy and colleagues (1996) followed up emergency service personnel after an earthquake in Australia. About one third of the personnel took part in a CISD intervention. The entire group was assessed for recovery on four occasions in a 2-year period. Consistent with our own negative findings, this study found no evidence of better recovery among debriefed helpers as compared to non-debriefed ones. Research on the effects of psychotherapeutic interventions with trauma patients yields results in the same direction. Silvoe, Chang and Manicavasagar (1995) observed that 19 out of 20 Cambodian refugees with histories of trauma were willing to talk about their emotional experience, a finding which contrasts with a common belief that Asians avoid the disclosure of emotionally sensitive information. However, only four of these patients found talking about their trauma helpful in

improving their emotional state, and three of the four found the relief to be transitory. Thus, there is some generality to our observations.

Our second question which concerns the differential impact of sharing on physical health and emotional recovery was found in a recent study by Greenberg, Wortman, and Stone (1996). The authors preselected college women for trauma presence and randomly assigned them to write about real traumas, imaginary traumas, or trivial events. Compared with participants in the latter condition, those in both trauma groups made significantly fewer illness visits at a 1-month follow-up. This confirmed again the health effects of expressing an emotion, even if the picture was here complicated by the fact that effects occurred also in the imaginary trauma condition. With respect to psychological variables, however, the real-trauma participants showed less favourable results than the other two groups. More specifically, they reported more fatigue and avoidance. These findings suggest that emotional expression can affect physical health variables and psychological ones in divergent directions.

Yet, if social sharing is not bringing about emotional relief, what could its benefits be?

Some benefits of socially sharing an emotion

Effects of socially sharing an emotion are probably numerous. In the following, we examine a few that are currently under investigation. They involve important cognitive and social functions. Sharing an emotion, it will be suggested, contributes to the construction and consolidation of the memory for an important, self-relevant event. Also, it serves the purpose of enhancing the processing and completion of emotional memories. Further, the sharing process has the potential to improve interpersonal relationships and social integration. In addition, it allows for constructing and spreading social knowledge on emotions in the social network.

Constructing and consolidating memory for important events

A prominent example of a memory for an important event consists of the assassination of the American President J. F. Kennedy in 1963. Even though few persons witnessed the assassination personally, most of those who were old enough to have heard about it at the time it happened still remember it clearly today. Characteristic of such a

memory is that people remember not only the facts and the circumstances which surrounded the assassination. They quite generally recall with almost perceptual clarity the personal circumstances in which they learned about it such as what they were doing when they heard the news, with whom, in what location, and many irrelevant details. Brown and Kulik (1977) called this phenomenon "flashbulb memories." Flashbulb memories were defined as particularly detailed, long-lasting memories of the personal context in which people first heard about important, shocking news (e.g., Brown & Kulik, 1977; Christianson, 1989; Conway, et al., 1994; Neisser & Harsh, 1992; Winograd & Killinger, 1983).

Why and how does the private flashbulb memory develop from hearing about public news? Social sharing was recently found to play an important role in this regard. Finkenauer, Luminet, et al. (in press) investigated the memory for the death of king Baudouin of Belgium in a large sample of Belgian citizens. The king had unexpectedly died during a vacation in Spain, after a reign of 42 years. The data revealed that the news of the king's death had been socially shared in an overwhelming fashion. More than half of the respondents talked about the event more than 6 times. Social sharing thus emerged as an integral part of a more general rehearsal process elicited by the news, which also involved following the media. Structural equation modelling (Bollen, 1989) allowed us to examine the mechanisms underlying memory formation in such circumstances. The analyses revealed that in the immediate aftermath, the event was appraised as important and elicited an emotional feeling state. Consequently, rehearsal processes involving both social sharing and information seeking behaviour (i.e., following the media) took place. These processes focused more on the original event--the news of the king's death--rather than on information relative to one's personal situation and surrounding circumstances when first learning about the news. Rehearsal thereby contributed to the creation of a collective memory in Belgian society. Yet, by socially rehearsing the collective memory, people's memory for personal circumstances was indirectly strengthened.

Social sharing thus appeared as a particularly efficient means to ensure that emotional events are not forgotten. By talking about the emotional event, people gradually construct a social narrative and a collective memory. At the same time, they consolidate their own

memory for personal circumstances in which the event took place. Though this information is apparently irrelevant as far as an event such as the king's death is concerned, the storage of flashbulb information is probably of high survival value when personal emotional events are involved.

<u>Processing and completing the emotional memory</u>

In the introduction to this chapter, we argued that emotions challenges the beliefs that people hold in order to gain a sense of coherence, predictability and control over themselves and the world (Janoff-Bulman, 1992; Parkes, 1972; Marris, 1958; Tait & Silver, 1989). Hence, emotion should elicit a mental "working through" process aimed either at the restoration of beliefs or at finding meaning in the event (e.g. Silver, Boon & Stones, 1983; Silver & Wortman, 1980; Tait & Silver, 1989). Cognitive dissonance research showed that people who engage in dissonance reduction typically initiate communication (e.g., Festinger, Riecken, & Schachter, 1956). Social sharing can thus be hypothesised to play some role in completing the cognitive business elicited by the emotion. This hypothesis leads to two specific predictions. First, emotional memories that were not socially shared should be associated with higher cognitive need for completion than emotional memories that were shared. Second, emotional memories that people still feel like sharing should be associated with a cognitive need for completion. Although the exact task to be completed may escape the person's awareness, the need to complete should be conscious and accessed easily through self-reports. These predictions received support in data we collected.

In our comparison of shared and secret memories (Finkenauer & Rimé, in press a), we observed that secret memories elicited globally more cognitive effort than shared events. Post-hoc tests conducted on items which tapped this difference revealed that as compared to shared emotional memories, non-shared memories were associated with (1) greater search for meaning, (2) greater efforts at understanding what had happened, and (3) greater attempts at "putting order in what happened." Similar items were later included in several studies in which the memory of an emotional experience was investigated some time after the occurrence of the event. In each of these studies, participants also rated if they still had the need to talk about this memory. Rimé, Zech, et al. (1996) included these variables in the

forms completed by respondents at the start of their investigation in which 127 adults recalled and then shared a recent negative emotion. A positive correlation, $r(126) = .35$, $p < .001$, was obtained between need for completion and need for sharing. Zech and Rimé (1996a) proceeded in a similar way with 51 volunteer students who recalled the most negative emotion in their life, and they also observed a positive correlation between the two variables, $r(51) = .41$, $p < .01$. Finally, Frenay and Finkenauer (1997) considered similar items in a follow-up study of 67 persons who suffered major burns in an accident. Consistent with the former findings, they observed a positive correlation, $r(67) = .51$, $p < .001$, between the need for completion and the need for sharing.

These data support the view that sharing is related to the need to complete emotion-related cognitive business (e.g., Martin & Tesser, 1989). Future research should examine how far social sharing actually involves such a completion task. It should also explore to what extent the considered process could contribute to reinstate in the person a sense of coherence and predictability, as well as a sense of control and mastery.

Enhancing interpersonal relationships and social integration

In one of the studies investigating secondary social sharing (Christophe & Rimé, 1997), participants had to recall a situation in which somebody shared with them either a low, or a moderate, or a high intensity emotion. In addition to questions on their secondary sharing, participants completed a questionnaire on how they reacted in this situation. The "listener responses" questionnaire assessed five dimensions, including social support, nonverbal comforting, concrete actions, dedramatising, and verbalising. Three of these dimensions significantly discriminated the high emotional condition from the other two. As compared to participants in the low and in the moderate intensity condition, those in the high emotional intensity condition reported less verbalising and dedramatising, and more nonverbal comforting. In other words, when intense emotions are shared, listeners reduced their use of verbal mediators in their responses. As a substitute, they manifested nonverbal comforting behaviours, like hugging, kissing, or touching. This suggests that the sharing of an intense emotional experience can decrease the physical distance between two persons. The decrease of interpersonal distance may have lasting consequences for the relationship

between the sharer and the listener. In this sense, sharing emotions may contribute to the development and maintenance of close relationships. This observation is consistent with findings from research on self-disclosure and liking. In a recent meta-analytic review, Collins and Miller (1994) found that people who engage in intimate disclosures tend to be liked more than people who disclose less. Also, disclosure causes people to like their listeners.

<u>Construction and dissemination of social knowledge on emotion</u>

People store a large amount of information about emotional events, emotional feelings, and emotional responding (e.g. Russell, Fernandez-Dols, Manstead, & Wellenkamp, 1995). Such knowledge is represented collectively in the form of emotion prototypes (Shaver, Schwartz, Kirson, & O'Connor, 1987), or of social schemata (Rimé, Philippot, & Cisamolo, 1990). Primary and secondary social sharing may contribute to the social knowledge about emotions (Rimé, 1995). Primary social sharing of emotion involves the "repeated reproduction" of the event and event-related emotions. Secondary social sharing involves a process analogous to Bartlett's (1932) "serial reproduction" which involves transmission of information through a chain of persons. Bartlett observed that participants in his studies on serial reproduction (1) transformed the original material into a caricature, (2) changed meaningless aspects into meaningful ones, and (3) reconstructed transmitted information in a manner fitting their prior knowledge and expectations. These observations suggested to Bartlett the notion of schemata. Schemata liberate cognitive resources, allowing the person to focus on more novel and unexpected aspects of the incoming information.

Thus, in the secondary social sharing of emotion, people probably process the emotional information they are exposed to through the filter of their pre-existing schemata of emotions. Information confirming these schemata will have a high probability of being neglected. In contrast, episodic elements failing to fit the schemata will be detected as salient, memorised, and later reproduced in serial repetitions. For episodes of weak emotional intensity, consequences of this process for the social knowledge of emotion will be limited because the number of serial repetitions will generally be low. For intense emotional

episodes, however, the number of serial reproductions in the form of secondary sharing will be high, thus affecting collective knowledge.

The notion that emotional experiences are communicated and feed collective knowledge of emotion was recently developed by Harber (K. D. Harber, personal communication, December 1995) under the concept of "the human broadcaster." Based on former research on how individuals cope with an emotional upheaval (Pennebaker & Harber, 1993), Harber proposed that the compulsion to communicate emotional experiences serves not only the teller's need (for meaning, perspective, closure, etc.) but also the community's need for news. Thus, the teller's urge to disclose supplies the receiver with useful knowledge. One of the predictions of the human broadcaster model is that a major event will "travel" farther than a minor event. A story travels when listeners are so disturbed that they, in turn, find disclosure outlets who may also find it emotionally necessary to tell others. A field study conducted by Harber and Cohen (K. D. Harber, personal communication, December 1995) provided support for these predictions. Students visited a hospital morgue during a psychology class field trip. Later, these students were asked to contact people to whom they relayed their morgue experience and to find out how many people these primary contacts had themselves contacted. Students additionally contacted one of their contact's contacts, and found out how many disclosures these people made. Results showed that a story's travel is positively related to the student's amount of pre-trip ruminations, pre-trip communications, vividness of disclosure and degree of emotional upset during the trip. These factors correlated not only with how many people the student told, but also with the number of people the student's contact's contacts told. All in all, the results from this study--conducted in naturalistic conditions--were remarkably consistent with those of the above described investigations.

General conclusion

The data reviewed in this chapter generally confirmed the prediction that emotions elicit a social sharing process. Social sharing was observed in a large variety of contexts and with a large variety of methods. However, the relation between emotional intensity and extent of sharing appeared more complex than was anticipated and this question certainly deserves more research. In the context of these investigations, we addressed an issue which pervades common sense. Does sharing an emotion help? Whereas positive effects on physical health are observed, we found that, with few exceptions, social sharing does not seem to impact on emotional recovery. The general question of the relations between emotion-related writing, experimenter-induced talking, or naturally occurring sharing on the one hand, and emotional recovery on the other hand is certainly in need for clarification. In particular, it should be made clearer which processes in sharing contribute to emotional recovery and which do not. Future research should also overcome a number of limitations of the work which was described in these pages.

First, contemporary views on emotion do agree that emotion are multifaceted phenomena involving physiological, expressive, behavioural, and subjective responses (e.g., Averill, 1982; Frijda, 1986) and it is largely recognised that these different facets correlate only in a lose manner (Frijda, Ortony, Sonnemans, & Clore, 1992). The present investigation concentrated mostly on one single facet of emotional responding--the subjective experience. We did so because the subjective experience appeared to be the critical variable for eliciting the sharing process. Nevertheless, the role of physiological, expressive, or behavioural responses should also be considered in this context..

Second, social sharing was always examined in the perspective of verbalization of the emotional experience. There are, however, other channels for expressing an emotion (for a review, see Feldman & Rimé, 1991) . Future research will have to consider nonverbal expressive aspects in the social sharing of emotion.

Third, our research has been limited to quantitative aspects of social sharing. Roughly speaking, we measured whether sharing took place or not, how often it took place, and with how many persons. Degree of recurrence of sharing was central in this work and we

generally did not focus on how exhaustive the person was in sharing an emotion. This has the inconvenience of leaving a good deal of questions unaddressed. How much of emotional events or which features of emotional events are shared and how much of emotional events or which features of emotional events are kept secret? How far and under what conditions would details of the event be reproduced, or distorted, or omitted? In which way and how far would the shared content evolve, or change with successive sharing situations? Or in which way and how far would the shared content evolve, or change simply as a function of time elapsed since the event happened? Such questions would certainly deserve particular consideration in the context of current debates on reconstructive processes in memory.

Fourth, with the exception of the distinction introduced by Pennebaker and Beall (1986) between factual and emotional aspects of the episode, our research did not explore the content of social sharing. It developed in line with the assumption--pervasive in the Western culture--that as long as people talk about their emotions, they are on the safe side. Reality is likely to be more complex. The content shared may play a crucial role with respect to emotional recovery or relief, as is suggested by recent research. To illustrate, working on recently conjugally bereaved individuals, Bonanno and Keltner (1997) found that expressing negative emotions predicted more severe grief while expressing positive emotions predicted less grief.

Fifth, there is still ample place for investigating the question of individual differences with regard to the social sharing process. In particular, it is possible that reconfronting an emotion through verbalization would be beneficial for some individuals but detrimental for others. Interactions of this type might actually account for the null effects recorded in our investigations. A close examination of the respective effects of an induced sharing on individuals prone to emotional expression/reconfrontation and individuals prone to emotional inhibition/avoidance of emotional memories (King & Emmons, 1990; Roth & Cohen, 1986) would be particularly suitable.

Finally, future studies will have to consider the impact of the recipient of social sharing. Kelly and McKillop (1996) recently concluded a literature review on the disclosure of secrets by recommending that one should reveal troubling secrets only to listeners who

can be helpful. Helpful listeners, in their view, are listeners who are discreet and non-judgmental, and who have the ability to offer new insights and help. If such a listener is available, people may profit from revealing personal information. If such a listener is not available, Kelly and McKillop (1996) recommend that it would be better to keep the information secret to protect the individual from further harm and humiliation. Thus, the listener's response may be of crucial importance for predicting whether sharing would have positive effects with regard to emotional recovery.

      To conclude, this review suggests that important efforts remain to be invested in order to clarify and to specify aspects of social sharing of emotion and their relations with emotional recovery. At the same time, exciting new perspectives emerge from this line of investigation. For instance, in this framework, emotion is seen as having the effect of intensively activating the person's ties to his or her social network. Emotion thus appears as a powerful elicitor of social integration. This fact may have considerable implications for the study of interpersonal and even intergroup relations. Also, in the present context, an emotional episode is seen as activating repetitive and varied narratives with different recipients. Recipients may reproduce these narratives, transform them, and contribute to their dissemination. Emotional information is thus likely to be particularly distinct in memory and to play an important role in structuring individual and collective memory. Finally, in this research, the compulsive need to share after emotion was found related to a process of generation of new meanings. This points to the fact that emotion challenges people's expectations, assumptions and beliefs. As is the case for trauma, emotion may thus affect self-esteem and self-identity in some essential manner. Generating new meanings, reconstructing esteem and identity requires social support, social contribution, and social validation. Perhaps this is what people are expressing when they say that "talking helps." Future research should thus consider the reconstructive and/or transformative effects sharing may have on the self, rather than on the emotional memory.

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Authors note

Table 1

Pearson correlations between intensity of emotion and extent of social sharing in 16 samples

Recall studies	N	Country of respondents	Target emotion	r
Luminet, Zech, Rimé, & Wagner (1996)	122	Belgium	Most negative in last 3 months	.17*
	101	U.K.	Most positive in last 6 months	.18*
	101	U.K.	Most negative in last 6 months	.21**
Rimé, Yogo, & Pennebaker (1996)	106	Korea	Recent negative	.26***
	92	Singapore	*Idem*	.35****
	153	Japan (Kyoto)	*Idem*	.29****
	167	Japan (Sapporo)	*Idem*	.27**
	83	France	*Idem*	.07
	144	U.S. (Texas)	*Idem*	.29*****

Table 1 (continued)

Studies with laboratory induction of emotion	N	Assessment of emotion intensity	Assessment of social sharing	r
Luminet, Bouts, Delie, Manstead, & Rimé (1996), *study 1*	23	Self-report	Observation in the lab immediately after	.62***
study 2	60	Self-report	Observation in the lab immediately after	.59****
		Facial changes	*Idem*	.30**
		Gaze aversion	*Idem*	.63****
study 3	60	Self-report	Self-report 48 hours after induction	.52***
Luminet, Rimé, & Wagner (1996) *study 1* (Belgium)	61	*Idem*	Self-report 24 hours after induction	.33***
study 2 (U.K.)	40	*Idem*	*Idem*	.02
Luminet & Gomrée (1996)	28	*Idem*	Observation in the lab immediately after	.47****
Luminet & Rimé (1996)	50	*Idem*	Self-report 48 hours after induction	.32**
Finkenauer, Frenay, Christophe, & Rimé (1993)	115	*Idem*	Self-report one week after induction	.15

* $p < .10$. ** $p < .05$. *** $p < .01$. **** $p < .0001$

Table 2

Pearson correlations between residual intensity of an emotion at follow-up, and (a) residual

need for sharing, and (b) actual sharing in current life

Figure Captions

Figure 1. Evolution of social sharing after the target emotional event in six follow-up studies:
Child birth (Rimé, Philippot, et al., 1994 (study 4), bereavement (Zech, 1994), first blood
donation, anxiety-arousing exam, attended dissection, and performed dissection (Rimé,
Finkenauer, Luminet, & Lombardo, 1993).

Figure 2. Social sharing of emotion: Rate and extent of sharing in samples from six different
locations (Rimé, Yogo, & Pennebaker, 1996).

Figure 3. Average extent of initial social sharing at each level of initial intensity of the
emotion elicited by a positive and by a negative event (Luminet, Zech, Rimé, & Wagner,
1996).

Figure 4. Average extent of residual social sharing at each level of residual intensity of
emotion elicited by the memory of a negative event (Luminet, Zech, Rimé, & Wagner, 1996).