

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/242697022>

# You can neither remember nor forget what you do not understand

Article · December 2003

CITATIONS

5

READS

13,080

2 authors:



Jordan B Peterson

University of Toronto

128 PUBLICATIONS 7,057 CITATIONS

SEE PROFILE



Maja Djikic

University of Toronto

31 PUBLICATIONS 815 CITATIONS

SEE PROFILE

Some of the authors of this publication are also working on these related projects:



The psychological significance of the Biblical stories: <http://bit.ly/2rMHp08> [View project](#)

# YOU CAN NEITHER REMEMBER NOR FORGET WHAT YOU DO NOT UNDERSTAND

**Jordan B. Peterson, Maja Djikic**

Department of Psychology, University of Toronto

## INTRODUCTION

On June 28, 1914, a radical Serbian youth-group member, Gavrilo Princip, assassinated the Archduke Franz Ferdinand, heir to the Habsburg Empire, and plunged Europe into the First World War. Seventy-five years later to the day, the president of Serbia, Slobodan Milosevic, roused his people to combat in a speech before thousands of his supporters, gathered to commemorate the 600<sup>th</sup> anniversary of the Battle of Kosovo (1389), an event that served as the focal point of a powerful collective Serbian sense of victimization and entitlement. “After six centuries,” Milosevic told the enthusiastic crowd, “we are again engaged in battles and quarrels. They are not armed battles, but this cannot be excluded yet” (Malcom, 1996). The memory Milosovic invoked, mystified and distorted through the intermediary centuries of “unjust hardship” suffered by the Serb people, served to justify Serbian attempts to regain territory they felt unfairly deprived of. Milosevic proved exceedingly successful in exploiting such collective memory to rouse the aggressive defensiveness of his people, and in manipulating them into plundering and murdering in Bosnia and Croatia in the following years.

Memory is vulnerable, easily distorted to fit beliefs and modes of action that are more expedient than accurate. When the process of remembering becomes collective, such distortion may be greatly increased. Collective memories are acquired and transmitted in a social context, and are therefore the modifiable property of many people (De La Ronde & Swann, 1998; Hardin & Higgins, 1996; Rosenthal & Rubin, 1978; Snyder, 1974). The tendency towards social modification, which can serve positively to unite the members of a group, has a very negative, dangerous, underground aspect. Individuals appear somewhat constrained in their willingness to inflict destruction (or at least in the power to do so). Groups of individuals are not. The dangers of self-deception about past events, far from trivial in the personal case, are tremendously magnified in the

social arena. The careless use of memory can lead directly to the grave abuse of people.

Group identity, like individual identity, is shaped by the past. Shared concepts, experiences and memories bind individuals together, and provide them with an implicit, collective frame of reference (Pennebaker et al., 1997; Peterson, 1999a). Such collective frames of reference help group members understand their individual fates, communicate easily with other group members, and lay out collectively acceptable future plans. However, the memories upon which collective identity is based are prone to distortion, and groups, like individuals, frequently modify their memories, in the attempt to keep their self-images morally apposite and pristine (Baumeister & Hastings, 1997). Each of the several steps involved in the essentially reconstructive process of memory (Bartlett, 1932) can serve as an occasion or opportunity to alter the original event (Igartua and Perez, 1997) – often, in a self-serving manner. The record of the event is first inevitably condensed. Inopportune details may be omitted or suppressed, while those that show the group in a positive light are stressed. Then the story is elaborated. Details are incorporated into the account that may not have even been associated with the original story or sequence of events. Finally, and most importantly, the modified memory may be utilized or applied in a context that most particularly justifies present strongly motivated beliefs and actions of the group. Representations of presumed events far removed in time are particularly prone to these forms of distortion, as the effects of reconstruction accrue across generations.

The collectively constructed “memory” of the Battle of Kosovo, for example – used by Milosevic and other Serb nationalists to justify attempts to take over parts of their neighboring countries – accentuated the victimization of the Serbian people, while omitting all reference to the somewhat equivocal actual outcome of the Kosovo battle. Nationalist Serbian leaders agitating for war also consistently implied that the Serbs faced great threat, and proposed that such threat could be confronted pre-emptively in armed battle (Malcom, 1996). Appeal to past or present victimization to rationalize current atrocity appears a far from uncommon and impressively effective technique for rousing hatred (Staub, 1997). Recently, for example, Hutu journalist Leon Mugesera applied the rhetoric of past and potential victimization while delivering a speech at a rally in Northern Rwanda. He told his Hutu audience that the Tutsis with whom they had lived for generations originally descended from Ethiopia (a conjecture introduced by the nineteenth century English explorer Speke) to heighten out-group bias and to incite rage against them as intruders from another country (Off, 2000). Mugesera also warned of potential threat to justify current attacks of Hutus on their Tutsi neighbors. “Know that the person whose throat you do not cut now will be the one

who will cut yours,” said Mugesera (Off, 2000, p. 18). What he may have lacked in subtlety, Mugesera made up for in effectiveness. Within four years, 800,000 Tutsis were massacred.

Complete and accurate historical accounting might contribute to genuine reconciliation between individuals and groups previously or presently in conflict, at least in principle, and help to prevent outbreaks of future violence. But several obstacles, philosophical and practical, stand in the way of such completeness and accuracy. The only truly comprehensive representation of an event is the event itself. Any memory of an event must be, by contrast, incomplete, motivated and reconstructed. In consequence, there appears to be a fundamental conflict between the twin aims of coherence or comprehensibility of representation and correspondence with reality in memory construction. This conflict exists because of the necessarily paradoxical relationship that obtains between the tremendous complexity of remembered events, and the inevitably filtered and narrowed viewpoint of the limited individual observer. The very idea of historical truth has therefore become subject to serious questioning. Furthermore, even if the existence of some transcendent and absolute historical truth is granted, provisionally, it is still very difficult, practically, to set up the circumstances so that the truth can be discovered – so that all the participants in a given cultural or historical circumstance have the opportunity to tell their particular stories, and to have them incorporated into some coherent and accurate representation of the past. It therefore becomes a simple matter to deem all the participants in a given conflict as equally right, pursuing their own equally valid historically-determined visions of reality and justice. Since the Nuremberg trials, however, civilized societies have adopted the idea that certain modes of behavior are wrong – axiomatically wrong. This means that individuals and groups do not all necessarily stand equidistant from the truth, although they still retain some unspecified but implicit right to their own idiosyncratic views of a given event. So how might truth be conceptualized, in some manner useful to a discussion of truth and justice, given the troublesome problem of historical veridicality, the necessarily motivated stance of the observer, and the absolute impossibility of full “objective” representation?

#### THE FRAME AND THE PICTURE: WHO CALLS THE SHOTS, AND WHY?

The presumption that the individual human mind operates like a videotape recorder, dispassionately observing the flow of ongoing events, and producing a permanent, objectively verifiable account of those events, appears natural, even self-evident. However, this intuitively appealing account – the “tape recorder

fallacy” (Neisser, 1982) – is inadequate, empirically and metaphorically. It has become clear in recent years that the sheer volume of information comprising any given sequence of events is so overwhelming that it cannot be comprehensively recorded, even in principle (Medin & Aguilar, 1999). The difficulty of coming to terms with such complexity is known, technically, as the frame problem. The frame problem, simply put, is this: how can a limited organism make realistic sense out of the unlimited information necessarily presented to it? Everything has to be simplified and modeled, without sacrificing “accuracy.” But how? The frame problem has presented a virtually insurmountable obstacle to the development of machines that can operate with even a modicum of independence in any real-world environment (Brooks, 1991a, 1991b), and forced a complete reconsideration of the idea of representation. It constitutes an equally immense barrier to the understanding of human perception and memory.

Every account of any event inevitably utilizes only a tiny fraction of the information that originally comprised that event. Even a video camera must have an operator – must have a motivated, active director who calls the shots. Calling the shots, in a particular situation, means continual determination of what processes and objects will be included in the record, and what elements will be ignored. “What to ignore” is precisely the most complex of cognitive problems, in the real world, since almost everything has to be ignored. This problem of “relevant object” and “irrelevant background” – and the problem of the biases any solution necessarily introduces – could apparently be solved by random sampling of the “environment” that is to undergo representation. However, the immense database that comprises the real world is so vast that a sample of appropriate representativeness would still be far too large to be manageable. How do you sample appropriately from a population of infinite size? Practically, therefore, randomness is of less than no value. Anyone who has switched a video-tape recorder on accidentally during a family event, for example, soon learns that the snippets of unfocused scenery and fragmented dialog thus registered manage to be simultaneously uninformative, uninteresting, incomplete, and incoherent.

The human solution to the problem of sampling is motivation. We are always engaged with the environment – are always “being-in-the-world” – and are never dispassionate observers. We are always pursuing the limited goals we construe as valuable, from our particular idiosyncratic perspectives. We pay attention to, and remember, those events we construe as relevant, with regards to those goals. We do not and cannot strive for comprehensive, “objective” coverage. This process of motivated engagement allows us to extract out and remember a world of productive predictability from the ongoing complex chaos of being.

In his book *Searching for Memory* (1996) Daniel Schacter goes to great lengths to demolish the long-standing myth of memory as literal recoding of reality

(echoing Bartlett (1932) and Jung (1959)). Schacter portrays memory as an essentially paleontological exercise. We reconstruct our memories from fragments of experience, using our broader understanding to guide us, just as dinosaurs are reconstructed from scattered bone fragments, in keeping with the broad knowledge of those doing the reconstruction (Schacter, 1996, p. 40). The events we remember were originally registered, in accordance with our motivations at the time, and are further revised, in the present, in accordance with what we now feel, want, and believe. We are bound to ignore, suppress, distort or even entirely fabricate fundamental aspects of the transpiring stream of events (ibid., p.102) if our current desires and beliefs compel us to do so.

Ziva Kunda (1990) has proposed, similarly, that individuals posit “truths” they find particularly desirable, but only if they can muster up evidence that “supports” those truths. People who are motivated to draw a particular conclusion attempt to be rational, at least *post-hoc*, and are therefore driven to construct a justification of their conclusion that might persuade a “dispassionate observer.” This means that people draw upon memories for facts and experiences that might support their desired conclusion, and that they “creatively combine” aspects of what they already know to develop new and supportive evidence. She reviews evidence suggesting that this process is far from objective, as individuals fail to realize (1) that their conclusions are biased by their goals, (2) that a small and delimited subset of their personal knowledge is being pulled into play, (3) that alternative goals might draw out different aspects of memory, and (4) that completely different or even opposing conclusions might be accepted under alternative circumstances (see also Kruglanski, 1980; Pyszczynski & Greenberg, 1987; Pyszczynski, Greenberg, & Holt, 1985).

Such problems of motivated reasoning become even more complex when the issue is not so much what physically happened in the past, as *the meaning* of what happened. We can make tentative steps, after all, towards an objective accounting for certain events and processes. We can calculate to the second when a solar eclipse occurred a century ago, and we can specify to the meter where it could be observed. What we cannot describe with equal certainty is the psychological impact of the eclipse. We all know from personal experience the immense difficulty of acceptably reconstructing an interpersonal event, such as a currently unresolved argument between two people. Consider, then, the difficulties in determining an acceptable account of something as complex as a war. Every individual battle must not only be noted, objectively – and portrayed in relationship to an ever-expanding net of relevant contextual information – as well as described in terms of its meaning, its implications for action and interpretation. It is no wonder that history is written by the victor.

Memory is not, therefore, and cannot be, an objective record of the past. There can be no memory without a subjective observer, and there is no subjective viewer who lacks a motivated viewpoint. All interpretations are therefore motivated, biased, if not by outright ideological concerns, then at least by a series of implicit decisions about where limited attentional resources might “best” be utilized. What does “best” mean, in such a context? How can memory be discriminated from fiction, since it is by necessity motivated and subjective? And is there anything that can halt the descent into pure post-modernism, or moral relativism, given such a position? Is everything mere interpretation? Do all perspectives become equally valid? If so, how do we distinguish between the claims of the Holocaust survivor to justice from the claims of the Holocaust perpetrator who maintains that his actions were justified (as his ideology presupposed)? How do we determine if a given position is correct or incorrect, without referring to any unattainable objective standard? Are we willing to presume that all positions are equally correct, which is tantamount to presuming they are all equally valueless (since value presupposes a hierarchy of accuracy, as to be “valuable” means to be more valuable) – a position that invalidates the whole notion of interpretation, or position, or opinion, or thought, and makes the search for historical accuracy seem entirely absurd. Such search seems impossible, once the notion of objective account is abandoned, just as the notion of monetary value once seemed impossible, in the absence of the gold standard. But there is a philosophically acceptable alternative to the determination of accuracy in the absence of objectivity – an alternative deeply rooted in pragmatism, a perspective that takes full account of necessary motivation, without abandoning in any manner the idea of or respect for the truth.

#### REPRESENTATIONS OF MOTIVATED ACTIONS: PRINCIPLES AND PITFALLS

We have proposed (Peterson, 1999a; Peterson, 1999b; Peterson & Flanders, in press) in keeping with several similar accounts (Oatley and Johnson-Laird, 1987, Adler, 1958), that perception is framed within a motivated narrative. This narrative, in its simplest form, specifies (1) a particular target of action, (2) a particular reference point against which that target is contrasted, and (3) a sequence of implementable behaviors that are designed to transform the reference point into the target (Peterson, 1999a, in press). The individual posits a desirable point “b,” in accordance with his current state of motivation, contrasts that against point “a,” his interpreted current position or state, and manifests a sequence of actions designed to eradicate the gap, or the value difference. The beginning and end points are abstracted interpretations (mental constructs), matched against the real world, which remain essentially axiomatic or invisible if correct. The actions

are not abstractions, but the manner in which abstractions ground themselves in the world, through their implementation in behavior.

We construe the world in a linear manner, perpetually moving from a comparatively undesirable starting point to a comparatively desirable end point (and then, inevitably, producing a new motivated frame, and beginning the ascent again). Motivated frames that produce their desired end are deemed both sufficient and successful. That success manifests itself to us in the form of satisfaction, or satiation, and in the satisfied disappearance of that frame of reference (a frame that, when successful, becomes a permanent part of our repertoire of useful frames). Motivated frames that fail, by contrast, are experienced as frustrating, disappointing, punishing, in need of revision or eradication. When we are operating within a motivated frame, all phenomena that aid our movement forward appear to us as positively valenced, as promising, as hope-inspiring. Phenomena that impede our movements, by contrast, appear as negatively valenced. Such valenced phenomena, positive or negative, are easily perceived as objects or events, at least when familiar. Non-valenced phenomena, neither helpful nor encumbering – neither friend nor foe, neither tool nor obstacle – are not perceived, are left latent, are invisible, are ground, rather than figure.

This motivated framing appears simple, in many regards, but it has many profound consequences. The most important of these, for the purposes of the present argument, is the inevitable materialization of a value-structure, as an emergent property of the motivated narrative or perceptual frame. To act, in reference to a given target, is to presume, implicitly but necessarily, that the target is more valuable than the present position and, more importantly, to presume that the utility or value of the current frame of reference may be judged by its success in attaining the goal. This means, equally implicitly and equally necessarily, that motivated reference frames that do not culminate in consummatory success must be regarded as ill-posed, by definition (even if that definition has not been explicitly formulated). Frames that fail do not produce what they are specifically designed to produce. One can say, therefore – without fear of contradiction – that unsuccessful action-and-perception frames are inadequate, according to the unconscious value structure of the individual or individuals who constructed them. Unsuccessful frames are incorrect, error-ridden, wrong. And although this might not be a universally applicable definition of truth, it is at least a universally applicable definition of error, which is a good start.

The definition of “wrong” is unfortunately complicated by the fact that delimited action-and-perception frames go wrong in very complex and immediately unspecifiable ways. This is because the subjective delimitation and narrowing that is a necessary part of pragmatic action-framing requires that most of the world be ignored – and ignored in an “invisible” and therefore difficult-to-



detect manner. The objects that make up goal-oriented perception, for example, are generally treated (“perceived”) as homogeneous units, in accordance not so much with their sensory features as with their function. A telephone may reasonably be viewed as a single thing, insofar as it is performing its duty, and transmitting speech. As soon as it fails, however, its intrinsic complexity, ignored during its customary use, manifests itself, and “cries out” (Brown, 1986) to be perceived. Any of the myriad and complex subcomponents of the telephone might be at fault. Furthermore, the vast functional array that encapsulates an “object” – and without which the “object” could not exist – also recedes into invisibility, during the act of simple use. In the case of the telephone, for example, this array includes the household wiring system to which it is attached, and the external exchange system that it is an integral part of. And it should not be forgotten that telephones may also fail, as they do in third world countries (for example), because of political or economic instability, as much as mechanical inadequacy. This means that the ignored part of a functioning telephone also consists of the stability of the broad social systems whose invisible and seamless operation constitutes part of the preconditions for its successful continued existence. The problem of “ignored ground,” therefore, further complicates (or even constitutes) the complex situation of “emergent problem.” Anything ignored for the purposes of current operations may re-emerge without warning. Such re-emergence reminds us that the world is much more complex than our conceptualizations.

Anything that stops an ongoing operation indicates the conceptual inadequacy of the value frame or the concrete actions comprising that frame. Many such emergent obstacles are awkwardly complex and unspecified, rather than simple and obvious. This awkwardness brings us face-to-face with the problem of meaning. We stated previously that a given frame might be considered inadequate, regardless of its specific content, if it does not achieve its specified goal, and that such consideration provided us with a universal definition of error. A universal definition of meaning may be extracted in a very similar manner. Although individuals aim at very different, and even opposing ends (so that very little may be said in principle about the absolute value of their goals), all individuals respond to disruption of their aims in an identical manner (or, at least, in a manner that can be defined as variation within specifiable parameters). Unexpected disruption of goal-directed behavior – emergence of novelty, or anomaly – invariably produces emotion. That emotion may be most simply considered a combination of negative emotion, or anxiety, or hurt, or disappointment, or frustration, which is response to threat (the threat, in this case, is to the goal itself, as well as to the integrity of the goal-directed frame), and positive emotion, or hope, or promise, or curiosity, as disruption signifies the re-emergence of ignored possibility (as unexpected failure at a hated job, for example, brings with it uncertainty, but also freedom). Evidence of error, which is

the re-emergence of the ignored world, is meaningful, intrinsically and unavoidably meaningful – and that meaning is a complex and initially undifferentiated combination of anxiety and promise. This means that the world that reveals itself in error is meaning (before it is object) or irrelevance.

What determines the specific valence or meaning, negative or positive, of a given error? Equally importantly, what determines the magnitude of that valence? Some failures are catastrophes. Some are trivial. Others provide desired freedom. How can the meaning of mistakes be categorized, and considered? And what has such categorization or consideration to do with the relationship between memory and justice? The question of “how” can best be answered by considering a scheme proposed by Carver & Scheier (1998), after the control-systems engineer Powers (1973). Carver & Scheier point out that abstract philosophical concepts – ideals – can best be considered not so much as abstracted objects of perception, in the classical sense, but as homogeneous groupings of behavioral schemes, simplified and treated as unitary classes for the pragmatic purposes of abstract conceptualization. The principle “be thoughtful”, for example, is not a disembodied attitude or value. It is instead a simplified representation of a non-contradictory grouping of predictable and consistent patterns of actions, concrete, mundane actions: make dinner for spouse, take garbage to curb, pick up children from school, give birthday card to secretary; do not bully subordinates, do not take undue personal credit for group accomplishments. These concrete patterns of actions themselves may be further decomposed into what are not so much whole behaviors as movements of muscles, and then of actions of the physiological control systems that underlie such muscle movements (and that are neither conscious, nor abstract, in any sense). This is a partial solution to the mind-body problem: abstractions are representations of behaviors, in large part, and remain valid only insofar as the behaviors that are thus represented actually exist, as patterns of actions. You are not thoughtful, despite your wishful abstract self-description as such, if you are frequently hostile (a sin of commission, from this particular value standpoint), or if you consistently forget your spouse’s birthday (a sin of omission).

An accurate representation of a given emergent anomaly (burning my spouse’s dinner, for example, while fixing the sink) means construction of a socially-acceptable account of the events, as well the construction of a credible case that the likelihood of future similar errors will be decreased. The social acceptability of this account and the credibility of the case for improvement is most generally socially adjudicated or negotiated, before actual evidence or the lack thereof manifests itself in reality. Is the accurate memory of such an event, from the perspective of a necessarily interested observer, “my spouse is hostile and resentful about kitchen duties” or “my spouse made a simple error, when

unfortunately involved in another beneficial activity?” Only time will tell. Repeated errors indicate insufficiently accurate representation. It certainly might be the case that either you or your spouse will be unable to forget the event (one, because “unjustly accused,” the other, because provided with “inadequate excuses or explanations”). This also implies that insufficiently accurate or insufficiently comprehensive representation leads to failure to forget (just as chronic social unacceptability of rationale, or repetition of the same error in the future, might lead to such failure). Very often, a motivated process of self-deception underlies this failure to fully represent and then to forget the past. Individuals confronted by anomaly frequently refuse to fully admit to such confrontation. They repeat the same counterproductive behaviors. They hold on to their inadequate frames of reference, despite their failures. They are afraid of having their basic life assumptions – their figure/ground distinctions – violated and overthrown, and of descending, in consequence, into unstructured, emotion-provoking, and once-ignored complexity and chaos.

SELF-DECEPTION:  
CREATING AND MAINTAINING DISTORTED MEMORIES OF THE SELF/OTHER

Unwillingness to fully process anomaly – failure, threat, frustration, and disappointment – appears common, to the point of normalcy. Such unwillingness has been variously conceptualized, implicitly or as a matter of definition, as repression, self-deception or defense (Freud, reviewed in Westen, 1998) or, more recently – in a highly-cited work of social psychology – as positive illusion (Taylor & Brown, 1988). Individuals characterized by “positive illusion,” for example, manifest “overly positive self-evaluations, exaggerated perceptions of control or mastery, and unrealistic optimism” (Taylor & Brown, 1988, p. 193). It is of some interest to note that 95% of college students apparently fall into such a category (Taylor & Brown, 1994a). Taylor and Brown claim that positive illusions actually help maintain or even constitute mental health, rather than comprising a central feature of psychopathology (see also Taylor & Brown, 1994; Taylor, 1989). They draw evidence from three main lines of investigation.

First, the “normal” personality appears to hold cognitive biases that are both positive and pervasive. Second, measures of self-deception tend to correlate negatively with various indices of psychopathology, particularly self-report measures of anxiety and depression. Third, self-deception appears positively related to high self-esteem and to positive mood. Taylor and Brown claim, in consequence, that positive illusions “make each individual’s world a warmer and more active and beneficent place in which to live” (p. 205). They argue, as well, that the distortions characterizing the self-deceiver (very much reminiscent of

those outlined by Greenberg (1980), in his discussion of the “totalitarian ego”) aid in the production and maintenance of traditional necessary and sufficient conditions for successful life adjustment: self-deceivers are happy, healthy and normal. Brown (1991; Brown & Dutton, 1995) maintains further that possible risks from these illusions (such as grandiosity) do not outweigh the benefits. Taylor, Collins, Skokan, and Aspinwall (1989) believe that those holding positive illusions (which are less reality-distorting than classic defense mechanisms) are also sufficiently flexible to maintain responsiveness to corrective information. In keeping with this view, Taylor (1989) has written a layperson’s book, recommending self-deceptive strategies as an aid to mental and physical health.

There exists, however, a body of work, interesting and at least as methodologically rigorous as the pro-positive illusion data, demonstrating (1) that the phenomenon of positive illusion is not necessarily ubiquitous and (2) that avoidance even of traumatic truths has consequences arguably classifiable as “bad.” Myers & Brewin (1996) claim, for example, with regards to point (1), that the phenomenon of so-called ubiquitous positive illusion may actually be a consequence of the presence of “subgroups of overly positive individuals.” They demonstrated that normal and nonanxious subjects showed no evidence of unrealistic optimism or overly positive self-evaluation, once the effect of a subgroup of “repressors” was taken into account. Paulhus’ recent work (1998) speaks to the same point.

A veritable plethora of evidence exists pertaining to point (2). A recent meta-analysis has indicated, for example, that repressive-defensiveness is associated with *lack* of subjective well-being (life satisfaction, happiness and positive affect) and that the strength of this relationship outweighed that obtaining with all other measurable personality traits (DeNeve & Cooper, 1998). This potent relationship may exist, in part, because inaccurate and overly positive self-estimates tend to set the stage for failure. Robins and Beer (1996) study of self-enhancing freshmen speaks to this point. At the end of a single academic year, students whose self-reported academic performance was greater than their actual record reported significantly higher subjective well-being, compared with a group matched in level of ability that accurately reported their records, even though they had initially predicted greater academic success for themselves. However, they were 32% more likely to have dropped out of school. Martocchio & Judge (1997) similarly reported a negative association between self-deception and learning/skill-acquisition, which they attributed theoretically to the tendency for self-deceivers to make external attributions to protect their self-image, instead of engaging in the difficult process of actual learning. Shane and Peterson (submitted) have recently reported that self-deceivers voluntarily pay more attention to positive than negative contingent performance feedback when

learning, and show dramatic decrements in performance, in consequence. Baumeister, Heatherton, & Tice (1993) found, finally, that individuals with high self-esteem tend to set unreachable goals. When faced with threat to these goals, they suffered larger drops in self-esteem than those who initially evaluated themselves in somewhat less positive terms. Baumeister, Smart & Boden (1996) have tied such drops in self-esteem directly to the emergence of violence. These authors suggest that it is precisely those individuals with high but unstable self-esteem (unstable as a consequence of self-deception, or positive illusions) who are most frequently aggressive. These notions fit well with the detailed observations of the Scandinavian expert on bullying, Dan Olweus, who has studied tens of thousands of children, in an attempt to understand and control proto-fascist behavior. Bullies have a “relatively positive view of themselves,” have “unusually little anxiety and insecurity (or [are] roughly average on such dimensions),” and do “not suffer from poor self-esteem” (Olweus, 1993, p. 34; see also Pulkkinen & Tremblay, 1982).

The potential pathway to hostile and aggressive self-esteem might be inferred from the results of two further studies: Garrison, Earls, and Kindlon (1983) found that 6 and 7 year old children whose self-ratings were higher than those derived from independent evaluators and teachers had more behavioral problems in school and were rated as more maladjusted by observers. Those children who rated themselves as less competent, by contrast (termed “diminishers”) showed no pattern of difference from “normal” children in areas of adjustment. Johnson, Vincent and Ross (1997) have demonstrated that higher levels of denial are associated with worse post-failure problem solving, once the positive effects of self-esteem are controlled, and showed that greater self-deceptive enhancement predicted not only worse post-failure problem solving but increased levels of hostility. Why? Well, first, there is nothing like the belief in personal superiority to justify acts of psychological and physical violence. Second, there is nothing like refusal to change, when change is necessary, to insure that the world transforms itself over time into something so hostile that retaliatory or even pre-emptive aggressive action seems not only necessary, but justified (Peterson, 1999a, 1999b).

While self-deceivers claim decreased stress and increased health, their long-term health prospects nonetheless appear comparatively poor. Tomaka, Blascovich & Kelsey (1992) found, for example, that self-deceivers made more generally benign appraisals of stressful tasks, in keeping with the pro-positive illusion expectation. Interestingly, however, high self-deceivers rated the totality of the laboratory experience as more stressful than the low self-deceivers, even though they initially appraised the specific stressful task they were completing in more benign terms. Jamner & Schwartz (1986) reported that the inattention to

pain characteristic of high self-deceivers appears associated with poorer long-term outcomes (delayed seeking of medical advice and consequent treatment for more advanced pathologies, premature discharge from hospitals, reduced monitoring in health-care facilities (Cohen, 1984)), despite its apparent short-term “benefit” (reduced pre- and post-operative anxiety, reduced medication use, better response to medical treatment, faster and less complicated recovery from surgery (Cohen & Lazarus, 1973; Mullen & Suls, 1982; Suls & Fletcher, 1985)). Finally, Shedler, Mayman and Manis (1993) provided evidence that individuals characterized by positive illusions heighten their stress reactivity, regardless of their self-reported calm. Very telling is the fact that self-deceivers’ levels of reactivity exceeded those obtained from individuals who were manifestly distressed. Eysenck (1994) disagreed with many of the specific diagnostic/methodological statements of Shedler et al. (1993), but outlined a body of experimental evidence supporting one main line of their reasoning: “suppression of emotion can play a vital part” in increasing susceptibility to disease. Why? How? The classic answer is unconscious conflict (Freud, in Westen, 1998). But it is simpler to note the effect that habitual self-deception has on the world.

Imagine the self-hierarchy or self-narrative or self-description of a habitual self-deceiver – imagine his or her theory of the world. Every level of representation has been rendered increasingly inaccurate and insufficient by environmental or experiential change or alteration, followed by wilful failure to update conception in the face of error. Every goal-directed action, predicated on a no-longer valid conceptual hierarchy, is therefore increasingly likely to produce anomaly, and to result in frustration, disappointment and anxiety, as the “world” increasingly refuses to conform to no longer valid expectations or desires. The first two forms of negative affect (frustration, disappointment) are consequential to the “absence of expected rewards” (Gray, 1982); the latter, anxiety, a consequence of the emergence of once-controlled complexity (Davis & Whalen, 2001). “Frustration, disappointment and anxiety” sound a lot like “stress.” We know that the limbically-centered anomaly-detection and emotion generating systems are integrally involved in response to stress (Davis & Whalen, 2001; LeDoux, 1996), and that they help regulate the release of the stress hormone cortisol (Gray, 1987). We also know that cortisol hypersecretion contributes to hippocampal degeneration, memory deficits, obesity, cardiovascular disease, Alzheimer’s disease, AIDS dementia, reduced central levels of serotonin, and depression (Raber, 1998; Stokes, 1995; Whitworth, Brown, Kelly & Williamson, 1995). This all implies that it is not so much “conflict” in the “unconscious” but the real-world consequences of categorical instability and failure to update habit that links self-deception to disease. Self-serving but pragmatically erroneous theories of self and world lead to failure of self and world. This might be regarded as the “whistling in

the dark” hypothesis: self-deceivers allow themselves to remain blithely and blissfully unaware in an environment rendered increasingly dangerous by their inaction. The fact of this heightened danger, and not the repressed contents of the unconscious, is what makes life increasingly “stressful.”

This theoretical perspective is in keeping with the findings of studies employing scales of socially-desirable responding (a concept analogous to self-deception or repression). Such scales originated as “lie scales” – sets of questions designed to detect individuals who attempted to “fake good” while completing personality or psychopathology scales (Eysenck, 1994; Furnham, 1986; Paulhus, 1990; Ones, Viswesvaran & Reiss, 1996). The tendency to fake good, however, soon became conceptualized as a personality trait in its own right (Block, 1965; Sweetland & Quay, 1953). Development of the Marlowe Crowne Social Desirability Scale (MCSD, Crowne & Marlowe, 1960) therefore led rapidly to the development of a body of work on “need for social approval” (Crowne & Marlowe, 1964).

The relationship between self-deception and socially-desirable responding can perhaps best be understood by analyzing the relationship between the self-hierarchy, as described previously, and the social milieu. People negotiate their “reality” (De La Ronde & Swann, 1998; Hardin & Higgins, 1996) – at least in part by using their impressions of others to guide their behavior (Rosenthal & Rubin, 1978; Snyder, 1974). This negotiated reality means establishment of shared, low-resolution assumptions, axioms and principles, which serve to foster cooperation among diverse individuals, and which add predictability to behavior and emotion in socially shared territories (Piaget, 1965; Peterson, 1999a).

From such a perspective, “identification with the group” means personal adoption of prevailing socially-constructed low-resolution axioms, and response to information supporting or endangering the integrity of those axioms, as if personally supported or endangered (Peterson, 1999a). Such “identification with the group” becomes self-deception when the presumption is made that individual behavior and desire is in concordance with societally-established low-resolution axioms, despite ample evidence at the level of emotion (chronic frustration, anxiety, disappointment) that actual personal behavior and the societal ideal remain substantively at odds (either because of personal or social inadequacy) (Peterson, 1999a). Self-deceivers produce instability in their axiomatic low-resolution categories with the progression of time, for example, because of their voluntary failure to update skill and representation, when faced with anomaly. The instability of these categories means that the world increasingly becomes “hostile,” as more and more anomaly is produced in the course of unstable category-predicated goal-oriented activity (people are less predictable and friendly than expected, events in the world seldom turn out as desired, etc.). This increased hostility either motivates radical and painful self re-construction

(unlikely, in the case of the habitual self-deceiver) or the adoption of an increasingly dangerous, vengeful, adversarial, totalitarian personality style (Peterson, 1999a; Peterson, 1999b).

A partisan of the most rigid orthodoxy... knows it all, he bows before the holy, truth is for him an ensemble of ceremonies, he talks about presenting himself before the throne of God, of how many times one must bow, he knows everything the same way as does the pupil who is able to demonstrate a mathematical proposition with the letters ABC, but not when they are changed to DEF. He is therefore in dread whenever he hears something not arranged in the same order (Kierkegaard, in Becker (1973), p. 71).

The authoritarian personality (Adorno, Frenkl-Brunswik, Levinson, and Sanford, 1950) was originally regarded as the prototypical fascist, and therefore by implication as someone necessarily right-wing. This was a very convenient line of logic for the time, given the preponderance of left-wing thinking among twentieth-century western academics. Shils (1954) proposed, however, that the emphasis on right-wing belief was misplaced; proposed that the extremists of the left might also be authoritarian. Both Eysenck (1954) and Rokeach (1956) presented data supporting this perspective, but were criticized extensively (Christie, 1956a, 1956b, Rokeach & Hanley 1956, Hanley & Rokeach, 1956, contra Eysenck; Stone, 1980, contra Rokeach). Altemeyer (1988) suggested reasonably enough in response to this argument that Western leftists and communists might not share the personality of communists in communist countries. He believed, instead, that “real” Eastern-block communists might be high in conventionalism, political conformity and authoritarianism, while those in the West, who apparently stood in opposition to current tradition, might be low in such attributes. Altemeyer’s notion appears predicated on the idea that it is intense traditionalism and conservatism as such that characterize the totalitarian mind, rather than position on the spectrum of political belief. Vladimir Ageyev and his colleagues have since demonstrated that Soviet communists are in fact more authoritarian (McFarland, Ageyev & Abalakina-Paap, 1992; McFarland, Ageyev & Djintcharadze, 1996) than non-communists; demonstrated further that, “although the cultural authorities and enemies were opposite for the two cultures, support for the authorities and opposition to the enemies were components of authoritarianism in both cultures” (p. 1005, McFarland et al., 1992). In addition, Soviet authoritarians, like their western counterparts, typically oppose democratic ideals and civil liberties and are more ethnocentric (showing prejudice against Jews, national groups, women, dissidents, etc.). McFarland et al. (1992) therefore concluded: “authoritarianism is tied to conventionalism rather than to the specific conservative ideologies found in the West. Authoritarianism is not totally content free; if it were, the items would not cohere as a scale, and



certainly, the same items could not cohere in such different cultures. Nonetheless, the same authoritarianism can be expressed as loyalty to different cultural norms, even opposite ones. In all cases, however, this intensified loyalty is coupled with hostility directed towards the culture's deviants, malcontents, and enemies and with support for the use of force against those who are perceived as threats to the accepted order" (p. 1008).

It appears to be voluntary rejection of individual capacity for exploration (and consequent failure to adaptively reconstruct of behavioral skill and cognitive category) that drives the authoritarian individual necessarily further and further into the arms of the state. This means that the authoritarian individual incorporates the state's presumptions into the self, but rejects any possibility that his or her individual efforts might add additional adaptive potency to or even transform the nature of that incorporated structure. Thus, the authoritarian's "protection from the unknown or anomalous" remains valid only in those circumstances where the state's perspective, expectations and desires dominate, and never in a situation where a truly individual response might be called for. It is the creative capacity of the self, however, that comprises the *state's* only potential response to the manifestation of anomaly (in its environmental, personified, or ideological guises) (Peterson, 1999a; Peterson, 1999b). Tradition, by its very nature, can only deal with what has transpired previously. This means that the individual who has sacrificed his relationship with the creative capacity of the self, in an attempt to avoid anomaly-induced negative emotion, has no choice but to react to the emergence of anomaly with aggression, in the attempt to force it out of existence (so that tradition can once again provide all the answers). Indeed, empirical evidence exists to suggest that it is precisely under periods of threat that authoritarian identification increases (Doty, Peterson & Winter, 1991; Sales, 1973; Sales & Friend, 1973). The fact that authoritarians tend to be low in trait openness (Peterson, B.E., Smirles & Wentworth, 1997) (which is abstract exploratory behavior) also lends credence to such a suggestion, and offers the possibility of positing a causal model: Rejection of creative capacity, evidenced at least in part as self-deception, means increased authoritarianism under conditions of threat. By contrast, willingness to face threat forthrightly and creatively means adherence to the truth as process, rather than state, generation of new truth, in consequence, and constant individual and social redemption (although not considered in such terms by modern thinkers). In keeping with such a theory, there is a growing body of clinical evidence suggesting that not only do those who avoid the painful truth get worse, but that those who voluntarily expose themselves to the anxiety-provoking and depressing – even if extremely traumatic – get better.

Pennebaker and colleagues have demonstrated, for example, that normal individuals who detail their past traumatic experiences decrease their autonomic reactivity and their subjective experience of distress, stimulate productive behavioral change, enhance their immune function, and improve their physical health over time (Pennebaker, 1988, 1989, 1993; Pennebaker & Hoover, 1985; Pennebaker & Susman, 1988; Petrie, Booth, Pennebaker, Davison & Thomas, 1995), while suppression of emotional thought, by contrast, decreases immune functioning (Petrie, Booth & Pennebaker, 1998). Pennebaker is convinced, specifically, that the act of turning trauma into words is therapeutic (Pennebaker, Mayne & Francis, 1997). If categories are regarded as functional (as means of goal-directed world-simplification, as means to obtaining desired ends) then the manner in which “verbal processing” might reduce stress is clear.

In the more explicitly clinical domain, Foa and colleagues have demonstrated that exposure techniques (which involve “reliving” a stressful event in imagination, over and over, in as much painful detail as possible) lead to long-term improvements for those suffering from post-traumatic stress disorder (e.g., rape victims), agoraphobics, and obsessive-compulsives (Foa, Feske, Murdock, Kozak, & McCarthy, 1991; Foa & Kozak, 1985; 1986). Conversely, female sexual assault survivors who attempt to suppress rape-related thoughts experience a significant rebound in the frequency of such thoughts (Shipherd & Beck, 1999). It should be noted that the magnitude of exposure-related improvement appears positively related to the stress induced as a consequence of the imaginal replaying. Participants characterized by higher levels of treatment-induced state physiological reactivity are also those who improve most significantly as a consequence of treatment. In their extensive review, Foa and Kozak (1986) note that exposure to feared situations constitutes a core element of theoretically-diverse yet successful psychological treatments for anxiety. Perhaps this core element exists for two related reasons: first, exploration, categorization and update of habit truly eradicates dangerous anomaly; second, belief in the fundamental utility of such voluntary exploration constitutes veridical, necessary and generalizable “self-efficacy” (Williams, Kinney, & Falbo, 1989; Williams, Kinney, Harap, & Liebmann, 1997) or even genuinely useful self-esteem. These studies and reviews strongly suggest that those who force themselves to come to terms with the categorical significance of anxiety-provoking and painful events are those who come through such events with their integrity restored.

We are now in a position where we can understand, in detail, the processes that underlie self-deception and the distortion of memory, and the manner in which those processes virtually ensure the emergence of personal and social psychopathology. Individuals operate within a goal-oriented structure, with a hierarchical nature (Carver & Scheier, 1998; Peterson, 1999a). Ongoing

experience is evaluated with regards to its implications for that structure. Events that indicate goal-attainment are positive; those that indicate failure or other disruption, negative (Gray, 1982; 1987; Oatley & Johnson-Laird, 1987). Events in the latter class are always undesired and frequently unexpected. The unexpected is not understood, although it is nonetheless immediately evidence that current plans and goals are insufficient. This insufficiency must be rectified, for desired progress to continue; such rectification can only take place once the unexpected and undesired has been explored.

“Explored” means evaluated with regards to the other goal-oriented schemas that make up the self-hierarchy; means, further, reconstruction of those schemas at the conceptual and skill levels, at whatever level appears most appropriate, so that similar future operations do not produce anomaly. Voluntary refusal to engage in this process, and then action as if the world has nonetheless been stabilized, constitutes self-deception. This is action as if the error message is irrelevant (when it in fact emerged as a consequence of plans and conceptualizations already acted upon as valid by the individual in question), or is insufficient reconceptualization, in the service of the shortest-term, immediate and most narrow goals. Such voluntary refusal inevitably produces a deterioration of skill and concept, particularly at the higher levels of conceptualization, and increasingly destructive mismatch between expectation, desire and reality. This continual but self-induced punishment breeds hostility, resentment and hatred (as well as ever-more stubborn refusal to “face the facts,” even when defined subjectively) (Peterson, 1999a; 1999b).

So what does this all mean? It means that most of the time we operate within the confines of our normal stories, which allow us to parse the world up into comprehensible, functional categories, evaluate ongoing occurrences, and attain those things we deem desirable. It means that now and then, because of our own ignorance, because of the stasis of our schemes of categorization, or as a consequence of unrealized change in the nature of the previously unmanifest world (and those three phenomena are not really distinguishable) things do not unfold according to our plans. We are made aware of our failures as a consequence of our innate default emotional response to the emergence of anomaly. We then avoid, and stubbornly maintain the structure of what we now know, by our own definitions, to be invalid, or we approach the terrible unknown cautiously, explore, and update in some normal or even revolutionary sense our goal-directed structures of conceptualization and behavioral routine. The ever-threatened structure of our “worlds” has found narrative representation in stories of the fall of man, in stories of the never-ending apocalypse. The archetypal attitudes to that eternal threat have been represented in mythology by the twin figures of the hero, who “renews the world,” and the adversary, who works for its

demise (or who does not trouble to work, who lies and remains arrogant, to produce the same end) (Peterson, 1999a).

Anthony Greenwald (1980), in his classic social-psychological paper on the totalitarian ego, compared the information-control strategies of the typical individual to that of authoritarian states, noting that such strategies were designed to “preserve organization in cognitive structures.” It is certainly the case that the organization of cognitive structures must be maintained (Kelly, 1955). Otherwise, everything degenerates into chaos, and chaos is not affectively irrelevant. It is, by contrast, terrifying; is in fact the essence of terrifying. Yet the other side of terror, so to speak, is pathological order, just as dangerous and frightening. It is a tricky business to negotiate between Scylla and Charybdis, but recourse to self-deception in the service of stability merely ensures that the gods conspire to flood the sinful world (Eliade, 1978). Greenwald shrank from drawing the most painful conclusions from his observations. He states: “the use of terror as a device for social control is a fundamental part of [Hannah] Arendt’s conception of totalitarianism, yet it obviously has no analog in the functioning of ego” (footnote, p. 609). This absence of ego-analog is something far from obvious. The positing of such a lack of identity appears more as a dangerous form of naivety, and also constitutes an implicit presupposition of whole lines of current theoretical and experimental endeavour in social psychology (as detailed previously).

Reinhold Niebuhr (1944) has observed something most pertinent and instructive in this regard: “It must be understood that the children of light are foolish not merely because they underestimate the power of self-interest among the children of darkness. They underestimate this power among themselves” (p. 11). It is certainly possible, and appears more than likely to be the case, that totalitarian states are not so much oppressive political structures forced upon innocent and otherwise benevolent subordinate individuals, as they are indubitable expressions of the general self-deceptive philosophy of the majority of the individuals comprising those states. The “totalitarian ego” is certainly capable of oppression and aggression. The self-deceptive individual is, likewise, perfectly willing to sacrifice the best in him or herself to the conveniences of the moment and, if the situation arises and the horrible act can be appropriately rationalized, to sacrifice the dangerous and irritating other to the rigid god of static belief. This is a depressing and frightening notion, but seems to be the lesson put forth in the strongest terms by Orwell (1965), Arendt (1994), Frankl (1971), Solzhenitsyn (1975) and, more recently, Goldhagen (1996) and Chang (1998). Active and, more importantly, passive processes of self-deception that feed collective memory distortion may well serve the short-term and narrowly-defined purposes of the individual and the state. It appears likely, however, that the sins of the self-deceptive accumulate, and find their expression in long-term terror and

catastrophe. And so one might posit that states that refuse to include the voices of the victimized, and that refuse to tell the truth about past arrogance and error, are also precisely those states that tend towards continual aggression, as well as continual self-destruction. And a true skeptic might notice that such an end might actually constitute such a state's true desire.

#### VIOLATING FUNDAMENTAL BELIEFS: THE NATURE OF TRAUMATIC MEMORIES

“Positive illusion” and individual self-deception constitute distortions in viewpoint that are frequently subtle enough to pass unnoticed, despite their potential for generating pathology. Self-deceptive individuals and those who surround them can therefore continue to “whistle in the dark,” as long as the feedback that they receive from the environment is not powerful enough to force them to become genuinely conscious of and re-examine their implicit frames of reference. Even catastrophic failure of action or belief may remain unprocessed. However, such failure has its emotional costs and consequences (as necessary desire remains unfulfilled; as protection from the complex world disappears), despite stubborn refusal or absolute inability to investigate the causes of pragmatic insufficiency. It is perfectly possible to suffer from failure, after all, without coming to any real understanding (indeed, any real representation) of the world-events that produced such failure.

Cultures, like individuals, have a value-hierarchy. That hierarchy is complex. Much of it is implicit, coded in patterned behavior, and not necessarily fully represented in an explicit abstract manner. Individuals nest their personal and somewhat idiosyncratic value hierarchies within the confines of an over-arching hierarchy, provided by the cultures they are part of. In this manner, the differing values and behaviors of plumbers, prison guards and shepherds may be brought into the twin domains of social desirability and predictability, so that the entire culture may benefit from the diverse activities of varying individuals, without being unduly threatened by that diversity. The cultural value-hierarchy – the corpus of laws, both written and unwritten, that governs that culture – might be regarded as the embodiment of the social contract, whose existence is most particularly revealed in the behaviors manifested by the individuals who compose that culture (rather than in the abstract representations purporting to encapsulate that culture). The existence of a given social contract gives rise to expectations, on the part of individuals, with regards to likely rewards and punishments (and with regards to what might be reasonably ignored, in a given situation). Culture, like memory, can therefore be said to be functioning properly, if its continued operation meets the expectations of its participants, in sufficient measure

(“sufficient” meaning: dreams of alternatives do not become sufficiently motivating to impel social revolution).

What if expectations are violated? What if the rules of the game are broken? Well, it depends on the magnitude of the rule. Violated expectations, or emergence of anomaly, at the level of action, are likely to threaten only the most timid of cultural participants, while providing the majority with an optimal dose of novelty. Most people enjoy minor transformations of low level behaviors or concepts, as long as those alterations are potentially productive or aesthetically pleasing. But disruptions higher up the abstraction hierarchy become increasingly threatening, increasingly traumatic. It may be somewhat pleasing if you discover that your spouse is assembling the new furniture incorrectly, despite his or her general mechanical competence. It is anything but pleasing if you find out that he or she is having an affair. In the latter case, more large-scale theoretical frame conceptualizations, invisible, stabilizing axioms vanish. More of the previously ignored complex world re-emerges. A sense of betrayal and personal incompetence rises, in precise proportion to the perceived magnitude of the error (“magnitude”: area of territory, space and time, past, present and future, now rendered both unpredictable and non-productive in consequence of the error). Such violation of fundamental presupposition constitutes trauma. Trauma is sudden negative emotion and confusion, at axiomatic levels of belief. Trauma is indicative of major error in conceptualization. Trauma is simultaneously unforgettable, because of its emotional intensity, and incomprehensible, because of its complexity.

Individual memories of traumatic events are particularly relevant to the current discussion. Cultures differ most dramatically with regards to their interpretation of past traumas. And it is of great interest to note that the terrible and incomprehensible things that an individual does are even more likely to produce psychopathologies of trauma than the terrible things that befall an individual. In the former case (an individual doing an incomprehensible act) the traumatized individual has encountered a situation that exceeds his understanding. He has done something that supersedes his own model of himself. He has revealed himself to himself, for example, as a force for great evil. Because this revelation shakes his understanding of the world to the core, he does not precisely remember. To remember is to tell a coherent story, detailing causality in behavior, and no such story can be easily told about the great individual capacity for evil. To remember is to tell a story imbued with meaning. Where there is no specified meaning, the story suffers, in consequence. The same problem of coherence obtains for the victim. The child who is a target of vicious sexual assault, to take an extreme case, might not precisely remember (although he may also be unable to forget). How is a four year old to make coherent, representable sense of an

event simultaneously so violent and shocking? So shrouded in secrecy? So much a violation of the trust that is a precondition for the child's dependence on adult care and protection?

Van der Kolk and Fisler (1995) have taken great pains to detail the paradoxical nature of traumatic memory. Trauma is the emergence of the unknown, in doses large enough to shatter long-standing presuppositions of predictability and stability. Tim O'Brien's autobiographical description of the reaction of soldiers to the absolute undesirability of the actual combat situation serves as dramatic illustration of the potential consequences of such shattering:

For the most part, they carried themselves with poise. Now and then, however, there were times of panic, when they squealed or wanted to squeal but couldn't, when they twitched and made moaning sounds and covered their heads and said Dear Jesus and flopped around on the earth and fired their weapons and cringed and sobbed and begged for the noise to stop and went wild and made stupid promises to themselves and to God and to their mothers and fathers, hoping not to die. In different ways, it happened to all of them. Afterward, when the firing ended, they would blink and peek up. They would touch their bodies, feeling shame, then quickly hiding it. They would force themselves to stand. As if in slow motion, frame by frame, the world would take on the old logic – absolute silence, then the wind, then sunlight, then voices. It was the burden of being alive (1990, pp. 18-19).

The unknown is not represented, and cannot be, just as the nature of the parent who perpetrates a violent assault on a child is a phenomenon beyond comprehension, beyond mapping. But the event still occurred. So what is remembered, what cannot be forgotten? Traumatic memories are highly emotion-laden and fragmentary. They consist of great fear, and flashes of sensory images. The neurophysiological work of Joseph LeDoux (1996), given a twist to account for unpredictability as primary motivation for fear (Davis & Whalen, 2001), explains exactly why.

Reaction to the unknown is a multi-stage process. When something unexplored (incomprehensible, dangerous, unpredictable) first manifests itself, it is not an object. It is instead something to motivate action (freezing, running away), before thinking, and perhaps even before emotion. The brain circuits that motivate such immediate action are phylogenetically ancient, very fast, with regards to sheer processing time, and very low-resolution, imprecise. Why? Because life is in danger, when the unexpected emerges. Failure of plan, of behavior, of conceptualizations means, in an instant, that anything could happen. One of the potential consequences of "anything" is harm. Freeze! Run! The unknown is,

therefore, most immediately, “that which compels immediate paralysis,” or, “that which impels me to run in the opposite direction.” That is categorization too, behavioral categorization, before emotion and certainly before object or name. Only after behavioral categorization is there emotion. Pain, frustration, disappointment, rage and anxiety (integrally linked negative emotions) surface in a confused jumble. All behavioral response systems are simultaneously set at alert, so that appropriate action (aggression, screaming, crying, flight) can be instituted on less than a moment’s notice.

In the absence of further danger, curiosity emerges. Additional exploration takes place, and the gathering of additional information. Only then will object recognition, naming, ensue (a process that in many very complex situations can take minutes, days or months and not the tenths of seconds we normally associate with immediate, familiar object perception). How should betrayal by a lover, or a belief – a collapsed ideology – be construed? What are the objects, in a world of betrayal? How should experience be construed, in the absence of the relationship, or the cognitive structure? This is not a question that finds its immediate resolution. Very old brain circuits mediate our initial behavioral, then emotional, responses to the unknown. Then the newer, linguistically sophisticated but slower circuits take over, if they are allowed to, if we are willing to face the threat and complete the work. What is that cannot be remembered, in the case of true trauma? Anything about the event that was not understood (which means almost all of it): the causal sequences leading to the violent assault, for example, the nature of any behavioral patterns characteristic of the abused child that were temporally proximal to the event or increased its probability (however inadvertently and innocently) and, most importantly, how the child’s conceptualizations and actions might be altered in the aftermath of the assault, so that its future probability will decrease. This and only this can be considered a sufficiently “accurate” representation.

If the linguistically sophisticated classification circuits cannot come up with a coherent account of the event (which is “what happened, pragmatically, but not necessarily objectively” and which is “correct” only in the case where a causal account has been generated in sufficient detail so that the account is socially transmissible and where repetition of the error is unlikely) then the emotional circuits, with their low resolution high action-motivation classification system, retain control over the memory. The memory is, at that point, only that low-resolution high-action motivation classification, and nothing else (no “accurate video-tape recording” somehow repressed into the unconscious, in complete form). The emotional classification makes the event both incomprehensible and unforgettable. The ancient emotional systems say, over and over again, in the form of recurrent traumatic images, “Here is a threat which has been



insufficiently processed. Process it. Your life is in danger. Process it. Your life is in danger.” And since they are automated systems, in large part, and since their job is only threat identification and communication, they are perfectly willing to say the same thing *ad infinitum*, and to ensure that the traumatized individual is unable to get on with his or her life until the terrible event has been made inclusive, coherent, communicable, and unlikely to repeat. An accurate historical memory therefore has precisely those properties – and is most difficult to generate in precisely those cases that originally generated the most negative emotion, confusion and chaos.

If my account of an event, say, as perpetrator, does not take into consideration your account, as victim (which means that it does not provide a story or encapsulation that is coherent, to you, and communicable, to you, and further, if it fails to convince you that it will not ever happen again), then your inability to forget and get on with your life is evidence for the insufficiency of my account. Understanding is the barrier to repetition. Understanding the past makes it go away. And “go away” means that it does not rear its ugly head in the present, in the form or recurrent “memory,” or in the future, in the form of replication of the original trauma. Germans who are still Nazis neither remember nor forget. Russians who are still Stalinists neither remember nor forget. They still embody the past, are still the past. The stories of their victims have not been incorporated into their historical narratives. They have not taken into account those they turned both literally and metaphorically into ground, when pursuing their own too-narrow interests. And these interests are defined as “too narrow” not merely by the fact of vicious aggression, terrible as that was, but by the absolute abject failure of those interests and the presuppositions they were founded upon to produce anything but constant painful evidence of their own conceptual inadequacy. The Nazi ideology failed by its own express standards – as well as by the standards applied by their enemies. The Stalinists failed, too, to make the future better, in any way, than the past, including those ways defined as better by Stalinists.

Aleksandr Solzhenitsyn (1975) made a brilliant, but terrifying supportive point in his *Gulag Archipelago II*. He was particularly interested in the case of communist ideologues, swallowed up despite their orthodoxy by the terrible waves of Stalinist persecution in the 1940’s and 1950’s in the Soviet Union. He considered them to be extremes of a more general case: “How could it be anything but hard! It was more than the human heart could bear: to fall beneath the beloved axe – then to have to justify its wisdom” (p. 326). To be so convinced that the world was a particular way, and then to be faced with such hard evidence that it was not? And what was the choice of these self-betrayed individuals? To fall into a terrible pit, to admit that everything one had believed in was wrong

(including memories, since they are beliefs too), or to deny one's own suffering, to make one's own motivations and emotions heretical? Imprisoned ideologues therefore not only suffered rejection and imprisonment, but rejection and imprisonment amplified by the fact that every complaint uttered in protest was heretical, was evidence for the insufficiency of the belief that both provided protection and gave hope? How could such a terrible trauma be remembered? Not without complete painful difficult dissolution of the current value system. Not without the incorporation into any new system of all the claims of the oppressed and rejected – including the now heretical self.

Ye have heard that it hath been said, Thou shalt love thy neighbour, and hate thine enemy.

But I say unto you, Love your enemies, bless them that curse you, do good to them that hate you, and pray for them which despitefully use you, and persecute you;

That ye may be the children of your Father which is in heaven: for he maketh his sun to rise on the evil and on the good, and sendeth rain on the just and on the unjust.

For if ye love them which love you, what reward have ye? do not even the publicans the same?

And if ye salute your brethren only, what do ye more [than others]? do not even the publicans so?

Be ye therefore perfect, even as your Father which is in heaven is perfect. (Matthew 5:43-48)

#### ACKNOWLEDGMENT OF SUFFERING AS A FORM OF JUSTICE

“Fundamental to all forms of justice is official acknowledgment of what happened, whether by criminal process or by truth commission,” according to Judge Richard Goldstone, former UN Chief Prosecutor in the war crimes trial in former Yugoslavia, and investigator of past political violence in South Africa. Setting the historical record straight by investigating grave human rights abuses, for example, might be regarded in theory as likely to aggravate already tense situations in countries recovering from genocide (such as Bosnia or Rwanda). But such a theory appears incorrect. On the contrary, failing to attempt such historical adjustment and adjudication creates several dangers (or leaves those already in place lurking, and liable to re-emerge).

If the perpetrating group does not acknowledge and take responsibility for past violence, the victimized group cannot reasonably re-establish any relationship of trust (a necessary precondition for any civilized reconciliation), since the motivations, theoretical positions and causal action sequences underlying the

original violence may well still be in place. Furthermore, if international court tribunals or similar institutions do not legally sanction the perpetrators of the crimes, the victims are likely to take responsibility for punishment in their own hands, continuing the cycle of violence. Finally, the problem of what Nico Frijda (1997) calls “unfinished business” will continue to manifest itself, if the perpetrators refuse, for example, to disclose the locations of victims’ bodies or mass graves or any other information necessary to victims’ families. The survivors are faced with moral obligations to their departed loved ones, and with the necessity of understanding their final fate, in order to grieve them properly. Both the living and the dead can reasonably claim not to be denied the suffering they endured. Suffering is, after all, injustice speaking for itself. And for the survivors, acknowledgment and condemnation of horrors endured becomes in itself a form of justice. In consequence, establishing a truthful, inclusive, complete and coherent historical record of violent conflicts will help decrease the likelihood of repetitive cycles of violence, and help foster genuine reconciliation.

The “taking into account” of that which is excluded makes society much stronger. The exclusion of the suffering from full membership in society means that the social group no longer has access to the full range of creative human possibility that the excluded potentially represent. Furthermore, continual conflict between victimizer and victim in any culture saps the strength of that culture. The perpetrators become increasingly totalitarian, cruel and rigid. The victims become increasingly resentful, hostile and nihilistic. Northrop Frye (1982, 1990) portrayed the entire Old Testament as a series of stories about the catastrophic consequences of emergent totalitarianism and cruelty among sequences of cultures who denied the weaker members of society their full rights as citizens. The philosopher of religion Huston Smith (1991) draws two examples from the Bible, to illustrate this point. The first is the story of Naboth. Naboth refused to grant his family vineyard to King Ahab. In consequence, he was framed on false charges of subversion and blasphemy, and then stoned. Since blasphemy was a capital crime, his property was confiscated by the state. When news of this conspiracy reached the prophet Elijah, the Word of the Lord descended up on him, saying:

“Arise, go down to meet Ahab king of Israel, who is in Sama’ria; behold, he is in the vineyard of Naboth, where he has gone to take possession.

And you shall say to him, ‘Thus says the LORD, “Have you killed, and also taken possession?’” and you shall say to him, ‘Thus says the LORD: “In the place where dogs licked up the blood of Naboth shall dogs lick your own blood”’” (1 Kings 21:18:19 RSV).

Smith states: “The story carries revolutionary significance for human history, for it is the story of how someone without official position took the side of a

wronged man and denounced a king to his face on grounds of injustice. One will search the annals of history in vain for its parallel. Elijah was not a priest. He had no formal authority for the terrible judgment he delivered. The normal pattern of the day would have called for him to be struck down by bodyguards on the spot. But the fact that he was ‘speaking for’ an authority not his own was so transparent that the king accepted Elijah’s pronouncement as just” (p. 289). A very similar sequence of events transpires later, during the reign of David. David sees Bathsheba bathing from the top of his palace roof, and wants her. However, she was married. In consequence, David sends her husband Uriah to battle, in the front lines, where he is placed dangerously, and then killed. Everything seemed fine, until Nathan the prophet heard the story. He sensed immediately that the thing David had done had displeased the Lord. So he marched straight to the king who, as Smith points out, had absolute power over his life, and said to him:

Why have you despised the word of the LORD, to do what is evil in his sight? You have smitten Uri’ah the Hittite with the sword, and have taken his wife to be your wife, and have slain him with the sword of the Ammonites.

Now therefore the sword shall never depart from your house, because you have despised me, and have taken the wife of Uri’ah the Hittite to be your wife.”

Thus says the LORD, “Behold, I will raise up evil against you out of your own house; and I will take your wives before your eyes, and give them to your neighbor, and he shall lie with your wives in the sight of this sun.

For you did it secretly; but I will do this thing before all Israel, and before the sun.”

David said to Nathan, “I have sinned against the LORD.” And Nathan said to David, “The LORD also has put away your sin; you shall not die.

Nevertheless, because by this deed you have utterly scorned the LORD, the child that is born to you shall die” (2 Samuel 12:7-14).

Smith states: “The surprising point in each of these accounts is not what the kings do, for they were merely exercising the universally accepted prerogatives of royalty in their day. The revolutionary and unprecedented fact is the way the prophets challenged their actions”(p. 290). He concludes, “stated abstractly, the Prophetic Principle can be put as follows: The prerequisite of political stability is social justice, for it is in the nature of things that injustice will not endure. Stated theologically, this point reads: God has high standards. Divinity will not put up forever with exploitation, corruption and mediocrity” (p. 292). Societies predicated on the idea that even the weak are worthy of respect thrive and last.

Societies that exploit, or forget the weak, risk the “eternal vengeance of God” (Peterson, 1999a):

Thus says the LORD: “For three transgressions of Israel, and for four, I will not revoke the punishment; because they sell the righteous for silver, and the needy for a pair of shoes – they that trample the head of the poor into the dust of the earth, and turn aside the way of the afflicted; a man and his father go in to the same maiden, so that my holy name is profaned; they lay themselves down beside every altar upon garments taken in pledge; and in the house of their God they drink the wine of those who have been fined. (Amos 2:1-16 RSV)

Tyrannical societies exclude. Such exclusions constitute a violation of the implicit principles upon which society itself must be founded, in order to maintain itself over time (Peterson, 1999a). Violation of such principle renders tyrannical societies self-defeating.

#### CONCLUSION

Memories, individual and collective, are shaped by our motivations, past and present. This shaping is inevitable, because the world is complex beyond comprehension. But such inevitable shaping is transformed into distortion by our arrogant and fear-predicated reluctance to abandon or modify cherished beliefs in the face of disconfirming evidence (even when that disconfirmation is personally defined). The individual and collective rigidity engendered by such reluctance produces increasing suffering, on our part, as well as that of others, as the world moves away from our model, and desires and need both remain unfulfilled. Furthermore, as the spiraling consequences of self-deception unfold, we refuse even to admit to that suffering and lack of fulfillment. This means that the deepest impulses we have, and that we share with others – pain, anxiety, and thwarted creativity – become heretical, and worthy of secrecy, punishment, and destruction. We therefore become willing to sacrifice the best parts of our selves to our rigid and oversimplified belief, and offer up the life and well-being of others, as well – particularly if those others may be construed as a threat to the integrity of our protective but increasingly fragile shells.

The psychological, historical and mythological record makes the story quite clear: individuals and societies that tip the balance too far away from correspondence and completeness of representation towards simple coherence risk degrading their relationship with complexity. Such degradation carries with it its own inevitable and severe punishment, as the ignored world takes its revenge. This implies that there are intrinsic albeit complex and subtle moral limits on what constitutes accurate memory. Memory has to make sense. It has to meet the

emotional and motivational needs of those who carry it. It has to be sufficiently flexible to allow for update. It has to account for past trauma, and decrease the likelihood of trauma in the present and future. Finally, an accurate representation of the past must account, acceptably, for the experience of all those whose being made up that past – must encompass and acceptably represent devalued suffering in the past; must make allowances for creative differences, in the present.

## WORKS CITED

- Adler, A. (1958). *What life should mean to you*. New York: Capricorn Books.
- Adorno, T. W., Frenkel-Brunswick, E., Livinson, D. J., & Sanford, R. N. (1950). *The authoritarian personality*. New York, NY: Harper
- Allaman, J.D., Joyce, C.S. & Crandall, V.C. The antecedents of social desirability response tendencies of children and young adults. *Child Development*, 43, 1135-1160.
- Altemeyer, B. (1988). *Enemies of freedom: Understanding right-wing authoritarianism*. San Francisco, CA: Jossey-Bass Publishers.
- Apsler, R. (1975). Effects of embarrassment on behavior toward others. *Journal of Personality & Social Psychology*, 32, 145-153.
- Arendt, H. (1994). *Eichmann in Jerusalem : A report on the banality of evil*. New York: Penguin.
- Bartlett, F.C. (1932). *Remembering: A study in experimental and social psychology*. Cambridge: University Press.
- Bauer, M.E., Vedhara, K., Perks, P., Wilcomck, G.K., Lightman, S.L. & Shanks, N. (2000). Chronic stress in caregivers of dementia patients is associated with reduced lymphocyte sensitivity to glucocorticoids. *Journal of Neuroimmunology*, 103, 84-92.
- Baumeister, R. F., Heatherton, T. F., & Tice, D. M. (1993). When ego threats lead to self-regulation failure: Negative consequences of high self-esteem. *Journal of Personality and Social Psychology*, 64, 141-156.
- Baumeister, R. F., Smart, L., & Boden, J. M. (1996). Relation of threatened egotism to violence and aggression: The dark side of high self-esteem. *Psychological Bulletin*, 103, 5-33.
- Baumeister, R.F. & Hastings, S (1997). Distortions of collective memory: How groups flatter and deceive themselves. In Pennebaker et al (Ed.). *Collective Memory of Political Events: Social Psychological Perspective*. New Jersey: Lawrence Erlbaum Associates, Inc.
- Becker, E. (1973). *The denial of death*. New York: The Free Press.
- Block, J. (1965). *The challenge of response sets: Unconfounding meaning, acquiescence, and social desirability in the MMPI*. New York: Appleton-Century-Crofts.
- Brewer, M. B., & Schneider, S. (1990). Social identity and social dilemmas: A double-edged sword. In D. Abrams & M. Hogg (Eds.), *Social identity theory: Constructive and critical advances*. London: Harvester-Wheatsheaf
- Brooks, A. (1991a). Intelligence without reason. MIT Artificial Intelligence Laboratory: *Artificial Intelligence Memo 1293*.
- Brooks, A. (1991b). Intelligence without representation. *Artificial Intelligence*, 47, 139-159.

- Brown, J. D., & Dutton, K. A. (1995). Truth and consequences: The costs and benefits of accurate self-knowledge. *Personality and Social Psychology Bulletin*, 21, 12, 1288-1296.
- Brown, J. D., (1991). Accuracy and bias in self-knowledge. In C.R. Snyder & Dr. R. Forsyth (Eds.), *Handbook of social and clinical psychology*. (pp. 158-178). New York: Pergamon
- Brown, L. L., Tomarken, A. J., Orth, D.N., Loosen, P.T., Kalin, N.H. & Davidson, R.J. (1996). Individual differences in repressive-defensiveness predict basal salivary cortisol levels. *Journal of Personality and Social Psychology*, 70, 2, 362-371.
- Brown, R. (1986). *Social psychology* (2nd Ed.). New York: Free Press.
- Byrne, D. & Bounds, C. (1964). The reversal of F Scale items. *Psychological Reports*, 14, 216.
- Carver, C. S., & Scheier, M. F. (1998). *On the self-regulation of behavior*. New York, NY: Cambridge University Press.
- Chang, I. (1998). *The rape of Nanking: The forgotten Holocaust of World War II*. New York: Penguin.
- Christie, R. (1956b). Some abuses of psychology. *Psychological Bulletin*, 53, 439-451.
- Christie, R. (1956a). Eysenck's treatment of the personality of Communists. *Psychological Bulletin*, 53, 411-430.
- Cohen, F. & Lazarus, R. S. (1973). Active coping processes, coping dispositions, and recovery from surgery. *Psychosomatic Medicine*, 35, 375-389.
- Cohen, F. (1984). Coping. In J. D. Matarazzo, S. M. Weiss, J. A. Herd, N. E. Miller, S. M. Weiss (Eds.). *Behavioral health: A handbook of health enhancement and disease prevention* (pp. 261-274). New York: Wiley.\*
- Crocker, J., & Luhtanen, R. (1990). Collective self-esteem and ingroup bias. *Journal of Personality and Social Psychology*, 58, 60-67.
- Crowne, D. P., & Marlowe, D. (1960). A new scale of social desirability independent of psychopathology. *Journal of Consulting Psychology*, 24, 349-354.
- Crowne, D. P., & Marlowe, D. (1964). *The approval motive*. New York: Wiley.
- Davis, M. & Whalen, P.J. (2001). The amygdala: vigilance and emotion. *Molecular Psychiatry*, 6, 13-34.
- Davis, P.J. (1987). Repression and the inaccessibility of affective memories. *Journal of Personality & Social Psychology*, 53, 585-593.
- De La Ronde, C., & Swann, W. B., Jr. (1998). Partner verification: Restoring shattered images of our intimates. *Journal of Personality & Social Psychology*, 75, 374-382.
- DeNeve, K. & Cooper, H. (1998). The happy personality: A meta-analysis of 137 personality traits and subjective well-being. *Psychological Bulletin*, 124, 197-229.



- Doty, R. M., Peterson, B. E., & Winter, D. G. (1991). Threat and authoritarianism in the United States, 1978-1987. *Journal of Personality and Social Psychology, 61*, 629-640.
- Edwards, A. L. (1953). The relationship between the judged desirability of a trait and the probability that the trait will be endorsed. *Journal of Applied Psychology, 37*, 90-99.
- Edwards, A. L. (1957). *The social desirability variable in personality assessment and research*. New York: Dryden.
- Eliade, M. (1978). *A history of religious ideas. Vol. 1. From the stone age to the Eleusinian mysteries*. Chicago: Chicago University Press.
- Esterling, B. A., Antoni, M. H., Kumar, M. & Schneiderman, N. (1990). Emotional depression, stress disclosure responses, and Epstein-Barr viral capsid antigen titers. *Psychosomatic Medicine, 52*, 397—410.
- Esterling, B. A., Antoni, M. H., Kumar, M. & Schneiderman, N. (1993). Defensiveness, trait anxiety, and Epstein-Barr viral capsid antigen antibody titers in healthy college students. *Health Psychology, 12*, 132-139.,
- Eysenck, H. J. (1954). *The psychology of politics*. New York, NY: Praeger.
- Eysenck, H.J. (1994). Neuroticism and the illusion of mental health. *American Psychologist, 49*, 971-972.
- Eysenck, S. B., Eysenck, H. J., & Barrett, P. (1985). A revised version of the Psychoticism Scale. *Personality and Individual Differences, 6*, 121-129.
- Foa, E. B., & Kozak, M. J. (1985). Treatment of anxiety disorders: Implications for psychopathology. In A. H. Tuma & J. D. Maser (Eds.), *Anxiety and the anxiety disorders* (pp. 451-452). Hillsdale, NJ: Erlbaum.
- Foa, E. B., & Kozak, M. J. (1986). Emotional processing of fear: Exposure to corrective information. *Psychological Bulletin, 99*, 20-35.
- Foa, E. B., Feske, U., Murdock, T. B., Kozak, M. J., & McCarthy, P. R. (1991). Processing of threat-related information in rape victims. *Journal of Abnormal Psychology, 100*, 156-162.
- Frankl, V. (1971). *Man's search for meaning: An introduction to logotherapy*. New York: Pocket Books.
- Frijda, Nico, H (1997). Commemorating. In Pennebaker et al (Ed.). *Collective Memory of Political Events: Social Psychological Perspective*. New Jersey: Lawrence Erlbaum Associates, Inc.
- Frye, N. (1982). *The great code: The Bible and literature*. London: Harcourt Brace Jovanovitch.
- Frye, N. (1990). *Words with power: Being a second study of the Bible and literature*. London: Harcourt Brace Jovanovitch.
- Furnham, A. (1986). Response bias, social desirability and dissimulation. *Personality & Individual Differences, 7*, 385-400.

- Garrison, W., Earls, F., & Kindlon, D. (1983). An application of the pictorial scale of perceived competence and acceptance within an epidemiological survey. *Journal of Abnormal Child Psychology*, *11*, 367-377.
- Goldhagen, D.J. (1996). *Hitler's willing executioners: ordinary Germans and the Holocaust*. New York: Alfred Knopf.
- Gray, J. A. (1982). *The neuropsychology of anxiety: An enquiry into the functions of the septo-hippocampal system*. Oxford: Oxford University Press.
- Gray, J. A. (1987). *The psychology of fear and stress* (2nd ed.). Cambridge: Cambridge University Press
- Greenberg, J., & Pyszczynski, T. (1985). Compensatory self-inflation: A response to the threat to self-regard of public failure. *Journal of Personality and Social Psychology*, *49*, 273-280.
- Greenwald, A. G. (1980). The totalitarian ego: Fabrication and revision of personal history. *American Psychologist*, *7*, 603-618.
- Hanley, C. & Rokeach, M. (1956). Care and carelessness in psychology. *Psychological Bulletin*, *53*, 183-186
- Hardin, C.D. & Higgins, E.T. (1996). Shared reality: How social verification makes the subjective objective. In R.M. Sorrentino, E.T. Higgins et al. *Handbook of motivation & cognition* (Vol. 3, pp. 28-84). New York: Guilford Press.
- Harland, D (1998). *Report of the Secretary-General pursuant to General Assembly Resolution 53/35 (1998): Srebrenica Report*.
- Igartua, J. & Perez, D (1997). : Art and remembering traumatic collective events; the case of the Spanish Civil War. In Pennebaker et al (Ed.). *Collective Memory of Political Events: Social Psychological Perspective*. New Jersey: Lawrence Erlbaum Associates, Inc.
- Jamner, L. D., & Schwartz, G. E. (1986). Self-deception predicts self-report and endurance of pain. *Psychosomatic Medicine*, *48*, 211-223.
- Jamner, L. D., Schwartz, G. E. & Leigh, H. (1988). The relationship between repressive and defensive coping styles and monocyte, eosinophile, and serum glucose levels: Support for the opioid peptide hypothesis of repression. *Psychosomatic Medicine*, *50*, 567—575.
- Johnson, E.A., Vincent, N. & Ross, L. (1997). Self-deception versus self-esteem in buffering the negative effects of failure. *Journal of Research in Personality*, *31*, 385-405.
- Jung, C.G. (1959). Archetypes of the collective unconscious. R.F.C. Hull (Trans.). *The collected works of C.G. Jung* (Vol. 9(1)). Bollingen Series XX. Princeton: Princeton University Press.
- Kelly, G. (1955). *The psychology of personal constructs*. New York: Norton.
- Kruglanski, A. W. (1980). Lay epistemology process and contents. *Psychological Review*, *87*, 70-87

- Kuiper, N.A., Derry, P.A., & MacDonald, M.R. (1983). Self-reference and person perception in depression: A social cognition perspective. In G. Weary & H. Mirels (Eds.), *Integrations of clinical and social psychology* (pp. 79-103). New York: Oxford University Press.
- Kunda, Z. (1990). The case for motivated reasoning. *Psychological Bulletin*, *108*, 480-90.
- Lane, R. D., Merikangas, K. R., Schwartz, G. E., Huang, S. S., & Prusoff, B. A. (1990). Inverse relationship between defensiveness and life time prevalence of psychiatric disorder. *American Journal of Psychiatry*, *147*, 573-578
- LeDoux, J. (1996). *The emotional brain: The mysterious underpinnings of emotional life*. New York: Simon and Schuster.
- Levy, S. M., Herberman, R. B., Maluish, A. M., Schlien, B. & Lippman, M. (1985). Prognostic risk assessment in primary breast cancer by behavioral and immunological parameters. *Health Psychology*, *4*, 99—113.
- Lorig, T.S., Singer, J.L., Bonnano, G.A., Davis, P et al. (1994-1995). Repressor personality styles and EEG patterns associated with affective memory and thought suppression. *Imagination, Cognition & Personality*, *14*, 203-210.
- Malcom, N. (1996). *Bosnia: A Short History*. London: Papermac.
- Marks, G. (1984). Thinking one's abilities are unique and one's opinions are common. *Personality and Social Psychology Bulletin*, *10*, 203-208.
- Martocchio, J.J. & Judge, T.A. (1997). Relationship between conscientiousness and learning in employee training: mediating influence of self-deception and self-efficacy. *Journal of Applied Psychology*, *82*, 764-773.
- McFarland, S.G., Ageyev, V.S. & Djintcharadze, N. (1996). Russian authoritarianism two years after communism. *Personality & Social Psychology Bulletin*, *22*, 210-217.
- McFarland, S.G., Ageyev, V.S. & Abalakina-Papp, M.A. (1992). Authoritarianism in the former Soviet Union. *Journal of Personality & Social Psychology*, *63*, 1004-1010.
- Medin, D.L. & Aguilar, C.M. (1999). Categorization. In R.A. Wilson & F. Keil (Eds.) *MIT Encyclopedia of cognitive sciences*. Cambridge, MA: MIT Press.
- Millar, K. U., & Tesser, A. (1987). Deceptive behavior in social relationships: A consequence of violated expectations. *The Journal of Psychology*, *122*, 263-273
- Mullen, B., & Suls, J. (1982). The effectiveness of attention and rejection as coping styles: A meta-analysis of temporal differences. *Journal of Psychosomatic Research*, *26*, 43-49.
- Myers, L. B., & Brewin, C. R. (1995). Repressive coping and the recall of emotional material. *Cognition and Emotion*, *9*, 637-642.
- Neisser, U. (1982). *Memory Observed: Remembering in Natural Contexts*. San Francisco: Freeman.

- Niebuhr, R. (1944). *The children of light and the children of darkness*. New York: Charles Scribner's Sons
- O'Brien, T. (1990). *The things they carried*. New York: Broadway Books.
- Oatley, K. & Johnson-Laird, P.N. (1987) Towards a cognitive theory of emotion. *Cognition and Emotion, 1*, 29-50.
- Off, C. (2000). *The Lion, the Fox and the Eagle*. Random House Canada
- Olweus, D. (1993). *Bullying at school: What we know and what we can do*. Cambridge: Blackwell.
- Ones, D.S., Viswesvaran, C. & Reiss, A.D. (1996). Role of social desirability in personality testing for personnel selection: The red herring. *Journal of Applied Psychology, 81*, 660-679.
- Orwell, G. (1965). *Nineteen eighty-four*. London, England: Heinemann Educational Books Ltd.
- Paulhus, D. L. (1990). Measurement and control of response bias. In J. P. Robinson, P. R. Shaver, and L. Wrightsman (Eds.), *Measures of personality and social-psychological attitudes* (pp. 17-59). San Diego, CA: Academic Press.
- Paulhus, D.L. (1998). Interpersonal and intrapsychic adaptiveness or trait self-enhancement: A mixed blessing? *Journal of Personality & Social Psychology, 74*, 1197-1208.
- Pennebaker, J. W. (1988). Confiding traumatic experiences and health. In S. Fisher & J.Reason (Eds.), *Handbook of life stress, cognition and health*. (pp. 669-682). New York: Wiley.
- Pennebaker, J. W. (1989). Confession, inhibition, and disease. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 22, pp. 211-244). New York: Academic Press.
- Pennebaker, J. W. (1993). Social mechanisms of constraint.(In D. M. Wegner & J. W. Pennebaker (Eds.), *Handbook of mental control* (pp. 200-219). Englewood Cliffs, NJ: Prentice Hall.
- Pennebaker, J. W., & Hoover, C. W. (1985). Inhibition and cognition: Toward an understanding of trauma and disease. In R. J. Davidson, G. E. Schwartz, & D. Shapiro (Eds.), *Consciousness and self-regulation* (Vol. 4, pp. 107-136). New York: Plenum.
- Pennebaker, J. W., & Susman, J. R. (1988). Disclosure of traumas and psychosomatic processes. *Social Science and Medicine, 26*, 327-332.
- Pennebaker, J.W (1997). *Collective Memory of Political Events: Social Psychological Perspective*. New Jersey: Lawrence Erlbaum Associates, Inc.
- Pennebaker, J.W., Mayne, T.J. & Francis, M.E. (1997). Linguistic predictors of adaptive bereavement. *Journal of Personality & Social Psychology, 72*, 863-871.
- Perloff, L. S., & Fetzer, B. K. (1986). Self-other judgements and perceived vulnerability to victimization. *Journal of Personality, 50*, 502-510.

- Peterson, B.E., Smirles, K.A., Wentworth, & Phyllis A. (1997). Generativity and authoritarianism: Implications for personality, political involvement, and parenting. *Journal of Personality & Social Psychology*, 72, 1202-
- Peterson, J.B. (1999a). *Maps of meaning: The architecture of belief*. New York: Routledge.
- Peterson, J.B. (1999b). Neuropsychology and mythology of motivation for group aggression. In Kurtz, L. (Ed.). *Encyclopedia of violence, peace and conflict* (pp. 529-545). San Diego: Academic Press.
- Peterson, J.B. (in press). The meaning of meaning. In Wong, P. *Selected Proceedings on Searching for Meaning in the New Millennium*. INPM Press.
- Peterson, J.B. & Flanders, J. (in press). Complexity management theory: Motivation for ideological rigidity and social conflict. *Cortex*, XX, XX-XX.
- Petrie, K. J., Booth, R. J., Pennebaker, J. W., Davison, K.P. & Thomas, M.G. (1995). Disclosure of trauma and immune response to a hepatitis B vaccination program. *Journal of Consulting & Clinical Psychology*, 63, 787-79.
- Piaget, J. (1965). *The moral judgement of the child*. New York: The Free Press.
- Powers, W. T. (1973). *Behavior: The Perception of Control*. Chicago: Aldine Publishing Company.
- Pulkkinen, L., & Tremblay, R.E. (1992). Patterns of boys' social adjustment in two cultures and at different ages: A longitudinal perspective. *International Journal of Behavioral Development*, 15, 527-553.
- Pyszczynski, T. & Greenberg, J. (1987). Toward and integration of cognitive and motivational perspectives on social inference: A biased hypothesis-testing model. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 20, pp. 297-340). New York: Academic Press.
- Pyszczynski, T., Greenberg, J. & Holt, K. (1985). Maintaining consistency between self-serving beliefs and available data: A bias in information evaluation. *Personality and Social Psychology Bulletin*, 11, 179-190.
- Raber, J. (1998). Detrimental effects of chronic hypothalamic-pituitary-adrenal axis activation. From obesity to memory deficits. *Molecular Neurobiology*, 18, 1-22.
- Robins, R. W., & Beer, J. S. (1996). *A longitudinal study of the adaptive and maladaptive consequences of positive illusions about the self*. Unpublished manuscript, University of California, Berkeley.
- Rokeach, M. & Hanley, C. (1956). Eysenck's tender-minded dimension: A critique. *Psychological Bulletin*, 53, 169-176.
- Rokeach, M. (1956). Political and religious dogmatism: An alternative to the authoritarian personality. *Psychological Monographs*, 70, (Whole No. 425)-18.
- Rosenberg, M. (1979). *Conceiving the self*. New York: Basic Books.
- Rosenthal, R. & Rubin, D. B. (1978). Interpersonal expectancy effects: The first 345 studies. *Behavioral and Brain Sciences*, 3, 377-386.

- Sackeim, H. A. (1983). Self-deception, self-esteem, and depression: The adaptive value of lying to oneself. In J. Masling (Ed.), *Empirical studies of psychoanalytical theories* (pp. 107-157). Hillsdale, NJ: Analytic Press.
- Sackeim, H. A., & Gur, R. C. (1979). Self-deception, other deception, and self-reported psychopathology. *Journal of Consulting and Clinical Psychology, 47*, 213-215.
- Sales, S.M. & Friend, K.E. (1973). Success and failure as determinants of level of authoritarianism. *Behavioral Science, 18*, 163-172.
- Sales, S.M. (1973). Threat as a factor in authoritarianism: an analysis of archival data. *Journal of Personality & Social Psychology, 28*, 44-57.
- Sapolsky, R. M. (1996). The price of propriety. *The Sciences, 36*, 14-16
- Schacter, D.L (1995). *Searching for Memory: The Brain, the Mind, and the Past*. New York: Basic Books.
- Shea, J.D., Burton, R. & Girgis, A. (1993). Negative affect, absorption and immunity. *Physiological Behavior, 3*, 449-457.
- Shedler, J., Mayman, M., & Manis, M. (1993). The illusion of mental health. *American Psychologist, 48*, 1117-1131.
- Shils, E. A. (1954). Authoritarianism: "Right" and "left". In R. Christie & M. Jahoda (Eds.), *Studies in the scope and method of "The Authoritarian Personality."* New York: Free Press of Glencoe
- Shipherd, J.C. & Beck, J.G. (1999). The effects of suppressing trauma-related thoughts on women with rape-related posttraumatic stress disorder. *Behavior Therapy & Research, 37*, 99-112
- Sieber, W.J., Rodin, J., Larson, L., Ortega, S., Cummings, N., Levy, S., Whiteside, T., Herberman, R. (1992). Modulation of human natural killer cell activity by exposure to uncontrollable stress. *Brain and Behavioral Immunology, 6*, 141-156.
- Smith, H. (1991). *The world's religions*. San Francisco: Harper.
- Snyder, M. (1974). Self-monitoring of expressive behavior. *Journal of Personality and Social Psychology, 30*, 158-164.
- Solzhenitsyn, A.I. (1975). *The gulag archipelago, 1918-1956: An experiment in literary investigation* (T.P. Whitney, Trans.) (Vol. 2). New York: Harper and Row.
- Staub, E. (1989/1997). *The roots of evil: The origins of genocide and other group violence*. Cambridge: Cambridge University Press.
- Steele, C. M. (1988). The psychology of self-affirmation: Sustaining the integrity of self. *Advances in Experimental Social Psychology, 21*, 261-302.
- Stokes, P.E. (1995). The potential role of excessive cortisol induced by HPA hyperfunction in the pathogenesis of depression. *European Neuropsychopharmacology, 5* (Supplement), 77-82.

- Stone, W. F. (1980). The myth of left-wing authoritarianism. *Political Psychology*, 2 3-19.
- Suls, J., & Fletcher, B. (1985). The relative efficacy of avoidant and non-avoidant coping strategies: A meta-analysis. *Health Psychology*, 4, 249-288.
- Swann, W. B., Stein-Seroussi, A., & McNulty, S. E. (1992). Outcasts in a white-lie society: The enigmatic worlds of people with negative self-conceptions. *Journal of Personality and Social Psychology*, 62, 618-624.
- Swann, W. B., Wenzlaff, R. M., Krull, D. S., Pelham, B. W. (1992). Allure of negative feedback: Self-verification strivings among depressed persons. *Journal of Abnormal Psychology*, 101, 293-306.
- Sweetland, A. & Quay, H. (1953). A note on the K scale of the MMPI. *Journal of Consulting Psychology*, 17, 314-316.
- Taylor, S. E. (1989). *Positive illusions: Creative self-deception and the healthy mind*. New York: Basic Books.
- Taylor, S. E., & Brown, J. (1988). Illusion and well-being: A social psychological perspective on mental health. *Psychological Bulletin*, 103, 193-210.
- Taylor, S. E., & Brown, J. D. (1994). Positive illusions and well-being revisited: Separating fact from fiction. *Psychological Bulletin*, 116, 21-27.
- Taylor, S. E., Collins, R. L., Skokan, L. A., & Aspinwall, L. G. (1989). Maintaining positive illusions in the face of negative information: Getting the facts without letting them get to you. *Journal of Social and Clinical Psychology*, 8, 114-129.
- Tesser, A. & Moore, J. (1990). Independent threats and self-evaluation maintenance processes. *Journal of Social Psychology*, 130, 677-691.
- Tesser, A., & Campbell, J. (1982). Self-evaluation maintenance and the perception of friends and strangers. *Journal of Personality*, 50, 261-279.
- Tesser, A., & Smith, J. (1980). Some effects of friendship and task relevance on helping: You don't always help the one you like. *Journal of Experimental Social Psychology*, 16, 582-590.
- Tomaka, J., Blascovich, J. & Kelsey, R.M. (1992). Effects of self-deception, social desirability and repressive coping on psychophysiological reactivity to stress. *Personality & Social Psychology Bulletin*, 18, 616-624.
- Tomarken, A. J., & Davidson, R. J. (1994). Frontal brain activation in repressors and nonrepressors. *Journal of Abnormal Psychology*, 103, 339-349.
- van der Kolk, B.A. & Fisler, R. (1995). Dissociation and the fragmentary nature of traumatic memories: Overview and exploratory study. *Journal of Traumatic Stress*, 8, 505-525.
- Weinberger, D. A., & Gomes, M. E. (1989). *Sensitized, self-assured, and repressive attributional styles: A new look at non-depressive bias*. Unpublished manuscript.

Weinberger, D. A., Schwartz, G. E., & Davidson, R.J. (1979). Low anxious, high anxious, and repressive coping styles: Psychometric patterns and behavioral and physiological responses to stress. *Journal of Abnormal Psychology, 88*, 369-380.

Westen, D. (1998). The scientific legacy of Sigmund Freud: Toward a psychodynamically informed psychological science. *Psychological Bulletin, 124*, 333-371.

Whitworth, J.A., Brown, M.A., Kelly, J.J. & Williamson, P.M. (1995). Mechanisms of cortisol-induced hypertension in humans. *Steroids, 60*, 76-80.

Williams, S.L., Kinney, P.J. & Falbo, J. (1989). Generalization of therapeutic changes in agoraphobia: the role of perceived self-efficacy. *Journal of Consulting and Clinical Psychology, 57*, 436-442.

Williams, S.L., Kinney, P.J. Harap, S.T. & Liebmann, M. (1997). Thoughts of agoraphobic people during scary tasks. *Journal of Abnormal Psychology, 106*, 511-52.