Individual and Cultural Reality Monitoring

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ABSTRACT: What is the relationship between our perceptions, memories, knowledge, beliefs, and expectations, on one hand, and reality, on the other? Studies of individual cognition show that distortions may occur as a by-product of normal reality-monitoring processes. Characterizing the conditions that increase and decrease such distortions has implications for understanding, for example, the nature of autobiographical memory, the potential suggestibility of child and adult eyewitnesses, and recent controversies about the recovery of repressed memories. Confabulations and delusions associated with brain damage, along with data from neuroimaging studies, indicate that the frontal regions of the brain are critical in normal reality monitoring. The author argues that reality monitoring is fundamental not only to individual cognition but also to social/cultural cognition. Social/cultural reality monitoring depends on institutions, such as the press and the courts, that function as our cultural frontal lobes. Where does normal social/cultural error in reality monitoring end and social/cultural pathology begin?

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CONSIDER the relationship between our perceptions, memories, knowledge, and beliefs, on one hand, and reality, on the other (for example, Johnson 1988; Johnson and Sherman 1990). As events are experienced, encoding them into memory is constructive in that our interpretation of those events (even what constitutes an event to begin with) is influenced by our prior knowledge (for example, schemas), expectations (for example, activated goals or agendas), and social context (for example, what others value) (Bartlett 1932; Bransford and Johnson 1973; Schank and Abelson 1977). What we then subsequently ruminate about, and how we ruminate about it, will be determined by schemas, expectations, and social context as well (Bruner 1997; Nelson 1993). Even later, the information we access will depend on what cues are available (Tulving 1983), as well as our goals and the knowledge we bring to bear (Ross 1989; Wilson and Brekke 1994).

The fact that the relationship between cognition and reality is not a one-to-one mapping creates the core epistemological dilemma we face—a dilemma that suffuses our understanding of who we are, our relations with other people, and every judgment and decision we make. Think how different life might be if we never confused what we only thought about doing with what we actually did (no returning to check the stove), if we never disagreed with a significant other about who said what, if we knew exactly where we saw a fact we need for our job, if we never misappropriated another's ideas, if we could trust the accounts of honest eyewitnesses about a crime to be accurate, if the events remembered from our childhood were not influenced by our subsequent experiences, and if we could keep our beliefs about each individual from being contaminated by stereotypes that might not be true of them. We can only barely begin to imagine, I think, the kind of clarity of thought and transparency of our emotions that such factual certainty might engender.

Of course, to lapse into acting as if memory were a perfect representation of actuality is to fall prey to naive realism. Those of us who read cognitive and social psychology, or current papers in history, anthropology, sociology, or literary studies, are likely to be reminded frequently of just how naive, naive realism is. Although protected from naive realism (at least in our professional lives), we run the risk instead of being sucked into the quicksand of a kind of naive constructivism. Naive constructivists act as if all memories, knowledge, and beliefs were equal—as if the fact that there are multiple ways of perceiving, interpreting, and construing made it impossible or fruitless to judge between them. It is a point of view that does not appreciate the functional importance of mechanisms that normally constrain just how far out memories, knowledge, and beliefs can get.

INDIVIDUAL REALITY MONITORING

It seems unlikely that a cognitive system would be viable if all information from all sources were simply rep-

resented in a jumble of amodal, abstract, propositional statements with no clue at all as to their origin. A system that treated, for example, the products of its imagination as equivalent to the products of its perception would likely suffer some evolutionary hardships. My lab has been intrigued by the question of how a cognitive system solves the problems posed by the constructive nature of cognition. We assume that the cognitive system represents information in ways that preserve its history (for example, visual information in visual cortex, auditory information in auditory cortex) (Damasio 1989). Thus the qualities of such information when it is activated, along with various inferential capacities that we have, typically allow us to make better than chance attributions about the epistemological status of our mental experiences (Johnson and Raye 1981). Nevertheless, both the information represented and the processes doing the attribution are imperfect, and thus errors will occur. However, our cognitive system is better off for having this information represented and for having such judgment mechanisms recruited than not. Clear evidence for this is the profound errors and confusions that occur when the capacity for creating these representations or for retrieving and evaluating them breaks down in cases of extreme distraction or stress or from organic brain damage (for example, Johnson 1988, 1991).

Both accurate and inaccurate memory can be understood within a cognitive architecture that specifies the processes recruited when information is encoded, consolidated, accessed, and monitored. Although all of these aspects of encoding and remembering affect the veridicality of memories and beliefs, this last step, the taking of a mental experience to correspond to some class of mental experience (a perception, a memory of an actual event, a prior or current imagination, a good judgment, a reasonable belief), is what we mean by reality monitoring or evaluation and attribution. Whether activated information is taken to be memories, knowledge, or reasonable beliefs is based on its phenomenal properties and its relation to other knowledge and memories. Such monitoring is affected by a number of factors, including the cost of errors, the time available, the person's motivation, and, again, the social context (Johnson and Raye 1981; Johnson, Hashtroudi, and Lindsay 1993).

In laboratory experiments, it is possible to induce people to claim to have seen things they have only imagined and to induce them to claim to have experienced autobiographical events the experimenter only suggested (for example, Johnson, Hashtroudi, and Lindsay 1993; Loftus 1997). More important, however, we can vary conditions to understand the factors that increase and decrease the probability of distortions in memory. In this work we do not necessarily focus only on whether a memory is accurate—we are, in fact, more interested in what leads someone to take it as true, rather than whether it is really true.

We know quite a bit about individual reality-monitoring processes. For example, there appear to be relatively simple, fast, heuristic process-

es that make attributions about the source of memories based on how familiar they are or based on an assessment of such characteristics as the amount of perceptual and contextual detail they have. For example, on average, memories of perceived events have more perceptual and contextual detail than memories of imagined events. Thus, if a memory is vivid, we tend to believe that it represents a real, perceived event. There are also slower, more systematic processes that attempt to retrieve additional supporting or disconfirming episodic information from memory; that evaluate information for internal consistency; or that compare memories with general knowledge to make plausibility assessments. This sort of systematic processing is particularly susceptible to disruption from stress, operating under short deadlines, and distraction, and such disruptions markedly increase reality-monitoring errors. Both heuristic and systematic processing are important because they provide useful checks on each other. If a vivid memory of a fantasy or dream passes the heuristic check for perceptual detail, it would likely be mistaken for reality unless caught by the more systematic plausibility check. On the other hand, if we took everything that was plausible as a real memory, regardless of whether it had any of the particular details characteristic of event memories, we would also make many more reality-monitoring errors than we do.

In individuals, these reality-monitoring processes are the result of neural interactions between different regions of the brain. Particularly important are medial temporal regions (especially the hippocampal formation) that appear to be central in binding the various elements of experience into complex memories to begin with, and the frontal lobes that appear to be central in both heuristic and systematic retrieval and evaluation of information. For example, patients with brain damage to the frontal lobes sometimes show a clinical symptom called confabulation characterized by untrue statements (sometimes quite fantastic) that the patient believes. One confabulating patient claimed to have played cards at a club away from the hospital the night before with the doctor and head nurse; another claimed to have been killed in World War I and then brought back to life (Stuss et al. 1978). Another claimed to have been a space pirate (Damasio et al. 1985).

In addition, clinical syndromes are sometimes accompanied by what is called anosognosia or anosodiaphoria. Anosognosia is an absence of awareness of deficit. Confabulating patients do not know they are confabulating. Likewise, patients with brain damage in certain regions may deny the paralysis in their arm or that they are blind. Patients with anosodiaphoria know they have a cognitive or physical deficit, but they show a casual disregard for the fact—they do not appear to be disturbed at all by the problem.

Cognitive psychologists have a number of techniques for studying the role of various brain regions in reality monitoring in normal individuals (Johnson and Raye 1998). For example, my lab recently published a study in which we recorded brain activity (event-related poten-

tials) from electrodes placed on the scalp of people as they engaged in memory tasks (Johnson, Kounios, and Nolde 1996). In one study, people saw some pictures of items and imagined others. Later the names of these items were mixed with the names of new items and half the people were asked to indicate which items had been in the previous task and which were new (an old/new recognition task). Other people were asked to indicate whether the items in the previous task had been seen, imagined, or were new (source identification task). The largest difference in brain activity between simply saying that an item was experienced previously (the old/new task) and identifying the source of the memory was recorded at electrodes over the frontal lobes. This is just what we would expect from the breakdown in reality monitoring that occurs from frontal brain damage. We have since used a technique that provides more precise spatial information, functional magnetic resonance imaging, in a similar study. We found activity in right and left prefrontal cortex (PFC) for both old/new recognition and source identification tasks—but the activity was greater in left PFC when participants were engaged in source identification than when they were engaged in old/new recognition (Nolde, Johnson, and D'Esposito in press). We are currently exploring the hypothesis that right PFC is disproportionately involved in heuristic evaluation processes and left PFC (or right and left together) in more systematic evaluation processes (Nolde, Johnson, and Raye in press).

In short, reality-monitoring failures in individuals can occur as a by-product of less than perfect but normal reality-monitoring processes or from more severe, clinically significant disruptions in reality monitoring that are associated with psychopathology or brain lesions. Neuroimaging techniques, in combination with cognitive theories, allow us to explore on-line the brain mechanisms that correspond to psychological processes as individuals engage in reality monitoring.

SOCIAL/CULTURAL REALITY MONITORING

So far I have treated reality monitoring as if it were almost entirely a private mental activity of the individual. Reality-monitoring processes, however, are embedded within an interindividual social context that influences the nature of the events we experience initially and how we interpret them, what we subsequently think about, including how we embellish memories, and the criteria we use later for making attributions about the origin of mental experiences. Furthermore, joint remembering has the potential for co-constructing myths, some of which may be dysfunctional (as when a batterer's victim thinks that the batterer is responding to transgressions of the victim) and some of which may be quite functional (for example, the sense of common history and shared enjoyment from reviewing together photographs of a family vacation that depict the fabulous scenery but not the arguments over when and where to stop for lunch).

Joint remembering also provides the possibility for reducing distortion. I might recognize that your account is more accurate than mine, once I hear it. Even if I do not have a sense that your account is better, if you remember an event quite differently from the way I do, it might appropriately reduce my confidence in an inaccurate memory. Socially isolated individuals, or those embedded in a social context that does not engage in interpersonal reality monitoring or that does so in unconstrained or pathological ways, potentially run the risk of increased reality-monitoring errors. As events are recounted, the interactions between family and friends play a critical and relatively unexplored role in everyday reality monitoring (for example, Middleton and Edwards 1990).

Societies or cultures, like individuals, require reality-monitoring processes to keep their memories and beliefs in line with reality (Johnson 1996). Informal social interactions are important at this more general social level as well—affecting, for example, the spread of rumors, development of urban myths, conspiracy theories, and so forth. Here there are a number of potentially interesting questions. For example, what evaluative processes and criteria do individuals within a given community use in interpersonal reality monitoring? Are there characteristic differences between communities not only in the information they have available but also in how they evaluate it? Just as at the individual level we can ask whether some people are more susceptible to distortions of reality (for example, people who have vivid images), we can ask whether some groups are at risk for reality-monitoring errors.

In addition to relatively informal social interactions between families and friends, there are more role-based, organized, or institutionalized reality-monitoring functions operating at the social/cultural level—in journalism, the legal system, science, education, therapy, and so forth. These institutions have explicit truth missions. Their members go through credentialing procedures that range from informal apprenticeships to formal training programs followed by licensing exams. Such procedures are designed, for example, to develop an appreciation for multiple perspectives, expertise in procedures for collecting and evaluating evidence, an understanding of objectivity (and its limits), and a sensitivity to the potential impact of motives and biases. Consumers and clients accept this expertise—indeed, they pay for it. It is one thing for a friend to question the accuracy of one's memory (or to encourage belief in it) and another for one's therapist to do so. It is one thing for a fellow citizen to question (or endorse) the account of a politician and another for a journalist to do so. It is one thing for an individual to claim that someone has lied and another for a court to find that a statement was (or was not) libelous. The impact of these institutionally based reality-monitoring activities can be profound for the individual (for example, in the case of interactions with a therapist) and for the society

more generally (for example, in the case of a news story reporting a lie by a political candidate).

It is worth considering the functional and structural roles played by various organizations and institutions in this social/cultural reality monitoring. Therapists, journalists, lawyers, scientists, and educators, I want to suggest, are our social/cultural frontal lobes. They perform imperfect but nevertheless critical processes for society as a whole to function well in our complex world. Within each of these institutions, parallels with individual reality monitoring can be seen. For example, consider the heuristic processes used in individual reality monitoring. These typically work, but they can let errors slip through; ordinarily, vivid detail in a memory is more likely to arise from real than imagined events, but using the amount of detail as a heuristic for identifying the origin of information sometimes causes unusually vivid or detailed memories for imagined events to be taken as real. Similarly, a journalist might heuristically assume that the facts given by a scientist or the head of a bureaucracy are correct because ordinarily these are the people who would be likely to know those facts. This works much of the time but not always.

As a potential check to reduce reality-monitoring errors, an individual can engage in more extended retrieval and reasoning, evaluating memories in light of other information. Similarly, journalists have a repertoire of systematic checks—consulting other sources, looking for documents, evaluating the expertise and motives of sources—all the activities of good investigative journalism. Importantly, the products produced by journalists are monitored by editors for newsworthiness, clarity, accuracy, completeness, and fairness. As with a normally functioning individual, mistakes will sometimes get through these systematic self-checks and editorial checks; however, these heuristic and systematic processes should provide constraints that limit the frequency and magnitude of distortions of reality.

For individuals, when these heuristic and systematic processes are not operating normally—when they are disrupted through brain damage, psychopathology, drugs, or other extreme circumstances—we say that the person is confabulatory, delusional, psychotic, or dysfunctional. When analogous processes are not operating in journalism, we call it tabloid journalism (for example, Goode with Hetter 1994). The incursion of tabloid journalism into mainline journalism is like progressive frontal damage. To fail to see it, or to treat it as our inevitable postmodern condition, is cultural anosognosia (unawareness of deficit). To treat it as harmless entertainment is to exhibit cultural anosodiaphoria (unconcern about deficit).

How professions or institutions regulate the practice of their members (and the extent to which they should) is a complex topic (for example, Belsey and Chadwick 1992; Fry 1985; Pippert 1989). Systematic studies comparing the mechanisms that different institutions (for exam-

ple, print media versus television; therapists versus lawyers) use for within-institution reality monitoring would be intriguing. The media, for example, have an implicit contract with readers and viewers, and lapses are disconcerting. However, people are likely to forgive what they believe to be honest mistakes. Distrust and cynicism are more likely if people believe that the media are careless, biased, or malicious, that is, if they believe that within-institution reality-monitoring processes have broken down.

Don Hewitt, one of the creators of the highly successful CBS newsmagazine show *60 Minutes* was quoted recently (Mifflin 1998) as being concerned about the impact of the success of *60 Minutes* on the quality of television journalism. The increasing number of shows with a newsmagazine format require more and more news stories; one potential consequence is that the standards for what constitutes news have slipped (partly as a result of needing to fill airtime), resulting in a blurring of the line between news and entertainment. The combination of personal journalism (that is, celebrity journalists) and stories that are sensational (for example, celebrity court cases, alleged sexual activities of politicians) has turned news from a financial drain into a moneymaker for networks, which increases the pressure for more moneymaking "news."

Many other stories have appeared in the media in recent years that raise important questions about the procedures for collecting and reporting news—for example, questions about the distorting influence of paying sources and dramatizing the news with reenactments and music (Tharp and Streisand 1994), the replacement of documentaries with docudramas (Frankel 1997), and the special problems posed by the open access of the Internet (for example, Turner 1996). As professional electronic journalism and Internet news services develop, reality-monitoring issues will be central. For example, Matt Drudge, the producer of an Internet column (the *Drudge Report*), is currently being sued by Sidney Blumenthal, a former journalist and current adviser to President Clinton, for publishing allegations (subsequently retracted) that Blumenthal has abused his wife (Clines 1998). Clines points out that Drudge does not have to answer to any editor regarding the accuracy of his stories, and he quotes Drudge as saying that the erroneous report in the Blumenthal case was "at worst . . . an accurate report of an inaccurate rumor."

As another example of institutionalized reality monitoring, consider therapy. There has been a dramatic rise in the number of cases in which adult individuals believe they have recovered previously repressed memories of childhood sexual abuse. For the moment, set aside the issues of the serious incidence of sexual abuse in our culture, questions that have been raised about the reality of repression or about the therapeutic value of recovering memories. More central to the current thesis is that therapists are engaged in a memory-exploring profession (as are, for example, police officers, lawyers, and child welfare workers) and hence engage in a type of interpersonal reality

monitoring in collaboration with clients. Their suggestions and responses have the imprint of authority or expertise as they help frame the pursuit of memories. Certain therapeutic practices used in certain situations may reflect a therapist's inappropriately low criterion vis-à-vis heuristic judgment processes: for example, assuming that eating disorders or difficulties in intimate relations are sure signs of childhood sexual abuse. Other practices reflect a failure of more systematic processes: for example, using hypnosis to uncover repressed memories, exposing patients to many accounts of sexual abuse, or explicitly urging patients to adopt lax criteria in evaluating the veridicality of their memories. Such practices may reflect a failure to consider that these practices themselves can be potential sources of the memories that are presumably recovered—that is, they may induce imagined events that are later taken to be memories of real events (for example, see Lindsay and Read 1994; see also Ceci and Bruck 1993 for similar issues with respect to inducing memories in children suspected to be victims of sexual abuse).

Like journalists, therapists must operate with imperfect reality-monitoring procedures, both as they apply to individual patients' memories and beliefs and as they apply to empirical evidence and clinical case studies about the efficacy of clinical practices. They must also operate within time and economic constraints, for example, making judgments quickly about how to respond to something a client says or to what a client seems to feel.

Within-profession response to the possibility that false memories might be induced by therapy has come in the form of task forces, workshops, published articles, and symposia at major conventions devoted to evaluating current evidence and practice (for example, Pressley and Grossman 1994). Clients have a right to expect that therapists keep up on the relevant theoretical ideas and findings for their field, but even in the best therapeutic practice, there will be overlooked information and honest misjudgments. However, like journalism, there is a point at which therapeutic practice is delusional and dysfunctional, a point at which imperfect but reasonable therapy becomes tabloid therapy. (Of course, just as there are tabloid journalists and tabloid therapists, there are tabloid lawyers, tabloid scientists, tabloid educators, and so on.)

A salient feature of our culture is that cross-institutional reality monitoring takes up some of the slack from failures of within-institution monitoring. Thus journalists monitor politicians, the courts monitor journalists and therapists, university professors in departments of communications monitor journalists, and so forth. A key type of cross-institutional reality monitoring is provided by academic research in, for example, history, sociology, and political science. The expanding field of media criticism evaluates practices, and studies the relation between practices and outcomes (for example, Cappella and Jamieson 1997; Fallows 1996). Similarly, within academia, there has been a burgeoning of therapy criticism (for example, Dawes 1994;

Loftus and Ketcham 1994; Ofshe and Watters 1994; Spanos 1994), which has, in turn, generated a call (Pope 1996) for the critics to raise their own standards of reality monitoring (that is, of unbiased evaluation of evidence).

By far, one of the most powerful sources of cross-institutional monitoring in our culture is provided by the courts. Two such cases illustrate some of the complexities inherent in the issues involved. The first was the suit brought against the journalist Janet Malcolm by the psychoanalyst Jeffrey Masson, claiming libel for a 1983 *New Yorker* article she wrote about him. Masson claimed that Malcolm made up quotations that were unflattering and damaged his professional reputation. This case dragged on for more than 10 years. The Janet Malcolm case is particularly interesting because Malcolm was a talented journalist who skated the line between effective, engaging reporting and what some regard as tabloid practices, and it shows the problem the courts face in deciding what is and what is not a faithful account of events. In 1989, a three-judge panel of the U.S. appeals court in California dismissed the libel suit, ruling 2-1 "that even if Masson did not say those words, Malcolm's inventions were permissible because they did not 'alter the substantive content' of what he actually said, or were a 'rational interpretation' of his comments" (Henry 1989, 49). This ruling was subsequently overturned by the U.S. Supreme Court, and in 1993 a jury concluded that five statements were fabricated and that Masson was libeled in two of them, but it deadlocked on the damages to be awarded. In 1994, another trial was held and the new jury found that two of the quoted statements were fabricated and one was defamatory. "But it ruled that Ms. Malcolm neither knew that the defamatory quotation was false nor acted with a 'reckless disregard as to its truth or falsity,' the standard public figures like Mr. Masson must meet to win libel judgments" (Margolick 1994). This case has generated much discussion within the media about journalistic practice.

A second case illustrating cross-institutional reality monitoring was brought by Gary Ramona, a father who sued the therapists who had treated his daughter. He claimed that she had been a victim of suggestive therapeutic techniques that led her to have false memories of being sexually abused by him. This case was decided in Ramona's favor, presumably partly on the basis of expert witness testimony that confusions between real and imagined events have been shown in laboratory studies and that the techniques used by the therapists could have induced false memories (Butler 1994). The Ramona case is particularly interesting because it raises the question of whether the courts are the best place to decide what is and what is not acceptable therapeutic practice.

If accurate, the reported costs of both of these cases were staggering—"a fortune in legal fees" in the case of the Masson-Malcolm conflict (Margolick 1994) and $1.7 million in legal costs for Mr. Ramona (Butler

1994). It does not seem too far-fetched an idea that less expensive, more efficient, and equally effective or better mechanisms could be devised for adjudicating issues such as whether journalistic or therapeutic practice meets current acceptable standards. A challenging policy problem would be to try to devise fair, high-quality, and less costly procedures for reality-monitoring the institutions and professionals who are themselves engaged in reality monitoring.

A DANGEROUS ANALOGY?

Does suggesting there might be an analogy between individual and social/cultural reality monitoring invite dangerous overextensions? With an individual, sufficient disruption of biological processes that affect mental functioning can result in involuntary commitment. Might we not invite involuntary commitment of media deemed pathological or invite the outlawing of therapists offering unconventional, but potentially effective, help? Might not the treatment—censorship or stifling professionalization—be worse than the disease? Whatever benefits in improved quality of work come about from credentialing, licensing, submitting one's work to the review of an editor, and so forth may come at the cost of introducing a source of systematic bias from whatever agency or group controls the licensing or review process.

Pointing out the critical function played by mechanisms of reality monitoring at the social/cultural level should not necessarily lead to endorsing violations of our First Amendment rights. Self-censorship (that is, conforming to standards) is the kind of self-discipline that we associate with professional activity. Self-control, self-monitoring, inhibiting impulse, taking into account consequences, seeking and evaluating alternatives—these are functions of the frontal lobes. But the frontal lobes do more than edit and constrain; they also enable the creativity we associate with professional activity: generating possibilities, following clues, discovering relations, challenging the given. Reality monitoring does not necessarily bring the monitor's conclusions into conformity with the party line. Reality monitoring, especially when there are different levels (individual, inter-, and intra-institutional) contributing their heuristic and systematic checks to the overall process, can be a way of discovering flaws in status quo beliefs.

As with individual reality monitoring, at the level of within- and between-institution reality monitoring, rules or practices that completely inhibited all speculative accounts, or accounts that do not conform to institutional definitions of reality, would not, in the end, be functional reality monitoring. Lack of spontaneity, inability to self-initiate, and perseveration of a dominant response are signs of frontal pathology just as is a failure to inhibit bizarre and fantastic responses. A culture, like an individual, must balance evaluative and generative functions.

Social/cultural reality monitoring requires that we identify possible

evaluative criteria and procedures within any given domain, agree to use them, and devise a means for changing them when appropriate. These criteria presumably include procedures for challenging the status quo, not simply for ensuring conformity. This is not necessarily easy, and it is certainly not error-proof, but the alternative is confusion, perhaps chaos. At the individual level, reality monitoring underlies sanity. At the social/cultural level, both within- and between-institutional reality monitoring promote trust, and, most important, the conditions necessary for the freedom provided by informed choice.

CONCLUSION

While there is still much to learn, we know a considerable amount about the cognitive psychology of individual reality monitoring—the factors and processes that operate in attributing memories, knowledge, and beliefs to sources. Our understanding of individual reality monitoring will continue to deepen as we conceptualize and characterize the architecture of the cognitive system: how various regions of the brain interact in reality monitoring and the relation between particular symptoms and particular lesions in the system (for example, Johnson and Raye 1998). Similarly, our understanding of social/cultural reality monitoring will deepen as we conceptualize and characterize the complex architecture that interrelates various institutions and organizations as they constrain our understanding of truths in various domains (Johnson 1996). As with individual reality monitoring, it may be especially informative to attempt to specify the relation between symptoms and lesions in individual parts of the system.

Our ordinary commonsense notions about memories and beliefs may not appreciate how constructed our lives are and how difficult it is to establish the truth of what happened. But let us not climb out on that constructivist limb and saw it off (cf. Lichtenberg 1996). Facts matter. It matters whether or not sexual abuse took place. It matters whether or not a journalist misrepresents what a source said. It matters whether or not lawyers purposefully mislead juries about the facts and whether juries and judges are equipped to evaluate the information before them. Furthermore, any relaxation of the reality-monitoring processes within an institution potentially reduces its legitimacy (and therefore efficacy) as a cross-institutional reality-monitoring mechanism. As a culture, we depend on these institutional mechanisms as fundamentally as individuals depend on their cognitive reality-monitoring mechanisms. Although it may be difficult to differentiate permissible interpretation and ordinary errors from pathology at either the individual or the cultural level, there are functional differences, and our challenge is to understand them. For a culture, as for individuals, what matters more than the truth of any one particular memory or belief (which may be impossible to determine) is the mechanisms we have in place for reality monitoring.

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