# Coming to Terms With Neurotrauma

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Impaired mental functioning after neurotrauma can lead to several forms of psychological distress. If psychological adjustment to mental impairments is problematic, individuals are at-risk for what Goldstein (1940) called a "catastrophic reaction." A catastrophic reaction is a state of extreme confusion mingled with anxiety, fear, and anger. In recovering from neurological trauma, individuals often become increasingly aware of their precariously changed state of mind, moreover they experience their inability to comprehend their "new selves." This process may lead to a catastrophic reaction.

According to Goldstein, individuals after a brain injury are often left without the ability to think abstractly. Without "abstract attitude", as he put it, they experience particular problems because they cannot use structuring and ordering concepts which they would need in order to understand their changed mental state. We would like to interpret Goldstein's neuropsychological theory in the light of the hermeneutic of subjective strategies of meaning-making and, in particular, illness narratives.

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In this paper, we present the results of a clinical narrative analysis of an interview with an individual with a neurotrauma injury. We took this interview from a corpus of 27 interviews because it shows what we think is an exemplary "narrative breakdown," reflecting what Goldstein meant by catastrophic reaction.

# Ms. E: A very short case history

Ms. E is a 46-year old woman born in Frenchspeaking Canada. She moved to the Englishspeaking part in her early 20's. For the past 23 years, she has pursued a career in insurance sales, working her way up from salesperson to regional manager. Ms. E lives with her husband and their 8year old son. She was admitted to the hospital for an aneurysm to her right anterior communicating artery. The results of her neuropsychological assessment indicated:

• pre-stroke memory intact, post-stroke memory severely impaired

• executive functioning difficulty

O decreased mental flexibility and abstract conceptualization

O normal range on measure of gross cognitive dysfunction

• prone to confabulation

## Interview Method

A semi-structured narrative interview was conducted 9 weeks after her stroke. This interview (of which we present an extract) was one of a series conducted over a period of two years (all interviews were audiotaped and fully transcribed). One part of the interview specifically focused on autobiographical memories. In the first phase of the analysis, we examined specific details of the text and then, through a series of stages, progress to overarching forms and narrative strategies of meaning-making.

### Ms. E's Weekend

Interviewer (I): Tell me, did you go out on a weekend pass last weekend?

Ms. E. (E): Yeah.

I: How did that work out?

E: Not very well.

I: What happened?

E: Well, again, -MY husband married someone who is pays the bills, cleans the house, takes care of Jeremy, makes the meals, like you know, I'm superwoman. {shrugs}

I: Yes ...

E: A(:)nyway, so he asked me "Are you going to do the groceries" "NO(:)" "Why not?" >"Because I don't feel up to it.< I'll make a list, we can make together and you can go. It won't kill you to go to the grocery store."

I: And this happened last weekend?

E: Yeah. And the(:)n my mother arrived. My mother and my brother and a sister arrived from

New Brunswick. My godmother, her son and her daughter, came up from Maryland, so you got to entertain. >They're only here for a weekend.< You know so(:) that was stressful.

I: Yeah. Well that would be stressful considering that you were just in the hospital.

E: I like to entertain, like (.) and we bought another house, this would be our un, deux, trois, quat, fourth house and we discovered that there were things that weren't the way they were supposed to be and we were supposed to be closing at the end of the April. >So we were saying we don't want, you know we don't know (.) if we want to close, we don't know if we want to go through until we see the house and appraiser < and he said like, "who are you?" and I said I'M AN INSURANCE REP. I WANT to ask you a few things and I AM going to avoid problems if I could.

I: So this was on the weekend?

E: Yeah.

I: My gosh, that was a busy weekend.

E: Oh yeah.

I: Gosh

E: A(:)nd ... what else was there? Oh yeah, May's birthday, my niece and Godchild. My sister in Barrie, her daughter, it was her birthday last weekend and we were trying to figure out how to arrange, I'm mean she's going to be 11.

#### Interpretation

Ms. E's mind is like a river that sucks in everything in its path: a stream of consciousness out of control. While this narrative does not seem to cease, at the same time it lacks connective tissue; its starts, shifts and stops have no clear markers, and consequently appear tangential. This enhances the overall impression of incoherence. Further, the different little stories being told tend to be decontextualized; that is, they seem to have no reference in the present dialogue, which gives them a somewhat scriptlike quality (as, for example, when Ms. E sets out to tell how "we bought another house...").

Regarding the content of her stories, they aim to evoke the idea of someone in control, actively coping with an array of difficulties (eg. the frequent "agentive" use of the personal pronouns "I" and "we"). We are talking about "evoking an idea," since Ms. E's husband made clear to us that none of the events mentioned here did really happen that weekend.

Narrative typically orders human experience and gives continuity and coherence to one's view of self and world. In this view, meaning is an emergent quality of narratized experience. Now, as a consequence of Ms. E's neurotrauma, her narrative sense, her capacity to discursively order her experience is seriously shattered. In a situation in which she needs it most, the organizing power of narrative is missing. She struggles to give a form to her experience in the face of abrupt neurocognitive changes. Her efforts to make sense of what happened to her lead to even more incoherence and confusion: The past becomes the present, disparate events get pulled in, scenes lack specificity (episodicity), and events on different mental levels (such as memory, imagination, wishful thinking, and rational reasoning) become fused into one narrative stream of consciousness.

This stream is also a stream of different emotions, vacillating from the experience of being in control to being helpless. This emotional overflow makes her feel even more chaotic. As Ms. E put it (in another part of the interview), she feels "frustrated," "lost," and "freaked out." As she becomes more and more distressed, her narratives become more and more disorganized and fragmented. This further overburdens her damaged brain, making it impossible for her to give any coherent structure to her account and her emotional state: a snowballing that unavoidably leads to what Goldstein described as catastrophic reaction.

# Discussion

Prigatano (1999) argues that "disturbances in higher cerebral function often are associated with some disruption of self-conscious perception or experience of those disturbances" (p. 30), a process which so far is poorly understood. We believe that some of this disruption may be linked to individuals' limitations, due to their neurotrauma, in narratively organizing their experiences, especially, the experiences of the neurotrauma itself.

In this view, it might be helpful to see Ms. E's narrative in the light of Gazzaniga's (1998) concept of a left-hemisphere "interpreter." For Gazzaniga, "the mind is the last to know things. After the brain computes an event, the illusory 'we' (that is, the mind) becomes aware of it. The brain, particularly the left hemisphere, is built to interpret data the brain has already possessed" (p. 2). This "interpreter ... constantly establishes a running narrative of our actions, emotions, thoughts and dreams. It is the glue that unifies our story and creates our sense of being a whole, rational agent"(p. 174). Apparently, Ms. E's left hemisphere, her "interpreter," is quite unaffected by her stroke, so it continues in its attempts to order and unify her experience. That is, there is still the impetus to create and sustain the "illusion" that she is still the same "whole, rational agent."

Narration, however, is a discursive activity whose functions are distributed throughout the brain, not just the left-hemisphere. In Ms. E's case, the damaged part of her brain constantly disrupts the process of narrative integration initiated by the lefthemisphere functions. Nevertheless, Ms. E continues her attempts to assure herself of her self-continuity by trying to form narratives based on accounts of being in charge – something she obviously is not. As a result, her narratives do not have the "intended" effect of reassuring her, rather, they exacerbate her mental and emotional state.

This view has important implications for rehabilitation, particularly in psychotherapy. For example, helping individuals understand and cope with their new reality by assisting them in learning to control structural aspects of their self-narratives. This might be accomplished by providing cognitive-therapeutic scaffolding that systematically focuses on narrative ordering (and not simply keeping a "memory book"). Our findings suggest that clinical support of an individual's attempts at narratively constructing a sense of self-continuity is pivotal to what we want to call, further developing Goldstein's concept, "catastrophic resolution."

#### References

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