Shrink Rap: Change Blindness

By Steven Hendlin, Ph.D.

Originally published in *Coast Magazine*, March 2008

Research suggests that what we actually see in the world around us is quite different from what we think we see. We fail to detect changes in our environment because of our need to focus our attention to accomplish tasks. It would simply be too distracting to try and notice everything. So our selective attention means we miss significant chunks of what is often right in front of us.

While we like to think that our mind works like a video camera, accurately recording everything, what really happens is that the mind works more like a narrow-focused lens, recording only a slice of the whole scene in front of us.

For example, in one study, an experimenter in the street held a map and asked a random pedestrian for directions. As the pedestrian provided directions, two confederates walked in between him and the pedestrian holding a wooden door. After the interruption, the experimenter was no longer there-he was replaced by one of the confederates who looked markedly different and had a distinctly different voice. However, nearly fifty percent of pedestrians failed to notice they were talking to a different person after the door passed. This phenomenon, know as change blindness, is shocking to most people when it happens to them.

Even when we are on the lookout for changes and insist we will detect errors, we still fail to find them. The reason for this "change blindness blindness" is that we don't believe we are subject to change blindness. We refuse to believe we will miss things presented right in front of us.

Change blindness is a useful concept to understand so that we don't delude ourselves that what we think we are seeing is really the whole picture. And our "blindness to our blindness" means we need to guard against overestimating our ability to catch errors. We all accept that in order to concentrate intently on a task, we need to narrow our attention to it-and to block out all distractions that compromise our complete focus. What we don't want to accept as readily is that the "distractions" we are blocking out mean we're always subject to seeing just a piece of what is occurring at any moment in our immediate environment. Accepting this obvious trade-off may lead us to be more understanding of another person's differing perception as to what is occurring-even if we are observing the same event. And it may also limit the dramatic consequences of overestimating our ability to detect changes.

For example, if we are distracting ourselves while driving by talking on a cell phone, we are less likely to see unexpected events, like a motorcycle starting to turn in front of us. Because we are looking for cars but not the motorcycle, we are more likely to be surprised by it.

One take-away from this research is this: Whenever we are focusing our attention narrowly on a task to do a good job, we better accept the consequence of missing salient events as the unavoidable trade-off. We can't escape missing something, no matter how hard we might like to take it all in.

Also, if we can develop a healthy skepticism of our ability to notice errors and changes even when we are trying to, we will take steps to have others check our work. So, for example, it's insufficient for me edit my own columns, articles, or book copy myself. I make sure at least one other pair of eyes goes over the material to catch my own omissions.

Don't let your ego blind you to the light at the end of the tunnel. Because if you are oblivious to your own blindness, it may be the light on a train warning you to get out of the way.