

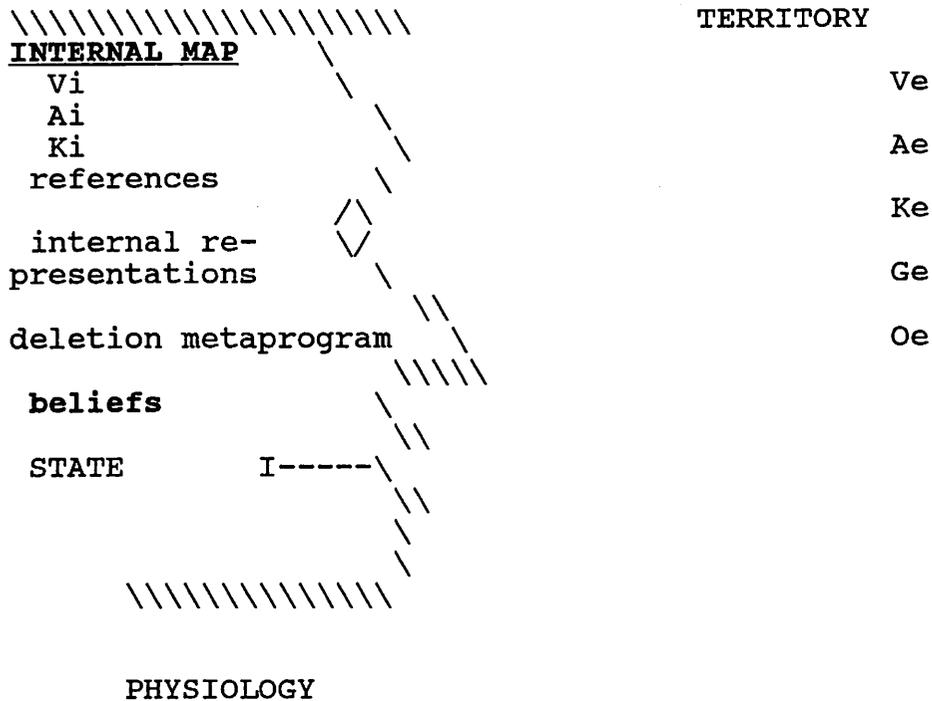
## EXISTENTIAL ASPECTS OF PAIN

As I am sure will be evident in this symposium, pain because it is the internal experience of an individual is a vast amorphous and unwieldy topic. Ask ten people to make a list of five words that they feel represents sex or love to them and you probably won't find any words the same. Just as we all have a different idea of what love and sex are pain is equally, uniquely experienced and varied from individual to individual. One persons intolerable agony is anothers mild discomfort. The power of the brain\mind to alter perceptions was demonstrated by those of you who heard the tape playing at the start of the seminar. The power to bias perceptions is illustrated by the well meaning Benjamin Rush at the turn of the eighteenth century, who convinced himself and almost everyone else then that the only way to survive Yellow Fever was to take extremely toxic mercurial cathartics and be copiously bled . In reality it was a miracle that anyone ever survived even the treatment much less the Yellow Fever and the treatment. How many of our treatments for back pain appear to work because of ours and our patients perceptual bias's? We all know how potent these are as is illustrated by the surprisingly high success with placebo treatments in many fields of medicine. What I would like to present to you today is that the power of perceptual bias is powerful and can be used to manage pain.

What makes any perception including pain enjoyable, neutral or unenjoyable?--our internal references which are derived from our previous experience and internal reactions to them. This is demonstrated by Pavlov's dog experiment where the experience of eating was conditioned to the sound of a bell which caused the dog to salivate. Thus after conditioning, the bell sound means much more to the dog than just the sound itself. The interesting and very important aspect of this is that the association of eating and the bell is made automatically and unconsciously by the dog. He doesn't think rationally that after the bell sound he is likely to be fed; his brain makes the association automatically. Just like the sight or the smell of good food makes us hungry automatically even if we know we can't eat at that time. There is a direct connection that bypasses the thinking mind. Pain is no different. We all had all kinds of painful experiences and whatever was happening around us at the time of experiencing the pain was noted often unconsciously by our brain\mind and associations made. If the only time you were ever hugged and paid attention to was when you were demonstrating pain and suffering you will have many positive emotional associations to you being in pain and suffering. So that you may unconsciously connect the demonstration of pain to the experience of being nurtured and be unwilling to give up your connection. Or if your parents became hysterical and fainted when you were in pain you will associate their

reactions to pain and react similarly yourself when the painful stimulus arrives. If the painful stimulus is associated with well being, esteem or achievement such as the pain of aerobic exercise or athletics it will be minimized and even felt as pleasurable. So when we talk about the experience of pain we are really talking about two things: The painful stimulus which is fairly straight forward and a pile of associations which define the internal meaning (pleasurable vs unpleasurable) perhaps more than the painful stimulus itself. The former can be altered structurally such as with medication or surgery and the latter can be altered by altering the brain\mind. Dave Anderson is going to talk about one way to affect the brain\mind and I'm talking about an approach at the other end of the spectrum. Dave's approach is concerned with content, meaning and development and I'm talking about restructuring the internal representation systems of the person and ignoring the content. By manipulating the internal perceptions themselves the brain\mind can be confused or reconditioned to utilize a more adaptive system.

A series of techniques were developed by Bandler and Grinder based on studying the way successful people think and the work of Milton Erikson. The theoretical model or metamodel (Bandler was a computer scientist) of the brain\mind works like this:



This is the working model for neurolinguistic programming. The phenomenological world is divided into the internal (with in the brain\mind)=the MAP and the external (all external phenomena that can be detected by the senses)=the TERRITORY. Since sensory input is modified and stored by the brain\mind as it becomes internalized, the internal re-presentations which form our individual MAP (internal world) of the universe is biased and is not an accurate re-presentation of the TERRITORY (external world). Our interface with the TERRITORY is the five senses:

Visual, Auditory, Kinesthetic Gustatory and Olfactory. When the senses are stimulated by the TERRITORY the experience is categorized as external ie, Visual external (Ve) when there is an internal sensation it is categorized as internal ie, Auditory internal (Ae). For Pavlov's dogs we have Ae--Ge (Auditory external--Gustatory external) before conditioning and Ae--Gi (Auditory external--Gustatory internal) after conditioning. Because there is so much sensory stimulation available and so much sensory data stored into our internal reference system the brain\mind cannot handle it consciously; we would never be able to act or make a decision if all this data was flooding the conscious mind. The brain\mind must therefore sort out this almost infinite amount of data by deleting most references and focusing on a few that are chosen to be consciously integrated. The sorting strategy or filtering systems are referred to as metaprograms. These metaprograms are the ways that each of us internally processes our individual worlds (MAPS). The particular metaprogram that is selected results from our STATE and beliefs. If we are in a depressed STATE our selected metaprogram will be one that will enable a depressed view of the world and the selected internal references (Vi, Ai, Ki, Gi, Oi) will be ones that we associate with past sad states such as the color of the room when your father told you that you were good for nothing at five years of age, the odor of the guy who sat next to you when you flunked your organic chemistry exam etc. So the

internal re-presentation of the TERRITORY will be selected from the stock pile of internal sensory references which support the state that the brain\mind decides to be in. The problem that most of us face is that the selection of STATE is unconscious unless we take conscious control of the process which I'll explain later. Our **beliefs** also determine which metaprogram is used by the brain\mind. If I believe that I fail at most things the selected metaprogram will pick the internal references (Vi, Ai, Ki) that have been associated to past experiences of failure and delete the ones that were associated with success.

There are many points of intervention in this process. Neurolinguistic programming says that if you don't intervene, these processes are happening randomly: They are determining your behavior and state like a piece fly paper picking up whatever is around. The many techniques of intervention and the order in which they should be done in order to be effective is beyond the scope of this discussion. However a few examples will illustrate the point.

Perhaps the simplest area of intervention is through the effect of **physiology** on **STATE**. Physiology here refers to body position in every detail including muscle tension especially in the face. This is best illustrated in simple body language. Why do we all have an idea what a depressed person looks like? Next time your depressed see how long you can feel bad while you stand straight with your

shoulders back, chin up and with a big smile on our face. Every state has a unique physiology by manipulating physiology we have some control over state. If you exactly match the physiology of someone who is in an intense state you will be able to accurately perceive their emotional state.

Anchoring is the process that the brain\mind uses to associate internal references to external references. In the Pavlov's dog experiment the bell (Ae) is the anchor reference to the gustatory (Gi) internal reference. So the bell becomes anchored to the food experience and salivation. We are forming anchors unconsciously all the time. By arbitrarily picking an anchor which can be readily reproduced at will an individual can associate internal references that produce a state such as joy to the anchor and produce joy at will. Anchors that are associated with unpleasant states can be de-associated by simultaneously "firing" anchors that are associated with positive states.

The internal representation that produces a particular state can be confused by altering the specific internal references. For example if I hate to do exercises, there will be a specific internal set of references that produces an internal sensory image that then triggers an unpleasant feeling whenever I think of exercising. By simply taking that internal image which will be expressed in specific subgroups of Vi, Ai, and Ki and changing the internal vision, sound and sensation I will then be unable to feel

hate toward exercise. When my brain\mind tries to call the old image up to produce a state of hate toward exercise it won't be able to de-associate the new image from exercise and my feeling about it will be neutral.

There are many other approaches effecting changes utilizing the neuro-linguistic programming model. They are effective, however, unless the individual is motivated to change, and sees that the current behavior or belief is counterproductive to his personal goals, the changes will not last. The individual will simply reprogram himself again. Techniques to motivate an individual must be used first if he is not already desirous of change.

Questions and comments are welcome:

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