

# CONSIDERING THE ELEMENTS OF VISUAL TRAINING PROCEDURES

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# DESCRIPTIONS

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- Visual Training Procedures are typically described in a particular format that usually includes:
  - Purpose,
  - Equipment needed,
  - Instructions, and
  - Goal(s)

# PURPOSE

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The name of a procedure often describes its purpose. If the name does not make it clear enough, then a purpose is typically stated. More often than not, this purpose relates to specific mechanisms of the visual system. So, an accommodative rock procedure relates to accommodation and so on.

# EQUIPMENT

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This section identifies what equipment might be needed. These days it might be hardware such as lenses, flippers, etc., or it might be software if some type of computer might be used. It might also include any particular arrangement of the parts, such as "eye level," "arms reach," "patient seated," etc.

# INSTRUCTIONS

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Instructions often take the form of a script of what the person is supposed to do and this can be done in a variety of styles. The instructions often have multiple subsections that may outline multiple levels of difficulty which are used to make the task more or less difficult. Sometimes this is accomplished by adding or subtracting equipment as well.

# GOALS

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Goals are often stated or implied in the instructions and generally reflect a canonical expectation. They may also be specific metrics that are tracked separately such as a certain number of correct responses, or the time taken to complete the task, comparing these to norms or standards, resulting in a judgement of satisfactory or unsatisfactory.

# THE FIGURE

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- Depending on the type of presentation and the audience, we could identify additional sections or subsections like modifications, alternative equipment, etc. This type of outline organizes or codifies these elements of VT procedures. I tend to classify these elements as the figural aspect(s) of VT procedures

# QUESTIONS

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- Now, one question is, where in this is the training or therapy?
- Another, what is the target of the training?
- And lastly, why do we call it “visual?”



# IMPRESSIONS (I)

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I) Now, one question is, where in this is the training or therapy?

My impression is that, as these things are presented, there is an assumption that the training or therapeutic effect is the result of repetition.

## IMPRESSIONS (2)

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2) Another, what is the target of the training?

My impression is that, as these things are presented, what is being affected is some deficient “thing” that we identified in some way.

# IMPRESSIONS (3)

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3) And lastly, why do we call it “visual?”

Mostly because the deficient pieces we identified are in some way categorized as part of “vision.”

## NOW, ONE QUESTION IS, WHERE IN THIS IS THE TRAINING OR THERAPY? (I)

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- I do not think that repetition is a necessary and sufficient element of training/therapy. I think that change can occur suddenly and with as little as one experience That doesn't mean that we can or should eliminate repetition.
- I think visual training is about learning

## WHAT IS THE TARGET OF THE TRAINING? (2)

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- I think that the target of visual training is the visual process as a whole.

## WHY DO WE CALL IT “VISUAL?” (3)

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- I call it “visual” because as optometrists our unique entrée to learning/behavior/performance is through the visual process.

# WHAT IS LEARNING?

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- Defining learning is a difficult task. This is one description that I am working with:
- A self-directed, relatively stable, restructuring of the field resulting in a more or less permanent change in behavior/performance.

# FIGURE/GROUND

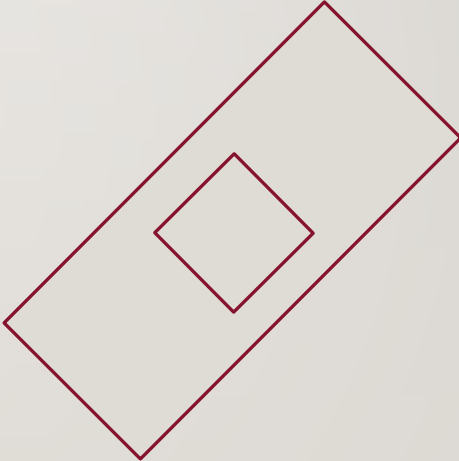
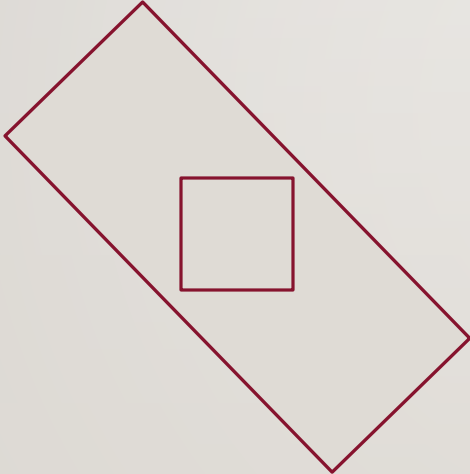
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- I mentioned that I think the descriptions and presentations of the elements of VT activities deal almost entirely with what I see as figural.
- However, I think that the true beauty and effectiveness of a VT activity/procedure is exposing and manipulating the ground. This leads to a re-structuring of the field.



# STRUCTURING THE FIELD

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# “REPETITION” IN ITS PLACE

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- As a practical matter repetition provides better opportunities for establishing constancy and introducing variation.

# A TRAINING EXAMPLE

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- (From tachistoscopic studies)”...we have reached the conclusion...that an essential part of the perceptual act is not only underway, but may be virtually completed before the stimulus is presented to the eyes.”

Renshaw, S., OEP Psychological Optics, September 1940.

# POSTURE

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- A more or less consistent, balanced arrangements (or relationship) among parts, from which movements tend to proceed and to which they tend to return.

# A TRAINING EXAMPLE

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- Manipulating the Ground
- Tach

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**Ending/Beginning?**

