Tact

- Defined as:
  - a verbal operant in which a response of given form is evoked (or at least strengthened) by a particular object
  - reinforced by socially mediated generalized conditioned reinforcement
- Invented term:
  - “Makes contact with” the physical world
- Tact response does not “refer to” a stimulus
  - “The only useful functional relation is expressed in the statement that the presence of a given stimulus raises the probability of occurrence of a given form of response.”
Tacts vs. Mands

• “Roughly speaking, the mand permits the listener to infer something about the condition of the speaker regardless of the external condition, while the tact permits him to infer something about the circumstances regardless of the condition of the speaker.”

Tact

• Stimulus substitution as a biological basis for reference
  – Words are not a substitution for the objects they stand for
  – The word “sandwich” is not a substitution for the object sandwich
    • Skinner – we can’t eat the word sandwich; not the same thing

• Watson “…words function in the matter of calling out responses exactly as did the objects for which the words serve as a substitute.”

• Ex: Responses to the word “fox”
  – Russell says we behavior to the word fox as though we have seen a fox ourselves
  – Skinner says – that’s not true
  – What do we do instead?
The Extended Tact

- “If a response is reinforced upon a given occasion or class of occasions, any feature of that occasion or common to that class appears to gain some measure of control. A novel stimulus possessing one such feature may evoke a response” (p.91).

Generic Extension

- “The property responsible for the extension of the response from one instance to another is the property which determines the reinforcing practice of the community.”

- Ex: Calling a novel chair a chair
Generic Extension

• Characteristics:
  – The response form must be a previously learned
  – The stimulus must be novel
  – The novel stimulus must have all the relevant features of the stimulus that previously controlled the response

(Peterson, 1978)

Metaphorical Tact

• “A second type of extension takes place because of the control exercised by properties of the stimulus which, though present at reinforcement, do not enter into the contingency respected by the verbal community.”

• Ex: Upon drinking soda for the first time child says “It tastes like my foot’s asleep.”
Metaphorical Tact

• Characteristics:
  – The response form must be a previously learned
  – The stimulus must be novel
  – The novel stimulus has some, but not all, of the relevant features of the stimulus that previously controlled the response

(Peterson, 1978)

Metonymical Extension

• “...an extension of a tact occurs when a stimulus acquires control over the response because it frequently accompanies the stimulus upon which reinforcement is normally contingent.”

• Ex: “The White House denied the rumor.”
Metonymical Extension

• Characteristics:
  – The response form must be a previously learned
  – The stimulus must be novel
  – The novel stimulus has none of the relevant features of the stimulus that previously controlled the response

(Peterson, 1978)

Solecistic Extension

• “The property which gains control of the response is only distantly related to the defining property upon which standard reinforcements are contingent or is similar to that property for irrelevant reasons.

• Ex: “You go first and I’ll precede you”
Solecistic Extension

• Malapropism
  – Misuse of similar sounding words
  – Ex: “No, a moo point. Yeah, it's like a cow's opinion. It just doesn't matter. It's moo.”

• Solecism
  – Grammatical mistake or absurdity
  – Non-standard usage
  – Ex: "This is just between you and I" instead of “This is just between you and me.”

• Catachresis
  – Misapplication of a word, especially in mixed metaphors
  – Ex: "Can't you hear that? Are you blind?"
  – The Cuban athlete “defecated” to gain fortune in the US.

Nomination

• “Novel occasions for which standard tacts are lacking”
  – Newborn child
  – Newly-invented machine
  – Newly-discovered flower
  – Newly-founded town
Nomination

• Proper name:
  – a name which is characteristically reinforced only in the presence of a particular person or thing

• Verbal processes responsible for naming
  – Surviving set of tact – *Beethoven’s Eighth Symphony*
  – Extension of tact relation
    • Naming of children
      – Generic or metaphorical extension
    – Naming due to cultural factors

Guessing

• “But if the form of the resulting response is not controlled by the stimulus in any way, it cannot be a tact. The tact is a relation, not merely a response, and in the absence of a controlling stimulus no relation can be established”

• Guessing - resemblance of current situation to past situations

• Is calling a coin toss a tact?

• Skinner (1942)
  – What were the main points?
    • “Normal” participants – not just previous call but if previous call was alternation
      – Guess is not capricious, determined by other events
    • “Psychotic” participants – not influenced by their own verbal behavior
Abstraction

Skinner:

• “Any property of a stimulus present when a verbal response is reinforced acquires some degree of control over that response, and this control continues to be exerted when the property appears in other combinations.”

• “…free extensions can not be tolerated…”

Abstraction

• Abstraction
  – Sharpening of stimulus control
  – Works opposite to extension
  – Reinforces response in the presence of a chosen stimulus property and fails to reinforce responses evoked by unspecified properties
**Abstraction**

- "Pyramid" → "Right!"
- "Pyramid" → "No!"
- "Pyramid" → "Right!"

**Abstract Tacts**

- **Importance:**
  - Identifies properties that are important to a listener
  - Response available when proper name is lacking

- **Dynamics**
  - "To evoke a response which is under the control of a single property of an object it is necessary not only to present the object but to ‘specify the property to be reacted to.’"
Discrimination vs. Generalization vs. Extension vs. Concept vs. Abstraction

- **Discrimination**: when behavior is brought under control of a stimulus through differential reinforcement
- **Generalization**: behavior under discriminative control also occurs, without training, in the presence of stimuli similar to the original
- **Tact Extension**: verbal responses to stimuli properties that have previously acquired a discriminative function but now appear in a novel context
- **Concept**: responding similarly to stimuli that are members of a class and responding differently to stimuli that are not members of that class
- **Abstraction**: occurs when discriminative control by a relevant stimulus property or properties is refined by the differential reinforcement of responses to stimulus properties respected by the verbal community

Differentiating Between

- Tact extensions are a type of conceptual behavior
- Tact extensions are different from generalization
  - Tact extensions: response is occasioned by stimulus property that was present when behavior was reinforced but now occurring in a novel context
  - Generalization: response occurs in the presence of a novel variation of the relevant stimulus property
- Saying "red" to objects that are red is not generalization
  - Stimuli appear exactly as they were taught
  - Responses of this type are abstract tacts
- Abstraction keeps tact extensions in check