PLIANCE, TRACKING AND AUGMENTING WITHIN RFT: VAGUE CONCEPTS MASQUERADING AS HIGH PRECISION TECHNICAL TERMS?

COLIN HARTE AND DERMOT BARNES-HOLMES

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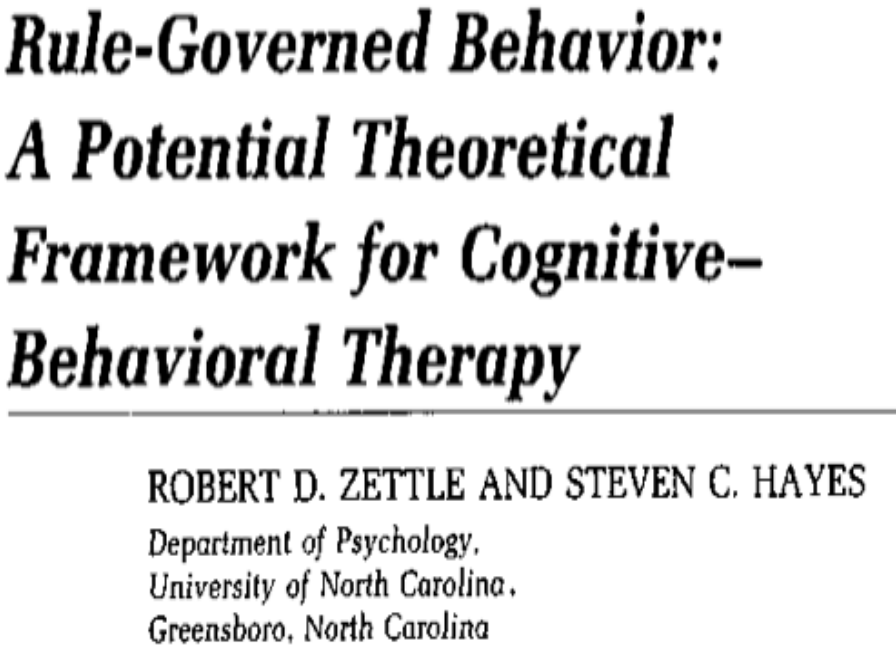
"It would be unfortunate if RFT researchers were reticent in recognizing the potential limitations of concepts that appear in the seminal text (Hayes et al., 2001), when those concepts fail to yield readily to experimental analyses. Indeed, this would be particularly ironic given that early advocates of RFT criticized Skinner's (1957) Verbal Behavior for failing to produce a vibrant and progressive program of basic experimental research."

(Harte & Barnes-Holmes, 2022)

PLIANCE, TRACKING AND AUGMENTING: WHAT ARE THEY?

- The study of rule governed behavior has long been a focal point in the experimental analysis of human behavior
- And it has also formed the conceptual basis for a prominent 3rd wave behavior therapy – ACT (Hayes et al., 1999)
- Pliance, tracking and augmenting are suggested to be *functionally independent* classes of rule-governed behavior (Zettle & Hayes, 1982)
- Antecedent verbal stimuli that influence the behavior of a listener because they refer to (either explicitly or implicitly) "apparent" consequences (i.e., they actualize specific functions in the stimuli for the listener).


Rule-Governed Behavior: A Potential Theoretical Framework for Cognitive–Behavioral Therapy

ROBERT D. ZETTLE AND STEVEN C. HAYES

Department of Psychology, University of North Carolina, Greensboro, North Carolina

PLIANCE

- *Pliance*: rule-governed behavior controlled predominantly by speaker mediated consequences for correspondence between behavior and the rule

- "You can only watch television after you finish your homework" where doing your homework is under the control of the speaker mediated consequence of being able to watch TV

TRACKING

- *Tracking*: rule-governed behavior controlled predominantly by the correspondence between environmental contingencies and the rule.

- "Study hard to do well in your exams and you will feel great afterwards" ("feeling great" may be explicitly stated or implied by the speaker, but in both cases the consequence must be inferred by the listener).

AUGMENTING

- Augmenting: rule-governed behavior that can occur together with pliance or tracking to alter the extent to which rule-specified consequences have reinforcing or punishing properties.

Motivative augmentals

- Increases or decreases the extent to which a previously established consequence functions as a reinforcer or punisher.
- "It's very cold outside today. You should wear a hat to keep you warm"

Formative augmentals

- Establishes reinforcing or punishing functions for a previously neutral stimulus
- "This piece of paper is a voucher that will get you a free hat"

SO, WHAT'S THE PROBLEM?

- *Kissi et al. (2017) systematic review*
  - Assessed records 1982-2015
  - Only 9 experimental studies retrieved
    - Pliance vs tracking x2; pliance alone x2; tracking alone x1; formative augmenting x2; motivative augmenting x0
  - Only 1 study found difference between pliance and tracking as separate classes of rule-governed behavior
  - Contradictory findings
    - E.g., Baruch et al. (2007) – no difference in effect pliance vs tracking on persistent rule-following in depressed individuals
    - McAuliffe et al. (2014) – difference in effect of pliance vs tracking on persistent rule-following for high depressed

- *Harte & Barnes-Holmes (2022) informal review*
  - Assessed records 2015-2020
  - 5 experimental studies retrieved
    - Pliance vs tracking vs augmenting x1; pliance vs tracking x1; pliance alone x1; formative augmenting x1; motivative augmenting x1
  - Only 1 study found difference between pliance and tracking as separate classes of rule-governed behavior
  - Contradictory findings
    - E.g., Kissi et al. (2018) - difference in effect of pliance vs tracking on persistent rule-following for normative participants
    - McAuliffe et al. (2014) – difference in effect of pliance vs tracking on persistent rule-following only for high depressed, not for normative

40 years after their conception, the terms have rarely been used as the basis for conducting systematic experimental-analytic research, despite their supposed theoretical centrality to the study of rule-governed behavior

SO, WHAT'S THE PROBLEM?

- Lack of *consistent cumulative* data - concepts do not appear to function differentially and thus their utility as functionally distinct concepts is unclear.

- Literature seems no further along in demonstrating the functional-analytic value of pliance, tracking, and augmenting in the experimental analysis of rule-governed behavior.

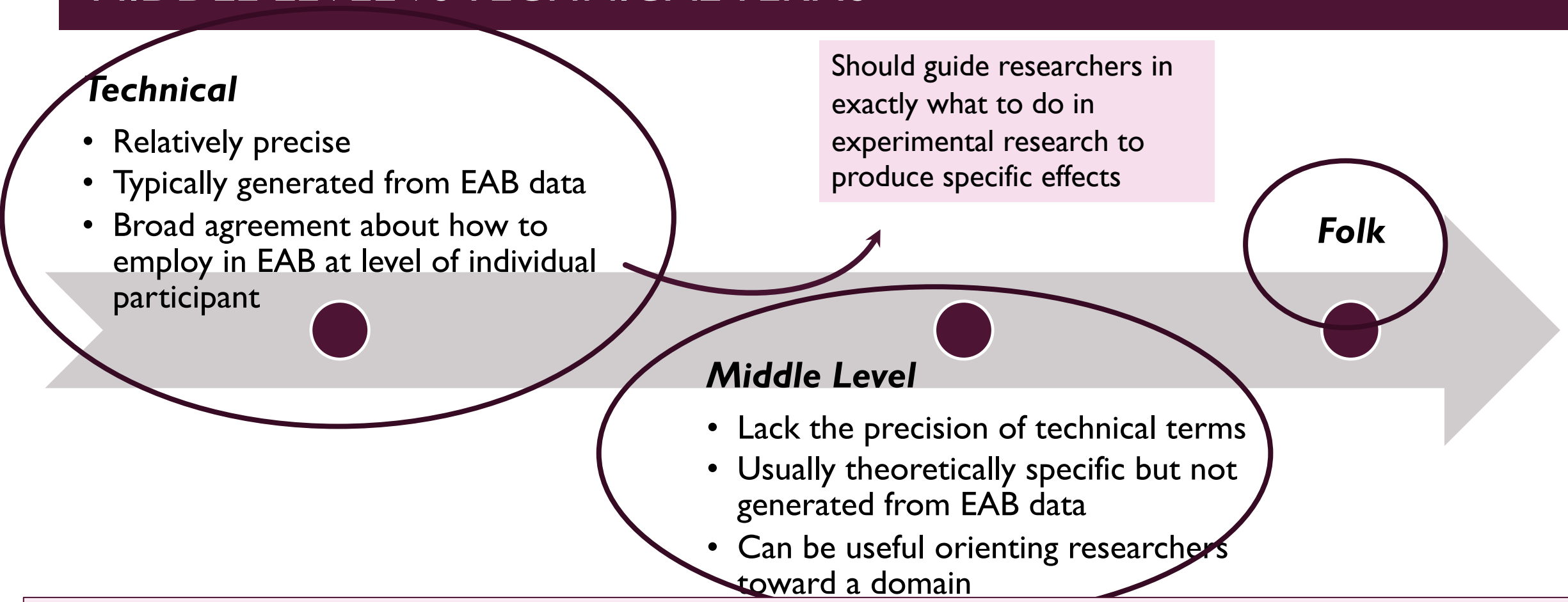
- The type of research that has employed these terms, does not tend to test the concepts themselves in a functional-analytic abstractive manner.
  - E.g., "compliance" could simply be substituted for "pliance," and "motivational statement" could be substituted for "augmental" without making any discernible difference to the research

WHY ARE THESE TERMS SO DIFFICULT TO PIN DOWN?

- Kissi et al. (2017) suggested that one of the main reasons for this tendency for inconsistent findings, and general lack of experimental use, may be that pliance, tracking, and augmenting are not sufficiently well-defined, distinct functional-analytic concepts.
- For example, when a particular instance of rule-governed behavior is considered a track, it is often possible to argue that it also has some of the properties of a ply.
- Even experts can't agree on what they are!
- ***So, why are they so difficult to pin down?***

Maybe they are not actually technical terms at all…

MIDDLE LEVEL VS TECHNICAL TERMS



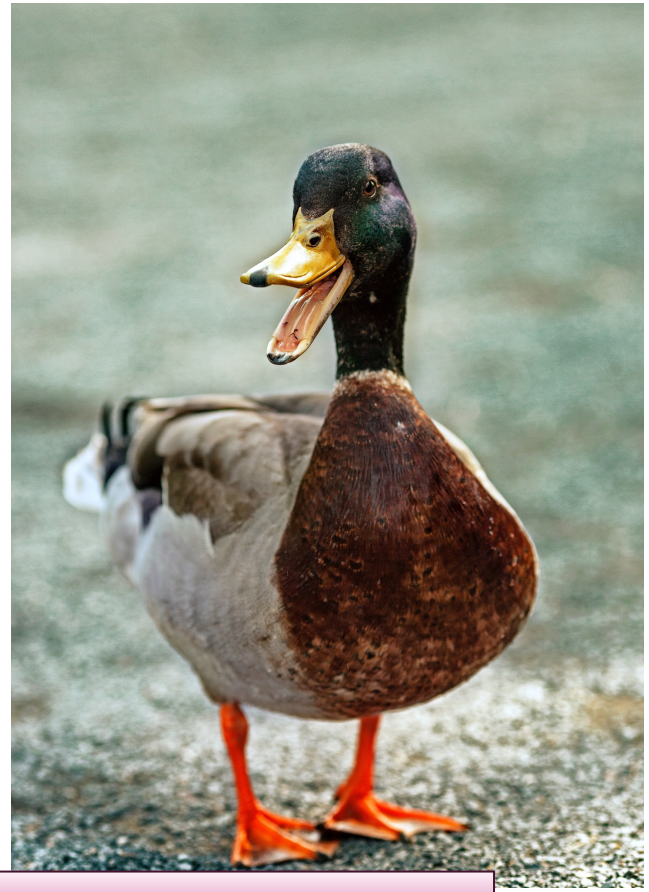
"describing something as a middle-level term is a way of placing it on a continuum between the analytic units of the basic science… and folk psychological terms… within a given domain" (Barnes-Holmes et al., 2016, pp. 367)

WHY IS THIS IMPORTANT?

- Insofar as RFT seeks to develop concepts that have clear utility in experimental analyses (i.e., toward prediction-*and*-influence), it seems important to be clear what terms are technical or not – seeks to develop increasingly precise generic account of language and cognition

- Not suggesting that RFT concepts be restricted solely to basic experimental analyses, but rather that they need to be rooted there

- And as we have just seen, they don't seem to have proven particularly useful in the experimental analysis of human language and cognition as seen through the lens of RFT



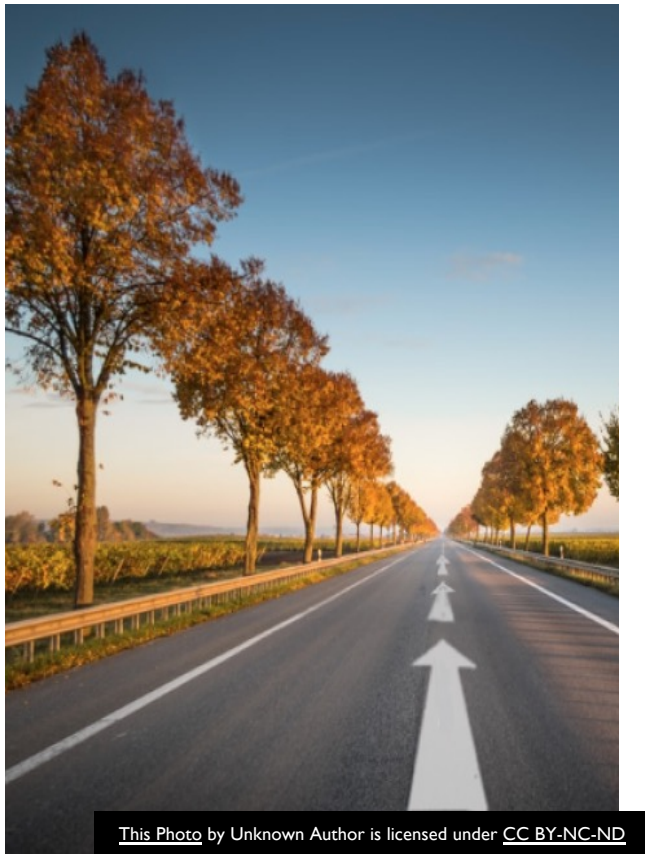
If it doesn't look like a duck, walk like a duck, nor quack like a duck, then its probably not a duck

SO HOW DO WE MOVE FORWARD?

- **Psychometrics?**
  - Recent research has sought to develop questionnaires assessing pliance and tracking in adults and children
  - But how can assessing ill defined terms with somewhat loose measures help in the experimental analysis of rule-governed behavior?

- **Qualitative?**
  - Recent research has sought to employ qualitative assessments of the ways people follow rules
  - But same problem

- **Our suggestion:** conceptualize rules as involving increasingly complex derived relational networks and focusing on various dimensions that impact such networks



RULES AS DERIVED RELATIONAL NETWORKS RATHER THAN INSTANCES OF PLIANCE, TRACKING AND AUGMENTING

- In order to unpack a particular domain, such as rule-governed behavior, data that might reflect the functional processes involved in this domain would need to be collected.

- In the service of this aim, we will now consider a series of recently published studies that have attempted to explore a more technical (i.e., basic experimental) analysis of rules **as relational networks rather than instances of pliance, tracking, and augmenting.**

- Within RFT, a conceptual analysis of rule-governed behavior involves defining rules as relational networks (O'Hora et al., 2004, 2014)

MANIPULATING RULES AS RELATIONAL NETWORKS

1. Impact of ***levels of derivation*** of a relational network on persistent rule-following (Harte et al., 2018)
2. ***Levels of coherence*** of a relational network on persistent rule-following (Harte et al., 2020)
3. Extent to which ***derivation moderates coherence*** and impacts persistent rule-following (Harte et al., 2021)
4. Manipulating ***non-critical aspects of a relational network*** and assessing impact on on persistent rule-following (Bern et al., 2020)
5. Impact of ***flexibility and coherence*** of a relational network and assessing impact on persistent rule-following (Harte et al., 2021)

These experimental analyses have uncovered subtle and complex effects by exploring the impact of experimentally definable, relational variables on responding in the face of competing reinforcement contingencies.

WHERE DOES THAT LEAVE US?

- Maybe experimental research conducted on pliance and tracking has just not been sophisticated/creative enough in measuring whether participants are following a ply or a track?
  - In other words, maybe researchers are not differentiating clearly enough between the stimulus (rule) and stimulus functions – so maybe we need **more** basic lab-based experimental analyses?

- On the other hand: the problem in developing a productive program of experimental research on rule-governed behavior within RFT may not be lack of creativity or sophistication on behalf of the researchers, but the lack of appropriate stimulus control over the behavior of the researcher afforded by the concepts of pliance, tracking, and augmenting.

- In short, the problem may be more likely to be in the concepts, not the researcher

CONCLUSION

- Pliance, tracking, and augmenting may be of limited value in the experimental analysis of behavior
  - They have failed to yield the levels of prediction-and-influence (with precision, scope, and depth) we typically seek in the experimental analysis of behavior
  - It therefore seems best to treat them as clear examples of middle-level concepts
  - This is not to say they are without value, but it is important to recognize the boundaries and limitations of the scientific terms we employ as basic and applied researchers and as practitioners.
- Recognizing such boundaries will always be important:
  - "We divide behavior into hard and fast classes and are then surprised to find that the organism disregards the boundaries we have set" (Skinner, 1953, p. 94).
- It is now time to develop and employ additional concepts, wrought from the crucible of the basic experimental research laboratory.

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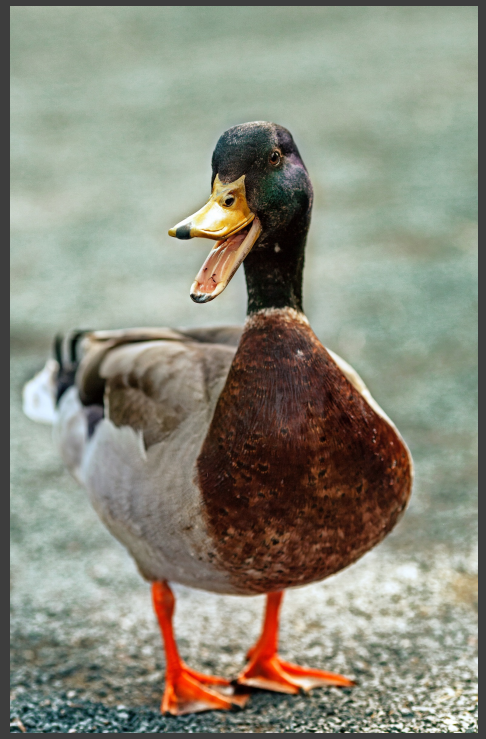
THANKS FOR LISTENING AND REMEMBER, THE RAT IS ALWAYS RIGHT!

Federal University of São Carlos (UFSCar), São Carlos, Brazil
Paradigma – Centre for Behavior Science and Technology, São Paulo, Brazil

Contact: colin.n.harte@gmail.com

SOME ADDITIONAL RESOURCES



- Harte, C. & Barnes-Holmes, D. (2022). The status of rule-governed beahvior as pliance, tracking and augmenting within relational frame theory: Middle-level rather than technical terms. *The Psychological Record, 72*, 145-158. https://doi.org/10.1007/s40732-021-00458-x

- https://www.BALC-I.net ('Behavior Analysis of Language and Cognition – International' website)

- ABAI Symbolic Language and Thought blog series (part of the Behavior Science Dissemination series): https://science.abainternational.org/category/symbolic-language-and-thought/

- **Contact:** colin.n.harte@gmail.com