

# Meaningful Differences

## After Wandering 40 Years in a Linear Desert, Are We Ready to Emerge? The Meaningful Difference of Israel Goldiamond

In the Forward to an upcoming book Andronis and Layng recently wrote, "Goldiamond lived in, and distinctively saw a world of behavioral contingencies. He not only spoke about contingencies, he lived them and perceived them with a unique clarity." He saw that behavior was a function of (mostly) nonlinear consequential contingencies, and that to understand behavior is to understand the contingencies, and their history, of which the behavior is a part. Though Goldiamond's work has implications for both basic and applied behavior analysis, the work has had its primary impact in the clinic.

Goldiamond's background in psychophysics and decision theory contributed to what became nonlinear contingency analysis (NCA). The behavior of interest was not only under control of its consequences, but of the consequences of the available alternative behaviors, and further, those consequences came in packages. Both aversives and reinforcers were involved, or what patients understood as costs and benefits. One has to consider the costs and benefits for the behavior of interest and its alternatives to understand its function. This analysis results in a matrix of relations whose resolution determines the behavior of interest, clinically designated as the presenting complaint or disturbing behavior. The examination of alternatives reveals the disturbing behavior to be a rational outcome of the matrix and is adaptive, not maladaptive nor dysfunctional. Intervention must consider these nonlinear matrix relations.

But there was more. Other sets of contingencies occurring at different times or places were frequently found to potentiate the consequences found in the matrix of which the disturbing pattern was a part. Interventions focused on these "systemic" relations resulted in a change in the disturbing pattern without it being directly targeted. Rumination, phobias, outbursts, self-injury, among other behaviors, would "drop out" without being addressed. His approach was entirely constructional. The goal was never to decelerate behavior or remove a consequence, it was to "establish behavior the absence of which is the problem." Many of today's ethical controversies could be resolved by adopting this Constructional Approach.

Few therapies or approaches available today employ a nonlinear analysis and are left trying to account for behavior in a Linear A-B-C analysis. This results in investigators employing a range of inferences or hypothetical constructs or private meditational variables. This is particularly true where C appears solely to involve costs or is absent. Goldiamond showed how to understand behavioral complexity and how to make sense out of seemingly irrational or costly behavior. Nonlinear analysis is as important today as when it was first developed over 40 years ago.



by Trustee  
T.V. Joe Layng, PhD

For readers interested to learning more about Goldiamond and his work a good place to begin is Layng, T. V. J. (2009). The search for an effective clinical behavior analysis: The nonlinear thinking of Israel Goldiamond, *The Behavior Analyst*, 32, (1) 163-184. It contains a rich source of references to Goldiamond's work. To understand Goldiamond's approach to emotions see Layng, T. V. J. (2017). Private emotions as contingency descriptors: Emotions, emotional behavior, and their evolution. *European Journal of Behavior Analysis*, 18 (2), 168-179. <http://dx.doi.org/10.1080/15021149.2017.1304875>, which has its foundation in his research and insights.

A detailed and updated introduction to Nonlinear Contingency Analysis and the Constructional Approach, is provided by Layng, T. V. J., Andronis, P. T., Codd, R. T., & Abdel-Jalil, A. (2021). *Nonlinear Contingency Analysis: Going beyond cognition and behavior in clinical practice*. London, UK: Routledge, Taylor & Francis Group (available October 2021). The forthcoming book in the ABAI book series *A Programming Contingency Analysis of Mental Health* by Israel Goldiamond, written in the early 1980s, is a comprehensive treatment of patterns clinical interest that is as relevant today as it was 40 years ago.

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