

The Golf Counter that Helped Set You Free

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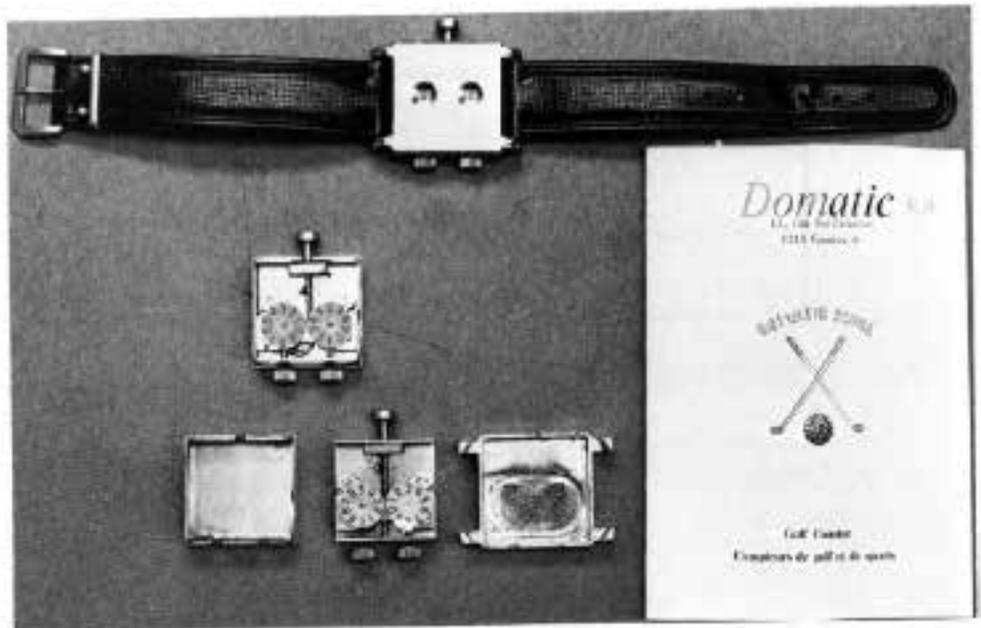


Behavior analysis developed for the most part in animal research laboratories equipped with all kinds of electrical and electronic devices capable of scheduling discriminative stimuli, reinforcers and punishers. Similar devices recorded time allocated to different activities and numbers of responses occurring in the different conditions arranged by the apparatus. It wasn't too long – in history of psychology time, anyway – before people began to ask questions not just of rats and pigeons, but also of humans. Humans were large and small, fully functional or with behavioral limitations of one kind or another. The interest of early behavior analysts, as with later behavior analysts, often was not just to better understand behavioral principles, but also to make a difference in the lives of the people with whom they worked. This latter interest soon led our forebearers outside the laboratory and into the natural environments in which human live and work.

The value of scientific rigor in the analysis of behavior by that time was well-established in the laboratory. To achieve equivalent rigor in moving outside the laboratory into natural environments required that the control and recording apparatus synonymous with the experimental analysis of behavior be adapted to these new settings. Some functions, such as arranging simple schedules of reinforcement, like a fixed-ratio 1, were easy enough to undertake “manually.” Counting and timing, however, often required more than a manual solution. Hand-held stopwatches were invented soon after the American Civil War, around 1869. Hand-held counting devices go back at least to the abacus (~500 CE). Thus, by the time behavior analysts ventured into human natural environments, a substantial technology – beyond fingers – had evolved for both timing and counting.

The history of science is in no small part grounded in adapting extant technology to new purposes. So it was with the pioneers of applied behavior analysis. These individuals ferreted out all sorts of counting and timing devices that were easily portable as the observer tracked humans through their daily lives.

One such pioneer was Ogden Lindsley, perhaps best known these days for his advocacy of precision teaching and standard-celeration charting. Having pretty much invented the analysis of human operant behavior in the laboratory, Lindsley also was famous for self-recording aspects of his own behavior. Self-recording means “counting” and to do that Lindsley used a simple mechanical wrist-counter developed for keeping count of one's strokes on the golf links. The golf counter was total portable and unobtrusive – it looked like a wristwatch. One simply pushed a button on the side



to advance the counter shown on the face of the counter. The frequency count accumulated in single units until it was manually reset. Its only limitation was its upper limit of a count of 100 (there is not a golf counter with enough

capacity to count the present author's strokes over 18 holes!). Multiples of 100 presumably were accommodated by recording elsewhere successive blocks of 100 responses.

Whether Lindsley was the first to adapt extant technology to recording behavior in free-flowing natural settings is a matter for historians to decide. The fact is that in the early days of applied behavior analysis, a plethora of hand-held counters appeared. They mimicked the function of the golf counter, but without the low upper limit on counting. From these humble beginnings of counting responses in real time in "real" environments, the digital revolution has given rise to smaller and smaller devices with greater and greater power. These devices played a major role in setting the analysis of behavior free of the artificiality and constraints of the laboratory. They have proven to be essential tools in both the arranging of contingencies and measuring their behavioral effects to the benefit of all whose behavior is so-observed.

Reference

Lindsley, O. R. (1968). A reliable wrist counter for recording behavior rates. *Journal of Applied Behavior Analysis*, 1, 77-78.