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THE BATTLE OF STALINGRAD: A BEHAVIOR ANALYTIC PERSPECTIVE

LA BATALLA DE STALINGRADO: UNA PERSPECTIVA BASADA EN EL ANÁLISIS DE LA CONDUCTA

MARCO A. PULIDO¹ LABORATORIO DE CONDICIONAMIENTO OPERANTE UNIVERSIDAD INTERCONTINENTAL

ABSTRACT

The purpose of the present paper is to suggest ways in which historians may use behavior analysis as a tool to design research agendas that may help them understand complex human behavior and atypical decision making processes. This paper presents a brief outline describing the general epistemological and pragmatic virtues of approaching human behavior from a behavior analytic perspective. This outline is followed by a general description of the elements that should be taken into consideration when developing a research agenda based on behavior analytic principles. Lastly a research agenda regarding a series of puzzling events leading to the encirclement of German Sixth Army during the so called "Battle of Stalingrad," is used to exemplify the methodology proposed in this paper.

Key words: Battle of Stalingrad, behavior analysis, research agenda

RESUMEN

El propósito de este ensayo es el de sugerir formas en que los historiadores pueden utilizar los principios del análisis de la conducta para desarrollar

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agendas de investigación que les ayuden a comprender el comportamiento humano complejo y los procesos de toma de decisiones atípicos. El ensayo comienza con una breve presentación de las virtudes epistemológicas y pragmáticas de aproximarse a la conducta humana desde la perspectiva del análisis de la conducta. Después de presentar las principales características del análisis de la conducta se describen los elementos que deben ser tomados en consideración al elaborar una agenda de investigación desde esta perspectiva. Por último, y para ejemplificar la aproximación, se presenta una agenda de investigación relacionada con una serie de extraños eventos que desembocaron en el aniquilamiento del Sexto Ejército Alemán durante la llamada "Batalla de Stalingrado."

Palabras clave: Batalla de Stalingrado, análisis de la conducta, agenda de investigación

History may be conceptualized as the analysis of testimonies regarding the behavior of the human species. Given its interest in human behavior, the behavior sciences are valuable tools for historians, however when historians have relied on psychology to help them understand particular sets of events, they have turned towards theories that lack empirical support (see Binion, 1982 for a review). It is easy to understand why more scientific approaches within the behavioral sciences have failed to establish contact with many historians. Behavior analysts for instance are rigorously trained to avoid unsupported generalizations of their data (Risely, 2001). Although this kind of training has helped to create a rigorous, respectable and useful scientific discipline it has automatically alienated it from the "quantum leap" involved in developing a carefully planed experiment and suggesting that the observed behavior is identical to that presented three centuries ago by some English sovereign (see for instance De Mause, 2002 for multiple examples of this kind of unsupported generalizations).

The present paper was not written to try to undermine the sound scientific training of future behavior analysts; additionally this paper does not intend to question the careful principles regarding experimentation and theory development that have made behavior analysis a respectable scientific discipline. Instead, this paper endeavors to explore ways in which solid scientific findings regarding human behavior may be offered to historians as a useful tool for designing fruitful research agendas.

One way to develop the ideas presented on the previous paragraphs would be to organize this paper in three different segments. First of all, the reader should attain a clear concept of the differences that separate traditional, mentalist psychology from behavior analysis; in a similar vein the first portion of this paper should give the reader the opportunity to assess the scientific and pragmatic virtues of behavior analysis as a tool for understanding human behavior. The second portion of this paper will present a brief outline on the facts regarding the encirclement of the German Sixth Army during 1942 by Soviet army groups (the so called "Battle of Stalingrad"). The second segment of this paper will also focus on the behavior of the German High Command during the months preceding the battle. Lastly, the events regarding the battle will be analyzed from a behavior-analytic perspective aiming at the development of a new research agenda that may be offered to historians interested in the subject.

ON BEHAVIOR ANALYSIS

Behavior analysis may be conceptualized as a natural science that endeavors to understand and predict behavior through the systematic analysis of its relations with the environment. As such behavior analysis is in general disagreement with the idea that sustains that the determinants of behavior are metaphysical in nature and "exist" in the form of immaterial thoughts inside the subjects head (Skinner, 1953). As an objective science, behavior analysts reject the idea that valuable data regarding human behavior may be obtained through introspective methodologies. Data regarding the relationships between behavior and the environment should only be obtained through the direct observation of these phenomena (Skinner, 1990).

Behavior analysis was originally designed by BF Skinner in 1938. Using carefully designed experiments and automated equipment, Skinner found that the behavior of organisms is fundamentally determined by its consequences. Further research by his students showed this finding to be general across a number of animal species (see for instance Ferster, 1958). Research focused in the applications of Skinner's findings showed human behavior was highly sensitive to change in reinforcement contingencies (Bijou, 1955; Wolf & Risley , 1965). An impressive number of subsequent replications gave considerable empirical support to Skinner's idea that behavior is determined by its consequences.

As it may be inferred from the previous paragraph, behavior analysis differs from traditional psychology in a number of interesting ways. First of all its methodology and its focus on behavior as a legitimate study object makes it possible to characterize it as a science. Furthermore the basic explanatory principles derived by this science have been obtained through careful and painstaking experimental research; finally, behavior analysis has established the foundations for an impressive number of different technological developments that are currently used (amongst others) in clinical, educational, social and pharmacological settings (see Bellack, Hersen and Kazdin, 1982 for a review). If behavior analysis is such a powerful tool for understanding human behavior, can it help historians understand the past? In the following section a well known but puzzling sequence of events regarding the German invasion of Soviet Russia in 1941 will be presented to the reader. After the description of these facts, an attempt to develop a research agenda based on a behavior analytic perspective will be presented to the reader.

ON THE BATTLE OF STALINGRAD

Operation Blue was generally designed by Hitler with the purpose of depriving Stalin from the rich oil and grain deposits located in Ukraine. It was composed of a series of armored thrusts and pincer movements spearheaded by Friedrich Paulus's Sixth Army. In its opening stages, (June and July) operation Blue was highly successful as enormous numbers of Russian soldiers and material were captured by the panzer divisions, however towards the end of October the general *momentum* of the offensive had stalled and the Sixth Army was detained in costly street fighting in the industrial city of Stalingrad. The "wings" of Sixth Army were sparsely covered by poorly equipped Rumanian and Italian forces and the risk of encirclement and eventual annihilation of all German troops inside the city appeared imminent. Time and again Hitler's generals pointed out this peril to him and advised him to move out of the city (Von Manstein, 1958).

During the early hours of November 19th 1942 Stalin unleashed operation Uranus on the front protected by the Rumanian Third Army, strong armored pincers quickly dissolved any resistance trapping nearly 300 000 soldiers in the Stalingrad pocket. Hitler was urged by his generals to allow Paulus to fight his way out of the pocket, instead he ordered Sixth Army to "stand fast" and wait for general Hoth to open a passage to the pocket (Carell, 1966). The decision was disastrous; despite repeated assurances by Goering that he could keep Sixth Army provisioned by the Luftwaffe the tonnage flown into the pocket was consistently insufficient to keep the army going (Bergstrom, 2008). The soldiers slowly starved and ran out of ammunition; Hoth's offensive petered out as his panzer divisions had to be sent elsewhere to stem other soviet threats. Eventually the entire Sixth Army died or passed into Soviet captivity; fewer than six thousand eventually returned to their homeland. Not even at the end of January, when only isolated German pockets of resistance remained did Hitler abandon his "stand fast" order. Only two soldiers managed to escape Stalingrad and return to the German lines.

The Stalingrad disaster was a terrible blow to Hitler's prestige as a warlord and also a turning point in the Second World War. It is also however a strange event within military history because the "stand fast" order and Hitler's disregard for his generals advice appeared completely counterproductive to the German war effort. As the events regarding the Battle of Stalingrad were basically the result of a single individual's decision process they also appear highly attractive for psychological speculation. The following section suggests how a research agenda on this subject may be designed from a behavior analytic perspective.

A RESEARCH AGENDA BASED ON A BEHAVIOR ANALYTIC PERSPECTIVE

A research agenda based on a behavior analytic perspective, designed to clarify the events that led to the annihilation of Sixth Army, should be designed around two principal issues. In the first place the agenda should endeavor to describe Hitler's decision process with as much detail and clarity as possible. Once the target behavior is adequately defined historians should proceed to identify other occasions when the target behavior was emitted, followed by a careful analysis of the specific consequences produced by this behavior.

The present author has already commenced research on the previously described agenda. This research has been principally based on commercially available texts on the subject and therefore should only be considered as a starting point for serious historians to consider (or reject).

Hitler's generals generically referred to the series of events culminating with the encirclement of Sixth Army as the "stand fast order" (see for instance Gorlitz, 1989). This particular order was relatively infrequent during 1940 and comparatively more common by the end of the war (Guderian, 1952). In its basic form a general receiving this order could not, under any circumstance, withdraw from his present position and should issue his soldiers orders to dig in and "sell their lives dearly." Towards the end of the war the series of events that led Hitler to issue this order were well known by his generals and have been described in very similar ways by different individuals. In general all descriptions suggest that any battle group separated from neighboring units (or completely encircled by enemy forces) could expect to receive this order as soon as news of the events reached Hitler's headquarters (Gorlitz, 1989).

As has been mentioned previously this order was relatively infrequent at the beginning of the war. According to general Jodl's letters this behavior first appeared in 1940 during the German invasion of Norway. British destroyers patrolling the waters in the vicinity of Narvick prevented German invasion forces from receiving provisions. Jodl colorfully describes Hitler's "despair" and complete incapability of "deciding" what to do about the situation. His more experienced and formally educated advisors simply suggested the garrison be ordered to "dig in and wait." In this particular context and war situation the decision was clearly successful as the destroyers were promptly withdrawn to cover other war interests of the hardly pressed and overstretched British Empire (particularly the withdrawal of English troops in Dunkirk).

The stand fast order was issued again during the terrible winter of 1941, with a stalled German offensive "shivering" before Moscow's gates. Strong masses of Siberian troops on skis penetrated deep into the German rearguard creating havoc and producing dozens of requests for withdrawal from Hitler's generals (Guderian, 1952). This new crisis was quick to "elicit" the "stand fast" order from Hitler and military history today regards this decision as the main reason why army group center was not destroyed during the winter of 1941 (see for instance Carell, 1966). Many historians also claim that saving army group center in 1941 increased Hitler's military prestige enor-mously; additionally it also confirmed Hitler in his ever increasing tendency to disregard good advice provided by his generals (and it has been suggested that it confirmed many of his generals in their meek and servile obedience to the warlord's wimps).

Stand fast orders were again issued during February 1942 when six German paratrooper divisions were encircled near Demyansk. The German troops where eventually released from the Demyansk pocket after months of successful air provisioning.

Viewed in the light of these preceding events the Stalingrad disaster appears more inevitable than improbable. Obviously professional historians interested on the subject could provide a sounder basis for an operant conditioning account of the previously described events. Additionally, professional historians could probably have access to more reliable testimonies than those consulted by the present author. Also they could probably develop and test alternative explanatory models for the same set of events. In any case the present paper suggests research agendas for historians may be developed using a behavior analytic perspective; how far can this agendas take historical research exceeds the purpose of this paper.

It is necessary to note here that both soldiers and writers have suggested (in layman's terms) ideas similar to those expressed in this paper. Jodl (1976) for instance wondered if the Narvick events were an important lesson that the "autodidact had learned by heart." In a similar vein Carrel (1966) wondered if the Demyansk pocket situation was counterproductive in the long run for the German war effort (by confirming Hitler to hold in Stalingrad). This paper is in general agreement with the ideas expressed by both Jodl and Carrel but also suggests that the Battle of Stalingrad could be approached by historians as a dramatic example of the effects of positive reinforcement on human behavior. The battle of Stalingrad may also be approached as an interesting example of the way in which an individual reinforcement story adventitiously shapes the fates of millions.

AN ARGUMENTATIVE AND METHODOLOGICAL SYNTHESIS

The collaboration between historians and the behavioral sciences is still incipient and sharply skewed towards psychological paradigms that have not been developed using experimental methods. At the beginning of the twenty first century, historians may explore collaboration with the new behavior sciences that offer empirically tested theories that have proven very useful in predicting and controlling both animal and human behavior. Radical behaviorism was developed as a scientific endeavor that precludes unsound generalization of behavior theory and principles; however these same theories and principles may be used as guidelines to direct historical research (never to make unsubstantiated assertions, but rather to narrow the selection and search for bibliographical and historical materials).

In order to develop a Behavior Analytical based research agenda the historian must first try to determine if the particular set of historical events that he tries to account for fit the mold of what Behavior Analysis can offer. Behavior analysis was originally developed to study how reinforcement contingencies change the behavior of individual organisms; thus, historical events determined by a single subject, where enough information exists to determine the outcomes of the subject's behavior would be ideally suited for the aforementioned research agenda. Once the historian has determined that a behavior analytic perspective is in order, an attempt should be made to clearly define the particular behavior that the research agenda attempts to account for. Lastly, an attempt should be made to identify the outcomes of the target behavior. Obviously once the outcomes have been identified and adequately documented an interpretation problem arises related with their putative reinforcing or punishing effects on the subject. Perhaps, as was the case with the example provided in this text, interpretation problems may be circumvented in terms of the relative frequency of the target behavior in the subject's reported behavioral repertoire.

As the present author knows of no previous attempts to orient historical analysis in the way suggested in this paper it would be of great interest to receive information that may confirm (or disconfirm) the usefulness of the present approach

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