Cambridge University Press 978-1-107-12250-5 — Purpose and Cognition David W. Carroll Index <u>More Information</u>

Introduction

The purpose of this note is to confess how "queasy" I have felt during all this oath mess both because I helped to precipitate it and because of the very difficult situation it has put you in. Yet, of course, I would do it again. (E. C. Tolman, 1950a)

As the Academic Senate met on the University of California, Berkeley campus on June 14, 1949, there was a palpable tension in the room. It was the Cold War era, a time when concern regarding the presence of Communists in government and the broader society was reaching a fever pitch. Among the headlines in the *San Francisco Chronicle* on the morning of June 14 were: "Atom Inquiry," "Are you a Communist?" "Hiss Perjury Trial," and "Business View of Red China" (Ritchie, 1964, p. 314).

During a time when discussion of political issues frequently veered into hysteria, one might surmise that the deliberations of a university faculty as prestigious as those assembled on the Berkeley campus would be especially valuable. However, the University of California professors were not mere discussants of the issues of the day; they were the issue of the day. One other *Chronicle* headline that day told the story: "U.C. Loyalty Oath New Pledge Scheduled for Heated Debate in Academic Senate Today."

As the Academic Senate began its meeting, a tall, bald man rose to address the faculty. Edward Chace Tolman (1886–1959) had been a member of the Berkeley campus since 1918, and a professor of psychology since 1920. One of the most eminent psychologists of the twentieth century (Diener, Oishi, & Park, 2014; Haggbloom et al., 2002), Tolman was a beloved figure at the University, in part due to a self-deprecating wit that did not fully mask his professional ambitions. Now, after more than three decades at Berkeley, he was in his early sixties and beginning to think about retirement. But he was drawn into action during the loyalty oath crisis because he felt passionately about both academic freedom and the larger political issues facing the country at that time.

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2 Introduction

The issue at hand was a new policy that University of California President Robert Sproul pushed through the Board of Regents that required faculty members to sign a loyalty oath in order to retain their positions. Faculty members had been required since 1942 to sign an oath, referred to as the Constitutional Oath, which affirmed that they would support the Constitution of the United States and the Constitution of the State of California. However, the new requirement, which came to be called the Special Oath, was different, for it required faculty members to assert that they were not members of a subversive organization, or be fired (Stewart, 1950).

Edward Tolman rose to explain why he would not sign the Special Oath. Arguing that it was neither good psychology nor good civil rights, he suggested that the policy amounted to guilt by association. Tolman stated that the new policy constituted political interference in the university and that questions regarding the fitness of faculty members for university positions were best left to the faculty themselves. Tolman said that he would not sign the oath and urged his fellow faculty members to join him in protesting the Regents' proposal. He became the leader of the non-signers, a small but resilient group of faculty members who sixteen months later would be fired for the refusal to sign the Special Oath.

By 1949, Tolman had secured a strong national reputation in psychology through decades of laboratory studies of maze learning in rats. Two assumptions were prevalent within the study of learning in the United States during his era: that studies of animals could be readily generalized to humans and that animal learning was characterized by the acquisition of specific responses. Tolman endorsed the first assumption but not the second. He constructed clever studies in which rats first learned how to navigate from the start box to the goal box and then later encountered obstacles that blocked the learned path. Tolman found that the animals discovered new response pathways to the goal box.

His research led him to a theoretical system he called purposive behaviorism (Tolman, 1932). Always open to different viewpoints, Tolman incorporated concepts from European psychology as his system evolved. A trip to Vienna led to collaboration with Egon Brunswik on a theory of the environment that was richer and more fully articulated than those of American psychologists (Tolman & Brunswik, 1935). Even more prominently, he drew significantly from the Gestalt psychologists, German scholars who argued that individuals operate within a field of dynamic forces, a view that provided Tolman with a framework for thinking about how rats navigated the mazes that he created. Ultimately, Tolman proposed that animals had not learned a discrete set of responses, but rather a cognitive map of their environment (Tolman, 1948).

CAMBRIDGE

Cambridge University Press 978-1-107-12250-5 — Purpose and Cognition David W. Carroll Index <u>More Information</u>

Introduction

Tolman's work was consequential. His studies helped to transform accounts of learning, a fundamental issue in psychology, from conditioned responses to cognitive processes. Equally important, he demonstrated that it was possible to study cognition within a behaviorist framework, combining the methodological approach of behaviorism with a cognitive interpretation of behavior. That demonstration was a key factor in the resurgence of cognitive psychology in the United States in the 1950s.

Tolman's research continues to stimulate psychological research, particularly into the brain mechanisms responsible for spatial learning. Whereas the notion of a cognitive map was greeted with considerable skepticism among experimental psychologists during Tolman's era, contemporary neuroscientists largely take the concept for granted and investigate its neurological foundations. Considerable research shows that the temporal lobe (in particular, the hippocampus) plays a central role in spatial learning in both animals and humans (O'Keefe & Nadel, 1978).

Tolman was also a central figure in another major transformation in American psychology in the second quarter of the twentieth century. In the 1930s, a group of scholar–activists formed the Society for the Psychological Study of Social Issues (SPSSI), an organization dedicated to the application of psychological principles to devise solutions to significant social problems, including poverty, prejudice, and militarism. Although earlier psychologists had entered the public arena to offer psychological guidance on such issues as how to maximize industrial efficiency and how to rear children, SPSSI ventured into more controversial political territory. By this time a national figure, Tolman lent his prestige to the fledging society by serving as SPSSI chair in 1939–1940. The society is now approximately 3000 members strong and continues to be active in addressing social issues such as workplace inequities and global climate change.

Tolman held an interest in social issues throughout his life. Born into an affluent and progressive family in Massachusetts – his maternal grandparents had operated a station in the Underground Railroad during the Civil War – he was dismissed from his teaching position at Northwestern University in 1918 in part due to his opposition to the United States involvement in World War I. His association with SPSSI would prove advantageous during the loyalty oath crisis. After Tolman and the other non-signers were fired in August of 1950, SPSSI pressured the American Psychological Association (APA) to pass a ban on psychologists working at University of California campuses. The non-signers sued the University and the California Supreme Court found for the non-signers two years later. In 1959, Cambridge University Press 978-1-107-12250-5 — Purpose and Cognition David W. Carroll Index <u>More Information</u>

4 Introduction

shortly before his death, the University belatedly recognized his contributions and awarded him an honorary degree. Posthumously, the Education and Psychology Building was renamed Tolman Hall.

An appreciation of the life and times of Edward Chace Tolman requires a consideration of both the man and his era. Tolman's research changed the trajectory of psychology by demonstrating the feasibility of studies of cognition, and his endorsement of SPSSI helped to change the relationship between academic psychology and society. His story is an essential contribution to our understanding of America, and American psychology, at mid-century.