author of numerous other books, largely in the field of affect. Many of these have been translated into English and other languages: for example, *The Psychology of Feelings* (1986), *The Logic of Feelings* (1905), *Problems of Affective Psychology* (1910). His writings indicate that he realized, more adequately than his predecessors, the significance of affective and emotional phenomena in all of the activities of life. He retired from teaching in 1901, and continued to edit his Revue until his death.

**Bibliography**


**Serge Nicolas**

**Richter, Curt Paul** (1894–1988). American psychobiologist. Curt Richter may have produced more "classic" papers in psychobiology and introduced more phenomena and more techniques for studying them than any other psychologist of the twentieth century. He was the quintessential example of someone with a "nose for phenomena," a scientist who is a superb observer and experimentalist, who operates with many types of explanation (physiological, evolutionary-adaptive, psychological mechanisms), and who constantly invents new and better ways of measuring things (activity wheels, drinking "Richter" tubes, new ways to measure nest building, salivation, autonomic activity).

Curt Richter was a doctoral student of the behaviorist, John Watson, at the Johns Hopkins University, where he spent his entire academic life. His official entry into psychology, the publication of his thesis in 1922, illustrates his special genius. This work was the epitome of an antihaviorist enterprise: a demonstration of endogenous control over behavior. An analysis of activity rhythms in rats was a foundation study on biological clocks in mammals. The most critical new finding was the continuation of the diurnal running cycle after the animal was placed under conditions of constant illumination, suggesting the endogenous control of the cycle. In order to do these studies of activity rhythms over periods of months, Richter invented the running wheel, a device that remains central even today to rhythm research. The work on activity rhythms gave birth to a major line of research in psychology, and became one of the themes of Richter's lifetime contribution. Further work by Richter elucidated the 4- to 5-day estrous cycle activity rhythm in female rats. demonstrated its control by ovarian hormones and the involvement of hormones and the hypothalamus in biological clocks. Studies of rhythms in humans and rats led to his "shock phase hypothesis," which holds that trauma may synchronize normally independent biological rhythms, and lead to pathological results.

Another major contribution is the work on behavioral homeostasis; indeed, Richter is the "father" of behavioral homeostasis. Following on Claude Bernard's description of the regulation of the *milieu interne*, and Walter Cannon's concept of homeostasis, Richter established the important role of behavior in regulation of body functions. He referred to this as "total self-regulatory function." This was demonstrated in many, many ways, with respect to activity rhythms, nesting, and most famously, dietary self-selection. Richter uncovered one of the paradigmatic examples of innately programmed behavior, sodium appetite in rats. Rats experiencing a sodium deficiency for the first time show an immediate preference for sources of sodium. This was studied extensively, and the approach was extended to adaptive adjustments in rat food selection in response to a variety of perturbations, including endocrine disturbances and a wide range of nutritional deficiencies. Richter established behavioral homeostasis as a fact about mammalian behavior much in the way Darwin established the theory of evolution, with a massive set of examples. His focus on innate recognition for essential nutrients, as with sodium, turned out to be an error; most specific hunger are learned. But even here, in studies of bait shyness in rats, he laid the groundwork for the current central importance of learned poison avoidance in food selection and animal learning.

The contributions of Curt Richter extend far beyond the areas of biological clocks and behavioral homeostasis (see citations below). He did important work on bait shyness, alcohol preferences, nutrition, the effects of hormones (especially thyroid and insulin) on behavior, the neurological organization of motor systems and the autonomic nervous system, the nature of domestication, and hopelessness and voodoo death.

Curt Richter is a personification of an important type of scientist. He had a framed quote from the French physiologist, Magendie, in his office: "I compare myself to a scavenger; with my hook in my hand and my pack on my back I go about the domain of science picking what I can find." The importance and range of pickings were extraordinary: All the effects Richter reported were big, never requiring statistical validation: often accompanied by methodological innovations, covering over 20 species.

Curt Richter was a great starter. His lifetime situation at the Johns Hopkins medical school limited
sharply the number of graduate students he had; but fortunately, the striking phenomena he demonstrated and began to analyze became focal in the hands of others in many areas of psychology. He provided the inspiration for the work of many biological psychologists, especially in the areas of hunger, thirst, food selection, and sodium appetite. He was a great basic scientist, but one with a serious and continued interest in pathology, and in solving both scientific and practical problems. All of this makes Richter the "complet psychologist," a genius at finding, measuring, and mining many of the most substantial phenomena in mammalian behavior.

Bibliography


Paul Rozin

RIGHT TO REFUSE TREATMENT. The right to refuse treatment has been one of the most controversial issues in mental health law over the past almost 30 years. The question of whether and when people hospitalized as a result of mental illness or released to the community after hospitalization or those involved in the criminal court or correctional process may refuse mental health treatment is a complex legal, clinical, ethical, and social problem (Winick, 1997). Because the differing mental health treatment techniques produce effects that vary widely, a single, all-encompassing legal approach to the issue would be inappropriate. Instead, it is useful to conceptualize a rough continuum of intrusiveness along which the various mental health treatment techniques can be ranked based upon the nature and duration of their effects and the ability of patients to resist them (Winick, 1997).

Comparing the therapies on these bases leads to the conclusion that psychotherapy and the other verbal therapy techniques should be ranked as the least intrusive on the treatment continuum. Next in order of intrusiveness are the behavioral techniques, and after that, the psychotropic drugs. Electroconvulsive therapy would seem more intrusive than medication, and the highly experimental techniques of electronic stimulation of the brain and psychosurgery would rank as the most intrusive.

Legal limitations on involuntary treatment stem from a number of sources—statutory, administrative, international law, and judicially crafted tort and constitutional law. Although most states now have statutory and administrative limitations on enforced treatment, the limits imposed by the U.S. Constitution and its state counterparts are the most significant inasmuch as they drive other legal restrictions.

Constitutional limitations on involuntary treatment have been derived from the First Amendment's protection against intrusion into mental processes and substantial due process protection for bodily integrity, mental privacy, and individual autonomy (Buddin v. Nevada, 1993; Washington v. Harper, 1990; Remle v. Klein, 1983; Rogers v. Okin, 1980). In addition, in more limited circumstances, the Eighth Amendment's ban on cruel and unusual punishments and the First Amendment's protection of the free exercise of religion may impose limits on involuntary treatment. In addition, equal protection principles may be invoked to question the discrepancy existing between non-mentally ill patients, for whom informed consent is a prerequisite to treatment and those suffering from mental illness, who are treated without informed consent and over objection.

First Amendment and substantive due process protections would seem applicable to the most intrusive treatment techniques such as psychosurgery, electronic stimulation of the brain, electroconvulsive therapy, and the psychotropic drugs, but not to the less intrusive interventions such as the verbal and behavioral techniques. The level of constitutional scrutiny appropriate for the more intrusive interventions has not been clearly resolved by the Supreme Court. In Washington v. Harper (1990), the Court applied a reduced form of constitutional scrutiny to uphold the involuntary ad-