The Critique of Psychology

From Kant to Postcolonial Theory

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What is founded on nature grows and increases, while what is founded on opinion varies.

FRANCIS BACON (1561–1626)

But is psychology founded on nature?

Preface and Acknowledgments

What contributes to the development of the discipline of psychology? Traditional answers suggest that it is new empirical evidence. However, a closer look at the history of psychology over the last two hundred years indicates that the accumulation of facts, problem solutions, induction, and the explanation of anomalies play only supporting roles. Indeed, studies on the social, political, and economic factors that have shaped the discipline have contributed significantly to an understanding of the theoretical and practical dynamics of psychology. With the shift to externalist explanations, problem-oriented historical and theoretical analyses have fallen out of grace. However, if one agrees with Gould's (1996) statement that "science moves forward as much by critiquing the conclusions of others as by making novel discoveries" (p. 25), then an analysis of the history of the critique of psychology becomes central. Thus, the focus in this book is not on socio-historical contexts, but on arguments, more specifically, critical arguments, regarding the problems of mainstream psychology at different stages of its development—a critique that has been combined often, but not always, with a vision for a better psychology and the promise to solve the theoretical, methodological, and practical problems of the discipline. Such a program requires emphasizing the logic, structure, and flow of rhetoric, which takes on an important function in psychology's history and contributes to an understanding of the modifications of the mainstream but also the margins. A focus on arguments does not mean that socio-historical traditions are not important. On the contrary, external dimensions are significant for recognizing changes, but they are not the center of attention in the following reconstructions.

Enough material has been accumulated that allows for a history of the critique of psychology since the second half of the 18th century. Thus, the idea that the critique of psychology is an intellectual movement that emerged only in the last forty years in Europe and in North America, and is based on a postmodern spirit, should be rejected. All selected critiques

of psychology in this book share dissatisfaction with the dominant views of psychology at a certain time, but they have endorsed different, even contradictory epistemologies, ontologies, and ethical-political world-views. The proposed systematic history and theory of the critique of psychology can only provide a brief snapshot of some of those influential and multifaceted critiques and arguments.

A history of the critique of psychology could distinguish between critiques that have been successful from those that have been influential. *Success* might be defined in terms of critiques that have led to a change of the whole discipline, whereas *influential* might mean that discourses have shaped reflections and practices of groups of psychologists. The book covers both dimensions in discussing critiques that have been successful such as Kant's and, even more clearly, the natural–scientific critique of psychology in the 19th century, and in presenting and reflecting on influential critiques such as the human–scientific, Marxist, feminist, postmodern, and postcolonial critiques of psychology, which have inaugurated new research programs in psychology but have never formed the mainstream. This book does not address whether certain critiques should or should not have been influential, or how these critiques should be ranked or evaluated. This is a metatheoretical task left to the reader.

The history and theory of the critique of psychology is intended as a positive project, performed not for the sake of constructing problems, but in order to provide intellectual tools that help to develop the discipline of psychology. Critiques have shaped the field, are changing the discipline, and will continue to be relevant to the future of psychology. Critics have an important role to play when they identify faults in the discipline, and some of them provide ideas how psychology's shortcomings can be overcome. Certainly, it is not beneficial to any discipline to ignore and repress its faults, with the hope that they will take care of themselves. It is an intellectual obligation to point out in an honest and open reflection that psychology may be submerged in problems, even when no solutions are provided, rather than assuming a priori that psychology is doing just fine.

ACKNOWLEDGMENTS

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On the Historiography of the Critique of Psychology

Why has a systematic history of the critique of psychology never been written? If one follows the distinction between *traditional* and *critical* histories of psychology, the reasons will be very different.[1] Traditional historians have no interest in focusing on the deficits of psychology because their attention belongs to the successes of the discipline. Critical or new histories have not attended to the history of the critique of psychology because of a skepticism towards intellectual history, which does not require working in archives, because it would make theoretical competence as important as historical knowledge, and because it would make critical histories of psychology themselves part of the history of the critique of psychology. It is necessary to clarify this terminology before these arguments can be reflected upon.

Traditional historians of psychology have focused on *contributors* to the discipline and their innovations in theory, methodology, and research. Persons, individuals, or *great men* have been studied as significant in shaping the outlook of the field. From such a perspective these individuals can be labeled accurately as great psychologists (R. I. Watson & R. B. Evans, 1991) or *pioneers* of psychology (Fancher, 1996). Other historians have elucidated the

Zeitgeist of the discipline, focusing on the intellectual, cultural, and some-
times technological context of a time in which a pioneer of psychology lived
and in which he[2] developed new theories, methods, and practices (see
Boring, 1950). Another traditional perspective has discussed the history of
psychology in terms of *ideas* or *problems*. D. N. Robinson (1976) tracked pat-
terns of change in ideas in his intellectual history of nonacademic and aca-
demic psychology, and Pongratz (1984) analyzed the development of
psychology as a progression of ideas, answers, and solutions to problems that
have been raised in the discipline.

   Traditional historians[3] have reflected on how to accomplish a history
of psychology. Boring (1950) distinguished between *personalistic* and *nat-
uralistic* theories of history, a distinction also endorsed by R. I. Watson and
R. B. Evans (1991).[4] Accordingly, a personalistic theory of history focuses
on the great researcher individual and his or her agency in discovering
psychological processes. Within such a perspective, psychoanalysis
moved forward because Sigmund Freud (1856–1939), the eminent discov-
erer of psychoanalysis, had significant insights into unconscious
processes, while at the same time he had the skills to promote his discov-
eries to groups of supporters and to a wider culture. The naturalistic the-
ory of history attends to various contexts, including the Zeitgeist. Within
such a perspective, psychoanalysis was inevitable in turn-of-the-century
Vienna. Pongratz (1984), who borrowed his historiographical reflections
from Dessoir (1902), identified a *chronological* history that would recount
important events in the history of psychology or divide psychology's his-
tory into periods.[5] A *biographical* history focuses on the life and works of
the masterminds of the discipline and their disciples whereas a *problem-
oriented* history looks at the development of and suggests solutions to
basic problems in psychology.

   Concerning critical histories there is no agreed upon denotation as to
what *critical* means in historiography. In its generic meaning, it would
suggest a perspective that does not identify itself with the field but looks
from a historical and theoretical distance at the development of psychol-
ogy.[6] There exist various overlapping critical traditions inspired and moti-
vated by Karl Marx (1818–1883), Friedrich Nietzsche (1844–1900),
Thomas S. Kuhn (1922–1996), or Michel Foucault (1926–1984) that may
include postmodern or social-constructionist perspectives, feminist histo-
riography that may or may not be sympathetic to any of the other men-
tioned perspectives, and a postcolonial historiography which is still at its
beginning in psychology (see Shouksmith, 1996). There also exists con-
siderable intellectual hostility among these traditions. Marxist historians
of psychology are considered traditional, specifically when Marxist-based
analyses are considered variations of the Zeitgeist theory of history (see

R. I. Watson & R. B. Evans, 1991), and postmodern thinkers consider Marxist analyses as strong candidates for modern (i.e., traditional) types of theory (see Lyotard, 1979/1984).

Marxist historians of psychology[7] begin more or less with Marx's and Engels' (1932/1964) argument that the ideas of the ruling class are the ruling ideas, or more precisely, that the dominant ideas are the expression of the ruling material relations. The human sciences are not independent entities but the outcome of real material production processes. Applied to the study of mental life this would imply that psychology must be studied in the context of the development of productive forces and class relations. Psychology could be understood as a superstructure emerging from the economic structure of society. Jaeger and Staeuble (1978) executed an exemplary historical study on the linkage and determination of modern psychology within the sociohistorical process and on understanding psychology as part of the political-economic context. Other Marxist historians analyzed psychology, and especially American psychology, as part of bourgeois reactionary ideology (Jaroschewski, 1974/1975). In the self-understanding of Marxist critical historians, their analyses do not provide traditional but critical histories in the same spirit as Marx's critique of political economy.

One strain among several within feminist theory has embraced the Marxist idea that dominating ideas result from the dominating group, but have replaced class with gender (see Chapter 7). Indeed, in all traditional histories of psychology one notices an astonishing neglect of women. Consequently, it was suggested to look at the exclusion of women in historical discourses and to emphasize the repressed voices of women in shaping the discipline. A precise expression of this perspective can be found in Furumoto's (1989) writings and her promotion of the *new history* of psychology derived from discourses in historiography. Traditional history—which focused on great ideas, great men, great discoveries, great insights, and great dates while portraying researchers as neutral and objective and defending truth over error—was contrasted with the new history that challenged traditional history, embraced subjectivity and understood scientific change as a shift in worldviews (see below for Kuhn). According to Furumoto, the new history attended to contexts and neglected voices, was characterized as *historicist* rather than *presentist*[8] and relied methodologically on primary sources and archival material. The line of research and argumentation in this new history of psychology that paid attention to the disregard of women (e.g., Scarborough & Furumoto, 1987) has been so compelling that textbooks have begun to include the contributions of Christine Ladd-Franklin (1847–1930) and Mary Whiton Calkins (1863–1930) in accounts of the history of the discipline (e.g., Benjafield, 1996; Goodwin, 1999), while at the same time

providing insight into the systematic processes of exclusion of women from academic psychology.

Postcolonial history, using methodologies that vary from traditional (focus on persons) to radical deconstructive analyses, has suggested various ideas for understanding the problem of ethnocentrism in European or American frameworks in psychology. For example, Guthrie (1998) discussed racism in the history of psychology and listed in this history significant African American contributors to the field including their academic biographies. I suggest that one should distinguish here between historians who focus on processes of ethnocentrism and racism within the history of European or American psychology and studies that focus on the exclusion of non-Euro-American perspectives. Included in the former context are parts of Chorover's (1979) reconstructions of genocide as well as Gould (1996), who told the history of how "people of color" were constructed as inferior and how American pioneers of psychology participated and contributed to racist theories and practices in the public and in academia. Gould's analyses were criticized by historians of psychology for historical mistakes (see Fancher, 1987) and Gould was labeled a *revisionist* historian of psychology (see Harris, 1997) because of his perspective. However, Gould provided an innovative point of view that has been taken up in more recent historically sound writings such as those by Richards (1997) who attempted to reconstruct the systematic interconnectedness of important streams of psychology with "race" research.[9]

A perspective that focuses on the exclusion or neglect of particular groups or perspectives must cope with a specific constellation of problems: Although I agree with the attempt to expose neglected contributions to the history of psychology by African American psychologists (and by women psychologists for that matter) to contemporary mainstream Western psychology, I also acknowledge the fact that mainstream psychology has been shaped mainly by male and Euro-American pioneers of psychology. Taking such an assessment as the starting point does not diminish the contributions of various groups to psychology, but allows one to reconstruct wide parts of Western psychology as constituting an indigenous psychology of male Euro-Americans, which may have limited relevance for people from other ethnic backgrounds and origins and for women.

Such an approach opens the door to a different history of psychology and allows psychologists, whether practitioners or researchers, to focus on a postcolonial development of their field. However, the degree of *indigenousness* cannot be established a priori but must be shown in concrete analyses. For instance, Paranjpe (1998) provided[10] not only an excellent history and comparison of Western and Indian psychology, and

showed surprisingly many commonalities but also significant differences between the two traditions. Holdstock (2000) demonstrates that Euro-American psychology could learn from other indigenous psychologies such as African psychology, while Howitt and Owusu-Bempah (1994) promoted the development of an antiracist psychology. Indeed, postcolonial histories have provided insight into the exclusions of people of color, in terms of hiding the indigenous dimension of Euro-American psychology, in terms of racism, and in terms of the fact that many pioneers of psychology have been involved in racist judgments and actions. Interestingly, textbooks are more open to acknowledging non-European psychological frameworks such as Taoism or Confucianism and contributions of African American psychologists, such as Francis Cecil Sumner (1895–1954) and Kenneth B. Clark (1914–2005) to the discipline (see Goodwin, 1999; Benjafield, 1996) than they are to speaking about racism of some important pioneers of psychology, such as Paul Broca (1824–1880), Francis Galton (1822–1911), Granville Stanley Hall (1844–1924), or Lewis Terman (1877–1956).

Significant changes to the understanding and rethinking of philosophies of science and their understanding of knowledge, truth, and progress were inaugurated by Kuhn's (1962) studies on theory development in the natural sciences, more specifically, in physics. Kuhn demonstrated that scientists do not follow the principles proposed by either logical positivism or critical rationalism and identified nonrational moments in the dynamics of the sciences. He suggested, as is well known, that scientific research was defined by *paradigms*[11] that consisted of theories, classic experiments, and trusted methods. These paradigms determine the experiments that scientists perform and the types of problems they consider relevant. A paradigm shift changes the basic concepts and methodologies and leads to a qualitatively different worldview that is incommensurate with the old one. Kuhn even included psychological explanations for the acceptance of paradigms when he suggested that students accept these paradigms because of the authority of their teachers and textbooks and not because of their evidence. He argued that the issues that were studied could easily be solved under the prevailing paradigm whereas difficult ones that could not be solved were not even addressed. He compared scientific education to a nonrational orthodox practice and shifted the focus of academic reflection and study to the context of discovery and to the sociohistorical dimension of science.

In terms of historical development, Kuhn identified *noncumulative developments* in the natural sciences and thus, challenged the traditional idea of scientific progress as a cumulative acquisition of knowledge based on experimental rationality. A consequence of his approach would be that

historians should look differently at various periods of science development. Normal periods should be studied in terms of cumulative knowledge acquisition within the accepted prevailing paradigm, puzzle solving, the elaboration of theories, the improvement of measurement, and the application of the paradigm to solve certain problems. During scientific revolutions, in contrast, historians should look at the various sociological, political, and psychological mechanisms that lead opponents to question the existing paradigm and proponents to defend their worldview. They should look at traditional puzzle solving but also at power, rhetoric, and even the age of the scientists.

Kuhn's analyses have been difficult to apply to psychology because he doubted whether the social sciences have achieved the status of a paradigm, and most historians would agree that the inflation of various theories, the coexistence of many incompatible research programs, and the reality of fads tend to characterize psychology as a preparadigmatic science (Teo, 1993; for a systematic literature overview of Kuhn's role in psychology, see Driver-Linn, 2003). Palermo (1971), who applied Kuhn's reflections to psychology, was historically unpersuasive because he put the history of psychology into a schema without doing justice to the complexity of psychological development. More important is Kuhn's idea that the history of psychology should not necessarily be seen as cumulative or continuous, as a story of progress, but as a story of diversification, a narrative in which social factors play probably a larger role than purely academic or scientific ones. There is clear evidence that Wilhelm Wundt's (1832–1920) introspectionism, behaviorism, and cognitive psychology used different "languages" (conceptual networks). Interestingly, there has been recent historical interest in Ludwik Fleck's (1896–1961) ideas on *thought collectives* and *thought styles* which have had an intellectual influence on Kuhn's writings, and which Kuhn (1962) acknowledged in his preface. Benetka (2002) explicitly adopts a *Fleckian* perspective in his historical reconstruction of 19th century psychology by giving priority to the concept of thought style over paradigm. Indeed, philosophers such as Hacking (2002) are well aware of the significance of this concept for the sociology of knowledge.

I. H. Fichte (1860) made use of the notion of a *critical history of psychology* to title his first book in his *Anthropology*. In this book he rejected spiritualism's suggested solution to the mind–body problem because he thought it would be incapable of laying the foundation for an objective study of humans (see p. 170). He rejected materialism because he thought it would not be able to explain the essence of consciousness and ideas. Fichte used his critical history in order to reject the theories of Benedictus Spinoza (1632–1677), Immanuel Kant (1724–1804), Georg Wilhelm Friedrich

Hegel (1770–1831), Johann Friedrich Herbart (1776–1841), and Rudolph Hermann Lotze (1817–1881). He applied a critical history of psychology in order to reconstruct the theoretical dead-ends of previous systems of psychology, to identify the conditions for a new and better psychology, and to promote his own system, for example, his particular interactionist solution to the mind–body problem. While Fichte applied a critical history of psychology, he did not really reflect on its theoretical or even metatheoretical status.

The *concept* of a critical history goes back to Nietzsche (1874/1988) who discriminated among a monumental, antiquarian, and a critical history in his essay on the use and abuse of history for life. Adapted for psychology, a critical history of psychology would suggest a move away from the powerful makers of psychology, from the great men of psychology, and from conserving and celebrating the past, to a perspective that breaks with history, interrogates the discipline's roots, and exposes issues that have been repressed or neglected. From a postcolonial perspective, which I would mark as the latest critique of psychology, an antiantiquarian critical history of psychology would suggest not to collect impressive insights, arguments, or studies, but rather to record the racist verbal and *actual* behaviors of pioneers of psychology. History, in this sense, would become a collection of all the vicious statements and practices of the great men of psychology or would account for the epistemologically inadequate and ethically outrageous publications in the history of psychology.

Such a history would allow for a deconstruction of great men of psychology by demystifying them as cognitive masterminds and contrasting their rational scientific contributions with their biased contributions. Such a history would reveal that a great theoretician or experimenter could be great in one area but trivial, illogical, unreflective, and irresponsible in another one.[12] I suggest that Nietzsche (1874/1988) specifically invited what have been labeled revisionist or presentist histories, which retroactively apply concepts such as sexism and racism to the works of pioneers of psychology. Nietzsche provoked such a focus because he emphasized the pragmatic dimension in his understanding of history, he rejected the idea that one should be lectured for the sake of being lectured, without being stimulated or invigorated for action, and he aligned a critical history with people who resist. In that sense a history of racism in psychology is not just a moral but also an activating force for current concerns (for a different interpretation of Nietzsche, see Greer, 1997).

Nietzsche's program, prone to important philosophical problems (see Habermas, 1985/1987), had a large influence on Foucault. What Kuhn accomplished for the natural sciences, Foucault did for the human sciences (see Dreyfus & Rabinow, 1982). Foucault did not reconstruct the

development of truth but what was *considered* true at a given point of time in the human sciences. He developed two historical disciplines that targeted complementary topics: Foucault's (1969/1972) *archaeology* focused on the reconstruction of discourses surrounding knowledge (the will to knowledge) whereas his *genealogy* (Foucault, 1975/1977) traced the history of power (the will to power) and provided interesting analyses of the development of power. He showed in his political history of the production of truth that power was not exercised by a single individual or by a group of individuals but rather that power is a network in which everyone was caught and involved. For instance, the abolishment of torture was not due to the enlightened progress of the prison system but the emergence of a new type of power that introduced disciplines. Instead of continuity in history, Foucault emphasized (as Kuhn did) discontinuity, and instead of a clear, linear, progressive stream of ideas he identified a multiplicity of developmental lines that may or may not cross and interact. According to the young Foucault, humans were not centers of action, knowledge, and speech but were driven by the unconscious structures of language (see Chapter 8).

Due to their conceptual complexity, Foucauldian analyses are rare in psychology. I have reconstructed techniques of problematization in psychology and the human sciences in the context of the construction of "mixed race," but these analyses took only one aspect of Foucault and did not really follow the whole methodological and conceptual arsenal developed by him (Teo, 2004). The idea of problematization follows the notion that in the history of the human sciences and also in psychology certain groups of people are made into problems (see Chapter 9). In order to render groups of people into problems one can use conceptual or empirical tools. Testing hypotheses on the inferiority of "mixed race" subjects is an empirical tool of problematization, regardless of the results.

Foucault-inspired analyses, relevant to the history and theory of psychology, came mostly from outside the discipline. The sociologist N. Rose (1996a), influenced by Foucault and by Gilles Deleuze (1925–1995), applied the idea that the human being is a historical and cultural artifact to a reconstruction of the genealogy of subjectification. He analyzed the role of the *psy disciplines* (psychology, psychiatry, psychoanalysis, psychotherapy) in the process of subjectification and unification of the self and investigated the practices and techniques in which persons were understood and acted upon. The history of psychology was linked to the identification of the role that the psy disciplines played in the genealogy of that regime. He was also interested in the projects and movements that challenge the idea of identity (feminist, labor, and antiracist movements) because identity was not understood as a source for emancipation[13] but

an obstacle. Rose saw traditional histories of psychology as narratives that supplied continuity, progress, and unity, whereas critical histories should include economic, professional, political, cultural, and patriarchal factors.

For N. Rose (1996b), a critical history of psychology was different from recurrent histories and critiques. Recurrent histories are disciplinary histories that recognize the present as the necessary result of the past and provide identity for a field and shape the future. When history is written as a critique, studies challenge the present in order to provide a different future. Rose criticized, based on Foucault's writings, such critiques as negative, reductive, and producing only *guilty verdicts*, and contrasted them with his concept of a critical history.[14] For Rose, a critical history should use studies of the past to reflect the present, *think against the present*, and question taken-for-granted experiences by examining the conditions that produced those experiences. A critical history should include analyses of power, not as negative as in traditional theories of power, but as positive in the meaning of looking at the power effects that constitute subjectivity. For Rose, critical histories should disturb what seems firm, identify contingencies rather than necessities, and look at discontinuities rather than continuities. They should look at the relationship among subjectivity, truth, and power and understand that psychology has changed society. However, as I have argued earlier, Rose did not fathom that critical histories of psychology could be reconstructed as part of the history of the critique of psychology.

The philosopher Hacking (1995) applied a Foucault-type archaeology of knowledge to the concept of multiple personality. He analyzed the social construction of multiple personality in North America which included diagnostic inflation, the role and change of diagnostic manuals in the construction of an illness, the discourses surrounding the causes and treatments of this illness, the idea that early sexual trauma was the source, and the pro and contra constructions that accompanied such a notion, including the false memory discourses. Hacking was not interested in the truth about this illness but he aimed at reconstructing how multiple personality became and was made into an object of knowledge, the ideas that surrounded the problem, and how it changed life and science. He also considered the illness paradigmatic for a memory concept and for a microcosm of the reflection on memory.

Kusch (1999), a historian and philosopher of science, was more influenced by the sociology of scientific knowledge than by Foucault, and understood psychological knowledge as a social institution. He suggested that scientific theories have the same ontological status as marriage, money, or monarchy. Just as money exists because there is a consensus that money should exist, theories exist because groups of people agree that there should be theories about the psyche. The conceptualization of

psychological knowledge as an institution allows the historian to trace the relationship of this institution to other institutions and their struggles in society. It also permits the relating of individuals to institutions, and the understanding of why certain individuals wanted to build, destroy, change, or preserve a particular social institution (a particular psychological theory). For example, the historian could identify actions in the struggle over scientific psychological theories and possibly reconstruct motives such as improvement of one's standing within the profession when it came to the preference for a particular theory. Based on his methodology, Kusch was able to provide an important and interesting analysis of early 20th century German psychological knowledge. He also compared scientific and folk theories of psychology, with the latter indicating slow change and no interest in stabilizing the former (whereas the opposite is true for scientific theories).

However, psychologists were more eager to embrace the epistemological idea that knowledge was a social construction (in psychology, see Gergen, 1985), an idea that emerged partially from various streams of postmodernism and from modifications of the sociology of knowledge (see Berger & Luckmann, 1966), than to adopt a Foucauldian methodology. Some of the most important historical studies have been presented by the psychologist Danziger (1990) who began his reconstructions with the idea that psychological knowledge, which includes textbooks, tables, figures, practices in laboratories, and so on, were socially constructed. Individual research psychologists did not act in an intellectual or institutional vacuum but psychological aspects such as loyalty, power, and conflict related them to each other. The consensus of the scientific community was less a matter of rationality[15] than a social issue that had been excluded and not examined in traditional histories of psychology. The social dimension could not only be identified in the interpretation of data but more importantly in the production of knowledge (context of discovery). For Danziger, the history of psychology became the study of the development of investigative practices, which includes the history of the relationship between experimenter and participants, norms of practices, centers of interest, the relations of the research community to the wider society, and so on. Parallel to showing the historical and cultural consensual change of the relationship between experimenter and research subject (Danziger, 1990), he also demonstrated the change of basic psychological categories, making them of a social, not a *natural kind* (Danziger, 1997a, borrowing from Hacking, 1992). Danziger, most clearly, represents the prototype of the new historian of psychology. His writings show a preference for historicism over presentism, discontinuity over continuity, externalism over internalism, and reflection and critique over celebration.

Yet, a metacritique of the new historiography shows that the presentation of *presentism* and *historicism* as two basic and independent perspectives is misleading (see Teo & Goertzen, 2004). We suggest that it would be more appropriate to distinguish a naïve *presentism*, in which past performances are described and evaluated in terms of contemporary standards, from a *presentist historicism*, and *historicist presentism*. In *presentist historicism*, realizing that it is impossible to completely eradicate current horizons from research or because questions and interests emerge from the present, researchers are aware of the fact that historical studies are motivated by contemporary interests, but at the same time they intend to do justice to historical contexts. In *historicist presentism* researchers use historical material in order to elucidate current topics. Such methodological differences turn significant when one deals with issues such as "race." A similar argument applies to the continuity and discontinuity distinction, where traditional historians have focused on continuity and new historians on discontinuity. In my view, there is evidence for both positions and it seems to be more a question of emphasis. Indeed, Danziger (2003) emphasizes more recently this point in a short article when he calls historicism and discontinuity *prejudices* of the new history.

In order to do justice to the continuity/discontinuity issue, Richards (1996) provided the distinction between *psychology* (lower-case "p"), by which he meant a topic that had been studied prior to the institutionalization of psychology as a discipline, and *Psychology* (upper-case "P"), by which he referred to the discipline as it was established and developed from the mid-19th century onward. For Richards, a critical history of psychology had certain service functions such as elucidating the present by providing information as to how something developed, establishing a *long-term memory* so that psychologists do not repeat previous theories and practices, and supplying information regarding changes that occurred over time. But more importantly, a critical history should reflect on the moral dimension of psychology because psychologists are not outside observers but participate in communities and cultures and what they do and say has consequences for other persons. A critical history should also focus on changes in psychological concepts because psychological language is a psychological phenomenon. Because Richards did not believe that there was an independent psychological reality prior to language, phenomena did not exist before the introduction of the concepts that described these phenomena. He suggested that nobody had an Oedipus complex before Freud, nobody was conditioned before Ivan Pavlov (1849–1936) and John B. Watson (1878–1956), and nobody had a high IQ before the development of the IQ concept. New concepts produce new realities.

R. Smith (1997) held a similar position when he argued that it would be "unacceptable" (p. 27) to project the modern academic discipline of psychology back to the past, and consequently saw psychology only as a recent phenomenon, more specifically of the 20th century, within the history of the human sciences. He suggested that the past must be understood in its own terms (historicism) and contrasted this position with most disciplinary textbooks on the history of psychology. Epistemologically, he was less interested in what *was* the truth in the human sciences than in the processes that led to what were considered truths. His history of the human sciences includes philosophy, psychology, legal theory, history, physiology, political economy, philology, anthropology, sociology, biology, and other disciplines that reflect on what it means to be human.

A sociologically driven history was presented by Ward (2002) who provides explanations of why psychology was successful in 20th century America in terms of guiding North American life. Ward argues that the lack of unification, which is the topic of many theoretical psychologists, has been a source of success and allowed psychology to form alliances with organizations and groups throughout the United States. Psychologists exported psychological knowledge to education, schools, industry, health, prisons, parents, and so on. He also emphasizes the importance of having large and powerful allies that help to reinforce networks of knowledge rather than improve knowledge itself. Another well-known factor in psychology's historical success was its alliance with the natural sciences, which was, according to Ward, a political decision. At the same time psychology had to exclude charlatans in order to draw new borders for the emerging discipline. Psychology is also seen as a commercial product that requires marketing, advertising, the fabrication of demand, services, and the selling of products, for example, in the domain of sexuality, with the result that parenthood, parents, and children were *psychologized*. Another factor in psychology's success was psychology's transportability in material form, by which Ward means that psychology produced machines and measures that required expertise. Following a *Durkheimian* stream of thought, Ward suggests that psychology's laboratories, machines, and measures form part of a ritual that maintains psychology's collective identity.

From an *epistemological* point of view, critical historians are confronted with two levels of the concept of truth. The first level refers to psychological research where it makes a difference for historians of psychology whether they understand psychology as a progressive accumulation of knowledge, its theories corresponding to natural and social objects and events, or whether they conceptualize knowledge as a matter of social construction and truth as a matter of consensus. The second level

refers to psychological historiography and the concepts of knowledge and truth in historical scholarship. I would argue that many critical historians have to live a double life when they consider knowledge and truth in psychological research as a social construction but present historical research as a matter of correspondence of historical objects and events with historical descriptions and explanations. Admitting that historical methodology might also be a matter of social construction, even prone to fads in historiography, or a case for another consensus, would imply that critical histories are part of a history of the critique of psychology. Isolating and identifying specific issues within a complex network of developments and focusing on these issues involves a process of consensus—including a critical consensus. Yet, most current critical historians adhere to a consensus theory of truth or social construction theory of truth when looking at research in psychology from a historical point of view,[16] or when challenging traditional historiography, but they are realists when it comes to critical historiography (or their own historiography).

Harris (1997) criticized celebratory histories, in which the present was seen as the progressive outcome of the past, when he identified the description of J. B. Watson's and Rayner's (1920) *Little Albert* experiment as a behaviorist myth because the original study contradicted the experiment's description in textbooks. He rejected traditional histories of psychology, which cleansed the political context from the history of psychology, but at the same time he denounced what he identified as critical revisionist histories of psychology such as provided by Leon Kamin (born 1924) and Stephen J. Gould (1941–2002) (mentioned above as an example of a postcolonial history).[17] I have no concern with his critique of traditional and other critical histories. Yet, a new problem emerges when a reader or a student is confronted with two opposing histories: They must either evaluate the original studies themselves or trust a priori that new historians produce more accurate histories. From the perspective of this book, however, critical historiography has no privileged epistemological status; rather it becomes part of the history of the critique of psychology.

Historians of psychology must choose between writing a general or a specific history of psychology. A *general history* of psychology entails the reconstruction of what are considered the most important general developments in the discipline. In practice, such general histories have focused on the history of mainstream psychology, the development of traditional psychology, or the academically most widely accepted psychology. *Specific histories* of psychology concentrate on particular details of the discipline which may be considered more or less relevant to shaping the field, such as a history of psychology at the University of Leipzig, a history of

German psychology between 1933 and 1945, a history of psychoanalysis, a psychohistory of J. B. Watson, a history of developmental psychology, a history of Indian psychology, and so on. Given recent arguments in historiography, metatheory, and philosophical epistemology (see Teo & Febbraro, 2003), one could argue that a general history of psychology in its very meaning is not possible, and that all histories are specific. Accordingly, a history of psychology that exclusively reports and summarizes the history of Western psychology is not doing justice to the idea of a general history and historians of psychology who have presumed that they have written such a general history of psychology are mistaken. However, it is possible to write a general history of dominant Western psychology—with an emphasis on German, British, French, and American traditions—that is, a history of the sources and trajectories of academic mainstream psychology, whereas a general history of psychology that reports theories of the psyche as they have been developed all over the world would never be sufficiently complete.

Critical historians are not interested in a history of the critique of psychology because it would make their critical historical reconstructions part of this history. Critical historians are also not focused on the reconstruction of general psychology. Yet, the proposed project of a history of the critique of psychology aims at a general history because some of the most important critiques of mainstream psychology should be included. The term *mainstream* has, of course, different meanings at different times. The mainstream of early 19th century was different from that of early 20th century psychology, which was very different from that of current psychology. A history of the critique of psychology is also a *specific* history because it provides arguments of marginalized positions with regard to the mainstream. It does not address conflicts within marginalized positions, for example, how Holzkamp's Marxist psychology was criticized by another form of critical psychology (see Busch, Engelhardt, Geuter, Mattes, & Schulte, 1979) or how one brand of feminist theory criticized another (Benhabib, Butler, Cornell, & Fraser, 1995). There is also a preference for critiques that attempted, based on their criticism, to develop a new psychology. It holds that critiques in this book should target grand portions of the mainstream and not just particular issues within the mainstream (e.g., I will not discuss whether path analysis constitutes causality in a natural-scientific sense).

This history will mention influential critiques such as J. B. Watson's critique of Wundt's psychology and Noam Chomsky's (born 1928) critique of behaviorism, but only in a cursory fashion, because the natural-scientific critiques of psychology of other natural-scientific oriented approaches are well documented in textbooks (e.g., Leahey, 2001). For the

20th century, I am more interested in comprehensive critiques, emanating from marginalized positions that provide significant challenges to the mainstream. In accordance with the idea of a history and theory of the critique of psychology this study will include critiques that have been historically and theoretically important. Based on such a framework there will be no overview of the critique of psychoanalysis which plays a central role in the self-understanding of current academic psychology but which should be, because of the scope of the material, the focus of a different book project.

This history and theory of the critique of psychology is in a sense traditional because it looks at intellectual development, at the history of ideas, as proposed by men and women in their published writings. There will be no systematic inclusion of the cultural Zeitgeist, the social context, the political, economic, and military background when reflecting on ideas and arguments of criticism, all of which were important in shaping the discipline. This decision is based on the notion that arguments have changed and will change realities. This reconstruction is not critical in understanding theories as institutions, looking at investigative practices, or accomplishing an archeology of knowledge, but it is critical in allowing significant voices of marginalized positions to be heard (for instance, postcolonial voices) and in promoting an understanding of these arguments. It is critical in pointing out that the presentist idea that the critique of psychology is a phenomenon of current psychology is historically misleading. This book is about looking critically at the history of psychology, studying the historical critiques of psychology, and understanding critical histories themselves as part of a historical process.

This history includes Kuhnian ideas that emphasized the role of persuasion and rhetoric as dynamic forces in the context of scientific revolutions (and science development), because it focuses on the role of rational argument and rhetoric in the history of psychology. Arguments and proof were key features in the development of a discipline (Lyotard 1979/1984), but in contrast to some postmodern thinkers, I do not understand arguments and proof as irrational but as rational within the context of a given community. Despite a current consensus against the role of argumentation in scientific development (see Ward, 2002, p. 31), I emphasize the power of arguments. Rhetoric is important in the course of disciplinary development, but this history of the critique of psychology will understand many arguments not just as a political form of persuasion (although I will point out rhetorical strategies in some critiques). I suggest that arguments are more important than previously suggested, and often more important in shaping the discipline than empirical proof (this does not say anything about other factors, such as politics and economics, that play a

role in shaping a discipline). In line with Foucault, this history and theory of psychology is interested in the development of discourses regarding the critiques of the subject matter, methodology, and the ethical-political dimension of psychology, which I consider reccurring themes of critique in the history of psychology (see Chapter 2). This represents a form of discourse analysis.

Although I think that arguments can be powerful in discourses and in institutions, this history does not need to endorse a correspondence theory of truth in terms of what psychological programs address. It is much more productive, given the historical nature of this book, to look at what was considered true at a given point of time, at the "paradigms," or better, at different language games of representative mainstream research programs and their critics, and at the consensus of a given community in terms of its worldviews. If truth in psychology is a matter of consensus, then it is necessary to look at the argumentative structures that psychologists have produced as well as to examine consensus-challenging discourses. Rather than studying empirical evidence and the results of experiments that never played the leading role for theory development in psychology, it is vital to reconstruct views on the subject matter, methodology, and ethical-political dimension of psychology, and on the different interpretations of problems, based on these epistemological, ontological, and ethical differences. In providing a reconstruction of these discourses I attempt to be truthful and accurate.

I will begin with Kant's critique of rational and empirical psychology because he had a huge impact on the development of German psychology in the 19th century. The 19th century is considered crucial in the transformation of psychology from a philosophical to a natural-scientific enterprise, and is characterized as a period during which psychology separated from philosophy (see Green, Shore, & Teo, 2001). It is shown how arguments, located within metatheories, were used to challenge the status quo. Then I will present the critiques of major perspectives of psychology: the critique of natural-scientific psychology concerning philosophical psychology; the critique stemming from human-scientific psychology regarding natural-scientific psychology; and critiques from relevance-motivated programs (Marxism, feminism, postmodernism, and postcolonial theory) regarding mainstream psychology.

Let me note one final thought on the relationship between theory and history (see also Hacking, 2002). Theory and history in this reconstruction complement each other and a history and theory of the critique of psychology is, by its very definition, and based on the fact that historical and theoretical problems are intertwined, an intellectual amalgamation of these two disciplines. Theory contributes to answering current historical

problems and history allows for a more adequate understanding of theoretical issues. You can understand (following a hermeneutic principle) the past better than it has understood itself. Given the multitude of critiques in the history of psychology, I have reduced the focus of this reconstruction to perspectives of psychology that have contributed significant arguments in the last 250 years and focused on three *themata* that accompany psychology: the subject matter, methodology, and ethical-political dimension of psychology, sometimes also discussed as the relevance of psychology. In some sense, this history and theory of psychology can also be labeled a thematic analysis (see Holton, 1973) of recurring themata and their critiques in the history of psychology by major perspectives of psychology. Of course, the critique of psychology itself is a recurring theme but also a recurring practice. The justification for selecting certain perspectives and themata of psychology is part of metatheory, discussed in the next chapter.[18]

2

Metatheory and the Critique of Psychology

Historically unaware psychologists might assume that the critique of psychology is an intellectual development that emerged with the social movements of the 1960s and 1970s in Western Europe and North America. However, the critique of psychology has a long historical and theoretical tradition and can be traced back in Western thought, if one were to endorse historical continuity, at least to Aristotle's (trans. 1941/2001) critique of platonic philosophy, for example, regarding the nature of the existence of the *Forms* (pp. 786–789).[1] However, the most significant critique of psychology in terms of understanding the outlook of current psychology was expressed by Immanuel Kant. This critique becomes the temporal starting point for this book and limits this study to the end of the 18th, the 19th, the 20th, and to the beginning of the 21st century. Such a limitation would also be justified based on Danziger's (1997a) argument of historical *discontinuity*, which suggests that psychology as a separate field of study did not exist before the 18th century and thus he considered textbooks on the history of psychology that begin with the Greeks as ignorant (see p. 21). Although I agree with the notion that traditional historiography has wrongly emphasized continuity, I would also argue that there is

more continuity than critics perceive and that the focus on Kant not only
has intellectual but also pragmatic justifications.

PSYCHOLOGICAL PERSPECTIVES

In order to present a history of the critique of psychology, which has not
been written from a systematic point of view, a metatheoretical perspec-
tive is required, from which critical discourses can be identified and their
significance evaluated. The following metatheoretical reflections are tools
in order to cope with the large amount of critical information that exists
in psychological discourses. From a theoretical point of view, at least five
basic academic perspectives of psychology can be identified since the
1700s, each operating with different assumptions about the subject matter,
methodology, and ethical–political dimensions of psychology, and from
and against which major critiques arose. *Metaphysical psychology* was
expressed in rational and empirical psychology (see Chapter 3).
Philosophical psychology in the first half of the 19th century was still
trapped in metaphysical considerations but incorporated results of the
natural sciences while keeping to the primacy of philosophical reflections.
Natural-scientific psychology's[2] systematic and organized history could also
be traced to Aristotle (384–322 BCE), or if one draws a more stringent cri-
terion, to at least René Descartes (1596–1650).[3] Yet, its dominant role in
psychology emerged only in the middle and at the end of the 19th century.
Parallel and partially in response to natural-scientific psychology, the per-
spective of *human-scientific psychology* developed, which received its name
only late in the 19th century (see below) but, if one were to believe in con-
tinuity, one could trace its roots back to the classical Greeks in Western
thought. Certainly, human-scientific psychology has its foundation in
metaphysical and philosophical psychology.[4]

   Finally, there is another perspective of psychology, a psychology
which accompanied some of the other perspectives and which could be
labeled *critical psychology* (or better: critical psychologies) that questioned
and addressed the relevance of a given mainstream psychology (for prac-
tice, for the working class, for women, for visible minorities, for non-
Western culture, etc.). This perspective was and is often expressed within
an ethical-political imperative (Marxism, feminism, postmodernism,
postcolonialism may be the most prominent examples).[5] Within this per-
spective a multitude of different approaches exist, which make the critical
perspective less a coherent program and more an amalgam of various
frameworks that have reflected on psychology as a discipline (for con-
temporary versions see Fox & Prilleltensky, 1997; Sloan, 2000; J. A. Smith,

Harré, & Langenhove, 1995). Critical metatheoretical reflections on psychology have also emerged within natural-scientific and human-scientific discourses but the focus in this book is on those critical frameworks that have a strong ethical-political meaning. This perspective emerged with the consolidation of academic psychology in the 19th century, but reached its zenith only in the 20th century.

From a historical perspective, any *typology* is problematic because it puts overlapping and historically discontinuous developments into an exclusive schemata (on the idea of overlapping disciplines, see Bunge, 1990). However, from a theoretical point of view, such a typology is a useful instrument in order to cope with historical complexity and to recognize that the critique of psychology developed very different arguments, depending on the perspective from which it emerged. The proposed perspectives have distinctive visions, problem assessments, and solutions for psychology. Representatives of the natural-scientific program challenged the unscientific character of human-scientific psychology and favored an alignment of psychology with the natural sciences (see Chapter 4). Human-scientific psychology objected to the reductionist character of natural-scientific psychology and promoted an alignment of psychology with the human sciences such as history (see Chapter 5). Ethical-political critical perspectives in psychology challenged both and advocated ethical but also epistemological and ontological reflections on the status of psychology (see Chapters 6–9). Most important for current concerns are the natural-scientific, human-scientific, and ethical-political critiques whereas the philosophical critique of metaphysical psychology has mainly been forgotten.

Which critique was dominant at a given point of time depended significantly on developments within the mainstream of academic psychology. Thus, before natural-scientific psychology became dominant, critiques, mostly natural-scientifically inspired ones, have focused on the lack of precision and clarity of philosophical and later of human-scientific psychology. With the successes of natural-scientific psychology, and its final dominance, critiques stemming from human-scientific psychology have addressed the ontological and epistemological shortcomings of natural-scientific psychology. This is not to say or ignore that many critiques emerged from research programs within one perspective such as the natural-scientific one, and targeted other natural-scientific research programs (for example, behaviorism rejected structuralism, cognitivism refuted behaviorism) (see Chapter 4). And although the critical perspective of psychology was available from the beginning of psychology (Marxism and feminism), the critique of the lack of political, ethical, and practical relevance of natural- and human-scientific psychology drew

attention in the mainstream only after 1945 (due to changes in the socio-historical context).

Within historical and theoretical reconstructions, the focus is often on the dualism of natural-scientific and human-scientific psychology. Despite my emphasis on the heuristic function of the division proposed here, and the reality of contradictory psychological discourses on psychological topics, the central division of natural-scientific and human-scientific psychologies might find support in the dualistic nature of psychological concepts. Concepts such as memory can be studied from a strictly natural-scientific perspective as well as from a purely human-scientific perspective. If one looks at memory's physiological basis, and its functions, principles, "laws," and divisions, one is not necessarily interested in an individually developed memory, the very *content* of memory. A person's unique memory of past experiences that gives meaning to this person's identity is part of a cultural-historical trajectory and as such the topic for a human-scientific perspective. From a natural-scientific perspective looking at the meaning of memory is problematic, whereas from a human-scientific point of view the physiological basis of memory may be considered important but not particularly significant to psychology. Both approaches promote very different ontologies, epistemologies, and methodologies for their particular conceptualization of psychological subject matters. And although not in the nature of the concept, but in the nature of human inquiry, it is understandable that questions concerning the relevance of such analyses have been raised.

From an institutional point of view[6] the traditional chiasm between natural-scientific and human-scientific psychology is recapitulated in contemporary North American and European departments of psychology, which are located sometimes in the faculties of arts and sometimes in the faculties of sciences (or in both), and which grant either a Bachelor of Arts or a Bachelor of Science degree to their undergraduate students. Programs and teachers of psychology try to ensure that students are exposed to courses from both the *arts* and the *sciences*. However, the classification of a course based on a concept may be arbitrary because one can look at *perception* not only from a traditional natural-scientific, but also from a human-scientific perspective (see Merleau-Ponty, 1945/1962). This dualism is even part of everyday consciousness, for example, when undergraduate students expect a human-scientific approach from psychology, and become disillusioned when they confess that they thought that psychology deals with the meaning of mental life, and not with statistical models or bio-physiological processes.[7]

Historians of psychology, meta-theoreticians, and psychologists have addressed the dualism of natural-scientific and human-scientific psychol-

ogy. The historian of psychology O. Klemm (1911) distinguished *meta-physical* from *empirical* psychology, the former dealing with issues of the soul, and the latter discovering psychological phenomena through intro-spection. He saw the relationship between the two as complementary, because metaphysical psychology included empirical connections of the mind and empirical psychology addressed questions of metaphysics. Based on a model of linear development of science, one could make the argument that metaphysical psychology developed into philosophical-empirical and later into natural-scientific psychology. However, it is his-torically more accurate to suggest that metaphysical psychology moved in significant parts into human-scientific psychology as proposed by Wilhelm Dilthey (1833–1911) at the end of the 19th century, whereas empirical psychology moved into natural-scientific psychology.

The distinction between the two systems of psychology played a sig-nificant historical role in the German-speaking tradition, where these two research perspectives not only co-existed but also shared public and aca-demic support up to the middle of the 20th century. The explicit differen-tiation of the two systems of psychology goes back to Christian Wolff (1679–1754) who divided psychology into a *rational* and an *empirical* branch (see Chapter 3). Herbart (1816) followed Wolff by dividing his textbook into empirical and rational parts, a formal arrangement of which he was well aware of (see p. 8), even if he rejected the content of Wolff's psychology. Fortlage (1855), in line with these distinctions, differentiated between a *speculative* and an *empirical* psychology, the former capturing (in a synthetic mode) the essence of the soul, and the latter proceeding in an analytic way when it concerned mental life.[8] Volkmann (1884) based his dualism of psychology on the *synthetic* (synthetische) and *analytic* (analytische) procedures of science. Synthetic psychology combined knowledge in a way that psychological phenomenon emerged as a result, whereas analytic psychology divided psychological phenomena. He also argued that higher psychological states needed a different type of psy-chology than do lower psychological states.

Dilthey (1894/1957) provided a systematic foundation for two differ-ent types of psychology when he divided psychology into a *descriptive* (human-scientific) and an *analytical* explanatory (natural-scientific) part. This was the time when the two psychologies were at the height of the struggle for dominance. Whereas Dilthey acknowledged the importance of a natural-scientific psychology, he nevertheless promoted psychology within the human-scientific tradition, arguing that psychology's subject matter was human experience and thus its method must be *understanding* (see Chapter 5). In direct response, Ebbinghaus (1896) endorsed psychol-ogy as a natural science that did not need the method of understanding,

but should rely on natural-scientific explanation and experimental methods. Instead of the concept of the natural and human sciences, Windelband (1894/1998) promoted the dualism based on a methodological opposition between nomothetic (sciences of law—what is) and idiographic (sciences of events—what was) empirical programs. Münsterberg (1899) rejected the division between nomothetic sciences that should produce general facts and idiographic sciences that establish single facts for psychology, well aware of the dualistic status of psychology (Münsterberg, 1903).

The *father* of German systematic experimental psychology, Wundt (1921), divided his psychology into an experimental branch that focused on the precise analysis of the basic processes of consciousness and a *Völkerpsychologie*[9] that covered psychological processes that accompany the development of human communities and mental products in the context of values, customs, and language, or what one could label complex psychological processes. Wundt acknowledged that the experimental method was relevant for simple psychological processes whereas complex psychological processes, emerging from culture and society, demanded a nonexperimental psychology (see also Rieber & D. K. Robinson, 2001). Experimental psychology was not entirely useless because training in experimental procedures honed the observer's vision and the ability to think psychologically in the context of a *Völkerpsychologie* (Wundt, 1921, p. vi).

Spranger (1914/1928) followed Dilthey and called a psychology based on the natural sciences a *psychology of elements* that dissected psychological processes. He distinguished this psychology from philosophical psychology, labeled *structural psychology* (see p. 8), which treated psychological phenomena as a whole in a meaningful context. He clearly promoted structural psychology, because if one tried to explain the decision of a human being, one did not dissect the judgment into ideas, feelings, and desires but one would understand the decision as a whole—on the background of a historical meaning and value complex. Jaspers (1913/1997) not only drew on this dualism in his metatheoretical reflections, but applied it to the field of psychopathology. He divided his study into a *verstehende Psychologie* (translated as *meaningful psychic connections*) as well as into an *erklärende Psychologie* (translated as *causal connection of psychic life*). He believed in the interconnection of both when he suggested that one understands through empathy how a psychological event emerges from another, but that, based on the experience that psychological phenomena are linked together in a regular fashion, one can "*explain causally*" (p. 301).

In the North American tradition it was Allport (1937, 1940) who, based on Windelband's reflection, prepared the notion of a *nomothetic* and

idiographic psychology. Critically, he observed an increasing nomothetic commitment in psychology but he pled for the inclusion of an idiographic approach in scientific psychology. Maslow (1966/1969) distinguished between a mechanistic and a humanistic science in psychology, and the term *third-force psychology*, used by historians of psychology, positions humanistic and existential psychology against behaviorism and psychoanalysis. However, in the proposed metatheoretical reflections behaviorism is considered part of the natural-scientific perspective, whereas psychoanalysis and existential or humanistic psychology are considered part of human-scientific approaches. Well known, but less applicable to the suggested system, is Cronbach's (1957) distinction between correlational and experimental psychology as two disciplines of psychology. I suggest that this method-based distinction intuitively acknowledged that there are ontological and epistemological reasons that justify the existence of different psychologies. In recent discourses it has become popular to divide psychology based on methodology, into quantitative and qualitative branches. Again I suggest that psychologists recognize that there exist justifiably different perspectives in psychology that require different kinds of theories and practices.

Evidently, metatheoretical discourses favor a dualistic understanding of psychology. The perspective of a critical psychology seems to represent presentist concerns. It was Habermas (1968/1972) who proposed, in the context of the relationship between knowledge and interest and on the background of an epistemological foundation for a theory of society three kinds of sciences: empirical-analytic sciences, historical-hermeneutic sciences, and critically oriented sciences whereby each type of science can be characterized by a specific underlying cognitive *interest* that guides its pursuit of knowledge. Empirical-analytical sciences are motivated by the production of nomological knowledge in order to achieve technical control over processes or objects. Historical-hermeneutic sciences are motivated by the practical interest of interpretation and understanding of meanings. Critical theory has an emancipatory interest and applies self-reflection as a basic principle of investigation. Habermas did not relate this program to psychological knowledge, but to human knowledge in general, and he identified psychoanalysis and ideology critique as prototypes of critical sciences, an approach which differs from the perspectives of psychology as proposed here (see also McCarthy, 1978).

I suggested, based in part on Habermas's epistemological justification, a tripartite division of current psychology into *scientia, cultura, critica* regarding different knowledge *functions* of psychology (see Teo, 1999a). Ethical-political psychologies (as critical psychologies) with their moral impetus were not limited to the moral domain and have captured

discourses in the second half of the 20th century, without having an explicit identity and self-understanding as a general ethical research program (they consider themselves Marxist, feminist, postmodern or postcolonial psychologists rather than ethical-political critical psychologists). Ethical-political psychology can also emerge from outside the discipline and later move into psychology (in fact, all of the discussed programs did so).

The critical perspective does not represent a coherent perspective but expresses different ideas and voices of concern. Critical psychology can also include a branch that focuses on issues of subject matter and methodology without an immediate ethical-political concern; yet, for the purpose of this book I will focus on critical psychology as it pertains to the ethical-political domain (there might be some skepticism as to whether postmodern psychology is motivated by an ethical-political concern; see Chapter 8). Historians of psychology might be reluctant to accept the ethical-political perspective as a separate perspective, but concerns of relevance have been expressed in psychology since the middle of the 19th century. For example, Beneke (1845) argued that political, social, and religious tumults could be overcome with the help of psychology, but he did not outline a program for such a political psychology of social action. He complained that academic psychology was about theory and not practice and that German philosophy rather dealt with *Absolute Nothingness* (absolutes Nichts) rather than with social reality (see p. viii).

From a synchronic perspective, representatives of different systems have strong views on how psychology should operate. Herrmann (1979) expressed the self-understanding of postwar natural-scientific, nomothetic psychology most clearly. He argued that "scientific psychologists formulate law-like statements of hypothetical character" (pp. 17–18), they formalize theories and methods, test theoretical hypotheses, use objective and reliable measurements, provide explanations and predictions, and they cherish "the experiment as the most important way for gaining knowledge" (p. 18).[10] Such a natural-scientific perspective is very different from Giorgi's (1990) human-scientific view suggesting that objectivity "is not a matter of transforming subjectively based data into objective data, but precisely a way of grasping subjectivity as it expresses itself, that is, to grasp it in its subjectivity would indicate objectivity" (p. 32). Koch (1981) expressed his epistemological critical perspective on psychology when he doubted that despite a century of knowledge-accumulation in psychology, and, despite the presumption, expressed in the huge volume of published articles, that studies have discovered thousands of nomological events, there is not a single statement that represents a law in the meaning of the natural sciences or not even in the meaning of universal acceptance. Prilleltensky and Fox (1997) expressed the stance of a critical

psychology, incorporating the ethical-political dimension, when they "evaluate the theories and practices of psychology in terms of how they maintain an unjust and unsatisfying status quo" (p. 3).

From a theoretical perspective (see Teo, 1999a), *natural-scientific psychology* produces knowledge about a psychological object or event, or details of this object or event. The subject matter *psyche* is divided into parts. Psychologists working within this perspective intend to provide nomological knowledge, using an analytic methodology of breaking down a psychological object or event, and studying well defined, detailed, and specific research problems. Since the 20th century, experimental and quantitative methods have been considered appropriate. Natural-scientific psychology is also associated with the traditional philosophies of science, with empiricism (Hume, 1748/1988), logical empiricism (Reichenbach, 1938), or with critical rationalism (Popper, 1935/1992), which have often been labeled as positivist epistemologies (this is not true for Popper). Natural-scientific psychology operates on the premise that the truth of an object can be reached through better, enhanced, more sophisticated, and future research, and psychologists in this system believe in a continuous progress of knowledge regarding the human psyche. Not only physiological psychology but also structuralism, functionalism, behaviorism, cognitive psychology, and biological psychology intend to follow this model of the natural sciences despite their fundamental differences. Yet, often natural-scientific psychology means solely assimilating the *methodology* of the natural sciences.

Human-scientific psychology produces meaning-knowledge primarily about a subject for a subject (this subject may be an individual, a community, or a whole culture). Its basic methodology can be described as synthetic, as putting together psychological parts into a larger whole, or, research is already focused on the whole picture of the human psyche. The subject matter of human-scientific psychology is the human psyche in its totality. Hermeneutic epistemologies (e.g., Gadamer, 1960/1997) have been considered corresponding philosophies of knowledge, while qualitative methods have traditionally been considered appropriate for this knowledge function (Rennie, 1995). The premise in this psychological perspective refers to the assumption that the provision of meaning allows individuals, communities, and cultures to become better individuals, communities, or cultures.[11] Psychological intervention is motivated by the idea that the personal status quo can be transformed into something better. Hermeneutic, some phenomenological, existential, humanistic, and dialogical psychologies should be mentioned here, as well as psychoanalysis (despite its original self-understanding as a natural science).

The third perspective refers to *critical psychology*, which produces critical knowledge about psychology as a field. The status of this perspective

is different from the other knowledge functions, as its level of research is often metapsychological and it operates from a research distance regarding the other perspectives of psychology. The critical study of psychology or psychological topics might be more prevalent in psychology than in many other academic disciplines, probably due to the complex subject matter of psychology and the dualistic nature of psychological concepts (see above). Critical psychology operates on the assumption that critical reflection changes theories, methods, concepts, and practices of the academic psychological community.

Critical perspectives of psychology have not only existed for the last 40 years, but appeared during the emergence of psychology as a scientific discipline and have accompanied psychology since then. In the crisis discussions of psychology, which have a history of over 100 years, one can easily see that critical psychology is part of the history of psychology. A large part of this reflection targets problems of epistemology and ontology and more recently, the ethical-political dimension of psychology. In this vein, Slife and Williams (1997) even recommended the recognition of a theoretical psychology as a formal subdiscipline that facilitates communication on the theoretical and practical status of psychology, envisioning theoretical psychologists as consultants (similar to statisticians) on hidden assumptions in psychology.

It was Willy who published in 1899 probably the first book on *The Crisis in Psychology*, already proclaiming a *chronic crisis* (p. 1) of psychology at the end of the 19th century. His main argument was that speculation has not been purged from the psychology of his time (including Wundt).[12] Other famous examples are Bühler's (1927/1978) reflections on the crisis, and, written in the same year, Vygotsky's (Wygotski, 1985) discussion of the historical meaning of the crisis of psychology. Since then, reflections on the crisis of psychology have exploded and include a vast crisis literature pertaining to subfields of psychology (e.g., social or clinical psychology). Reviewing the literature after 1945 one sees references to the crisis of psychology in the context of a crisis in social psychology, personality psychology, and experimental psychology, a crisis of psychometrics, an identity crisis of developmental psychology, a statistical crisis, a methodological crisis, a scientific crisis, a philosophical crisis, a theoretical crisis, an anthropological crisis, a pragmatic crisis, an ethical crisis, a political crisis, a crisis of German psychology, a crisis of the psychological labor market, a publication crisis, a *crisis of crisis proclamations* and so on (for overviews see Bakan, 1996; Gummersbach, 1985; Herzog, 1984; Mos, 1996; Teo, 1993; Westland, 1978).[13]

Some psychologists aim their critiques at epistemological and ontological issues such as subject matter (e.g., Eberlein & Pieper, 1976), methodol-

ogy of psychology (e.g., Smedslund, 1988), or ethical-political relevance, which includes the practical relevance of psychology (e.g., Prilleltensky, 1994). Practical and ethical-political relevance should be addressed in terms of generality and particularity. One can question the relevance of psychology for practice and its application for humans in general or its meaningfulness for certain human groups. Based on the idea of psychology as a bourgeois discipline, Marxist psychology questioned the (emancipatory) relevance of psychology for working people (e.g., Bruder, 1973). Feminist psychology addressed the issue of psychology as a male science, the mismeasure of woman (Tavris, 1992), and the neglect of women's concerns and experiences (Gilligan, 1982). Postcolonial psychology addressed the issue of neglect of ethnic minorities within American-European culture and the exclusion of non-Western cultures' conceptualizations of psychological matters (or the inferiorizing of minorities and other cultures), while at the same time mainstream psychology is seen as a *white* Western discipline (Teo & Febbraro, 2003). Other psychologists, more inclined towards postmodernism, address psychology's limited relevance for contemporary culture and consider psychology's language game outdated[14] (see Gergen, 1985). Critical reflections also targeted subdisciplines of psychology such as developmental psychology (Broughton, 1987; Burman, 1994; Morss, 1992; Teo, 1997; Walkerdine, 1988) or social psychology (Cherry, 1995; Gergen 1994a; Parker, 1989; Parker & Shotter, 1990; Potter & Wetherell, 1987; Wexler, 1996).[15]

It has been emphasized that these perspectives of psychology are not mutually exclusive and that interests, premises, and goals overlap. In that sense the differentiation is a cognitive tool in order to understand history, theory, and conflicts more adequately. That there is overlap can be best understood by looking at individual biographies. A psychologist may be able to work with all perspectives, either simultaneously or at different stages of his or her career (see Teo, 1999a). Some researchers point out that critical reflections arrive later in academic life (Oeser, 1988), that there may be a season for theory in psychology (Ross, Febbraro, Thoms-Chesley, Bauer, & Lubek, 1996), or a *maturity shift* towards reflection late in one's career (Edwards & Endler, 1987). Although numerous examples could be found for a movement from natural-scientific psychology towards a critical approach, I would like to draw attention to two remarkable figures: Sigmund Koch (1917–1996) became an outstanding critic of psychology (compare Koch, 1959–1963, versus Koch, 1981). Jan Smedslund moved from a natural-scientific understanding of psychology to a critical one that identified pseudo-empirical dimensions of psychology (compare Smedslund, 1963 and Smedslund, 1994). Yet, psychologists might as well defend and promote one perspective during their entire

careers. There is no reason, perhaps only institutional constraints, why psychologists should not work with natural-scientific, human-scientific, and critical perspectives at all stages of their career.

Recognition is achieved by psychologists who have worked in the system of natural-scientific psychology while considering human-scientific concerns that are of greater interest to the general educated public. A famous example would be Sigmund Freud, who was trained in the natural sciences as a physiologist and had a natural-scientific attitude when studying psychological phenomena (see Fancher, 1973). At the same time Freud's approach functioned, and still functions widely, as a human-scientific approach, and contemporary natural-scientifically inclined psychologists do not consider psychoanalysis scientific anymore. Yet, the human-scientific Freud provided meaning for individuals and communities by elucidating cultural products such as art and jokes and their meaning in everyday life and allowed for the application of psychoanalytic ideas to film, literature, and popular culture. Another well known example is Burrhus Frederic Skinner (1904–1990), a representative of a natural science approach, who articulated some of his ideas in novels and popular magazines (e.g., Skinner, 1971; see Rutherford, 2003). Given his human-scientific interests, which he separated from his natural-scientific ones, it is not surprising that Skinner drew much more public attention to his person than did the neo-behaviorists Clark L. Hull (1884–1952) or Edward C. Tolman (1886–1959).

The suggested differentiation of psychology into different perspectives is based on history, and ongoing traditions, but also on the characteristic of the psychological subject matter. From a *normative* point of view, one could argue that the perspectives require a kind of equilibrium among each other (see Teo, 1999a). The idea of such equilibrium among the perspectives does not mean that psychologists should not discuss problems in each perspective. On the one hand human-scientific psychology may take a critical stance when challenging parts of natural-scientific psychology as not addressing problems of genuine human psychology, or when suggesting that its research is lacking in ethical reflection. On the other hand, natural-scientific psychology may take a critical stance when arguing that parts of human-scientific psychology are based on speculation and that human-scientific psychology is close to popular psychology. Such discussions might provide the launch for discussion on how methodologies are understood differently in the human and natural sciences. From a normative point, equilibrium among the perspectives of psychology would mean that there should be space for reflection on the discipline and for asking critical questions.

Based on these *idealtypic* reconstructions one might gain the impression that the natural-scientific and human-scientific perspectives have the same status in academia. From a *factual* point of view, which addresses issues of power, it is evident that these perspectives are not on an equal footing. Natural-scientific psychology's history is a history of becoming mainstream, which also means that important aspects and dimensions of human psychological life are neglected (from the perspective of human-scientific psychology). And history has taught that a colonization of all branches of psychology are not beneficial to psychology in terms of ontology, epistemology, and ethics, and that a colonization of the whole field, as perpetrated for instance by behaviorism, does not lead to an advancement of knowledge. Problems also arise when studies of problematization are presented and justified as natural-scientific ones. This becomes most evident in psychologists' involvement with the study of "race" and in the lack of reflection on epistemological (ontological and ethical) assumptions (see Teo & Febbraro, 2003). If one treats "race" as a "natural quality" and not as a socially, culturally, and historically constructed concept, then one will reproduce a sociohistorical meaning construction (see also Danziger, 1997a). Although admittedly, such a construction (e.g., the inferiority of Blacks) may give meaning to certain communities, it has not much to do with authentic natural science.

Natural-scientific psychology's colonization process of human-scientific psychology and of the mainstream is not a question of better evidence. According to the analysis of Ward (2002), psychology could have become part of the humanities. That it did not, can be linked with politics because "it makes no sense to attach oneself to fields that are weak" (p. 56) or areas that are perceived to be weak. On the other hand the dominance of natural-scientific psychology in the mainstream has led to a situation where most critical reflection focuses on problems of mainstream psychology. Thus, this book will concentrate more on the critique of natural-scientific psychology and mainstream psychology, and address issues of relevance. Unfortunately, critical psychology may be diminishing its reflections on mainstream psychology, as critical studies are targeted towards the small minority of critical psychologists or as critical psychology is becoming an institutional division within the discipline. Positively, this would mean that psychologists who specialize in natural-scientific psychology could learn about human-scientific psychology and critical reflections. Negatively, an institutionalization of critical perspectives might lead to the delegation of reflection. In any case, a lack of critical self-reflection might result in psychology being an unaware discipline that is prone to self-misunderstandings and defense mechanisms.

PSYCHOLOGY AS A PROBLEMATIC SCIENCE

Given the three contradictory perspectives of psychology that are still in existence in academia, expressing problems of the discipline while at the same time challenging each other on a reccurring basis, it is understandable that researchers have labeled psychology a problematic science (see also Woodward & Ash, 1982). Psychology became a problematic science because of the fundamental differences in conceptualizing the subject matter, methodology, and the relevance of psychology among the various perspectives in psychology. Psychology being a problematic science is also the precondition for a history and theory of the critique of psychology. The forms and contents of a specific critique depend on the perspective that is taken regarding mental life.

Natural-scientific perspectives challenged the metaphysical character of human-scientific psychology, whereas human-scientific perspectives challenged the reductionistic character of natural-scientific psychology, and ethical-political perspectives in psychology disputed the relevance of both of these. Moreover, the problematic character of psychology stems from opposing perspectives that suggest problem solutions exclusively in terms of a particular perspective. From the perspective of natural-scientific psychology, the lack of natural-scientific precision is responsible for the problems of psychology, a situation that should be overcome through more scientific rigor, formalization, and natural-scientific conceptualization. From the perspective of human-scientific psychology, the problem lies in what is considered the solution in natural-scientific psychology: The conceptualization of psychology as a natural science is the problem because it does not do justice to the specific subject matter of psychology, and the unique, fundamentally and qualitatively different relationship between researcher and research object in psychology and the natural sciences. From such a perspective, a problem solution strategy would endorse the development of psychology as a human science.

Despite these differences in points of view, one is able to identify some crucial factors around which some of the most important critiques have centered in the last two centuries. From a historical as well as theoretical point of view, problems can be analyzed in terms of three basic complexes: the subject matter of psychology, the methodology of psychology, and the relevance of psychology (for practice or for the powerless). These three factors are not independent of one another because a commitment to a particular methodology might determine a particular understanding of the subject matter, and a commitment to a subject matter (e.g., behavior) entices a commitment to a certain methodology. Further, both may be closely related to the problem of relevance. In a

general sense these three basic problems parallel discussions in three philosophical disciplines: The problem of subject matter is an ontological issue; the problem of methodology is an epistemological matter; and the problem of relevance shares problems of ethics.

As emphasized when dealing with the perspectives of psychology, these three factors around which problem assessments (historical and theoretical) are focused are a heuristic tool to organize the vast material on the critique of psychology.[16] These three factors are a scaffolding based on which critiques of psychology have been chosen. For the description of the problematic discourses of psychology it is less important to understand the number of factors and the role of factors. Such a reflection would become crucial when it comes to a crisis intervention program, and when discrimination between substance and phenomena of the problematic status and the crisis is substantial. For example, if one assumes that the theory–practice problem of psychology (lack of practical relevance) is the substance of the crisis, then one would use a different problem solution program from the one used if one assumes that the subject matter is the problem.[17] Problems of subject matter, methodology, and relevance are expressed in several phenomena although one should realize that any problem assessment depends on the psychological perspective. For example, from a natural-scientific perspective any philosophical conceptualization of the subject matter of psychology is the problem, whereas from a human-scientific psychology the narrow conceptualization of the subject matter of psychology is the problem.

I will list phenomenologically some critical discussions regarding ontology and epistemology, whereas ethical-political perspectives will be treated in detail in Chapters 6–9. An often-mentioned phenomenon of the crisis, in my analysis closely related to the issue of subject matter, and shared by psychologists of all systems, is the problem of the *synchronic missing unity of psychology* (see also Staats & Mos, 1987), which Willy (1899) already identified at the end of the 19th century. From the perspective of human-scientific psychology, the discipline can be characterized as producing small and isolated empirical results that lack theoretical integration and have no concrete significance for the meaning-seeking person. But even from a natural-scientific perspective the lack of theoretical integration or unification of psychology, solely within a natural-scientific perspective, is a major problem (Staats, 1991). This lack of unification, which also indicates the lack of *paradigmatic* status of mainstream psychology, is a significant problem for natural-scientific psychology, because it follows the lead of the seemingly unified (certainly paradigmatic) status of the natural sciences. Given that human-scientific psychology includes the historicity of psychological knowledge, unification is, in my

view, less a problem. In philosophy, no expert considers unifying the diverse field of philosophy, with its different worldviews, as a meaningful goal, and if psychology is more a philosophical than a natural-scientific discipline, then the issue of unification would not be a problem (see Chapter 4).

In addition, if one assumes that the two basic programs of psychology are incompatible in terms of their understanding of subject matter and methodology, then the problem of the unification of those two perspectives is impossible. Unification is theoretically achievable, if at all, not between the basic perspectives, but only within each perspective. Yet, a potential unification of natural-scientific psychology would even strengthen the exclusion of human-scientific psychology. On the other hand, any premature theoretical rejection of unification (Krantz, 1987) seems unwarranted. Indeed, historians point to a lack of historical understanding in discourses of unification (e.g., Richards, 2002).[18] Missing unity is also found regarding geographical areas. For example, American psychology, which has become dominant in the 20th century, can be compared to German-speaking psychology that has a long hermeneutic tradition and includes philosophy, history, anthropology, and other human sciences, and which rejected on an ongoing basis Americanized psychology (see also Tolman, 1989, 1994, 2001).

Hand in hand with this synchronic disunity of psychology goes a diachronic *stagnation of knowledge*, meaning the lack of unambiguous growth of knowledge in both natural-scientific and human-scientific psychology, both of which have accumulated a vast amount of empirical information. From a critical point of view, the many statistically significant results of natural-scientific psychology have ambiguous theoretical meanings because they are based on the proliferation of incompatible theories and research programs operating with different models of the human being and different research practices (see Holzkamp, 1983). Wilhelm Wundt's (1832–1920) introspective experimental psychology was very different from contemporary experimental psychology; yet, Wundt's experiments have not been falsified. They are ignored because psychology developed different research views and practices. And cognitive psychology ignores the huge amount of empirical results of behaviorism, not because all of them have been disconfirmed, but because of a different focus.

From a realist epistemological point of view, the form and content of a thought should be able to represent characteristics of an object or an event. However, this representation is intertwined with interests and constellations outside and inside the institution of psychology. It is clear that the implicit or explicit conceptualization, model, metaphor, or theory of

the psyche determines or influences what a researcher can and wants to see, and how he or she can or wants to do research (method), which emphasizes that the conceptualization of the psyche, of mental life, and of the subject matter is a central scientific problem and an issue of controversy and critique. There is an intimate interconnection between theory and empirical research in the sense that a particular conceptualization leads to results within this conceptualization and that the conceptualization itself, as a presupposition, is not tested (see also Holzkamp, 1983). For perspectives of psychology this means that natural-scientific psychology produces empirical research based on a natural-scientific self-understanding, whereas human-scientific psychology produces empirical knowledge based on its premises.

For natural-scientific psychology I suggest that hypothesis testing, as esteemed as it might be, is not really a test, but rather an illustration of hypotheses that make sense within a particular research program. As such it becomes the goal of the researcher to produce circumstances and conditions in which a hypothesis is not rejected. Instead of the acknowledgement of incompatible worldviews, human-scientific psychology repeats the argument that the highest level of the psyche, what is traditionally called consciousness or subjectivity, cannot be explored sufficiently when chemical processes in the brain are studied, that subjectivity is not clarified when only the behavior of a person is investigated, and that a research method that might be very helpful on a biochemical or physiological level cannot automatically be transferred to human mental life. Instead of the acknowledgement of incompatible worldviews, natural-scientific psychology is left with the argument that psychology as a human science is not objective, reliable, and value-neutral.

The fragmentation of mental life into parts, or faculties as they used to be called, in natural-scientific psychology is not simply an intellectual course of action that fell from the sky in the process of the triumph of the natural sciences, but has its sources in social contexts (see Ash & Geuter, 1985; Lück, Grünwald, Geuter, R. Miller, & Rechtien, 1987; Jansz & Drunen, 2004). Staeuble (1985) pointed out, from a social-historical perspective, that the particularization of mental life paralleled the development of institutions in the consolidation of modern capitalist societies. In the educational system power, discipline, obedience, achievement, and so on count; in the health system health problems are identified and repaired individually; and in the legal system the accountability of perpetrators and the reliability of testimonies are of interest. This constellation of research successes of the natural sciences of physiology, physics, and chemistry on the one hand, and the political–historical development of society and its institutions on the other hand, led to a positivist understanding of psychology. No longer was

an understanding of mental life of interest, but rather a positivist explanation, which meant the "functional relationships between variables" (M. H. Marx, 1951, p. 6); (see also Winston, 2001). Such a reconstruction is of course already the perspective of a critical history.

The reflexive critique of the conceptualization of the subject matter of traditional natural-scientific psychology takes two forms. The epistemological and ontological critique refers to an inadequate conceptualization of the subject matter of psychology, for example, in using machine metaphors in order to study human mental life, a very important tradition in psychology (see Sullivan, 1984). It is criticized that the human subject is wrongly conceptualized as a passive and reactive machine, driven by causes, with components that can be added up (such as nature and nurture). The machine metaphor is attractive as the many technological changes enable new psychological theories based on technological innovations (from the clock and engine to the computer). The ethical-political critique argues that psychology reproduces the functionality of subjects and, in doing so, supports the status quo of society, and that psychology reproduces an alienated, individualized, male European, while at the same time the factors that lead to alienation, individualization, and ethnocentrism are neglected (see also Habermas, 1968).

More extensive than ontological issues surrounding the subject matter are discourses attacking the methodology of mainstream psychology, the second theme regarding the problems of psychology. Natural-scientific psychology has developed several arguments against human-scientific psychology, and, with a degree of zealotry, against psychoanalysis. However, most critiques regarding psychology as a natural science target the methodology of mainstream psychology. From a critical perspective, one would have to describe an investigative practice that conceptualizes the subject matter by the way the method prescribes it, as *methodologism* (Teo, 1993), a concept similar to the one used by Bakan (1961/1967), *methodolatry* (p. 158), to denote the worship of method. In a similar vein, Toulmin and Leary (1985) referred to the *cult of empiricism* and Danziger (1985) called it the *methodological imperative*.

Methodologism means that the method dominates the problem, problems are chosen in subordination of the respected method, and psychology has to adopt without question, the methods of the natural sciences. Historically, it is understandable that the methodology of the successful natural sciences was very attractive to psychologists and methods appeared as the source with which the scientific status and credibility of psychology could be guaranteed. Even Freud, the most influential representative of a human-scientific psychology, expected solutions to the theoretical and practical problems of psychology to come through the

natural sciences (see Habermas, 1972). From the perspective of a human-scientific psychology and a critical psychology, a science should choose its method according to its problems and its subject matter. One could even say that the adequacy of the methodology with regard to the subject matter should be a central scientific criterion, and as long as the adequacy of a method for the subject matter is not known the scientific value and all other objectification criteria are ambiguous (Holzkamp, 1983).

The methodologism of natural-scientific psychology causes various subproblems. From an epistemological and ontological-critical as well as from a human-scientific perspective the experiment in psychology has limited value (for example, only for basic psychological processes), given the nature of the psychological subject matter, and the reality of persons and their capacities.[19] Along with this discussion goes the critique of mainstream psychology's identity as a nomothetic science for which causal connection between conditions and effects is central. As a nomothetic discipline psychology should provide universal laws, explanations, and predictions. Yet, not many results in psychology qualify as universal laws especially when it comes to higher psychological processes. From a constructivist point of view, the supposed causal processes are in fact constructed by the researcher (Holzkamp, 1968).

More recent critiques have argued that psychology takes reasons for causes and that empirical hypothesis testing is not a test but an application of good reasons (Holzkamp, 1986), that in several important psychological investigations if-then-statements have implicative character (Brandtstädter et al., 1994), that psychology is not an empirical science because valid statements in psychology are explications of common sense and hence necessarily true (Smedslund, 1988, 1994), or that experiments (in social psychology) are circular and produce unfalsifiable truisms (Wallach & Wallach, 2001). Studies that attempt to test necessarily true statements are labeled pseudo-empirical (Smedslund, 1995). It appears that hypothesis testing and experimental arrangements are a challenge to the skill of the experimenter in constructing time, space, and population, but not a test in its very meaning. Finally, operational definitions, which appear to natural-scientific psychology as a huge advantage because they are able to overcome metaphysical definitions, appear from the perspective of a critical psychology as an inflation of definitions. Indeed, Percy W. Bridgman's (1882–1961) original intentions were not really applicable to psychology (see Green, 1992). Other issues concern practices such as using statistics as a tool for exploration in order to find significant differences, which is not disclosed in publications, and, in any case, the publication of nonsignificant results in psychology is rare.

I have distinguished a critical psychology that focuses on epistemology and ontology, and a critical psychology that focuses on ethical-political

issues, but they are often combined which can be seen in the second half of this book. From the perspective of a critical psychology that emphasizes the relevance issue, a lack of reflection on the ethical-political domain hinders psychology from becoming a meaningful science. Lack of relevance of psychology refers to the lack of practical relevance of natural-scientific as well as human-scientific psychology. It has been argued that the progress in statistics and experimental design, and the help of increasingly complex software for data analysis, is in reverse proportion to being able to apply the results to real world contexts (Holzkamp, 1972). Lack of relevance also means that natural-scientific psychology has no relevance for suffering or oppressed persons (while it may be relevant to the powerful in society). Lack of relevance also suggests that psychology is not relevant to women because psychology is a male-dominated discipline, to visible minorities because of a history of racism, and to non-Western cultures.

Some problems in the ethical-political context refer to ideological influences on psychological theory and practice. From the perspective of natural-scientific psychology ideological influences are expressed when psychologists have a political conscience in psychology. From the perspective of psychologists who emphasize the ethical-political dimension in the context of discovery or even the context of justification, the repression of the ethical-political domain is the central problem. Persons live and act always on the background of a sociohistorical and cultural context, and such a fact makes psychology prone to ideological influences. For example, clinical psychologists (trained in the natural sciences or in the human sciences) are pressured from insurance companies in a way that psychology loses emancipatory relevance. In the Marxist critique of relevance, mainstream psychology represents the beliefs and ideas of a dominating class; in the feminist critique, the worldview of men; and in the postcolonial critique, the interests of white Americans and Europeans. Cultural critics have argued that the dominance of American psychology has to do with the economic power of the US (Parker, 1989).

Given the variety of problems that psychology faces, there should be no doubt that psychology as a discipline needs a systematic reflection on ontology, epistemology, and ethics. In the following chapters, some of these problems will be presented more systematically. The following chapters focus on early critiques of psychology followed by the natural-scientific critique of psychology, and the human-scientific critique of psychology, and the critiques of relevance center around the Marxist, feminist, postmodern, and postcolonial discourses of psychology.

3

Kant and Early 19th Century Critics of Psychology

The 19th century has been considered crucial in the transformation of psychology from a philosophical to a natural-scientific enterprise (see Green, Shore, & Teo, 2001). More precisely, it can be characterized as a process of loosening and separating psychology from philosophy (see Windelband, 1892/1958). Two historical observations are worth mentioning with regard to this time period: First, most historians of psychology focus on the second half of the 19th century and discuss psychology in the context of Gustav Theodor Fechner (1801–1887), Hermann von Helmholtz (1821–1894), Wilhelm Wundt (1832–1920), and Hermann Ebbinghaus (1850–1909), among others. But what happened before these pioneers? The fact that many of the philosophical psychologists did not influence the course of psychology directly (they did indirectly) does not mean that psychology was not a vibrant topic in the first half of the 19th century. Second, there are usually only a few names mentioned when it comes to German psychology before 1850: Immanuel Kant, Johann Friedrich Herbart, and Rudolph Hermann Lotze. Lotze was often included in this time period not because of the publication dates of his works (the most significant were published in the 1850s and 1860s) but because he was more philosophical than natural-scientific (see Boring, 1950). This limited

focus misrepresents the plurality of philosophical discourses that influenced the discussion of experimental psychology later.

The observation that there is a historical focus on the second half of the 19th century not only holds true for the North American community but also for the German-speaking one. A recent book by Benetka (2002) that analyzes 19th century psychology mentions again only Kant, Herbart, Fechner, Wundt, Ebbinghaus, Wilhelm Dilthey (1833–1911), and Franz Brentano (1838–1917) (the same is observed in textbooks such as Pongratz, 1984). Interestingly, German historiography has accumulated more knowledge about psychology of the 18th century than of the first part of the 19th century (e.g., Eckardt, 2000; Jaeger, & Staueble, 1978). Underpresented is also the interaction of psychology with applied and related disciplines such as medicine (see Lotze, 1852) and jurisprudence, which sought advice from psychology (see the textbooks on forensic psychology: Ideler, 1857; Wilbrand, 1858). Indeed the history of psychology needs to look at discourses before Fechner's publication of the *Elements of Psychophysics* in 1860, which is, according to Boring (1950), the year "that the history of experimental psychology could very well begin" (p. ix).

There were important psychological developments in many European countries and in North America during the time period under investigation (see Rieber & Salzinger, 1998). There were significant psychological developments even in countries that are usually neglected in psychological historiography, such as India (see Paranjpe, 1998). However, there is also a consensus among historians of psychology that German psychology played a crucial role in the development of the discipline as psychologists know it today. Wilhelm Wundt, the "father" of experimental psychology is placed by historians of psychology "first in a ranking of the most eminent psychologists of all time" (Benjafield, 1996, p. 69). He played a significant role in shaping the outlook of North American psychology by training in his laboratory G. Stanley Hall, James McKeen Cattell (1860–1944), Hugo Münsterberg (1863–1916), Edward Bradford Titchener (1867–1927), and Lightner Witmer (1867–1956), to mention a few (see also Rieber, 2001).

Boring (1950) reprinted a map of central Europe before WWI which listed mostly names of German university cities and emphasized the significance of the German context. Other important German experimental pioneers include the Wundt student Oswald Külpe (1862–1915), Carl Stumpf (1848–1936), and Georg E. Müller (1850–1934). German-speaking pioneers of psychology also include Sigmund Freud (1856–1939), the Gestalt psychologists Max Wertheimer (1880–1943), Kurt Koffka (1886–1941), Wolfgang Köhler (1887–1967), and Kurt Lewin (1890–1947), and the hermeneutic psychologists Ludwig Binswanger (1881–1966), Eduard

Spranger (1882–1963), and Karl Jaspers (1883–1969). The intellectual-historical task to identify theoretical concepts of experimental psychology that were derived from metaphysical and philosophical psychology has only partially been shown, for instance, with regard to Herbart by Danziger (1983) and Boudewijnse, D. J. Murray, and Bandomir (1999, 2001).

German psychology of the first half of the 19th century, which was considered to be part of philosophy (or psychology was considered the base for philosophy: Beneke, 1845; Waitz, 1846), was dominated by the ideas of classical Greek philosophy (Aristotle), theology, and the psychologies of Gottfried Wilhelm Leibniz (1646–1716), Christian Wolff, and, to a lesser extent, Johann Nikolas Tetens (1736–1807) (see Siebeck, 1880, 1884; Hartmann, 1901; Dessoir, 1911; O. Klemm, 1911). The German idealists Immanuel Kant, Johann Gottlieb Fichte (1762–1814), Georg Wilhelm Friedrich Hegel, and Friedrich Wilhelm Schelling (1775–1854) were the domineering figures in philosophy at that time. But Fichte, Schelling, and Hegel also accounted for the identity crisis of German philosophy (see Schnädelbach, 1984), which produced great speculative philosophical systems that were in strict contrast to the emerging successes of the natural sciences.

Kant did not belong to the school of absolute idealism, so he became significant for the rehabilitation of philosophy. For Helmholtz (1903) in 1855 it was not Kant, but rather Schelling and Hegel, who ruined philosophy while Kant's epistemology could be understood as in concordance with the natural sciences. This led to a revival of Kant in various neo-Kantianisms, beginning in the middle of the 19th century (Köhnke, 1991; Teo 2002). The increasing credibility of the natural sciences was already reflected in the titles of Waitz's (1849) and Beneke's (1845) books that shared the vision of psychology as a natural science (see also Drobisch, 1842). Waitz (1849), however, was well aware that natural scientists would label his textbook "philosophical." Even the Hegelian George (1854) emphasized the importance of developing psychology as a natural science. Yet, for George, an empirical perspective in psychology would not exclude "true speculation" (p. vi).

KANT'S CRITIQUE OF RATIONAL AND EMPIRICAL PSYCHOLOGY

Critical comments on psychology have been expressed before Kant, most notably in Aristotle's (384–322 BCE) challenge of Plato's (437–347 BCE) conceptualization of the psyche (see also Green & Groff, 2003). During the Middle Ages there were extensive discussions on psychological topics

such as the primacy of will or reason[1] and the controversy surrounding *universals*, to mention some prominent ones. In modern times, Descartes' (1637–1641/1996) thoughts on innate ideas were criticized by Locke (1689/1996) who in turn was criticized by Leibniz (1765/1996). Despite the importance of these critiques and controversies they did not systematically challenge a whole field of research. Kant, with whom this history of the critique of psychology begins, provided such a challenge. This philosophical giant's critique of psychology had the most significant influence on the development of psychology, mostly in stimulating research *against* his critique, which targeted psychological subject matter and methodology (core issues of psychology; see Chapter 2). Neo-Kantians such as Johannes Müller (1801–1858) and Hermann Helmholtz (1821–1894) adopted Kant's epistemology and rejected his ideas on psychology, while at the same time they excelled in natural-scientific research on psychological topics. The historian of psychology Dessoir (1911) called it "an irony of history that despite everything, fundamental progresses in psychology were introduced by [Kant's] criticism"[2] (p. 154). And even more wide-ranging, Boring (1950) stated that Kant "set his mark on German thought of the entire nineteenth century" (p. 204).

In order to understand Kant's critique of psychology it is necessary to briefly outline psychology's background. German psychology during the second half of the 18th century was a vivid and multifaceted discipline. *Rational* and *empirical* psychology, a system division carefully introduced by Christian Wolff, and the twofold target of Kant's critique, was only part of academic philosophical psychology. Another part was natural-scientific psychology with physiologists of the soul already demanding that psychologists should study physiology and the anatomy of the brain; instead of a philosophical approach, a medical method was preferred (see Dessoir, 1902). The 18th century also led to the expression of popular psychology, and several psychological magazines were founded and distributed to the educated public, such as the *Magazin zur Erfahrungsseelenkunde* (Magazine for Empirical Psychology), edited by Carl Philipp Moritz (1756–1793) and published between 1783 and 1793 (see also Eckardt, 2000, 2001). Dessoir (1902) also mentioned an *analytic* psychology that was focused on the detailed account of inner feelings and a description of personal thoughts, emotions, and desires.

The idea of explaining the soul in terms of various *faculties* was firmly established and found its legitimacy in Aristotle's (2001) five faculties (powers)[3] of the soul in his *De Anima*: "the nutritive, the appetitive, the sensory, the locomotive, and the power of thinking" (p. 559)[4], and in Wolff's German invigoration of faculty psychology.[5] Psychological phenomena were explained by referring to faculties, and these faculties were

construed extensively. Based on the acceptance of the concept of faculties of the soul, it became a primary task to identify the kinds and numbers of psychological faculties. Dessoir (1902) identified three basic solutions to these problems (pp. 381–382). First, faculties could be derived from the experiential content of mental life. One could label these experiences as effects of the soul, and because effects have causes, the causes should be the faculties of the soul. Second, faculties could be identified according to anatomy or physiology. For example, one could argue that there must be five faculties based on the five senses. And finally, faculties could be established from the objects of the mind. For instance, the faculty of memory corresponds to the representation of past objects, whereas the faculty of providence corresponds to the representation of future objects.[6]

The most significant thinkers that influenced 18th century German academic psychology in a general sense were Leibniz, Wolff, and, to some extent, Tetens. The latter, a contemporary of Kant, intended psychology as a natural-scientific discipline, which meant that he adopted observation. He believed that introspection should take place at the beginning of a psychological investigation that should be concluded with a metaphysical synthesis (and not vice versa), that there should be a strict division between facts and hypotheses, and that most psychological explanations have a hypothetical character (see Carus, 1808; Dessoir, 1902). He also refuted the idea of the reincarnation of the soul in an attempt to understand the relationship of body and soul more adequately. Tetens, a follower of faculty psychology, aimed at reducing the soul into its basic faculties and became famous for his authoritative tripartite division of psychological faculties into the basic processes of feeling (Gefühl), understanding (Verstand), and willing (Wille), which became the systematic basis for Kant's critical philosophy (see also Windelband, 1892/1958).[7] Interestingly, as pointed out by Carus (1808), Tetens placed feeling in the first position. Kant, who did not challenge the notion of basic faculties, designed his famous works (Kant, 1781/1968; Kant, 1788/1968; Kant 1790/1968) according to these three basic powers (Meyer, 1870).

In a general sense, Kant was influenced by the so-called Leibniz–Wolff tradition of thought. Leibniz, the German philosopher, mathematician, physicist, historian, diplomat, and coinventor of the differential and integral calculus made the soul the center of his philosophy. For Leibniz (1720/1930) the world was a network of forces, of soul-like units, that could not be reduced further. He famously conceptualized them as monads. The world was composed of hierarchically organized kinds of monads, depending on the clearness of their perceptions. At the bottom of the hierarchy were simple monads, entelechies, with perceptions that were obscure and undifferentiated. Monads were souls when

perceptions were somewhat clear, and the mind could differentiate ideas but was not separat from those ideas. These sentient monads were capable of desire and presentation, of perception and memory. When the monads were capable of rational thought they became rational monads, the conscious souls of human beings, who were capable of perception and apperception (self-consciousness and reasoning). *Apperception* was a clear perception, where the "I" was set against the contents of ideas. At the top of the hierarchy was the supreme monad from whose perceptions all other monads were created. Given that all monads were created by this supreme monad, Leibniz introduced the concept of a preestablished harmony among the monads, which also found its expression in his mind–body parallelism (see also Dessoir 1911; Fancher, 1996).

Wolff limited the concept of a preestablished harmony to the mind–body problem and gave up the concept of a monad because representation would only be possible to souls that have consciousness (see Dessoir, 1911). This line of inquiry referred to a specific type of psychology, which he labeled *rational psychology* (Wolff, 1740/1972) and which he distinguished from *empirical psychology* (Wolff, 1738/1968). Rational psychology was conceptualized as the science of what was possible by the human soul: "Psychologia rationalis est scientia eorum, quae per animam humanam possibilia sunt" (Wolff, 1740/1972, §1). It was closely linked with ontology and cosmology, but also with empirical psychology (see §3). Wolff understood empirical psychology as the science that identified principles, with the help of experiences, with regard to what actually happened in the human soul: "Psychologia empirica est scientia stabiliendi principa per experientiam, unde ratio redittur eorum, quae in anima humana fiunt" (Wolff, 1738/1968, §1).

Rational psychology attempted to identify the nature of the soul using deductive methods (contemporary psychologists would label it metaphysical psychology)[8] from the principles to the experiences, whereas empirical psychology moved inductively from the experiences to the principles (see Wolff, 1738/1968, §5). Wolff's rational psychology covered the soul's substantiality, simplicity, immateriality, immortality, and so on, as well as the mind-body problem (commercium mentis cum corpore). These concepts were delineated in a rational process. For example, the soul, for Wolff, was a simple substance, because it was not a body and not a composite entity, and "since every entity is either composite or simple . . . the soul must be a simple entity" (Wolff, 1740/1972, §48).[9] The soul must also be a substance because the soul was a durable and modifiable object. The essence of the soul consisted in its power of representing the universe (§66). The faculties of the soul were not different entities, because if that were the case, then the soul would be an aggregate of

several substances. According to Wolff this would be incongruous and, therefore, faculties of the soul were not different substances (§82).

Wolff also distinguished between the power of the soul and the faculty of the soul, the former referring to the constant process of acting, and the latter indicating the possibility to act. In order to assess what actually happened in the human soul, which was the topic of empirical psychology, experience was required. Wolff covered in his empirical psychology the ability of the soul to know, desire, the interaction of the soul and the body, the faculties of the soul, and so on (see also Dessoir, 1902). He was a master of dividing the soul into various faculties, and firmly stood upon the idea that for all observable psychological expressions, psychological faculties must be responsible. He divided the faculties into two major groups: cognitive faculties, or faculties to know (de facultatis cognoscendi), and appetitive faculties, or desiring faculties (de facultatis appetendi). Each group was divided into higher and lower parts. Lower cognitive faculties included, for example, perception, senses, imagination, memory, oblivion, and reminiscence while the higher ones included attention, reflection, and reasoning. The lower desiring faculties referred to a variety of human affects while the higher ones referred to willing. It is noteworthy here that his division of the faculties into a theoretical area (cognitve faculties) and a practical area (desiring) did not allow him to include feeling as a separate faculty (as Tetens did, see above). Wundt (1874/1910) pointed out that Wolff took the twofold classification from Leibniz who identified ideation and appetition as the basic forces of monads (see p. 22). Finally, the separation of *rational* and *empirical* was so significant in the history of science that R. I. Watson and R. B. Evans (1991, p. 237) have argued that the notorious epistemological distinction between empiricism and rationalism began with Wolff rather than with Descartes and John Locke (1632–1704).

Kant scholars have pointed out that Kant's views on rational psychology were influenced by Tetens, Leibniz, and Wolff (R. I. Watson & R. B. Evans, 1991, emphasized Wolff) in a general sense but he was particularly inspired by the writings of the Wolffian Martin Knutzen (1713–1751), the widely educated German Enlightenment philosopher Hermann Samuel Reimarus (1694–1768), and Moses Mendelssohn (1729–1786) (Meyer, 1870), all of whom contributed to the development of rational psychology. Cramer (1914) even argued that Kant's thoughts on rational psychology should be understood in the context of a much larger body of writings that included, in addition to the mentioned figures, the Wolffian Alexander Gottlieb Baumgarten (1714–1762), the logician and Wolffian Friedrich Christian Baumeister (1709–1785), Friedrich Casimir Carl von Creuz (1724–1770), the opponent to Wolff's and

Leibniz's philosophies Christian August Crusius (1712–1775), the logician Joachim Georg Darjes (1714–1791), the popular philosopher Johann Georg Heinrich Feder (1740–1821), the Wolffian Georg Friedrich Meier (1718–1777), and the important logician Gottfried Ploucquet (1716–1790). This is not the place to discuss the details of this influence or even to discuss Kant's changing and developing views on rational psychology. Thus, this reconstruction will limit Kant's critique of rational psychology to his masterpiece, the *Critique of Pure Reason*, and his critique of empirical psychology to his *Metaphysical Foundations of Natural Science* (Kant, 1786/1970).[10]

In order to understand the logic of Kant's critique of rational psychology the basic tenants of his epistemological reflections are summarized here. In his critique of pure reason, Kant (1781/1968) attempted to investigate the conditions of the possibility of knowledge, a program labeled as transcendental philosophy. From a simplified point of view, he attempted a reconciliation of rationalism and empiricism by emphasizing the role of experience in gaining knowledge (neglected by rationalism) and pointing out that human knowledge began with experience. But in contrast to empiricism, which neglected the role of reason, Kant pointed out that not all of knowledge arose from experience. Knowledge had two aspects, namely sensibility [Sinnlichkeit] and understanding [Verstand], whereby the a priori sensibilities (space and time, also called *forms of intuition*) and the a priori principles of understanding, the categories of the mind, were of special interest to Kant.[11] These a priori categories of understanding imposed themselves or were added to sensory experience. For example, if one suggests that all humans have a father, this information cannot come from sensory experiences since one is not able to experience that all humans have a father. When one uses the word "all" one employs the category of *totality*.[12]

Because of the process of imposing categories onto sensory experience, human understanding and knowledge was limited to the world of *phenomena*, the world of appearances. The other world was the world of *noumena*, which were the *things-in-themselves*. In contrast to some contemporary interpretations this did not seduce Kant into denying the reality of the external world. Kant also made an important distinction between understanding (Verstand) and reason (Vernunft) and argued that understanding transformed sensory experiences and reason transformed understanding when it attempted to grasp the absolute. Reason intended to transcend the world of phenomena and to grasp the essence of reality. Yet, reason could not be applied to abstract ideas without running into problems: In dealing with the soul, reason was trapped in *paralogisms*; in grasping the universe, reason was ensnared in antinomies (meaning that

contradictory parts of a statement can both be proven as true such as the world has a beginning versus the world has no beginning); and in addressing God objectively, reason was spellbound by inescapable problems. Kant's critique of rational psychology was contained in the section on paralogisms.

A paralogism was originally defined by Aristotle (2001) in his *Poetics*: "Whenever, if A is or happens, a consequent, B, is or happens, men's notion is that, if the B is, the A also is—but that is a false conclusion" (p. 1482).[13] Kant (1781/1998) distinguished between a logical and a transcendental paralogism, the former defined as "falsity of a syllogism due to its form" (p. 411; A 341/B399) and the latter—the paralogisms of rational psychology belong to this category—were understood as having a "transcendental ground for inferring falsely due to its form" (p. 411; A 341/B 399). According to Kant, the *I think* (cogito) (Descartes' *cogito ergo sum*, A 346/B 404) was the subject matter of rational psychology, and the whole of rational psychology was based on that principle. The entire wisdom of rational psychology was, for Kant, based on *I think*. Kant's critique of rational psychology argued that the subject matter of rational psychology (*I think*) was a consequent (Aristotle's B) based on which rational psychologists made false conclusions regarding the substantiality, simplicity, identity, and relations of the soul (Aristotle's A) (see Caygill, 1995). In other words, rational psychology suggested, based on the unity of self-consciousness, that the soul was a simple, identical, and relational substance. Or as Meyer (1870) phrased it: Rational psychology assumed wrongly that the simplicity, unity, and independence of thought represents the simplicity, unity, and independence of a thinking substance.

Kant (1781/1998) described the first paralogism, treating the problem of the substantiality of the soul, in the following way: the absolute subject of my judgments and something that could not be used to determine another thing was defined as *substance*. The *cogito* was "the absolute subject of all my possible judgments, and this representation of Myself cannot be used as the predicate of any other thing" (pp. 415–416; A 348). Thus, rational psychology concluded that I am, as soul, substance. Yet, this conclusion was false. As Kant had pointed out earlier in his critique of pure reason, the category of substance had no objective significance and had meaning only when a perception was subsumed under it. The concept of substantiality referred only to an idea but not to a reality. The idea that the soul was substance was only meaningful if one agreed that this concept led no further.

Kant discussed in the second paralogism the idea of the simplicity of the soul. He clarified that a thing "whose action can never be regarded as the concurrence of many things" (p. 417; A 351) could be defined as simple. The soul (the thinking I) was such a thing, and thus,

rational psychology incorrectly concluded that the soul was simple. Kant pointed out that the *I think*, the basis for rational psychology, was a subjective condition, which was made into a concept of a thinking being. The simplicity of a soul could not be derived from the *I think* but was an expression of an immediate apperception. In fact it was tautological for Kant, in the same manner as Descartes's *cogito, ergo sum*. The idea of a unity of thought, however, did not prove the simplicity of the soul. The assertion of the simplicity of the soul had value and meaning only in order to distinguish it from matter (the soul was not corporeal). Even so, such an assertion did not allow for a discussion of the difference or similarity of the soul with matter. All one could say was that the thinking subject was not corporeal, represented as an object of the inner sense, but not an object of the outer one.

Kant's third paralogism dealt with "personality" [Personalität] and it began with the assertion that something that was conscious of the numerical identity of itself at different times could be defined as a person. Because the soul was conscious of the numerical identity of itself at different times, one concluded falsely that the soul was a person. However, according to Kant, one could not make this conclusion with regard to the personality of the soul because it had the same status as self-consciousness and as such was valid a priori. This argument of rational psychology said nothing more than that I was conscious of myself, and it was inevitable that the identity of myself was encountered in my own consciousness. The identity of the consciousness of myself was a formal condition of my thoughts but it did not prove anything.

Finally Kant's fourth paralogism concerned the ideality of the external world and in contemporary thinking belongs to epistemology proper rather than to (rational) psychology. The paralogism began with the premise "that whose existence can be inferred only as a cause of a given perception has only a doubtful existence" (Kant, 1781/1998, p. 425; A 366). Because all external appearances were in such a way that their existence could not be immediately perceived but one could assume them as the cause of given perceptions, one made the false conclusion that "the existence of all objects of outer sense is doubtful" (p. 425; A 367). This was wrong, according to Kant. He then defined an *idealist* as a person who did not deny the existence of external objects, but as someone who believed that one could not be—based on experiences—certain of reality. From this idealism, Kant distinguished *transcendental idealism*, which regarded all appearances as representations and not as things in themselves, and which understood space and time as sensible forms of intuition but not as conditions of objects. On the other hand the *transcendental realist* considered space and time as independent of sensibility. Nevertheless, the "tran-

scendental idealist is an empirical realist" (p. 427; A 371) who suggested that reality, as appearance, was immediately perceived (not inferred) (transcendental realism was, according to Kant's critical comment, based on empirical idealism).

The result of all the reflections on the paralogisms was that rational psychology was not a systematic body of knowledge but a discipline that limits the speculations of reason, rejects materialism as well as spiritualism, and realizes that one should move from useless speculation to the practical use of reason (B 421). Kant's critique of rational psychology is largely incomprehensible for contemporary psychologists because they have lost knowledge of discourses on the soul. His critique also elicited negative comments from many of his followers in the 19th century (see Meyer, 1870, for an early overview). In terms of psychology, Kant's arguments suggested that because rational psychology went beyond the powers of human reason, researchers had only the opportunity to study the soul from an empirical point of view. But according to Kant, empirical psychology was not a science but only an assembly of psychological bits and pieces.

Indeed, better known in contemporary discussions, and often mentioned in textbooks on the history of psychology, is Kant's critique of empirical psychology, as expressed in the preface to his *Metaphysical Foundations of Natural Science* (Kant, 1786/1970) (see Boring, 1950; Fancher, 1996). In his critique of pure reason, Kant (1781/1998) had argued that philosophy had two basic subject matters: nature and freedom (see A 840). Philosophy of nature dealt with natural laws (what is) and philosophy of morals dealt with moral laws (what should be). In the *Metaphysical Foundations* Kant was concerned with nature (not freedom), dividing the study of nature (in its material meaning) into two parts: Physics [Körperlehre] that regarded objects of the external sense, whereas psychology [Seelenlehre] was concerned with objects of the inner sense. In addition to this distinction, Kant added various levels of science, or one could argue, a hierarchy of the sciences (see also Plaass, 1965).

At the top of the hierarchy stood *proper natural science*, which studied its objects according to a priori principles and which showed apodictic certainty. It needed a pure part and thus, included metaphysics of nature. In fact, a proper natural science could only be identified as long as one found mathematics in it. The example Kant had in mind was physics. *Improper natural science* studied its subject matter according to empirical laws and showed empirical certainty but no more. Chemistry did not deserve the name of a proper natural science, as chemistry was according to Kant a systematic art, an experimental doctrine. At the bottom of the hierarchy stood psychology, which could not fulfill the concept of a proper natural science such as physics: "this is because mathematics is

inapplicable to the phenomena of the internal sense and their laws" (Kant, 1786/1970, p. 8). But psychology was not only divided from proper natural sciences such as physics, which was able to systematically organize a complete body of knowledge according to principles, but also from chemistry, an improper natural science, an experimental doctrine, because psychology was only able to develop into an empirical doctrine of the soul which contained organized facts. Psychology could "never become anything more than a historical (and as such, as much as possible) systematic natural doctrine of the internal sense, i.e., a natural description of the soul, but not a science of the soul, nor even a psychological experimental doctrine" (p. 8). This statement has fueled important controversies and encouraged researchers to prove Kant wrong. More recently, Tolman (2001) has taken up again Kant's arguments in order to position his skepticism of current psychology: "A natural-scientific psychology is doomed to failure from the outset. Only a psychology that is at once moral and natural has the capacity to rise above the merely empirical" (p. 182).

But empirical psychology, banished from the field of metaphysics, and understood as applied philosophy, was too important to be neglected. Instead, it was included in Kant's anthropology, published in 1798 as *Anthropology From a Pragmatic Point of View*, and covered a variety of psychological topics (Kant, 1798/1968). The first book of his *Anthropological Didactic* covered the faculty of cognition [Erkenntnisvermögen] and discussed senses, ideas, consciousness, reason, imagination, understanding, cognitive psychopathologies, introspection, and so on; the second book regarded feelings of pleasure and displeasure [Gefühl der Lust und Unlust], feeling for the beautiful; and the third captured the faculty of desire [Begehrungsvermögen] (affects, passions, the moral good, and so on). As pointed out above in discussing Tetens, Kant promoted feelings of pleasure and displeasure as a bridge between the two other faculties and argued that all psychological faculties could be traced back to those three basic ones. His *Anthropological Characteristic* investigated the character of person, gender, folk, "race," and the human species [Gattung]. From a postcolonial perspective one must point out that Kant's anthropological reflections on "race" and ethnicity certainly did not reach the notion of an empirical doctrine since they were filled with prejudicial remarks (see Bernasconi, 2001; Teo, 1999b). Kant is certainly *not* "the only philosopher in the German tradition who is truly devoid of ambiguities" (Habermas, 1997, p. 84) (see Chapter 9).

Kant's (1798/1968) critique of the method of self-observation in his anthropology (see BA11-BA15) is also noteworthy. Kant made a distinction between noticing [bemerken] and observing [beobachten] whereby observing referred to a methodical collection of observations concerning

our selves, useful as material for diaries, but afflicted with the problem of easily leading to idolization [Schwärmerei] and even to madness [Wahnsinn]. According to Kant, paying attention to one's self was necessary but should not be performed in daily communication because it would lead to embarrassment or eccentricity. The opposite of embarrassment or eccentricity was frankness, a confidence in oneself of not being judged negatively by others. Kant's concerns were centered on self-observation (introspection) because this method would lead to confusion and one would discover only what one has put into the mind, might those things be of a flattering or of a frightening kind. If acts of imagination were observed after they had been called upon deliberately, then they might be worthy of reflection. But the observation of unintended mental processes would be a reversal of the natural order of knowledge and might lead directly into the asylum.

EARLY 19TH CENTURY CRITICS OF PSYCHOLOGY

Johann Friedrich Herbart, who was called to Kant's chair in Königsberg in 1809, was one of the giants of 19th century philosophy, psychology, and pedagogy. Early historians of psychology recognized him as one of the major players in psychology (Hartmann, 1901; Dessoir, 1911; O. Klemm, 1911). Herbart receives less attention in contemporary history of psychology despite his role in the demise of faculty psychology, his innovative mathematical and educational psychology, and his conceptualization of unconscious processes (a notable exception is Benjafield, 1996). Herbart also provided a metacritique of Kant's critique of psychology, which will not be part of this reconstruction (see Meyer, 1870). Herbart (1824) was well aware of the importance of a critique of psychology and suggested that Carus's history of psychology was useful but that a critique of psychology would be "something much more preferable" (p. 44). Significant is Herbart's contribution to the elimination of faculty psychology, which assumed that each psychological expression could be explained by a particular faculty. For example, to account for the fact that persons were writing poetry, faculty psychology assumed a faculty of poetry (a faculty also listed by Kant, 1798/1968, BA79-BA93).

Kant did not challenge the idea of psychological faculties. This task was left to Herbart, who deserves a place in the history of the critique of psychology.[14] However, Herbart (1816) was part of ongoing psychological discourses and thus, showed ambivalence regarding his own critical assessments of faculty psychology. He divided his textbook of psychology

into two parts: In the first part he presented psychology from the perspective of faculty psychology, whereas in the second part he introduced his own psychological system, based on the hypothesis of ideas as forces. Herbart drew a connection between faculty psychology and Wolff's empirical psychology and related his own psychological system to Wolff's rational psychology (p. 8). Empirical psychology, according to Herbart, should cover the self and the mind and had been material for poets, ethicists, historians, and philosophers. Yet, empirical psychology could not substantially increase knowledge, because all of us knew most about psychology from our own observations (p. 1).

Herbart complained that psychology was different from the other empirical sciences because pure empiricism in psychology would be impossible. He argued that if anyone promised such a method one would have to be prepared for fraudulent claims. In addition, "self-observation mutilates the facts of consciousness" (p. 3) and psychological concepts were developed on an unscientific foundation. Whereas the natural sciences were able to show, according to Herbart, concrete examples of their theories and operated with systematic abstraction, psychology would not be based on a clearly determined material, its abstraction would be unsystematic, and the establishment of laws derived from observations could only be performed in a fragmentary manner. Inner experience, which did not have more legitimacy than outer experience, could not be the basis for developing scientific laws, because human beings were an "aggregation of contradictions" (p. 6), because mental life was in "permanent change" (p. 7), and because experience would not be able to distinguish whether the dualism of mind and body was real. In his *Psychology as Science*, Herbart (1824) repeated this argument against introspection. In the process of self-observation individuals would bring their own history into the process, so that introspection could never produce pure results, which would always be contaminated with the preexperiences of the observers. Moreover, Herbart argued, one's own life history depended on memories and memories were constrained by effort, incidental events, gaps, and personal interests. He even mentioned that one might invent, after the fact, that one has experienced certain things (pp. 12-13). (Herbart was equally critical of the observation of others.)

Herbart (1816) argued that the largest damage was accomplished in psychological study when what actually happened in the mind was explained by faculties that humans possess, a process by which psychological faculties became personified, and psychology turned into mythology. In fact, the concept of faculty would allow for an indeterminate number of classifications. For instance, imagination could be divided further into poetic, mathematical, or military imagination; yet, all these classifications

were, as historical examples show, prone to constant revisions and did not provide a clear foundation. If certain faculties could not be identified in wild humans and in newborns, then faculty psychology was forced to argue that they show the potential to develop theses faculties. But if the faculty of poetry was just a possibility and not a reality that could influence or not, then the concept did not explain anything. Herbart pointed to the problem that faculty psychology required the developed and educated adult human being as the source for studying human psychological faculties. But this also meant for Herbart that "there are no *general* facts" (p. 12) in psychology and that facts could only be found in the momentary conditions of individuals. He pointed to inconsistencies of faculty psychology in terms of classification when one compared the division of the soul into ideation, feeling, and desiring, which actually contradicted an organization that distinguished between higher and lower faculties, for example, in order to differentiate humans from animals (p. 13).

Herbart (1824) showed most convincingly that one could not explain the *facts of consciousness* by classifying them and by assuming for each class of facts an underlying faculty. Faculty psychology was unable to answer the question of what kind and how many faculties really existed (p. 3). Faculty psychology could not explain the causal interconnection of the various faculties, for example, the relationship between thinking and feeling, and instead of answering this question, faculty psychology intended to emphasize the difference between the faculties, which appeared to be involved "in a true *bellum omnium contra omnes*" (p. 23). In contrast to such a position, Herbart (1825) pointed out that ideation, feeling, and desiring were united and that in the process of ideation (cognition), feeling and desiring were involved at the same time—just the balance between them might change (p. 66). He also pointed out that it was not clear whether the faculty of feeling was a faculty that produced feelings or one that recognized feelings (p. 76). According to Herbart, feelings were part of consciousness but not the faculty of feeling. Faculty psychology did not realize that the faculties of the soul had been developed in abstraction from experience.

Herbart (1816) believed that one could use the concept of a faculty not to produce psychological laws, but in order to clarify psychological phenomena. For example, in his textbook's chapter on abnormal conditions he suggested that the source of madness would be a sick imagination, in most cases influenced in a damaging mode by the faculty of desire (p. 80). However, he emphasized that such a clarification did not really explain psychological events. Herbart's (1824, 1825) rejection of faculty psychology led him to substitute the concept of faculty with the concept of *force*, to put ideation in the center of psychology, and to develop a mathematical psychology of the statics and mechanics of mental life, the former dealing with

the inhibitions and fusions of ideas, and the latter, for example, examining the idea's thresholds. The soul's ideas were the true subject of consciousness (Herbart, 1825, p. 295). These ideas could disturb each other or they could be in balance or in motion. These processes should be represented in mathematical equations, in a completely rational way, based on experience, metaphysics and mathematics. Herbart believed that his psychology would resemble natural science, and in contrast to Kant's assessment, he showed that psychological phenomena could be treated mathematically. Herbart's psychology represents a paradigm shift in psychology, because as an authentic psychology it did not require physiology. Although Herbart founded his own school and was extremely influential in the early 19th century, the course of psychology took a different direction.

Eduard Beneke (1798–1854) was another pioneer of early 19th-century psychology and wrote, among other psychological treatises, two textbooks on psychology in 1833 and in 1853, with the latter focusing on the application of psychology. Hegel, chair at the prestigious University at Berlin, did not accept Beneke's writings that rejected the philosophical speculation of German idealism and thus, he started only as professor extraordinarius at Berlin. He developed a system very similar to Herbart, and has been accused of plagiarism (see Brett, 1912–1921/1962, pp. 563–565). Beneke (1845) intended psychology as a natural science, suggesting that psychology was the natural science of inner experience and should follow the methods of the natural sciences. He also suggested that it was the right time for a new approach because "only a very small crowd still believes in the speculative gospel"[15] (p. ix) of German idealism. He extended the critique of faculty psychology by comparing the developed and undeveloped soul and argued that psychological phenomena, which could be identified in the developed mind, would not allow the conclusion that faculties or powers of these phenomena exist in the undeveloped mind. Equally plausible was that these forms developed later in life through a long string of diverse processes without existing as faculties or powers. Thus, understanding, judging, desiring, and reasoning were not faculties but developed and emerged over time. Humans were predetermined to understand but their understanding was not preformed, and consciousness was not inborn, because there was only an inborn capacity for consciousness (see p. 51). Faculties were not substances but expressions and activities of an underlying basic faculty. The basic conceptual mistake consisted for Beneke in making something abstract into something concrete (see also Dreβler, 1840).

Interestingly, Beneke (1845) covered topics of rational psychology without labeling them as such when he discussed in his first chapter the general processes and the basic essence of the human soul, including the

mind–body problem. Interesting as his ideas are, including his chapter on psychopathologies, he is significant in the history of the critique of psychology as someone who challenged the *relevance* of traditional psychology (see also Chapter 2), while at the same time expressing his hope that his *new psychology* could contribute to the solution of sociopolitical problems (even if the hope was only expressed in the preface). He complained that the limitations of the status quo had been identified previously and adequately, but that there was a lack of understanding of how to solve its problems. A "thorough solution" (p. viii) could only be achieved by understanding the basic processes of human nature. A natural science of the human mind should be the basic science in academia and should help to understand and solve human needs. But German philosophy "has not found time and desire to deal with reality" (p. ix) and rather occupied itself with concepts such as "absolute Nothingness" [absolutes Nichts].

In order to contextualize such a critical perspective one should study the historical political-economic background. The publication of Herbart's (1816) textbook nearly coincides with the final defeat of Napoleon Bonaparte (1769–1821) in 1815 at Waterloo. Thereafter, the German states experienced a time of restoration, which lasted till 1830, the July revolution in France, which stimulated various political demands in Germany (see Snell, 1976). Most significant in the middle of the 19th century were the revolutionary events of 1848/1849. Economically, the German states experienced a rapid social development in the first half of the 19th century, moving from a mostly agrarian to a more industrialized society emphasizing manufacturing, commerce, and urban growth. These dramatic changes did not really concern most academics, who were more individualistic than social in their self-understanding, and more "scholastic" than political (see also Schnädelbach, 1984). The opposition to feudalism, the many political gatherings, social revolts such as those by the weavers in the 1830s and 1840s, and even the revolution of 1848 mostly inspired intellectuals outside of the university system such as Marx and Engels. Ramm (1967) argued that an "intellectual speculation about men in society" (p. 463) was the characteristic of German intellectuals in the 19th century. However, not much of this reflection can be observed in the writings of many psychological authors, who did not challenge the various state bureaucracies (see also Jaeger, 1982) and rather saw social classes as unavoidable consequences of social life (see Schilling, 1851, p. 214).

Beneke (1845), who addressed these political, social, and religious problems as issues that could be overcome with the help of psychology, did not outline a program for a political psychology. He shared the criticism that academia was about theory and not practice and he complained about German philosophy. More typical was Theodor Waitz (1821–1864) who confessed that

he did not allow the 1848 revolution to disturb his psychological studies not because he was indifferent towards the political movement, but because he never could decide to be active in matters of which he understood little (Gerland, 1896; see also Siebert, 1905). Beneke (1853), in response to his ethical-political concerns, developed a textbook of pragmatic psychology, specifically designed to help practitioners. For Beneke psychology was the natural science of the soul, and because other natural sciences had practical applications, psychology should have applications as well, a discipline called pragmatic psychology. He called it a "prejudice" (p. 1) when psychologists assumed that psychology was too noble to deal with practical matters.[16]

The Herbartians Moritz Wilhelm Drobisch (1802–1896), professor in Leipzig, and Waitz followed Herbart's basic critiques. They did not develop a systematic critique, which was accomplished by Lange (see Chapter 4) but critical complaints were expressed in introductions or prefaces. Drobisch attempted to provide knowledge about general psychological phenomena and their laws, a description that should be based on normal psychological life (in contrast to abnormal psychology). He published various works on psychology, one on mathematical psychology, and a book on *Empirical Psychology According to the Natural-Scientific Method* (Drobisch, 1842). Drobisch compared the results of psychology with those of the natural sciences and argued that astronomy, physics, chemistry, and physiology had developed more rapidly than psychology. The reason he identified was the association of psychology with philosophy, instead of with the natural sciences. An affiliation of psychology with the natural sciences, however, did not mean taking another natural science as the idol, prematurely adopting its method, or imitating its theories, but rather comprehending the content of consciousness clearly, correctly, and representing its natural nexus, from where true theories of mental life could be developed (see pp. 30–31). This meant that any physiological approach to psychology would be limited because psychology dealt with the content of consciousness and not just the processes (p. 30). Drobisch reconceptualized rational psychology as theoretical psychology, which should not be speculative but should apply mathematics to the field. His discussion of mental life included a critique of existing ideas, including the concept of a psychological faculty.

Theodor Waitz, professor of philosophy at Marburg, is now better known for his ethnological and anthropological writings, which were translated into English (see Waitz, 1858/1863). Rejecting idealistic approaches to psychology he conceptualized psychology as a natural science (see Waitz, 1849). He rejected speculation because it assumed certain concepts without a theory about where these concepts came from (Waitz, 1846, p. iii). Instead, Waitz intended a *foundation of psychology*, which should be achieved by

basing psychology on "undoubted physiological facts" (p. iv)[17] and which would allow psychology to become independent of philosophy. He included a critique of psychology—labeled as the removal of common psychological prejudices (pp. 126–138)—in which he rejected Kant's idea of time and space as a priori forms of sensibility. As an argument he used the developmental observation that a child and an adult have very different ideas of space and time. Waitz also rejected faculty psychology and suggested that inborn mental capacities were in fact inborn physical capacities. His physiological orientation made it also necessary to include a long treatise on animal psychology in the foundation of psychology.

Waitz (1849) also reflected on the problem of self-observation. He argued that introspection divided mental life into an observing and an observed part when in fact mental life was united. In addition, the observer was identical with the observed which was from a metaphysical point of view impossible and from a logical point of view a contradiction. His conclusion was that self-observation necessarily always contained an observation error, which could be improved upon but never completely overcome (p. 17). He contrasted self-observation with the observation of others. Yet, the observation of others would be dependent on correct interpretation of external signs such as words or facial expressions. Waitz concluded that therefore, the observation of others was in "great danger of error" (p. 17), which would make it only a secondary method. Psychology would require introspection, which would necessitate criteria in order to make it a precise method, as well as psychological analysis and synthesis.

Gustav Schilling (1815–1872), professor of philosophy in Gieβen, envisioned in his 1851 textbook on psychology an application of Herbart's fusions and inhibitions to society. He joined the practice of criticizing faculty psychology and called the idea of psychological faculties insufficient and empty. Schilling (1851) provided several arguments against faculty psychology, such as that only individual momentary states could be identified in mental life but not faculties (for example, I experience anxiety but not the faculty of anxiety); faculties were insufficient to describe mental life and led to false distinctions; the concept of faculty did not explain mental life; the unity of the soul contradicted the notion of independent faculties; and when faculties were understood as real possibilities, psychology had to deal with an illogical concept (see pp. 208–212).[18] Schilling is more of interest in terms of raising the relevance question and hoping that psychological theories could be applied to society. He also emphasized that external nature and society influenced mental life. But instead of understanding mental life in terms of social life (as some of his contemporaries such as Marx did, see Chapter 6), he understood social life in terms of mental life. For Schilling, persons were like ideas that inhibit each other or fuse together

(Schilling was a Herbartian) and because certain ideas led and others served in mental life, certain individuals should lead and others should serve. Classes were then the "inevitable consequence of processes developing from the cohabitation of many" (p. 214).

Immanuel Hermann Fichte (1797–1879) (son of the famous J. G. Fichte) was author of several psychological publications. Important is his 180-page critical history of psychology in his *Anthropology* (Fichte, 1860) (see Chapter 1). Karl Fortlage (1806–1881), professor in Jena and an eminent psychological author, published several books on psychology. In his *System of Psychology* (Fortlage, 1855) he praised the advances of physiology and defended the role of introspection while rejecting *metaphysical* speculation. His goal was a reconciliation of empirical research with speculation in order to promote the moral and religious interests of humanity (Fortlage, 1875). Leopold George (1811–1874), professor of philosophy in Greifswald, declared that the soul was part of nature, and thus, experience and physiology were crucial for the discipline's progress—at the same time he attempted to combine this progress with Hegel's speculation.

The authors mentioned here did not provide a systematic critique of the subject matter, method, or relevance of psychology, but rather shared a rejection of materialism while attempting to do justice to the successes of the natural sciences. This was most clearly expressed by Schaller (1856) who rebuffed materialism and called it "one-sided, indefensible, a hypothesis that contradicts the facts"[19] (p. iii). The value of metaphysical reflection in psychology fits also with Rudolph Hermann Lotze, another psychological mastermind of 19th century psychology, who began his *Medical Psychology* (Lotze, 1852) with long enquiries into the essence of the soul. And finally, one should not forget the mastermind of speculative thought, Hegel, who provided extensive criticisms of phrenology, physiognomy, and empirical psychology, criticisms which could also be brought under the umbrella of a philosophical critique of natural-scientific approaches to psychology (see Tolman, 2001, for a concise overview).

4

The Natural-Scientific Critique

The 19th century systematic critique of philosophical psychology, in its rational or empirical form, was not put forward by natural scientists, who were more concerned with actual research. Most systematic critiques of philosophical psychology emerged from philosophers themselves who were critical of the status quo of philosophical psychology while admiring the successes of the natural sciences. Researchers such as Helmholtz (1903) complained in the middle of the 19th century that under the dominance of Schelling's and Hegel's philosophies academics preferred the short path of pure thought to the burdensome long path of natural-scientific research (see p. 89). In contrast, paving the way for neo-Kantianism, Helmholtz praised Kant and argued that there was no difference between philosophy and natural science, and that Kant's ideas were alive. Physiological researchers such as Johannes Müller (1801–1858) had found that the nature of the senses determines perception, and thus supported a physiological interpretation of Kant's theory of knowledge that stated that the mind determines knowledge. However, Helmholtz did not develop a systematic critique of psychology. John B. Watson, who brought one of the most significant changes to Western psychology, was not a genuine natural scientist, and received notoriety in psychological historiography because of his rhetorical skills rather than for the brilliance of his own research.

The assumption that "speculative" psychology did not have much to offer to scientific psychology is misleading from a theoretical-historical viewpoint. For the intellectually interested historian the evidence is over-whelming that research interests in the second half of the 19th century emerged from discourses and personal connections of the first half (see, for instance, Danziger, 2001, on Wundt's concept of volition). In fact, some issues addressed by experimental psychologists in the second half of the 19th century could only be understood by reconstructing the discussions of rational and empirical psychologists (e.g., the concept of *apperception* was used by Leibniz as well as by Wundt). The natural-scientific critique of psychology in the 20th century targeted philosophical psychology, human-scientific psychology, psychoanalysis, and (as natural-scientific psychology became the dominant program) it criticized other natural-scientific approaches to psychology as well as theoretical and methodological concepts used in the mainstream (for instance, cognitive psychology challenged behaviorist psychology). However, in this chapter I will focus on early natural-scientific psychology's critique of mainstream philosophical psychology in the 19th century.

LANGE'S CRITIQUE OF PSYCHOLOGY

The first systematic critique formulated from the perspective of natural-science and combined with an extensive alternative program, was expressed in one of the most influential books of the 19th century, F. A. Lange's (1866/1950) *The History of Materialism and Criticism of its Present Importance*.[1] The *History of Materialism* is a philosophical text that challenged psychology from the perspective of the natural sciences. Lange's critique of psychology and his alternative program of a *psychology without a soul* were developed in this book, to be more precise, in the book's third section entitled *Man and the soul*, which encompasses nearly 150 pages (pp. 83–230).[2] Lange originally planned this third section as a separate book with the title *Critique of Psychology*, but in the end he published it as part of his *History of Materialism* (see Pongratz, 1984). Lange passionately criticized philosophical psychology, its subject matter and methodology, while offering an alternative framework. In fact, he had outlined a program for an objective psychology nearly half a century before J. B. Watson expressed his ideas. Contemporaries of Watson were well aware of that fact and Titchener (1914) wrote in his critique of Watson's *Psychology as the Behaviorist Views it* that Watson's behaviorism was not really new, specifically referring to Lange's writings.

Early pioneers of psychology were familiar with Lange's writings on psychology and could access his views on a psychology without a soul in

either the original German or the English translation. James (1890/1983) referred to Lange in his discussion of the functions of the brain in his *Principles*, and quoted a lengthy passage in which Lange rejected and ridiculed phrenology. G. S. Hall (1904) knew Lange's work and quoted the *History of Materialism*, as did Baldwin (1905). Wundt (1877) identified Lange as an important figure in idealistic neo-Kantian philosophy and referred to the *History of Materialism* as an excellent source. Brentano (1874/1995) referred several times to Lange's ideas in his *Psychology from an Empirical Standpoint*, yet called Lange's notion of a psychology without a soul paradoxical, and rejected Lange's criticism of introspection.

German historiography recognized Lange's role in the history of psychology and German thought in general (Sieg, 1994) and English-speaking writers were aware of his significance (see Russell, 1950; Stack, 1983; Willey, 1978). O. Klemm (1911), the historian of psychology followed Lange's course of description in his historical discussion of atomistic materialism (p. 32) and mentioned him prominently as an opponent of introspection (innere Wahrnehmung) (p. 85). More recently, Pongratz (1984) has counted him among the "fathers of modern psychology" (p. 90), but added that he has often been overlooked in psychology because Lange had not published his originally planned *Critique of Psychology* as a stand-alone work. In North America, for example, Hilgard (1987) introduced Lange as an early critic of introspection, and interpreted Lange's psychology without a soul (misleadingly) as a psychology without a self.

Lange belonged to a group of early epistemological Kantians, who introduced a psycho-physiological foundation for Kant's epistemology, which would lead to neo-Kantianism, an enormously influential yet divided intellectual movement of the 19th century (see Köhnke, 1991). As discussed earlier (Chapter 3), Kant's (1781/1968) *Critique of Pure Reason* had suggested that human knowledge did not mirror external objects and events but that external objects and events were modeled according to the human mind. Kant suggested that *things-in-themselves* were essentially unknowable but the human mind could know and understand their lawful appearances. In accordance with such an epistemology, the physiologist Johannes Müller (1801–1858) had formulated that the mind was not cognizant of objects and events in the external world but rather of states of the nervous system (see Fancher, 1996). Lange (1887) mentioned Müller for addressing this issue, but primarily credited Hermann Helmholtz (1821–1894) for demonstrating that the nervous system imposed its characteristics on mental processes.

For Lange, Helmholtz's studies refuted epistemological materialism and supported a Kantian inspired epistemology. However, it was not Kant's forms of intuition and the categories but the physiological organization of

humans that determined what humans know. Lange (1887) designated the idea that the qualities that humans perceive do not belong to things-in-themselves but to humans' physiology as the fundamental statement of psychology and philosophy. Lange, who had attended Helmholtz's lectures as a student, rejected, as Helmholtz did, not philosophy in general but only absolute idealism as developed by Hegel and Schelling, and he saw a return to Kant as the unique possibility to invigorate philosophy (see Lange, 1887).

Lange (1866/1950) neither doubted external reality nor the fact that it followed certain natural laws. However, he was convinced that humans were not able to grasp the essence of reality. Because of the character of the senses, humans could not have true pictures of things-in-themselves but only perceived the effects of objects. Colors, sounds, and smells did not belong to things-in-themselves but excited the senses and were qualitatively very different from what humans perceived. Human beings captured only the world of experiences and appearances based on their physiological organization. Body, matter, and the *physical* were only ideas, but these ideas resulted from natural laws. It might be difficult to understand that the promotion of epistemological idealism did not contradict support for an empiricist natural-scientific psychology and did not mean the end of science and truth (see Gregory, 1977). Lange was epistemologically an idealist but in actual research he favored a sort of *positivism* (see Köhnke, 1991). As an idealist he thought that the human mind had no access to things-in-themselves and that science could only study their appearances. As a positivist, or to be more precise, as a materialist of appearances (Vaihinger, 1876), Lange believed that appearances could be studied with the rigorous concepts and methods of the natural sciences. Lange emphasized that psychologists could formulate natural laws based on these appearances.

Lange (1866/1950) did not "deconstruct" psycho-physiological research or studies on the relationship between the brain and the psyche when he summarized the results of Jacob Moleschott (1822–1893), Pierre Flourens (1794–1867), Theodor Meynert (1833–1893), Eduard Hitzig (1839–1907), or David Ferrier (1843–1928). His critique targeted the phrenological studies of Franz Josef Gall (1758–1828) and Johann Kaspar Spurzheim (1776–1832), and academic philosophical psychology. This critique was required before Lange would outline his alternative program for an objective psychology without a soul. Phrenology was rejected because of its unscientific methods and its logic of research. Lange pointed out that Gall's procedure did not follow the methodological standards of the exact sciences, and remarked that this circumstance was an important source of the success of phrenology. Because it did not follow the natural-scientific standards, everyone could adopt phrenology, the

results were interesting and experience seemed to confirm the results (see pp. 113–114). In fact, Lange compared phrenology in its scientific status to astrology and homeopathy. To paraphrase what a Popperian would later say: Phrenology found evidence for verification but did not provide any rules for what would constitute a falsification of its theory.

Lange also distanced himself from Johann F. Herbart's influential academic mathematical psychology (see Chapter 3) which had influenced Lange's thinking. He even published a separate critique of Herbart's psychology in *The Foundation of Mathematical Psychology: Essay on the Fundamental Error of Herbart and Drobisch* (Lange, 1865). In the *History of Materialism*, Lange (1866/1950) emphasized that Herbart's attempt to master the world of ideas was not as successful as he intended and in no way, as Herbart had attempted, could be compared to the ways Copernicus and Kepler had mastered the world of the planets. He even compared Herbart's system to the delusions of phrenology and ridiculed Herbart's psychology as being trapped in a forceful metaphysical whirlpool (see p. 164).

However, he agreed with Herbart that the field of psychology needed a critique of psychology which would have to conclude: "We are afraid that if this were to be written now, there would not remain very much of the whole supposed science" (p. 167). Lange also rejected the psychology of the Herbartian Theodor Waitz (1821–1864), who had given up Herbart's mathematical method and had changed Herbart's system into an outline for an "empirical" natural-scientific psychology (see e.g., Waitz, 1849). Waitz belonged to a group of 19th century philosophical psychologists who attempted to make psychology into a scientific endeavor (see Chapter 3). However, according to Lange, Waitz had just transformed Herbart's mathematical psychology into a theory on the nature of the soul. But Lange argued that there was no need to reflect and study the nature of the soul as long as psychology had "little accurate knowledge of particular phenomena which are the first things to be considered by any exact investigator" (p. 168).

Lange was very critical of German philosophical attempts to develop a systematic foundation for psychology. Karl Fortlage (1806–1881), professor of philosophy at Jena, had proposed an empirical scientific psychology based on introspection (Fortlage, 1855). For Lange, "the whole book deals in general propositions, with a terminology of his own invention, without a single definite phenomenon being described" (Lange, 1866/1950, p. 171). Rudolph Hermann Lotze introduced his famous *Medical Psychology* (Lotze, 1852) with a discussion on the existence of the soul, the mind–body problem, and the essence of the soul before he dealt with physiological issues. For Lange, this first part contains "a hundred

and seventy pages of metaphysic, to which it is owing that medical men have not benefited by the book" (p. 175). I. H. Fichte's (1860) metaphysical psychology as developed in his *Anthropology* was characterized by Lange as showing "logical weaknesses and pretentious repetition of obsolete errors" (p. 176). Leopold George's (1811–1873) speculative psychology (see George, 1854), and Julius Schaller's (1810–1868) studies were rejected because they were dependent on speculation. Only Wilhelm Wundt was mentioned favorably as a counter-example to German academic philosophical psychology. Lange (1887) also praised Ernst Heinrich Weber's (1795–1878) and Gustav Theodor Fechner's (1801–1887) psychophysics as a substantial building block in a scientific psychology.

In *The Labor Question in its Significance for the Present and Future*, Lange (1875) even interpreted Weber and Fechner sociologically. Lange suggested that Weber's law, according to which the ability to distinguish stimulus differences did not depend upon the absolute but on the relative difference (see Fechner, 1860), could be applied to social and political phenomena. According to Lange "the sensation of the increase of political oppression is not proportional to the absolute value of the increase, but that it is dependent on the relation of the increase to the size of the whole political oppression" (Lange, 1875, p. 115).[3] Lange suggested that a society with generous freedoms would react with large discontent towards a moderate deterioration of rights. A society with already limited freedoms in a context of oppression would react with less discontent towards the same increase in mistreatment and the experience would be less severe towards the same amount of political deterioration. Lange (1887), who had worked as a schoolteacher, and thus was concerned about pedagogy, also envisioned educational implications from psychophysics and suggested that certain educational tools be based on psychophysical knowledge. He suggested that it was unwise to provide children early in life with gifts and treats because such children would not be able to appreciate small treats. He considered it wiser to make the child's mind accustomed to a few treats, which would leave children receptive for small gifts. Similarly, he recommended that teachers should think about the principle that the relative increase rather than the absolute amount of rewards would be relevant.

In contrast to highly critical remarks on German philosophical psychology, Lange praised British psychology—particularly the contributions of Charles Darwin (1809–1882), Herbert Spencer (1820–1903), and Alexander Bain (1818–1903). His only concern was that the British psychologists had not gone far enough, because their theories still lacked a firm experimental foundation. Lange (1866/1950) even argued that British psychology was much more useful to practitioners (politicians,

teachers, physicians, and artists) than the German psychological literature. Lange specifically had great admiration for Darwin and, together with Ludwig Büchner (1824–1899), was one of the first German intellectuals to incorporate Darwin's ideas into psychological and political theory. Weikart (1999) even suggested that Lange was "probably the first anywhere" (p. 83) to apply Darwinism systematically to social issues. Indeed, several years before Darwin published *The Descent of Man* in 1871, Lange talked about the struggle for existence in human society in his 1865 edition of *The Labor Question*.

Lange applied Darwinism to psychology as well as to social theory. He praised Darwin for contributing to the psychological understanding of the human species and argued that complete departments of psychology should follow Darwin's lead. Lange introduced his psychology (1866/1950) with a reflection of the evolutionary bases of the human mind, which included a discussion on the age of the human "race" and its unity. Summarizing and challenging the scientific discourse of his time, he laid out as an axiom of psychology, the notion that mental life should be understood as part of natural history and humans' evolutionary past. Not avoiding polemics, Lange suggested that it would be more acceptable to evolve from a highly organized animal than to emerge from an "inorganic clod of earth" (see p. 109).

In terms of his critique of philosophical psychology, Lange (1866/1950) rejected the idea, common among his philosophical contemporaries, that the *subject matter of psychology* could be determined or clarified a priori (see p. 162). For Lange, it did not make sense to start with metaphysical principles of the soul such as "extensionlessness" (p. 163) (Descartes' res cogitans) because such definitions would not allow for the scientific treatment of the subject matter. Moreover, he suggested that the concept of a soul was empty and solely a myth (see p. 168). Instead of defining psychology's subject matter a priori it could be defined a posteriori. A *psychology without a soul* should proceed on the basis of investigating various mental phenomena.

Lange suggested that it would still be useful to keep the name psychology as long as there was something that was not studied by any other science. Besides sensation and perception, psychology should investigate human action and language, and generally all manifestations of mental life (see p. 178). Lange also expressed disrespect for traditional psychological terms such as thinking, feeling, and willing because it was not clear what corresponded to them, and a priori definitions would be of no use, for example, in comparative psychology. He pointed out that humans knew nothing of a will but they would know its manifestations: "When we speak of this 'will,' we only add a comprehensive word for a group of

vital phenomena. Every supposition of a thing for a name is to exceed the facts given us, and is, therefore, scientifically worthless" (p. 148).

Lange criticized the core method of philosophical psychology, namely self-observation (introspection) (pp. 168–177). He called upon Kant who noted that self-observation "leads to enthusiasm and hallucination" (p. 169), and thus Kant, according to Lange, based his own empirical psychology, his anthropology on the observation of others rather than on introspection. Lange emphasized that psychology did not require introspection or subjective accounts. Instead of self-observation, he recommended the controlled observation of others. The crucial moment in the method of observation referred to the issue of whether the observation could be "made by others . . . or whether it evades any such control and confirmation" (p. 174). The capability of being tested became a core feature for Lange's program, as did the elimination of the influences of preconceived views. The exclusion of subjectivity, "the neutralising of the influence of the observer's subjectivity" (p. 177), made observation an objective method. Introspection and observations which were directed towards one's own thoughts, feelings, and impulses did not allow for the testing nor the exclusion of subjectivity and thus introspection would be an inexact and subjective method that should be excluded from natural-scientific psychology.

In terms of a natural-scientific methodology he suggested a pragmatic perspective because the extent to which the "scientific method can be applied to psychology must be shown by the result" (p. 177). For Lange psychological processes were based on physiology and physics, and thus he suggested that psychologists should identify the physical or physiological basis for each psychological process. Lange called this method the *somatic method* (p. 184), which in fact was a natural-scientific materialistic method. In order to be successful, research psychologists "should as far as possible keep to the corporeal processes" (p. 184) that were connected with mental phenomena. This method was neither a refutation of nor a contradiction to his epistemological idealism because such a methodological approach did not suggest that a corporeal process was the ultimate essence of psychological reality. In line with this somatic method, Lange suggested that psychologists should explain emotions by their corporeal symptoms (see p. 183). For Lange any solid result in the study of emotions required a serious study of symptoms. He proposed a program that anticipated the William James (1842–1910) and Carl Lange (1834–1900) theory of emotion by arguing that the "consciousness of our own emotions is only determined and brought about by the sensation of their corporeal reactions" (p. 184). In the context of emotions, Lange also praised Darwin's (1872/1965) essay on *The Expression of the Emotions* for psychology.

Lange also envisioned support for his natural-scientific psychology, his psychology without a soul, from *animal psychology* because it would be easy to "subject the animal to experiments" (p. 178). Animal psychology provided support for the rejection of introspection because animals could be observed rigidly by focusing on movements and actions, while at the same time the subjectivity of the observer or the research subject did not play a role in animal experiments, and the procedure could always be repeated. Animal psychology would provide objectivity because observations could be repeated and thus were cleansed from the influence of personal preconceptions. Not surprisingly, Lange also recommended the study of children, especially infants. He pointed out that systematic experiments on newborns could contribute immensely to the foundation of a natural-scientific psychology (see p. 180).

Even more than in animal psychology, psychologists could observe the basic elements of any psychological process in infancy. For example, in observing the first words of a child, psychologists could draw conclusions on the development of the mind (see p. 174). Lange concluded that from experimental infancy research one could learn more than from the many volumes based on speculation. Another area supported by Lange was *Völkerpsychologie*[4] as far as it applied a linguistic method that could be used scientifically. Linguistics was for Lange one of the most essential sources of *Völkerpsychologie* as it had helped to bring language into scientific analysis. Lange mentioned Wilhelm von Humboldt (1767–1835) who had demonstrated the psychological character of speech. Yet, he also warned of early explorers: He mentioned James Cowles Prichard (1786–1848), and their psychological interpretations because they were often guided by misunderstandings, religious prejudices, ethnocentrism, and a lack of empathy for other civilizations.

In contrast to a philosophical psychology, Lange's natural-scientific psychology also promoted statistics. This becomes particularly clear in his work on the labor question where he called statistics "the most revolutionary of all sciences" (Lange, 1875, p. 16). According to Lange (1866/1950), statistics allowed for a solid methodological study not only into human actions and human chances, and in doing so, into social life, but even into the "motives which guide the individual in his actions" (p. 194). Psychological knowledge could be gained from the number and kind of crimes committed, suicides, illegitimate births, educational data, and the number of literary productions. Even statistics of commerce and navigation, traffic reports of the railways, quantities of crops and cattle, and the results of the subdivision of property (see p. 194) would lead to psychological knowledge. Being of a critical mind, Lange also warned against the prejudiced use of statistics, for example, when the

number of crimes occurring yearly in a country was used in order to make statements on the morality of a country. According to Lange, from a purely statistical point of view it would be necessary to begin such an analysis by "dividing the number of punishable actions by the number of opportunities or temptations to punishable actions" (p. 199).

Lange's emphasis on statistics for a natural-scientific psychology raised the philosophical question of free will. Lange concluded that individual will was governed by physical conditions and thus considered the doctrine of the freedom of the will to be "obsolete" (p. 196). Referring to Kant, he saw no contradiction between freedom and necessity or, as Lange phrased it, "between freedom as form of subjective consciousness and necessity as fact of objective science" (p. 196). For Lange, there was always "empirical conditionality and strict causality of all human actions" (p. 197). The average will "approximately represents the great mass of all individual will-impulses" (p. 195) and was influenced, for example, by age, sex, climate, food, and labor (see p. 195).

Mainstream North American psychology and historians of psychology have neglected Lange although he signifies the slow transformation of 19th century science, philosophy, and psychology (see Green, Shore & Teo, 2001). Lange rejected philosophical speculations on the nature of the mind and recommended detailed empirical studies. This was an important intellectual event. His arguments that psychology needed concepts derived from physiology instead of a vague terminology, that the subject matter of psychology was not the soul or consciousness, that psychologists should focus on actions and other manifestations of life, that introspection was subjective and thus the observation of others, a process that could be controlled, should be endorsed, and that psychologists should use statistics, animal and infant psychology, make Lange a true pioneer of natural-scientific psychology and a pioneer in the history of the critique of psychology.

THE PROBLEM OF SPECULATION

Auguste Comte (1798–1857) famously formulated the development of thought from the theological state (natural phenomena were produced by supernatural beings), to the metaphysical state (abstract forces produced phenomena), and finally to the positive state, growing since the time of Bacon, which included the study of natural laws and the observation of facts, accompanied by some reasoning and academic specialization. For psychology, Comte (1896) recommended the application of scientific methods, specifically the experiment, but argued that psychology should

be excluded from the positive sciences. He identified philosophical psychology as the last phase of theology (see p. 11) and suggested that mental phenomena could be studied sufficiently within anatomy, physiology, and his own program of a positive philosophy.

His critique of philosophical psychology targeted introspection because this method did not lead to any consensus in two thousand years of psychological pursuit and because introspection guided as many theories as there were observers of internal phenomena. In fact, according to Comte, psychologists "have mistaken their own dreams for science" (p. 13). Positivism has been an extremely influential meta-theory in psychology and developed into Ernst Mach's (1838–1916) *empiriocriticism*, and later into *logical positivism* or *logical empiricism*. In all types of positivism the demarcation of science from nonscience was crucial and the accusation of metaphysics and speculation became a kind of academic death sentence.

Indeed, one core feature of the critique of psychology expressed by natural-scientific proponents was the accusation of *speculation*. Lange (1866/1950) had argued that psychology could learn more from experiments than from all the books based on speculative reflections (see above). Wundt (1874/1910) characterized Herbart's understanding of feelings, emotions, and impulses from the interaction of ideas as a hypothesis that was in "conflict with an exact analysis of experience" (p. 26). Willy (1899) argued that Wundt's psychology was saturated with speculation and he started his essay on the crisis of psychology with the statement that "it is known that psychology in general is even today still caught in the bonds of speculation" (p. 1).[5] J. B. Watson (1913) challenged the idea that the subject matter of psychology should be the facts of consciousness and that the method for identifying these facts should be introspection. He argued that such a perspective would be caught up in speculative questions, which would not be open to experimental scientific study.

Skinner (1953), who followed in the footsteps of Watson, intended psychology as a true science (he transformed psychology into radical behaviorism). His critique of hermeneutic psychology emphasized the lack of precision of what understanding, interpretation, intuition, and value judgment precisely meant and its lack of practical relevance. In Skinner's words, these hermeneutic approaches have yet not shown "any capacity to work a change in our present predicament" (p. 8). An irony was that Skinner's behaviorism, particularly his theory of language development, was criticized by Chomsky (1959/1967) for its speculative character, repeated and most clearly expressed in his introduction to the 1967 reprint of his original 1959 paper. Referring to Skinner's ideas on language acquisition as "largely

mythology" (p. 142), Chomsky (1959/1967) pointed to "Skinner's specula-
tion regarding language" (p. 142); "behaviorist . . . speculation as to the
nature of higher mental processes" (p. 142); and "a futile tendency of mod-
ern speculation about language and mind" (pp. 142–143). In the original
review Chomsky (1959/1967) argued that the results obtained in the labo-
ratories of the behaviorists could not be applied meaningfully to complex
human behavior such as language because the "speculative attempts to dis-
cuss linguistic behavior in these terms alone" (p. 145) would neglect funda-
mental factors. One could label it a *metairony* that Chomsky's concept of an
innate *language acquisition device* should be accused of speculation (see
Moerk, 1989).[6]

Willy (1899) did not intend a natural-scientific critique of psychology
but a general critique of the psychology of his time, which often consid-
ered itself to be natural-scientific (Wundt, Brentano, James, Ebbinghaus,
Mach, Külpe, etc.). He identified two main dimensions of the crisis of psy-
chology: the metaphysical crisis and the methodological crisis (see also
Chapter 2). The metaphysical crisis of psychology consisted in the fact
that at the end of the 19th century, psychology was caught in the bonds of
speculation, which was largely influenced by metaphysical spiritualism.
According to Willy, psychologists like Wundt, in the name of exact empir-
ical science, fell back into the lap of speculation. If they truly wanted to
succeed as psychologists, then they should not give any leeway to the
philosophical worldview. According to Willy, metaphysics and an empir-
ical approach in psychology were not only exclusionary but they negated
each other. The methodological crisis for Willy consisted in the inability to
bring methodological questions to a solution, questions regarding the cor-
rect method for psychology (experiment versus introspection), the role of
psychological causality, the possibility or impossibility of the transference
of natural-scientific methods to psychology, the role of intuition and
abstraction, and so on. Willy targeted Wundt and suggested it an irony
that Wundt called Herbart's ideas an accumulation of fictions when in
fact many of Wundt's concepts were based on fictions.

J. B. Watson (1913) included in his critique an attack on the essence of
psychology: a strike against the traditional subject matter and methodol-
ogy of psychology (his criticism is well known and repeated in many
textbooks). The subject matter of psychology should not be consciousness
but behavior and the methodology should not be introspection but the
methods of the natural sciences, including experiment and observation of
others. Watson's critique was significant because he not only criticized
psychology but at the same time he offered a new psychology that prom-
ised solutions to academic as well as practical problems, a theory that
cohabitated much better with the Zeitgeist of American society. Watson

was a master of rhetorical skills and part of his success (as it is understood in hindsight) had to do with his skills in persuasion and marketing.

His arguments have been repeated in several of his academic and nonacademic publications. In *Behaviorism*, J. B. Watson (1924/1998) contrasted the old outdated introspective psychology that studied consciousness and supposedly was related to superstition, magic, and religion with his new psychology based on the advances of the natural sciences. According to Watson, Wundt's psychology, which solely exchanges the religious soul for consciousness, produced only "pseudo-science" (p. 5). Because Watson's strength was not modesty, which would suggest that behaviorism could contribute to an understanding of certain aspects of human mental life, he made it clear that this self-proclaimed new psychology would have to replace the old psychology completely. In Watson's words, the behavioristic research program showed "why behavioristic formulations and methods are an adequate way of accounting for all psychological problems" (p. 18).

J. B. Watson's (1928) rhetorical skills were even more clear in *The Ways of Behaviorism*, which was directed to the general public. Behaviorism was described as a natural science that did not need speculation, was objective, based on facts, made predictions, and achieved control. He used simple examples for making his point for prediction of behavior: "If we fire a revolver behind any ten individuals who are sitting quietly in a room, we can predict" (p. 15). Watson's attack went significantly beyond James's (1890/1983) who, too, meant that psychology was a natural science of mental life, and was aware of the problematic character of introspection, but still designated introspection as the basic and central method in psychology. James's concern was more about the misleading character of language and psychologists' fallacies, which included the confusion of one's own standpoint with that of the mental fact and the assumption that if the psychologist was conscious of the mental state, the mental state was also conscious of itself (see James's Chapter VII).

For Pavlov (1927/1960), whose aim was not to provide a systematic critique of psychology, the physiological study of the highest functions of the nervous system should not be based on psychology but rather on physics and chemistry, "the more advanced and more exact sciences" (p. 3). He identified psychology as a science without exactness and doubted whether psychology could be considered a science at all. Pavlov listed as witnesses James and Wundt and provided the argument that what was defined as psychology depended on the particular ideas of particular researchers. He then suggested that only an experimental physiology of the higher brain functions would lay the foundation for a true science of psychology in the future.

Chomsky (1959/1967) did not provide a critique of the whole field of psychology but of the dominant worldview in psychology at the time, namely behaviorism, and used language acquisition, as explained by learning theories, as a case example of behaviorism's limitations. Chomsky criticized the categories of operant conditioning such as stimulus, response, and reinforcement, and criticized the concepts that Skinner used to explain language acquisition as being imprecise, metaphorical, speculative, and irrelevant. For example, applied to real life contexts outside the laboratory, the concept of "reinforcement has totally lost whatever objective meaning it may ever have had" (p. 153). Applied to language acquisition, the concept of reinforcement "is based not on actual observation, but on analogies to laboratory study of lower organisms" (p. 155), which meant that the so-called natural-scientific concepts of behaviorism are metaphoric generalizations that create the illusion of a rigorous scientific theory, yet in fact, represent solely analogical guesses. Skinner's assertion of the significance of feedback in the process of language acquisition was not based on any empirical evidence. Chomsky summarized that "there is little point in speculating about the process of acquisition without much better understanding of what is acquired" (p. 169).

CONTROVERSIES IN NATURAL-SCIENTIFIC PSYCHOLOGY

Critiques and countercritiques of natural-scientific psychology could also be identified by looking at some of the famous controversies in the history of psychology such as the late 19th century debate between Dilthey and Ebbinghaus on the role of natural-scientific psychology. In 1894, Wilhelm Dilthey (1957) (see Chapter 5) published an essay on *Ideas on a Descriptive and Analytical Psychology* in which he challenged the viability of a psychology oriented towards the natural sciences. As an alternative he suggested a descriptive psychology that takes the totality of mental life into account. At the end of the 19th century, Ebbinghaus (1896) responded in the *Zeitschrift für Psychologie und Physiologie der Sinnesorgane*. He argued that there was no need for a descriptive psychology because natural-scientific psychology would be able to deal with all the issues raised by Dilthey. Ebbinghaus (1896) rejected all of Dilthey's arguments by suggesting that they were motivated by emotion and not by reason. Ebbinghaus argued that Dilthey proposed a grand framework with no real content, and that his general ideas were without concrete examples.

Ebbinghaus even provided a psychological explanation for Dilthey's reaction, namely, that it was based on a psychological impulse, on the feeling that natural-scientific psychology violated the whole entity of

the psyche. Ebbinghaus argued that Dilthey's description of contemporary psychology was inadequate and that his portrayal of the history of psychology was misconceived. In Ebbinghaus's view, the arguments against associationism put forward by Dilthey only applied to Herbart, who, according to Ebbinghaus, was not a good representative of natural-scientific psychology. In fact, explanatory psychology, including its conceptualization of causality, had no problems dealing with the concerns raised by Dilthey. He concluded that Dilthey's polemic was not objective, that it was inadequate, and that Dilthey contradicted himself in requiring hypotheses within his descriptive psychology. According to Ebbinghaus, there was no need for a descriptive psychology à la Dilthey. A short response by Dilthey (1957), published in his collected works as a note (unpublished during his lifetime), completed the reflection. Dilthey repeated in this final note that the *Geisteswissenschaften* (human sciences) began with inner experience, and emphasized that this fact made the human sciences qualitatively different from natural-scientific psychology. He argued that Ebbinghaus misunderstood the argument of the role of hypotheses in psychology. In addition, Münsterberg (1899) addressed Dilthey's critical ideas and also rejected them (see Stoffers, 2003).

A better-known controversy was exchanged between cognitive psychology and behaviorism. Behaviorism was challenged by empirical research (for a short overview see Palermo, 1971) as well as by conceptual shifts such as the development of the computer and accompanying metaphors. Researchers such as Allen Newell, Herbert Simon, and Noam Chomsky inaugurated the cognitive revolution in the 1950s (see D. J. Murray, 1995). In the 1960s, human beings were no longer seen as stimulus–response units but rather as information processing systems with a computer planning and organizing a variety of psychological phenomena (G. A. Miller, Galanter, & Pribram, 1960). Neisser (1967) argued that there was no need to defend his position against stimulus–response theories because cognitive processes existed and thus should be studied. He defined the task of the psychologist in terms of understanding the software (the programs) rather than the hardware. Later, Neisser (1976) provided a critique of his own program when he identified the limited applicability of information-processing metaphors beyond the laboratory and even predicted a dead-end if psychology were to limit itself to this metaphor.

Behaviorism was also challenged by biologically oriented scientists such as Jean Piaget (1896–1980) and by ethological researchers. Already Konrad Lorenz (1903–1989), one of the pioneers of ethology, had argued that species-specific behavior towers above learned behavior in importance and that phylogenetically programmed behavior could not be

conditioned in a Skinnerian way. As an example he suggested that it would be impossible to condition a female pigeon to lie on her back during copulation (see R. I. Evans, 1976, pp. 3–16, interviewing Lorenz).[7] According to Lorenz, behaviorism did not conceptualize various species' behavioral particularities. The studies by Harry Harlow (1905–1981) that challenged feeding as the source of attachment were influential in psychology. In the behaviorist framework it was assumed that infants attach because of learned responses, with feeding being the central factor. Also psychoanalytic theory gave feeding a dominant status in the explanation of attachment. However, in the 1950s Harlow's research on rhesus monkeys, in which he and his colleagues separated baby monkeys from their mothers and exposed them to surrogate mothers, made it clear that contact comfort was more important than feeding in the development of attachment (Harlow & Zimmerman, 1959).

Evolution-based researchers not only challenged behaviorism but also human-scientific psychology and various theories within psychology. One could start with Darwin's (1871) critique of the assumption of the uniqueness of humans when he argued that the difference between humans and animals was a matter of degree and not kind. Wilson (1975) attempted the integration of various philosophical, sociological, anthropological, and psychological theories within his program of sociobiology, which implicitly or explicitly critiqued the theoretical shortcomings of several psychological theories (including behaviorist and humanistic ones). For example, Lawrence Kohlberg's (1927–1987) theory of moral development (see also Chapters 7 and 9) was critiqued for not presenting a mechanism for the development of moral judgment (which was not true because Kohlberg based his theory on Piaget's program that included cognitive adaptation and equilibration). Instead, Wilson proposed an understanding of moral development as a process of biological adaptation. Accordingly, it would be a selective advantage for young children to be self-centered and preconventional and for adolescents to be peer-oriented and conventional.

Historical controversies such as the Wundt-versus-Bühler debate were less significant in the North American context than controversies surrounding structuralism versus functionalism, Gestalt psychology versus behaviorism, Carl R. Rogers (1902–1987) versus B. F. Skinner, and so on. There also exists a long history of the natural-scientific critique of psychoanalysis and this critique has been canonized in virtually every contemporary textbook of psychology (for instance, in developmental psychology, see P. H. Miller, 1993; Santrock, MacKenzie-Rivers, K. H. Leung, & Malcomson, 2003). There is a mainstream consensus that psychoanalysis can be characterized critically by an inadequate methodology,

an untestability of its claims, and an overemphasis on childhood sexuality. The ethical-political relevance critique challenged Freud's bias in terms of gender (Oedipus complex) and culture (the theory of psychosexual development is not universal at all). Finally, the history of psychology is filled with empirical and theoretical criticisms of mainstream research programs arriving from other natural-scientific theories; yet, these criticisms did not necessarily challenge the foundations of psychology as a discipline, including its subject matter, methodology, or ethical-political relevance. Many of these mainstream debates are covered in history of psychology textbooks and are not repeated here.

An important topic of continuity concerns the status of natural-scientific psychology in terms of fragmentation and unification. Already in 1874 Brentano (1874/1995) envisioned "a more unified way of explaining mental phenomena" (p. 80) and complained about the immature state of psychology and that statements about mental phenomena would always be challenged by researchers with a different perspective. The problem of unification was not only addressed from an empiricist natural-scientific perspective, but also from Marxist perspectives (Holzkamp, 1983; Tolman, 1988), from human-scientific viewpoints (Kristensen, Slife, & Yanchar, 2000; Yanchar & Slife, 2000), and from critics' skeptical reflections on the mainstream (Koch, 1993).

However, the problem of unification is specifically a problem for natural-scientific psychology because it took physics as the lead science in its epistemological reflections at the beginning of the 20th century with all its enduring effects. In the process of separating philosophical reflections (that are not unified) from psychological studies, the philosophies of the natural sciences, more specifically, of unified physics, became a crucial factor of attention. Carnap (1928/1967, 1932), in his neo-positivist program, suggested that all concepts and statements of the empirical sciences could and should be reduced to concepts and statements of physics. Such a perspective inspired some of the unification programs and one of its best-known representative, Staats (1981, 1991), who produced many publications on this topic (for a general overview on the unification issue see Sternberg, 2005; Sternberg & Grigorenko, 2001). For Staats, the fragmented and disorganized shape of psychology was a major problem of the discipline, particularly for a discipline that intended to be natural-scientific.

Staats (1999) pointed out that behaviorism, the research program that more than any other espoused to emulate the natural sciences, was never unified—a judgment that also applies to contemporary cognitive psychology. Staats provided a critique that should concern all natural-scientific psychologists when he compared the conceptual situation in

psychology to that of physics. The state of psychology translated to physics would mean that a particular research group uses terms such as mass, gravitation, proton, and so on, while another one would use a completely different network of concepts when referring to the same issue. This would be considered unacceptable in physics. This situation also led to the belief in many areas of science that psychology is not really a natural science. Staats held that the young age of the discipline, the complexity and uniqueness of psychological phenomena, disunified modes of operation, and psychology's productivity or proliferation were responsible for this disorganized state of psychology. He suggested that this disunity could be overcome through effort, an infrastructure, and resources for a unification program.

Staats's critique of natural-scientific psychology is based on the assumption, despite an acknowledgement that psychological phenomena are unique, that psychological concepts are of a natural quality. I suggest that only if they were of a natural kind would unification be possible, but if they are of a sociohistorical quality, psychology might look much more like philosophy than physics. If psychology is still a philosophical discipline, then empirical studies should be considered rhetorical instruments for convincing others of the relevance of a given theory. In philosophy, of course, unification of its many traditions is not a meaningful topic. The sociohistorical character of psychological concepts has been the focus for the human-scientific critique of psychology.

5

The Human-Scientific Critique

The research program that challenged systematically the methodology of the natural sciences in psychology was that of Wilhelm Dilthey (1833–1911). At the same time he proposed an alternative *geisteswissenschaftliche* psychology (see Teo, 2001). Dilthey (1894/1957, pp. 139–240) argued in his *Ideas on a Descriptive and Analytical Psychology* that due to the specific subject matter of psychology, it would be wrong to emulate the natural sciences and that causal explanations as provided in those sciences could not be used satisfactorily in the domain of mental life. According to Dilthey, the subject matter of psychology was experience in its totality, which could not be adequately dealt with in natural-scientific experimentation and measurement. Experience in its totality meant that mental life did not grow from parts, that it was not constructed from elements, that it was not a composite, or a result of the interactions among atoms of sensation or emotion, but that mental life was at all times an overarching unit. Based on such a critique, Dilthey described two psychologies: a natural-scientific psychology which worked with basic processes such as association or apperception and used causality for explaining mental processes; and a human-scientific psychology in which the totality of mental life, the developed mental life and not elements, were used for description and analysis, and which considered *understanding* the most adequate method.

Dilthey had a significant influence on 20th century psychology, on the *geisteswissenschaftliche Psychologie* of Eduard Spranger (1882–1963), on Karl Jaspers's (1883–1969) ideas on psychopathology, on Edmund Husserl's (1859–1938) phenomenological psychology, and on Hans-Georg Gadamer's (1900–2002) hermeneutics. In North America his ideas influenced Gordon Allport (1897–1967) (see Nicholson, 2003) and his spirit lives on in various forms of humanistic psychology (see also Dilthey, 1976; Harrington, 2000, Rickman, 1988). Of course, it must be pointed out that his alternative psychology was not developed with the same institutional support as experimental psychology and that his conceptualization of the mind did not become part of the mainstream of academic psychology.

DILTHEY'S REJECTION OF NATURAL-SCIENTIFIC PSYCHOLOGY

Dilthey's psychological writings must be understood within the context of his attempt to establish an epistemological foundation for the *Geisteswissenschaften* (see Teo, 2001).[1] Dilthey sought to develop a critique of historical reason in the same manner as Kant developed a critique of pure reason for the natural sciences. Epistemological positions as outlined by Auguste Comte and John Stuart Mill (1806–1873) were unsatisfactory to Dilthey (1883/1959) because they assimilated history into the concepts and methods of the natural sciences. In contrast, he suggested that the anchor for the human sciences was the analysis of human experience, the facts of consciousness, and the mind. The most basic and central human sciences were those disciplines that studied *life-units* (Dilthey meant humans) that produced society and history, and thus, the young Dilthey considered psychology to be the basic discipline of the mind. For Dilthey it was also important to include history and life-experiences as research material of psychology as these would enable the development of knowledge of historical life as well as of how to rule, guide, and develop society. But in contrast to Immanuel Kant, John Locke, or David Hume (1711–1776), Dilthey refused to limit his reflections to the epistemological (cognitive) subject; rather, he focused on the entire subject whose psychological essence included, besides cognition, emotion and volition.

In order to understand Dilthey's critique of psychology it is important to lay stress on the distinction between the natural sciences [Naturwissenschaften] and human sciences [Geisteswissenschaften] (see also Teo, 1999), which Dilthey did not originate but elaborated conceptually. The latter included history, political science, law, political economy, theology, literature, and art. Psychology might not be counted as a Geisteswissenschaft in a cate-

gorical sense as it was, for the young Dilthey, the basis for all human sciences. However, because psychology was also based on understanding, as were all the other sciences that dealt in some way with the historical-social reality, psychology was a Geisteswissenschaft in a methodological sense.[2] Dilthey himself was not completely content with the term Geisteswissenschaft, as the term Geist (mind) drew the focus away from the emotional and the motivational sphere of humans, which were as important as the cognitive aspects with which they were completely interconnected.

Dilthey (1883/1959) was cautious about his dualism of scientific disciplines. On the one hand he emphasized that natural and mental processes are qualitatively different, which would justify the concept of the Geisteswissenschaften and make Friedrich Ernst Daniel Schleiermacher (1768–1834), G. W. F. Hegel, and F. W. Schelling more relevant for his epistemological reflections than A. Comte, J. S. Mill, or H. Spencer. On the other hand he emphasized that mental life was only one part of the psychophysical life-unit, which implied only a relative independence of the Geisteswissenschaften. Based on this distinction, Dilthey's critique targeted the limited conceptualization of the subject matter in psychology as well as the natural-scientific methodology of psychology. As an alternative he emphasized a sociohistorical understanding of the subject matter of psychology, which included an analysis of the *objective mind* in studies of the individual mind (see also Marx's concept of the mind in Chapter 6). Instead of attempting to subsume psychological issues under natural-scientific explanations, he promoted understanding as the core method for psychology.

In terms of the *critique of the subject matter*, Dilthey was dissatisfied with natural-scientific psychology because of its formalism. He argued that the focus on the forms and processes of mental life prevented an examination of the content of the mind. In other words, he was less interested in a curve of forgetting than in the *content* of what concrete subjects were actually forgetting or remembering. Psychological contents were not explained, for Dilthey, by advancing research on psychological processes or identifying psychological laws. Psychological contents depended on a person's meaning structure. For Dilthey (1977), it was the very content through which meaning was formed.

Individual meaning and individual mental life depended on the *objective mind* (a Hegelian term) of a given historically situated society, by which Dilthey designated the spirit of a social community or era, as expressed in laws, morality, ethics, and institutions. Individual mental life was influenced by (or better, embedded in) this objective mind. Human consciousness (in its totality) became objective in language, religion, myths, customs, and organizations. The objective mind

could be recognized in all expressions and outcomes that humanity has left for succeeding generations. With these human creations, according to Dilthey, psychology could have its rigorous research material. It would allow for a genuine analysis and a deeper and more complete understanding of human individual mental life. Dilthey (1958) also provided ideas on how to conceptualize the objective versus the individual mind. He suggested that both were equally important, which also meant that the individual mind was not just determined by the objective mind. A given mental life was equally determined by the objective mind as well as by the strength of the individual (Dilthey specifically had the concept of a genius in mind). There was no contradiction for Dilthey in suggesting that the individual was central in determining history and that the individual was, at the same time, determined by history.

Natural-scientific psychology was not really interested in the embeddedness of the individual mind in the objective mind, in the representation of a whole epoch in the mental life of a single person, and in the expression of humanity's past in the modern individual. Dilthey, on the other hand, targeting natural-scientific psychology's limitations, emphasized the sociohistorical character of the psychological subject matter. Dilthey (1883/1959) argued that the idea of a human being beyond history and society was a natural-scientific fiction, and that the subject matter of psychology should be the individual as part of society, history, and culture. The individual was a point at the intersection of a multitude of systems that became more refined and specialized in the course of the development of a culture. In this process individuals themselves became more refined, specialized, and complex. For instance, Dilthey (1894/1957) mentioned that emotions demonstrate more complexity in the course of the development of art. And the increase in differences between individuals was due to the division of labor and sociopolitical differentiation.

The implicit and explicit critiques of the subject matter of physiological, experimental, and natural-scientific psychology did not mean that Dilthey believed that a sociohistorical understanding of the mind would be completely sufficient. He emphasized that humans were natural beings. He suggested that humans were influenced by nature but also by nurture (Dilthey, 1883/1959, pp. 17–18). However, although aware of the biological dimension, he did not really focus on it, and rather emphasized the study of psychology in the context of history and in the relation of the objective and the subjective mind. Dilthey intended to move psychology away from physiology and physics to the results and reflections of history, and to build a bridge between psychology and historiography. Dilthey (1894/1957) was very clear on this issue: "Man cannot learn what he is

through meditation about himself, nor through psychological experiments, but only through history" (p. 180); "what man is, can only be told by his history" (Dilthey, 1960, p. 226); "man recognizes himself only in history, never through introspection" (Dilthey, 1958, p. 279).[3] Given the significance of history for understanding humans it was not surprising that Dilthey emphasized that the *Geisteswissenschaften* were focused on the study of history. The first step in this endeavor would be to study historical products in psychological research.

Three different programs for psychology nourished Dilthey's critique of psychology. First, Dilthey envisioned psychology as a *content psychology* (in contrast to a formal psychology). The distinction between form and content was a significant philosophical distinction and, according to Windelband (1958, p. 461), could be traced back to the distinction between a priori and a posteriori knowledge. Dilthey (1962) identified dominant psychology as a formal discipline and suggested that the focus on forms and processes of mental life prevented an examination of the content of the mind: "The psychological laws are pure formal laws; they do not concern the content of the human mind, but its formal conduct and behavior' (p. 43). This situation of psychology was completely unsatisfactory to Dilthey (1958) because every experience contained a content, which represented meaning to an individual.

Another line of critique emerged from his vision of psychology as a *descriptive psychology* as expressed in his famous *Ideas on a Descriptive and Analytical Psychology* (Dilthey, 1894/1957). He promoted the concept of a descriptive psychology as an alternative to the explanatory experimental psychology of his time. Descriptive psychology should focus on the depiction of the parts and connections of mental life, as they are experienced in their totality. Critically he remarked that natural-scientific psychology would not do justice to the nexus of mental life. For example, Dilthey (1894/1957) suggested that *cognition* was only one part of human mental life with the other parts being *emotional* life, which he considered the center of mental life, and acts of *volition* (p. 180). These three parts, which were grounded in a traditional philosophical–psychological distinction (see Chapter 3), were always interconnected and only a process of scientific abstraction allowed for distinguishing them. Mental life was much more to Dilthey than intellectuality: "It is common to oppose thinking, feeling, and desiring as three separate concepts, as if feeling and desiring contain no thinking. That is wrong" (Dilthey, 1990, p. 354).

Dilthey (1894/1957), who argued that the "purpose of humans is to act" (p. 27) did not exclude action or behavior from his reflections on the mind, but understood action as only one expression of life, as only one part of human essence. The problem with action, or behavior for that

matter, as a potential core category of psychology, was that it did not allow the complete representation of inner life. This could only be accomplished through the concept of experience [Erlebnis] in the sense of a subject's meaningful encounter with the natural, cultural, historical, and human world. It was also important to emphasize that the focus on the description and analysis of an individual mind was not in contrast to emphasizing its connection with the objective mind, because they were always interconnected. For example, acts of volition (internal and subjective) and culture (external and objective) were interconnected, and thus, psychology could "study the nature, laws, and connection of our acts of volition by looking at the external organization of society, the economic, and legal order" (Dilthey, 1894/1957, p. 190).

A third level of critique emerged from the idea of a *structural psychology* (Dilthey, 1962, p. 317). The concept of a structure was developed in his *Ideas on a Descriptive and Analytical Psychology* (Dilthey, 1894/1957). Dilthey suggested that a person's mental life was embedded in a context and at the same time influenced this context, which led to an organization of internal states, which he labeled *structure*. Each individual biography was situated in a connected structure, which was organized and developed into a coherent whole. It would be the task of descriptive psychology to study this structure and the knots that bind the psychological strings to a totality. The concept of structure had theoretical implications: "Mental life does not grow from its parts; it is not built from elements; it is not a composite, not a result of interacting atoms of sensation or emotion: it is originally and at all times an overarching unity" (Dilthey, 1894/1957, p. 211).

This was an obvious attack against natural-scientific psychology, which did not do justice to the nexus of all experiences. In fact, challenging psychology that focused on these elements, Dilthey (1894/1957) put forth the notion of the "Gestalt of mental life" (p. 220), a term he already used in the 1860s when referring to the "Gestalt of our mental life" (Dilthey, 1990, p. 27) as an unexplained synthesis of mental functions. This unity of the mind and the person distinguished mental life from the physical world and explained Dilthey's respect for literature, in which, according to Dilthey (1894/1957), humans reach an intuitive understanding of the nexus of mental life. However, a descriptive psychology would have to clarify these ideas (in contrast to literature) in a general way (see Dilthey, 1894/1957, p. 153). Dilthey also suggested that the mental structure had a teleological character when it aimed for happiness—again a concept that would be excluded from natural-scientific psychology.

In terms of the *critique of the methodology* of psychology, Dilthey argued that natural-scientific psychology was not able to study the mind sufficiently because causal explanations, used in the natural sciences,

could not be applied to the mental world. While explanatory (natural-scientific) psychology built on basic processes such as association or apperception, descriptive psychology separated description and analysis from the explanatory hypotheses. In descriptive psychology "the complete reality of mental life must be used for description and preferably analysis, and this description and analysis must have the highest achievable degree of certainty" (Dilthey, 1894/1957, p. 168). In order to achieve this goal, descriptive psychology would have to begin with the developed mental life and not with elementary processes (p. 169). Dilthey (1894/1957) called upon Wilhelm Wundt (1832–1920), who also realized that experimental psychology would be limited to basic psychological processes, and that the study of mental life required more than causal explanations (see, pp. 166–167).

Dilthey attempted to establish a methodology that would do justice to the very subject matter of psychology and this meant *not* to imitate natural-scientific methods. Although he was skeptical of philosophical systems, he demanded from science that research should maintain a philosophical intention. Dilthey (1894/1957) considered understanding [Verstehen] to be the most appropriate "method"[4] for psychology, simply summarized in the basic dictum: "We explain nature, but we understand mental life" (p. 144). However, he did not totally exclude other methods of psychology and acknowledged, besides understanding, a variety of auxiliary approaches to psychology, including introspection, comparative methods, experimentation, and the study of abnormal psychology (see Dilthey, 1894/1957, p. 199). And based on his view of the human mind, according to which the objective mind and subjective mind were interconnected, he emphasized the study of the products of mental life as a very important tool in the canon of psychological methods.

Dilthey (1958) suggested that understanding was possible because of the objective mind, because each individual expression represented something common in the realm of this objective mind. Words, sentences, gestures, acts of politeness, works of art, and historical actions could only be understood because there was a common meaning that connects expression with understanding. According to Dilthey, persons were nourished by the world of the objective mind since they were born (in current terms: one is socialized into a culture). And, one could understand an individual only if one knew how this individual came to be.

The most appropriate method for psychology, according to Dilthey, was *understanding*. This method was important because the complexity and nexus of psychological mental life could not be expressed in concepts (Dilthey, 1977, p. 164). Accordingly, the complexity and its interconnectedness could only be represented in experience and in immediate

consciousness. Persons experienced the totality of their essence and this totality should be reproduced in the process of understanding (Dilthey, 1958). Dilthey (1958) distinguished between *elementary forms of understanding*, which are ubiquitous in everyday life in the form of immediate processes (p. 207), and *higher forms of understanding* when something contradicts everyday experience (p. 210). In higher forms of understanding one would begin with an examination of the problem, the involved context, and finally one would reach understanding. The understanding of a person could be modeled on the understanding of poetry, or the interpretation of literature and art.

From empathy arose the *highest form of understanding*, and in which the totality of mental life was effective: the reexperiencing [Nacherleben] of others people's experiences (see Dilthey, 1958, pp. 213–216). It was another feature of a *geisteswissenschaftliche* psychology as reexperiencing of the psychological life distinguished mental processes from nature (Dilthey, 1977). The *scientific form of understanding* and interpretation led to hermeneutics (Dilthey, 1958, p. 217) with the final goal "to understand the author better than he has understood himself" (Dilthey, 1894/1957, p. 331). Besides the category of understanding Dilthey developed the concepts of experience, expression, and meaning (see Dilthey, 1958) as critical counterconcepts to natural-scientific psychology's categories.

Natural-scientific psychology, of course, did not elaborate on the concept of understanding. Given the criteria of science it was important to Dilthey to emphasize that he was not only interested in singularity. On the contrary, he tried to understand the relationship between generality (uniformity) and particularity (singularity), significant for any understanding of mental life. As the mental totality of each human being was particular, it was the "most obvious problem to formulate laws, i.e., uniformities of behavior" (Dilthey, 1977, p. 195). Dilthey tried to analyze and understand the particular mental totality while aiming for general principles. This could be done because "particularity arises on the basis of all these uniformities" (Dilthey, 1894/1957, p. 270). In fact, Dilthey did not envision a purely idiographic description and understanding of the individual but intended an understanding of generalized individuals. His desire for general results could also be understood in the context of his emphasis on the concept of an objective mind.

Dilthey's desire for generality could be recognized in his suggestion to develop types. Particular and individual expressions were not random but could be subsumed under a type because certain basic forms, which one could call "types," reoccur in the process of variations (Dilthey, 1894/1957, p. 270). Types are not metaphysical constructions because humanity contained an order just as the objective mind contained an

order. This order, which allowed for the identification of types, also allowed for an understanding of types and individuals (Dilthey, 1958, p. 213). The focus on types and what was subsumed under the concept of a type was not an arbitrary part in Dilthey's system. It was an essential component of Dilthey's psychology and philosophy. This typological intention could be identified easily in his philosophy of worldviews (Dilthey, 1960) and in the fact that the *geisteswissenschaftliche* psychologist Eduard Spranger (1882–1963), a follower of Dilthey, developed types of both personality and adolescent experience.

THE GERMAN-SPEAKING CONTEXT

Dilthey, rather fragmentarily, laid out the program for a *geisteswissenschaftliche* psychology, and his ideas remained abstract and did not show their relevance to concrete research questions. A concrete program was accomplished by Spranger (1929), who applied hermeneutic ideas to the psychology of adolescence. Spranger incorporated Dilthey's view on the human mind into development by formulating a holistic characterization of adolescence, which ranged from age 13 to 19 for girls, and from age 14 to 22 for boys. This program could be labeled a developmental youth psychology based on understanding. Spranger accepted Dilthey's critique of natural-scientific psychology, however, his concept of understanding differed significantly from Dilthey's. Spranger also laid out the foundation for a hermeneutic personality psychology, which was, in contrast to his psychology of youth, influential in the North American context (see Nicholson, 2003).

With regard to the critique of natural-scientific psychology, Spranger (1929, pp. 21–30) argued that any physiological explanation of development that focused on changes in human physiology, from childhood to adolescence, could not solve the psychological problem of development. He suggested that a physiological account that explained that Socrates (469–399 BCE) was brought to prison because his muscles moved him into prison represented an unsuccessful clarification. An individual struck by lightning, and whose plans, moods, and attitudes towards life changed because of an original physical event, required an explanation in terms of the individual's interpretation of this experience. Similarly, the male adolescent's psyche could not be explained by the onset and increased production of semen. According to Spranger, physiological psychology was not without relevance, but it did not add to psychology proper. Anatomical facts were interesting, but they did not contribute to an understanding of adolescence. More specifically, one could not explain

feelings of isolation or loneliness, radicalism, or tendencies towards idealization, which occurred during adolescence, by understanding the activity of genital glands. For Spranger, anatomical-physiological changes of structure represented one realm of facts, and psychological changes of structure meant a second and independent realm of facts.

In his *Types of Men*, Spranger (1914/1928) had suggested that psychology was too dependent on the natural sciences, for instance, in the conceptualization of the mind–body problem. He pointed out that a natural-scientific psychology, which focused on the physical determinants of the mind–body relationship, would ignore the contexts of meaning in which experiences are created (see p. 7). In addition, the dependence of psychology on the natural sciences prevented critical questions regarding the results of physics, chemistry, physiology, and mathematics. Like his teacher Dilthey, Spranger identified a psychology based on natural science as a *psychology of elements*, which he contrasted with a *structural psychology*, based on hermeneutics, the human sciences, and philosophy. This psychology of elements would be interested in the components of consciousness, but any analysis of the components would not enable a study of the content of psychological experiences.

A psychology that divided mental life into cognition, feeling, and conation, with subdivisions within each of those parts, would be inferior to a psychology interested in the psychological whole, nested within contexts of meaning. Spranger used the example of how one should understand the decision of a historically significant figure. He pointed out that psychologists would not need to divide this decision into ideas, feelings, and desires, but that they would need to identify and address the motive which prevailed in a historical context, filled with meanings and values. Spranger identified the destruction of the meaningful wholeness of mental life as the scientific shortcoming of natural-scientific psychology. The problem of subjectivity could not be solved by putting pieces (elements) together again, after they had already been separated. In contrast, a hermeneutic psychology would identify mental life as a meaningful whole, as part of a cultural context, and would start with the totality of mental life. As a comparison Spranger suggested the evisceration of a frog, from which one might learn the inner construction and physiological functions of organs, but this understanding would not allow putting the parts together again and recreating the living frog. Mental life did not work like a mechanism that consisted of material parts but required a psychology that arranges meaningful experiences and actions of persons into the center of study.

Spranger was not only critical of natural-scientific psychology but also of Dilthey's concept of understanding (see Teo, 2003). Dilthey had

suggested that the highest form of understanding would be represented by the reexperiencing of other persons' experiences, a process which would particularly justify the distinction between human-scientific and natural-scientific psychologies. Spranger rejected Dilthey's highest form of understanding as an essential method for psychology. Spranger (1929), who intended an understanding of the psychological organization of adolescence by providing a complete portrayal (see p. 2), argued that such a portrayal should not focus on concrete individuals, as performed in autobiography and literature, because psychologists would never be able to exhaust concrete individuality (p. 3). Rather he sought to provide a *typical* picture of adolescence. Spranger's human-scientific psychology was interested in a general perspective, in laws of development, and in a typical picture, while being aware that, because of the cultural embeddedness of mental life, this typical picture would be limited to a certain cultural stage, and could not transcend time and space.

For Spranger (1929), whose motivation for a hermeneutic psychology derived from the need to help adolescents who were in psychological distress, and who believed that help could only be accomplished through a process of understanding, the method of understanding was not captured adequately through the concepts of reexperience, sympathy, or empathy with an individual's mental life. Understanding, for Spranger, should comprehend all mental connections as meaningful, as part of a system of values, and "in the form of objective valid knowledge" (p. 3). Such a goal could be accomplished more successfully from an outside perspective. Thus, an understanding of the other was less limited than an understanding of one's self and one could understand people of the past better than they have understood themselves (this was a basic hermeneutic principle). Moreover, one might understand someone of the same generation, age, or class, but this did not allow for the grasping of the meta-subjective meaning connections (p. 7) that were always involved and which were central to a psychology of understanding. Whereas Dilthey's descriptive psychology included the specificity of subjectivity, Spranger's psychology of understanding intended to grasp connections that were not consciously given to individual subjectivity (p. 8).

For Spranger, true understanding required knowledge of the objective mental connections, which transcended immediate life consciousness. One could understand a person of the past better because one knew the historical context; one could understand a child better than he or she could understand himself or herself because one was aware of the developmental background; one could understand adolescence better if one understood the "historical and societal conditions" (Spranger, 1929, p. 5). So, for Spranger, the system from which a human being could be

understood was much more complex than the sum of an individual's experiences. This position becomes obvious in developmental psychology. Spranger (1929) provided the example of play to make his point (see p. 8). A simple answer to the question "why does a child like to play?" would propose that a child plays because it is fun to play. If one were to ask a child, she might answer, because she likes to play. If someone responded that a child plays in order to practice future activities relevant to her life, then developmental psychology would have a theory of understanding that went beyond the subjective experience of the child. Similarly, the questions of "why do we think as we think, why do we evaluate as we evaluate, why do we act as we act" (p. 8) could not be answered by looking into the individual. In order to answer these questions psychologists must understand broader connections of meaning and trans-individual mental realities. An understanding of adolescence, based on grasping the connections of meaning, should go beyond what was experienced by the adolescent. Thus, certain adolescent expressions should be understood as developmental expressions, even when the adolescent had expressed something to the contrary.

A similar critique of natural-scientific psychology can be found in Erismann's (1924) program for a psychology of insight [einsichtige Psychologie], in which he argued that a true psychology that incorporated a general knowledge of humans, required the permeation into the meaning of mental processes. He pointed out that natural-scientific psychology, which he labeled as atomistic psychology, was successful, but was based on a different subject matter and a different methodology. German-speaking authors also include Karl Jaspers (1913/1997), who more than anybody else attempted a reconciliation of human-scientific and natural-scientific psychology, for instance in his famous psychopathology. In his program he combined philosophical and theoretical reflections with somatic methods, and he integrated case studies, statistics, experiments, as well as the *method of understanding*. Husserl (1936/1996) criticized the *naturalization of the psyche* (see p. 69; §11), by which he meant the emulation of the natural sciences in psychology with regard to methodology and in terms of assigning mental life the same ontological status as nature. Despite its successes, a natural-scientific psychology was limited, for Husserl, because it was not able to address concerns of subjectivity and because it contributed to the crisis of the natural sciences in general.

Some German postwar (after 1945) publications from the standpoint of a human-scientific psychology did not identify the limitations of natural-scientific psychology in terms of subject matter, methodology, or relevance, but rather asked for a domain of research that was not covered within natural-scientific psychology (see for instance, Gruhle, 1948).

Gadamer (1960/1997) is less known for having contributed to a critique of mainstream psychology because his critique targeted Dilthey on the one hand and the natural sciences (in general) on the other. Gadamer criticized Dilthey, who shifted in his career from a psychological to a hermeneutic foundation of the human sciences, for not having accomplished a hermeneutic grounding for the human sciences because in his writings Dilthey only produced "sketches" (p. 224) for that program. More relevant from a history of the critique of psychology, however, is Gadamer's critique of the human sciences that take the natural sciences as their idol. Gadamer rehabilitated the concept of *prejudice* which he saw as a condition for understanding and as grounds from which research was accomplished (see also Chapter 9). The human sciences are unique because they focus on an object (as the natural sciences) but they are also embedded in long traditions. In the human sciences researchers are "motivated in a special way by the present and its interests. The theme and object of research are actually constituted by the motivation of the inquiry" (p. 284). Gadamer, not a psychologist but a philosopher, emphasized the epistemological specificity of the human sciences. If one were to consider psychological issues of a sociohistorical kind, one could argue that psychology is by and large a human science.

THE ENGLISH-SPEAKING TRADITION

A variety of interesting and sophisticated arguments, based on a human-scientific perspective, were developed in the English-speaking context. Allport (1947), who had a large influence on the rehabilitation of human-scientific reflections in North American psychology, was stupefied by the admiration of physics in psychology, but he could understand the adoption of physicalism and the corresponding machine model in psychology because of the technological successes of the applied physical sciences and because of the emphasis of technology in American society. Allport asked what psychology could contribute to the solution of postwar problems and to the improvement of human relationships, but found that academic concepts and research findings did not provide much of a solution. Instead of following a machine model as in classical and neo-behaviorism (and also in the developmental model of psychoanalysis), psychology, as a meaningful discipline, should rather follow a human-scientific program, as it was originally laid out in the intentions of moral science, which recognized morality as a central feature of mental life.

Allport (1937), who considered the psychological subject matter to be "infinitely more complex" (p. 5) than the biological sciences, criticized the

exclusion of the individual from psychology. This had significant consequences. For instance, the psychologist was not superior in understanding and judging people because the focus on the generalized mind did not do justice to the richness of individual minds. Psychologists had been socialized into applying abstract laws when it concerned other human beings, but they had not learned how to understand and focus on individual natures. Traditional psychologists, according to Allport, were absorbed by method rather than by the specificity of the subject matter, yet, the traditional scientific method was unable to comprehend individuals. Allport also suggested new conceptualizations for the notions of law and experiments, while at the same time arguing that some problems of individuality could not be studied by experiments at all. Allport's focus was a psychology of individuality, which should be idiographic, meaning an attempt to study the particular.

Abraham Maslow (1969) outlined a critique of science and of natural-scientific psychology, in which he characterized traditional science and psychology as mechanistic and *ahuman* whereby mechanistic meant an emphasis on prediction, control, certainty, exactness, and organization. He suggested that those attributes, taken to the extreme, came within the realm of pathology and neurosis. At the same time he implied that average scientists were excessive in their need to control and that, from a psychological point of view, science could be understood as a defense against anxiety. According to Maslow, natural-scientific psychology, with its focus on prediction and control, was simplistic and of little value to humans. In a process of abstraction natural-scientific psychology would codify, purify, structure, and organize experiences. These abstractions then became reality so that it appeared that "the blueprints are more real than the houses" (p. 75).

For Maslow, knowledge produced in traditional science and psychology was that of a spectator as opposed to experiential knowledge. Spectator knowledge lacked participation, involvement, and was intended as neutral. Spectator knowledge in psychology involved the division of subject and object of research, conceptualizing humans as passive, and creating an image of a helpless person controlled by external circumstances. Experiential knowledge was focused on experience. The experiential knower in psychology attended to the person's individuality, identity, spontaneity, and responsibility. The experiential knower saw persons as centers of action, as persons who do as opposed to persons "who are done." Criteria for explanations in the natural sciences, which included parsimony, simplicity, and monism, should be contrasted with the richness of understanding in experiential knowledge. Maslow did not consider traditional science or traditional psychology as wrong, but he saw them as narrow-

minded, a situation which he hoped to overcome with his program of a humanistic psychology. His vision for a comprehensive human-scientific psychology included concrete experiences, whereby value-neutral objectivity was overcome by caring objectivity and the need to include values in science. Interestingly, Maslow also identified traditional science as ethnocentric, Western, and nonuniversal (see also Chapter 9).

Giorgi (1970) expressed most clearly—from an academic point of view—that psychology should not be a part of the natural sciences, while at the same time he suggested that a human-scientific psychology could hold on to its scientific character. Giorgi identified (what has been called in this book) the *methodologism* of natural-scientific psychology (see Chapter 2), with the argument that psychological phenomena were made to fit the method. He argued that the natural-scientific approach to psychology could be characterized as empirical, positivistic, reductionistic, quantitative, deterministic, and predictive (p. 63) and that the natural-scientific method in psychology was embedded in these criteria. The criteria then determined the questions that psychologists asked about psychological phenomena—obviously a very restrained endeavor for the study on any subject matter. In consequence, all questions in academic research were phrased within what Giorgi called the measurement question: "How do you measure" ? (p. 64). Giorgi referred to this practice of natural-scientific psychology as "measurement precedes existence" (p. 65), meaning that psychological phenomena that could not be measured did not enter the psychological discourse (and if a phenomenon was measurable then it was psychologically relevant). Giorgi argued that measurement provided rigor in the sciences, but he rejected the idea that because it did so in the natural sciences it would do the same in psychology. Instead, for Giorgi, the definition of rigor depended on the nature of the phenomena, and he suggested that human scientists would have to explore other ways of rigor than measurement.

Giorgi summarized some of the major points for a critique of mainstream natural-scientific psychology: a lack of unity (the growth of the field due to proliferation and not due to internal progress); a lack of direction based on unformulated goals; an unwarranted emulation of the natural sciences; an inability to investigate significant phenomena in a meaningful way; a lack of holistic methods; not doing justice and in sensitivity to the human person; and an irrelevance for the lifeworld. Giorgi thought that the most important reason for the problems of psychology was the adoption of a natural-scientific viewpoint in psychology. Giorgi attributed this adoption to internal struggles while contemporary critics are more blatant. For example, Ward (2002) argues that the alliance of psychology with the natural sciences was a political

decision because it would make no sense to associate an emerging field with disciplines such as philosophy and the humanities, which were perceived as weak. At the same time all charlatans had to be excluded in order to draw the line between members and nonmembers of the discipline. For Giorgi (1970), this commitment to the natural sciences led to the fact that the method preceded the phenomena that should be studied and to the exclusion of holistic methods. In contrast to a natural-scientific psychology he outlined a human-scientific psychology and later a phenomenological psychology (Giorgi, 1995).

Some of the basic reflections have lived on in various current human-scientific or hermeneutic approaches to psychology, which more or less have successfully challenged mainstream psychology (see also Bugental, 1967). More recently, Martin and Thompson (1997) challenged the primacy of epistemology/methodology over ontology/subject matter and pointed out that there were distinct features to the subject matter of psychology. These included what one could call the sociohistorical embeddedness, the uncertainty, and the moral character of human experiences and actions. In Dilthey's tradition, they emphasized that the subject matter of psychology was qualitatively different from that of the physical sciences. Martin and Sugarman (2001) pointed to the distinctive character of the psychological subject matter by drawing on Hacking's (1992) distinction between natural and human kinds. In a hermeneutic tradition and against a naïve environmentalism, they argued that humans were not reducible to the sociohistorical context because they can influence the context while at the same time they were affected by it.

Based on mainstream psychology's scientistic misunderstanding of the subject matter, Martin and Thompson (1997) challenged the possibility of progress in psychology as well as the meaning of empirical evidence (see also the human-scientific reflection of Mos, 1998, 2003). Because of the rise of social-constructionist and postmodern reflections in psychology (see Chapter 8) they also rejected relativism in psychological inquiry. Human-scientific (hermeneutic) perspectives have been applied to a variety of contexts, most notably to clinical psychology but also to social issues such as multiculturalism (Fowers & Richardson, 1996), which shows that philosophical hermeneutics is a regenerative research program. Contemporary philosophers such as Taylor (1985, pp. 13–57) also demanded a hermeneutic foundation for the social sciences.

6

The Marxist Critique

Marxist psychology has developed into a variety of discourses that might even contradict each other in terms of their central premises. These discourses were developed by Soviet psychologists such as Sergej Rubinstein (1889–1960), the cultural-historical thinkers Lev S. Vygotsky (1896–1934), Alexander R. Luria (1902–1977), and Aleksei N. Leontyev (1903–1979); Freudian Marxists, who merged Marx's economic, social, and political theories with psychoanalysis, included Herbert Marcuse (1898–1979), Erich Fromm (1900–1980), and Theodor W. Adorno (1903–1969); French Marxist psychologists such as Georges Politzer (1903–1942); German critical psychology, best represented in the studies of Klaus Holzkamp (1927–1995); and by many other "new left" or Marxist feminist research programs in the English-speaking world.[1] In this chapter I discuss some of the most original and intellectually intriguing critiques of psychology, ideas as they were specifically developed by Marx, Vygotsky, and Holzkamp.

Besides innovative Marxist research programs it is also important to acknowledge critical dead-ends in the historical reality of dogmatic Stalinist perspectives in psychology. For example, P. G. Klemm (1953) criticized in his preface to a textbook of psychology, used in the German Democratic Republic, the lack of progressive literature in psychology. He endorsed T. D. Lysenko's (1898–1976) pseudo-scientific research because it supposedly destroyed the reactionary views of T. H. Morgan (1866–1945),

A. F. L. Weismann (1834–1914), and J. G. Mendel (1822–1884) on heredity. He promoted Pavlov as an example of a truly progressive psychology and he endorsed the "genial works of Stalin"[2] (p. 5) on Marxism and linguistics as having paved the way for the study of language and cognition in psychology. Klemm functions as an example of how an original skeptical program that intended a rigorous critique of ideology became ideological itself, believing that arguments were unnecessary, and that the accusation of *reactionary* for opposing programs and the label of *progressive* for one's own research would be sufficient for a critique of psychology.

KARL MARX'S CRITIQUE OF PHILOSOPHICAL PSYCHOLOGY

Decades before any Stalinist arguments could be developed, Karl Marx (1818–1883) provided an interesting critique of psychology (see Teo, 2001).[3] He critiqued psychological ideas of his time for neglecting the sociocultural and political-economic embeddedness of the human mind and he urged academics to study concrete individuals, who lived in concrete historical societies, rather than reflecting on an abstract individual beyond history and society. Marx attempted an understanding of mental life that was based on Hegelian philosophy, which he merged with the results of the natural sciences. He attempted a reconciliation of Hegel's idealism with the positivism of the natural sciences. Marx never wrote a book or an essay on psychology because he was primarily interested in philosophy, political economy, and politics. Especially in his later writings Marx no longer participated in discussions on the mind. Philosophy's goal was, as Marx expressed in his famous last thesis on Ludwig Feuerbach (1804–1872), not to interpret the world but to change it (Marx, 1888/1958, p. 7), and philosophy became a tool in order to promote social change (Marx, 1844/1956, p. 385).

Hegel (1830/1992) had discriminated among the subjective, objective, and absolute mind. The *subjective mind* referred to an individual mind and its faculties of sensation, habit, consciousness, perception, reason, desire, memory, and imagination. The concept of an *objective mind* meant the mind of a social community or era as it was expressed in law, morality, and ethics, whereas the *absolute mind*, as an infinite entity, was expressed in art, religion, and philosophy. Hegel connected the subjective and objective mind by arguing that individuals could not transcend their time because the *Zeitgeist* was also the individuals' mind (see Hegel, 1817/1986; see also Dilthey in Chapter 5). Marx (1867/1962) did not incorporate the idea of an absolute mind into his philosophy, but he attempted to elaborate on the connection of a subjective and objective mind.

Marx's critique of philosophical psychology was expressed in terms of the traditional misunderstanding of human nature, the false conceptualization of consciousness, and the misguided use of what constitutes the research material of psychology (the ontological and epistemological problems of philosophical psychology). In terms of human nature, Marx pointed to the societal dimension of humanity. The essence of humans could not be found in personality, or in physical or biological features, but primarily in the societal dimension (Marx, 1844/1956, p. 222). As pointed out in the famous sixth thesis on Feuerbach, Marx claimed that the human essence could be recognized in the "ensemble of societal relations" (Marx, 1888/1958, p. 6).[4] Even lonely scientists were societal beings because the material with which they worked was social, the language was social, and their existence was social (Marx, 1932/1968, p. 538).

Although Marx identified societal relations as the essence of human nature, this did not mean that humans were not natural beings. For Marx humans were societal, historical, and natural beings. Marx repeatedly emphasized the natural dimension of humans in the *Economic-Philosophical Manuscripts* (Marx, 1932/1968). In 1860 Marx (1964) stated that Darwin's book on natural selection was "the natural-historical foundation for our view" (p. 131). The difference between Marx and Engels (who highly regarded Darwin's evolutionary theory because it was consistent with dialectical materialism) and Darwin was that, because of human production in the course of history, it would be impossible to transfer laws that play a role in animal life to human existence. In terms of history, in the *Economic-Philosophical Manuscripts*, Marx (1932/1968) pointed out that history was the true natural history of the human being (see p. 579).[5] Any philosophical psychology discussing human nature would have to acknowledge these dimensions. It also would have an impact on how one understands, for instance, the senses. For Marx, the senses were not only natural objects, but "the formation of the five senses is the work of the whole preceding world history" (pp. 541–542). He argued that the meaning of sensory objects changed according to sociohistorical contexts and according to one's own position in these contexts.

Based on the natural, social, and historical quality of human nature, Marx laid out the sociohistorical quality of the mind or consciousness. The human mind was, according to Marx and Engels (1932/1958), a societal product and thus the mind of an individual was not just the mind of a single person, because the mind was in connection with society and part of society (p. 167). Consequently, Marx urged philosophers to study the mind of concrete individuals who lived in concrete historical societies and not to reflect on the mind of abstract individuals beyond history and society. For example, he argued that religious consciousness was a societal

product that must be studied within a given particular form of society (Marx, 1888/1958, p. 7).

The sociohistorical dimension of the mind (consciousness [Bewuβtsein]) was discussed extensively in *The German Ideology* (Marx & Engels, 1932/1958).[6] According to Marx's materialist position, he emphasized the role of language in the development of consciousness, and that language developed out of the necessity of interacting with other humans. In addition to language, production (labor) became the source for the development of the mind. But modes of production were power-laden, as productive humans not only influenced nature but also other human beings. They developed relations with other persons and production took place under these societal relations. According to Marx, forms of interaction had appeared as struggles between exploiters and exploited people. In terms of consciousness, he argued, this situation had enormous consequences, because the ideas of the ruling class became the ruling ideas and "the ruling ideas are expressions of ruling material relations" (Marx & Engels, 1932/1958, p. 46). Morality, religion, metaphysics (including philosophical psychology) were thus ideologies that were in no way independent from the social realities in which they were expressed.

Marx used the metaphor of a *camera obscura* to describe ideology or false consciousness.[7] Marx knew about perceptual phenomena such as optical illusions, the invertive function of the eye, and quasi-technological applications such as the *camera obscura* and described the mind (consciousness) accordingly. These understandings led Marx to the conclusion that the mind had distorted views of the world (as in optical illusions), and that the mind worked upside down. Marx and Engels (1932/1958) used the model of the *camera obscura* in *The German Ideology* to describe the workings of the mind: "If in all ideology humans and their relations appear upside down as in a camera obscura, this phenomenon arises just as much from the historical life-process as the inversion of objects on the retina does from the immediate physical process" (p. 26).

In contrast to philosophical psychologists and anthropologists of his time, Marx connected the mind to power and the practice of humans. Such an idea seems trivial but an examination of philosophical psychology of his time, when cognitive processes were disconnected from real-life activities, demonstrated its significance. This conceptualization of the mind led to the famous statement: "Life is not determined by the mind, but the mind by life" (Marx & Engels, 1932/1958, p. 27). This central idea can also be found in the *Manifesto of the Communist Party* of 1848: Ideas of freedom, education, and right were "results of bourgeois production and property relations" (Marx & Engels, 1848/1959, p. 477), and the content of laws could be found in the life conditions of the ruling class. He expressed this

idea most clearly in 1859: "The totality of these production relations forms the economic structure of society, the real basis on which is built a legal and political superstructure, and which corresponds with certain societal forms of the mind" (Marx, 1859/1961, pp. 8–9). For Marx, it was not the human mind that determined being, but on the contrary, it was the societal being of humans that determined their mind.

Marx and Engels (1932/1958) criticized traditional German philosophical psychology and anthropology for starting with what humans imagine and then making conclusions about real humans. In contrast, they suggested a methodology in which one began with active humans in order to understand their ideas and imaginations. Human existence and history presupposes, first of all, that humans must be able to live. According to Marx and Engels, human beings ate, drank, and required clothing and shelter. Another presupposition was that the satisfaction of one need led to the production of new needs. At a certain point in history humans did not just find their means of living, they produced them. Thus, the history of humankind should be studied in relation to the history of production. In addition, procreation was a necessary presupposition of historical development. In short, he suggested that in order to study the mind one should study the preconditions that made the mind possible. This had not been done or reflected upon in philosophy or philosophical psychology.

His methodological critique targeted the neglect and contempt for studying the products of human labor in order to understand the human mind: "One sees how the history of industry and the developing objective existence of industry is the open book of human nature, of . . . human psychology" (Marx, 1932/1968, p. 542). In the course of this argument, Marx expressed his criticism for the content of modern psychology: "A psychology, for which this book, the sensuously most tangible and accessible part of history, is closed, cannot become a real science with a genuine content" (p. 543). Marx (1867/1962) did not challenge the natural sciences (or psychology's emulation of the natural sciences), but philosophical psychology. In this sense he could be considered a proponent for a natural-scientific critique of philosophical psychology. He admired the natural sciences and interpreted processes of capitalist economy and historical development as natural-scientific laws. Marx (1932/1968) also projected a monistic view of science in which the natural sciences would contain the human sciences and the human sciences would contain the natural sciences. History would involve the history of nature and the history of humans. Marx's critique was much closer to the natural-scientific critique than to the human-scientific one. However, he also addressed issues of relevance by suggesting that the ruling theories were of little value for the oppressed.

VYGOTSKY'S CRITIQUE OF PSYCHOLOGY

Marxism had produced a variety of psychologists, with Lev Vygotsky probably being the best known in North America. His psychology was considered bourgeois in the Soviet Union of the 1920s until the 1950s, and Vygotsky's (1934/1962) book on *Thought and Language* was no longer published after 1936 in the USSR. Kozulin (1984) noted that Vygotsky's psychology during his lifetime was overshadowed by more popular theories including that of Pavlov, but that he became, many years after his death, one of the best known Soviet psychologists in North America. Indeed, Vygotsky left a huge scientific legacy, including numerous unpublished manuscripts, which must be judged as astonishing in their meaning for contemporary psychology. As most developmental and educational psychologists know, Vygotsky's *Zone of Proximal Development* has become one of the classic concepts in these research areas. Vygotsky finished his essay on the crisis of psychology in 1927; it was published first in 1982 in Russian and in 1985 in German (Wygotski, 1985).[8] Vygotsky, who identified a variety of problems responsible for the crisis of psychology, outlined a dialectical-materialist psychology for overcoming the crisis.

As previously discussed (see Chapters 2 and 4) the missing unification in psychology was a chronic topic in the history of psychology with contemporary reflections not decreasing on this issue. Vygotsky (Wygotski, 1985) identified the lack of theoretical integration as one central feature of the crisis in psychology. He complained that the ongoing practice of collecting facts without any kind of theoretical integration would reach its end, and that the time had come to unite existing research and to establish the relationship between various areas of psychology. This argument is related to another dimension of the problem of unification, namely, that different research programs rely on different realities. Psychoanalysis, behaviorism, and subjective psychologies operated not only with different concepts but also with different facts. Vygotsky mentioned that for the psychoanalyst the Oedipus complex was a reality while it was an imagination for a psychologist using a different framework (see p. 69).

Another factor for the crisis, according to Vygotsky, was the unwarranted *expansion of ideas*, by which he meant that various research programs in psychology began with basic insights or principles that were then generalized to all areas of psychology. But a principle that might make sense in one area might not be right in explaining a whole field of research. According to Vygotsky, at the beginning of this process, was the discovery of a fact of more or less significance. Psychoanalysts discovered the importance of the determination of psychological phenomena through unconscious processes and the role of sexuality in various activities.

Reflexology discovered the conditioned reflex, and Gestalt psychology the role of Gestalt in processes of perception. William Stern (1871–1938) discovered the role of personality in his program of *personalism*.

Basic ideas of these research programs then began to influence neighboring fields, they started to dominate the whole discipline, and finally these ideas were dislocated from their original meaning. Vygotsky mentioned that psychoanalysis began with the idea of a neurosis, which was then spread to the whole field of clinical psychology, and then to the psychopathology of everyday life, child, art, and social psychology. Psychoanalysis became sociology, an epistemology, and a complete worldview in which everything from communism to church, from occultism to advertisement, literature, and art could be explained. The same development could be identified in reflexology where the idea of the conditioned reflex was extended to dreaming, thinking, and creativity, then to the fields of social psychology, art, psychotechnique, education, and psychopathology, and finally it became a worldview in which the reflex was praised as everything, and kleptomania, class struggle, language and dream were all just reflexes. Gestalt psychology transferred the idea of Gestalt to animal psychology, psychology of art, social psychology, and psychopathology; as a worldview, Gestalt psychology discovered Gestalten in physics, chemistry, physiology, and biology; Gestalt became the foundation of the world and when God created the world "he" might have said there should be Gestalt (see p. 81). Stern's personalism also provided a worldview in which the solar system, an ant, and Hindenburg were all personalities. Yet, Vygotsky added that the basic ideas of these programs assumed such a breadth that the content moved toward the zero point, and their ideas began to be rejected. It could easily be seen how these criticisms apply to North American psychology, especially behaviorism. For Vygotsky, each idea had a meaning in its place but when put to global significance it was meaningless.

Vygotsky rejected the arbitrary unprincipled combination of theories resulting in an *eclecticism of psychology*. He specifically mentioned V. M. Bekhterev's (1857–1927) system in which research results of the Würzburg School were combined with concepts of associationism and psychoanalysis. He also mentioned attempts to combine Marxism with psychoanalysis as ill-conceived because one would have to close one's eyes to contradictory facts, and one would have to neglect important principles, even violate them (p. 114). Even if Freud's concepts contradicted dialectical materialism, this did not mean that Vygotsky suggested excluding the unconscious from a Marxist perspective, but rather that Marxism should conquer psychoanalytic fields of research. Vygotsky also rejected the idea of testing Freud's facts with experimental methods,

which in his view was just another form of eclecticism (p. 126). In terms
of methodology, Vygotsky rejected the idea that the experiment could be
applied automatically to psychology. He called the transfer of experimen-
tal and mathematical methods to psychology a way to make psychology
look like a natural science when in fact it expressed only psychology's
helplessness (see p. 151). Vygotsky rejected any kind of *methodologism* sug-
gesting that a method should be used only if it did justice to the object.
Any other practice would just generate an illusion of science (see p. 131).

Vygotsky pointed out that the problems of psychology were rooted in
psychological language because each psychological school operated with
its own concepts. These concepts were derived from everyday language,
philosophy, or natural science. But concepts that were developed from
everyday language were diffuse, ambiguous, but apt for practical life,
whereas philosophical concepts could not really be transferred to psy-
chology because of their long traditions, and concepts stemming from the
natural sciences only simulated the scientific status of psychology. Instead
of borrowing concepts, psychology should develop its own language,
which Vygotsky considered itself to be a methodological approach (see
pp. 154, 173). The development of these concepts, the combination of
facts, the organization of isolated laws into a system, the interpretation
and evaluation of research results, the clarification of methods and basic
concepts, and laying the foundation for basic principles should be real-
ized in a general psychology based on Marxism. Vygotsky envisioned a
monistic, antieclectic, materialist unification of psychology.

This new Marxist psychology should not dogmatically follow the
writings of Marx but apply his methodology in order to develop concepts
for the unique science of psychology. Vygotsky was adamant that he did
not want to learn what psychology was by quoting Marx, but that he
wanted to learn from the method of Marx how one should develop a sci-
ence and how one should approach mental life. He also argued that a
Marxist psychology did not really exist (see p. 272). This position on Marx
led to controversial interpretations of Vygotsky's thinking. In the United
States the editors of the early English translation of *Language and Thought*
decided that the references to Marx were rhetorical and not essential to
Vygotsky's theory. As a consequence, "they dropped all the vaguely
'philosophical' passages with references not just to Marx but to Hegel and
other thinkers" (Kozulin, 1984, p. 116).

Vygotsky (Wygotski, 1985) was well aware that two groups of psy-
chologists existed: one group that denied that there were any major prob-
lems in psychology, and thus denied the crisis; and a second group that
accepted the crisis but believed that it applied only to other fields and not
to their own research program (e.g., Watson) (see p. 175). Vygotsky also

provided an explanation for the substance and development of the crisis. He suggested that the crisis of psychology was driven by demands from industry, education, politics, and the military (see p. 201) and thus he made practical relevance the main source of the crisis. He believed that applied psychology would lead to a total revision of methodology and change psychology into a truly natural science. By natural science Vygotsky meant a real science that referred to something that exists (and everything that existed should be labeled *nature*). Vygotsky used this terminology to distinguish *real psychology* from spiritual psychology, which would not be successful in solving practical problems.

HOLZKAMP'S CRITIQUE OF TRADITIONAL PSYCHOLOGY

Klaus Holzkamp (1927–1995) could be seen as following the footsteps of Vygotsky by laying the foundation for psychology and attempting to provide a unique, innovative, and (regrettably for most North Americans) largely incomprehensible, conceptual network for psychology. Holzkamp, whose monographs inaugurated heated discussions in the psychological community, was probably the most significant representative of *German Critical Psychology* and was an important figure in postwar German psychology in general.[9] North American scholarship on the history and theory of psychology seems to neglect his ideas because there is a focus on contributions of German psychology before WWII and because Holzkamp's foundation of psychology follows a philosophical model of science, which was expressed by Hegel and later by Marx, and not a positivist research program. Models that attempted to provide a comprehensive representation of reality in a network of concepts have been criticized by research-oriented scientists and more recently by postmodern philosophers and sociologists of knowledge (see also Chapter 8). Only a few works of Holzkamp, who was not interested in marketing to a North American audience, and none of his monographs, have been translated into English. However, several publications on critical psychology are available (Holzkamp, 1992; Ijzendoorn & Veer, 1984; Osterkamp, 1999; Teo, 1998a; Tolman, 1989, 1994; Tolman & Maiers, 1991).

Holzkamp's theory development is not only intellectually interesting but also provides rich material for social history.[10] His ideas and writings should be understood in the context of West Berlin culture and the postwar Americanization of German psychology (see Maiers, 1991; Métraux, 1985). His early writings in the 1960s were critical of traditional methodology but not Marxist in any sense. Holzkamp attempted to solve the problems of traditional psychology within the logic of providing suggestions on how to

overcome problems of traditional psychological research. In his book on *Theory and Experiment in Psychology*, Holzkamp (1964) investigated the relationship between theory and experiment and demonstrated convincingly that the interpretation of experimental results was not binding and that psychology offered theories for which one could produce experiments that both verified and falsified the theory. It is important to mention that Holzkamp performed experiments himself (e.g., Holzkamp & Keiler, 1967) while at the same time he discussed problems of psychological experimentation. At that stage of his intellectual development he did not really challenge the basic value of experiments for psychology, and argued that doubts about experiments were due to misunderstandings (Holzkamp, 1964). As a remedy for the problems of experimental psychology, he outlined criteria that should guide researchers when they were striving to achieve experiments representative of their theories. Only later, when he had incorporated classical Marxism, did Holzkamp (1964/1981) distance himself from this project, arguing that nobody cared about criteria, that even he himself did not consider them in his own experimental research practices (p. 277).

In this pre-Marxist phase, Holzkamp (1968) attributed the central weaknesses of psychology to a misconceived philosophy of science. Consequently, he tried to develop a new philosophy of science, called *constructivism*, in which new criteria for research were developed. His book *Science as Action* (Holzkamp, 1968) was intended for the scientific community as an alternative to the traditional philosophies of science. He sought to demonstrate that an empirical-inductive philosophy of science was untenable, and attempted to develop a philosophy of science that would do justice to the real research practices of scientists. In hindsight and in light of the attention that the *social-constructionist* movement has received in the 1980s and early 1990s, his ideas, including the notion that reality was constructed and created in psychological experiments, seem highly contemporary.

Holzkamp's early Marxist reflections were neo-Marxist in nature and were expressed in publications from 1968 to 1972, the year in which he published *Critical Psychology: Preparatory Works* (Holzkamp, 1972). This shift in theoretical orientation and the emergence of critical psychologies in Germany should be understood within the context of a broader social development in modern industrialized societies in the 1960s (Teo, 1993) and within the context of postwar West Germany and the specific sociocultural problems of this society (Benz, 1989). The Cold War, authoritarian structures in all arenas of life and especially at universities, the perceived failure of the majority of the population to deal adequately with Germany's past, and a lack of knowledge about parental involvement in

German fascism, buried in economic growth, sensitized many students to challenge society's ideas and behaviors (Teo, 1993). The Free University of Berlin became a center for alternative agendas (Rabehl, 1988).

The German student movement in its diverse developments (Teo, 1993) had a direct influence on the thinking of Holzkamp, who was already recognized as a leading theoretical psychologist in Germany, when the ideas of neo-Marxism became predominant in his thinking.[11] This context should be taken into account if one wishes to understand why he sought to develop a "better" psychology, and not just to criticize psychology, as many psychology students did. The need for critique was motivated not only by psychology's limited theories, but also by the concrete experience that psychology, and especially its methodology, did not address the burning issues of the time (Mattes, 1985). Most critical psychologists drew upon Marx, but there was no common agreement about which aspects of his thought should be incorporated into their theories (see also Zygowski, 1993).

Neo-Marxism provided a tool that allowed Holzkamp to propose solutions to problems in psychology and a compromise between critical-theoretical reflections and traditional psychology, a middle ground that should lead to an emancipatory psychology. The German neo-Marxist movement was largely influenced by the thoughts of Max Horkheimer (1895–1973), Theodor W. Adorno (1903–1969), and Jürgen Habermas (born 1929). Horkheimer (1937/1992) had argued in a prewar paper on the distinction between traditional and critical theory that a traditional theory (by which he meant a positivist theory that applied logic, mathematics, and deduction for the assessment of its sum-total of propositions) would be extremely limited. The narrow focus of traditional theory would hide the social function of science, the social formation of facts, and the historical character of research objects. As an alternative he proposed critical theory that would relativize the separation of individual and society, and reject the separation of value and research, and of knowledge and action. Horkheimer recommended the reasonable organization of society that met the needs of the whole community as an important value for critical theory. This would include the abolition of social injustice.

Habermas, a second-generation critical theorist, already showed in his early studies that he would not limit himself to the categories of traditional Marxism (Habermas, 1968). In the 1960s and 1970s, Habermas published important works on epistemology, participated in the positivism dispute in German sociology (Habermas, 1967/1988), and influenced widely the critical discussions in Germany on the social sciences' methodology. In his attempt to develop an epistemological foundation for critical theory (Habermas, 1968/1972; see Chapter 2), Habermas included

Anglo-American philosophy of language into his thought. This linguistic turn of critical theory indicated a shift away from the Marxist production paradigm and was central for his communicative foundation of sociology. In his later writings he embraced psychologists such as Jean Piaget (1896–1980) and Lawrence Kohlberg in his social philosophy and was even able to integrate sociological system theory into his concept of society (Habermas, 1981).

However, for Holzkamp, Habermas's epistemological writings of the 1960s were significant. As pointed out in Chapter 2, Habermas (1968/1972) had suggested intimate relationship between knowledge and interests, whereby the concept "interest" represented not an economic, psychological, or political, but a transcendental category. For Habermas, interests were fundamental orientations that were necessary for the reproduction and self-constitution of the human species and had their foundation in the natural history of humanity. Based on this idea, he was able to justify three qualitatively different categories of sciences that were guided by different interests. Beside the technical cognitive interest of the empirical-analytic sciences and the practical interpretative interest of the historical-hermeneutic sciences, Habermas identified an emancipatory interest of the critical sciences (Habermas named psychoanalysis and Marxist ideology critique).

Holzkamp's (1972) goal in his neo-Marxist phase was the development of an emancipatory psychology. At this time, the critique of traditional psychology meant to question the relevance of psychology for practice; to identify problems of traditional psychological methodology; and to disclose psychology's hidden, ideological assumptions. Based on neo-Marxist reflections, Holzkamp analyzed the relevance of psychology for practice. He argued that the sophistication of experimental methodology and inferential statistics led to the particularization of reality in psychological research. But this fact also meant that in all real-life contexts, those variables that had been controlled and excluded in the laboratory would show up, because the social world of the practical psychologist would consist of real problems. Given the discrepancy between experimental research and real social life, psychology could not achieve technical relevance. Moreover, if technical relevance alone was to be established it would mean working for the powerful in society. Thus psychology, according to Holzkamp, would require emancipatory relevance, which would be accomplished if research helped individuals in obtaining self-enlightenment about their societal dependencies.

From an ontological point of point of view, Holzkamp (1972) argued that there was a fundamental difference between the subject matter of physics and psychology. Research in physics could be characterized in

terms of a subject–object relationship, whereas empirical research in psychology must be understood in terms of as a subject–subject relationship. But this also meant, according to Holzkamp (1972), that the experiment depends on the acceptance of arranged, reversible roles, according to which the experimenter expects that the research subject demonstrates the role of a subject in an experiment and only displays certain behaviors. The research subject also accepts the role of the experimenter who gives instructions. Behaviors such as challenging the experiment or the experimenter would be unacceptable for research. However, if the experiment depended on cooperative subjects, then the conceptualization of psychology as a natural science, as a nomothetic science, would be completely misleading.

Holzkamp (1972) did not argue that the problems of traditional psychology were arbitrary, but rather that they were embedded in ideological influences on psychology that reflected the sociohistorical context in which it existed. According to his analysis, traditional psychology conceptualized the individual as concrete, while concepts such as society were perceived as abstractions. He argued that these ideas resulted from a bourgeois ideology of the individual. From a Marxist perspective, however, the notion of the individual was not at all concrete but was extremely abstract, especially as long as traditional psychology abstracted the individual from her or his historical-societal position. Holzkamp urged, in responding to the weaknesses of traditional psychology, for psychological enlightenment by binding theory to practice, for a free and symmetric dialogue within research, purged of power, and for the development of a socially responsible psychology. This critical-emancipatory psychology remained programmatic but was soon overtaken by a new critical psychology inspired by the *socialist turn* of the German student movement (Teo, 1993). At the end of his book, Holzkamp (1972) included a self-critical evaluation of his own papers, indicating his socialist turn, which moved him away from neo-Marxism towards classical Marxism.

In order to understand Holzkamp's shift from critical-emancipatory psychology to critical-conceptual psychology, it is important to analyze the development of the student movement, the changes at the *Psychological Institute at the Free University of Berlin* (Mattes, 1988), and his experiences with a "scandal" (see Teo, 1993). These personal experiences, the establishment of an *Institute for Psychology* separated from the critical *Psychological Institute* at the same university, the intellectual radicalization of some parts of the left, and group dynamics at the institute, moved him away from compromises with traditional psychology. Holzkamp (1972) completely challenged his own writings from a classical Marxist position. He criticized his own system (types of relevance) as being unfounded, and rejected an instrumentalist reduction of science (relevance).

With the socialist turn, Holzkamp acquired and applied principles of the cultural-historical school (Leontjew, 1959/1973; see Holzkamp & Schurig, 1973) and embraced classical Marxist literature (Marx and Engels). He sought to realize positive knowledge, which could not be achieved by mere critique, but only through research on the real subject matter of psychology. This *critical-conceptual period* lasted from the publication of *Sensory Knowledge* (Holzkamp, 1973) to the *Foundation of Psychology*[12] (Holzkamp, 1983). During this period Holzkamp held that psychology's problems could not be solved within the framework of traditional psychology, or through compromises between critical and mainstream thinking, but rather that psychology required a radically different outlook. Thus, he and his colleagues attempted to develop a better conceptualization of psychological subject matters.

The first book within this new framework dealt with the reconstruction of the object of perception and laid out the basic methodology for conceptual studies in German critical psychology (Holzkamp, 1973). Holzkamp argued that a true understanding of perception in general psychology would only be possible by including the natural history, the prehistory, and the history of humanity. Accordingly, he suggested steps in analyzing psychological concepts such as perception. In the first step, one should incorporate the natural history of perception and identify the general evolutionary-biological characteristics of perception. In the second step, one should analyze the main features of perception with regard to their general societal-historical characteristics by focusing on the transition from prehuman to human life-forms. In the third step, one should clarify perception under a given historical-economic reality such as bourgeois society. In order to accomplish these goals for psychology, critical psychology should include material from biology, physiology, ethology, anthropology, archaeology, and so on. Holzkamp (1973) emphasized that Darwin's theory of evolution was the decisive framework for natural-historical analyses.

Based on this general methodology, colleagues at the *Psychological Institute* followed with their own studies on psychological objects. Especially important were the works of Holzkamp–Osterkamp (1975, 1976)[13] on emotion and motivation, and the works of a trained biologist on the natural history of the psyche and consciousness (Schurig, 1976). The many books produced by Holzkamp's colleagues indicated that critical psychology was the result of a scientific community working together on a common research program, refining methods and enriching the knowledge base of psychology. It was, however, Holzkamp who summarized and elaborated the results in his voluminous study *Foundation of Psychology* (Holzkamp, 1983). In the book, he intended not

only to reconstruct psychological objects, but also to reconstruct the psyche as such. Using a so-called *analysis of categories* (of Kantian origin), he intended to provide a systematic-paradigmatic foundation for psychology, its subject matter, and methodology.

In this period, Holzkamp (1978) also refined his critique of psychology. This critique was an important part of a process in which the clarification of the conceptual foundations of psychology was perceived as linked to the critique of traditional psychology. Traditional psychology was depicted as producing small and isolated empirical results, while lacking theoretical unification. The status quo of psychology was described as an accumulation and proliferation of competing theories based on different models of human nature, different methods, and different practices, while its history was characterized as a series of theoretical fads. The accumulation of statistically significant yet theoretically insignificant findings was professed as leading to the stagnation of knowledge and to the lack of scientific progress in psychology.

As an alternative, Holzkamp (1983) suggested a unified paradigm for psychology to overcome the *indeterminacy* of traditional psychology, a topic that can be identified in all of his periods (Teo, 1993). In his early works, for instance, Holzkamp (1964) challenged operational definitions in psychology as leading to an inflation of definitions in psychology and he argued that causality was constructed rather arbitrarily by the experimenter (Holzkamp, 1968). In the critical-conceptual period, the circularity of empirical research was considered a major issue for the *indeterminacy* of psychology (Holzkamp, 1978). Holzkamp argued that any conceptualization led to results within the conceptualization, while the conceptualization itself could not be tested empirically (the conceptualization was a presupposition). Therefore, psychology came up with contradictory theories regarding the same object while the theories were all empirically tested and "supported."[14] Consequently, psychology required clarification of its basic concepts, which could be achieved through establishing a foundation for psychology (Holzkamp, 1983).

The *permanent crisis* (Holzkamp, 1983, p. 45) of mainstream psychology was not attributed to the theory–practice problem or to simple ideology, but to the indeterminate status of basic concepts (categories). A real crisis intervention program, according to Holzkamp's analysis, should tackle the real source of the crisis, the subject matter of psychology, and should develop scientifically qualified categories that grasp the subject matter of psychology adequately. Thus, only after psychology developed an adequate understanding of its subject matter did it make sense to talk about methodologies. In this context he criticized traditional psychology for using an investigative practice that conceptualized the subject matter

according to the way the method prescribed it, an approach in which the method dominated the problem, or problems were chosen in subordination of method (Holzkamp, 1983) (see also Chapter 2).

Holzkamp's alternative, a system model of psychology, pursued a different logic. According to scientific knowledge one should assume that humans were the result of a long evolutionary process. At the evolutionary beginning stood very simple organisms that differentiated into more complex organisms over time. Holzkamp suggested that it made sense to assume that the psyche was part of the same evolutionary process. Why should it not be possible to reconstruct the development of the psyche? In order to achieve that, he suggested an analysis of categories, which was based on a *historical-empirical* method (Holzkamp, 1983). With this method, he reconstructed the development of the psyche to its human level. Using so-called preconcepts and following the evolutionary development of the psyche, its differentiation and qualifications on different levels, a system of categories (basic concepts) was developed by *matching processes and categories*. According to Holzkamp, real processes and categories corresponded with each other and guaranteed an adequate conceptualization of the subject matter of psychology. The difference between Holzkamp and traditional Darwinism was based on the Marxist understanding that at a certain point in evolutionary development natural history was transcended (not abolished) by sociohistorical development that allowed for a new quality of development. Applying these ideas, he was able to derive general definitions of human subjectivity and their meaning within bourgeois societies (see also Tolman & Maiers, 1991).

For example, in order to analyze human activities in bourgeois societies, Holzkamp (1983) developed the category-pair *generalized action potence* versus *restrictive action potence*. An analysis of restrictive action potence seemed more important as it was the typical coping pattern of individuals in bourgeois societies. Restrictive action potence referred, for example, to an instrumentality in human relationships, to an arrangement with the powerful, to actions in which human beings gave up long-term goals in order to achieve short-term advantages, or to actions that led to alienation. Thinking within restrictive action potence was static and isolating, while emotions were characterized through anxiety and inner compulsions. As an alternative, he suggested a generalized action potence that called for "liberated" actions. The category-pair was not developed in order to put individuals into a certain category but in order to enlighten humans about their own possibilities, which indicated the idea of psychology as the science of the subject. It was also evident that traditional psychology, as bourgeois psychology, could only conceptualize restrictive dimensions of human subjectivity.

Holzkamp was popular during the 1970s and 1980s but a look at critical discourses in the 1980s indicated a shift away from Marxism towards diverse variants of postmodernism, starting in France, and towards the arguments of feminism and multiculturalism in North America (see Teo, 1997). In postmodern discourse the very idea of a grand theory, or the possibility of a global, universal, and inclusive theory (exactly what Holzkamp attempted with a foundation of psychology) was challenged vehemently. Postmodern discourse, with its rejection of grand projects, its departure from metanarratives, and its affirmation of multiplicity, plurality, difference, antifoundationalism, and local truths (see Teo, 1996), hit at the very heart of his research program (see also Chapter 8). For many critical communities, postmodernism's relativism seemed more attractive than the search for a unified, reality-representing system of categories.

Since 1983 and until his death in 1995, one could use the label of a *subject-scientific period* of critical psychology (a psychology from the standpoint of the subject), which represented a Marxist science of the subject. Holzkamp tried to demonstrate the significance of his analyses for psychology by elaborating on the idea of a *science of the subject* (see also Holzkamp, 1991), as already suggested in the *Foundation of Psychology*. In addition, he tried to do justice to other alternative psychologies by acknowledging the contributions of psychoanalysis and phenomenology to critical psychology's development. The utopian dimension in this latest phase became very modest. Psychology from the standpoint of the subject should help individuals to understand their possibilities and to improve their quality of life under capitalist life conditions. Concepts developed within the framework of critical psychology should help to fulfill these goals. In further development of this idea, he published his final monograph, *Learning: Subject-scientific foundation* (Holzkamp, 1993), in which a learning theory from the standpoint of the subject was presented.

Critical psychology as a subject-oriented research program promoted a type of research in which subjects were both participants and co-researchers simultaneously (Holzkamp, 1986, 1991). Psychological research was intended as research *for* people and not *about* people. This was only possible if psychological research were conducted from the standpoint of the subject. The perspective of the subject was meant in a radical sense. In an interview, Holzkamp (1984) argued, using the example of an alcoholic, that if a researcher or therapist already knew at the beginning of an intervention that drinking should end for this alcoholic, subjectivity, the subject's standpoint, was excluded. It might turn out, after a thorough analysis of the person's situation, that drinking alcohol was the best solution for this specific person.

The significance of reflecting on psychological categories elicited many Marxist reflections (see Teo, 1995) but there has also been an

increased reflection on basic concepts in other critical constructivist discourses. Danziger (1997a) challenged psychology's categories for being intended as natural qualifications but having meaning only in an historical and social context (see also Chapters 1 and 8). Danziger's critical-historical analysis of categories represents one side of a coin, while the other side was Holzkamp's attempt to construct concepts or theories that grasp parts of human subjectivity more adequately. If the limits of one's categories were the limits of one's world (paraphrasing Wittgenstein, 1968), how might better categories than those provided by traditional psychology be conceptualized? The development of solutions to this problem remains an important task for theoretical or philosophical psychologists but is not a real research topic for natural-scientific psychologists.

FRENCH REFLECTIONS

There exists a long Marxist tradition of the critique of psychology in France. An early example would be Georges Politzer (1903–1942), a member of the French resistance and executed by the German occupiers of France in 1942, who criticized psychology from a Marxist perspective. In his book (Politzer, 1928/1978) he called the history of psychology a history of disappointments and, as did many others of his time, challenged psychology of his time for emulating physiological laboratories and using instruments. For Politzer, such a practice would not be sufficient to establish the scientific status of psychology. He specifically criticized the *impotence* of scientific methods in psychology and even argued that psychologists' understanding of mathematics was fourth-rate. This meant that mathematicians developed sophisticated concepts, a knowledge that then was handed down to physicists, who in turn delivered their understanding to physiologists, who finally provided this information to psychologists. According to Politzer, a similar process would occur regarding the experimental method, which would find its meaningful application in physics, was then trimmed down in physiology, and became pomp in the hands of psychologists. Both processes led to the decline of the scientific quality of mathematics and experiments in psychology.

Politzer also pointed to the temporal nature of research results when he argued that the calculation of means did not often survive their validity beyond the publication date of the results. He characterized psychology as a formal, sterile, and scholastic discipline, and he predicted that psychologists of the future would make fun of classical psychology as his colleagues made fun of scholastic arguments. By classical psychology Politzer meant introspective experimental psychology as outlined by

Wundt and his students. But his critique of psychology did not only target classical psychology, but also the most important research programs of his time: psychoanalysis, behaviorism, and Gestalt psychology. He criticized behaviorism (J. B. Watson) for producing only the illusion of objectivity, and for failing to develop a real psychology. Instead he produced something that was closer to physiology or biology. He challenged Gestalt theory as a research program that intended to concentrate on the totality of mental life, yet did not produce any understanding of the meaning and form of this totality. As a genuine psychology he identified psychoanalysis. Yet, psychoanalysis too had to be critiqued in order to develop a concrete science of subjectivity.

Another well-known materialist psychologist in France was Sève (1972/1983) who developed a Marxist theory of personality. For Sève, personality psychology, as well as the whole field of psychology, was immature. The theoretical immaturity of psychology was expressed in its inability to solve the issue of psychology's subject matter, a problem that if solved would bring decisive progress in the field. Problems of the subject matter were expressed in traditional psychology in the dualism of mind and body, in abandoning psychology in favor of biology, and in suggesting that psychology and physiology formed a unity, a solution which did not solve the specificity of the psychological. The problem remained that the psychological was unique because it was qualitatively different from nervous activity while at the same time it was nervous activity. Traditional psychology was not able to solve these issues, as it was not able to provide real basic concepts. In addition, traditional psychology never understood the relationship between the individual and society. As a solution Sève looked for assistance from philosophy, more specifically from dialectical materialism.

Some of the Marxist discourses went into postcolonial reflections (see Chapter 9) and, in English-speaking countries, Marxist thoughts survived in various radical psychologies (see Parker & Spears, 1996). But Marxist approaches in psychology, just like left-wing political parties, never had the same standing in North America as in Europe, even if one admits that Marxist influences in psychology were not represented correctly in the history of American psychology (see Harris, 1996, 1997). It seems that the perceived contradictory relationship between individualistic traditional psychology and collectivist Marxism prevented many North American psychologists from incorporating Marxist thinking into their research. Even Parker and Spears (1996) reported in the book's dedication that the left-leaning publisher suggested a change from the original title of the book, *Psychology and Marxism: Coexistence and Contradiction*, to the neutral title, *Psychology and Society*. It did not matter that Parker and Spears (1996)

were critical of orthodox Marxism and did not consider it a system of knowledge but rather a program of research. Marxist psychology has not only been combined with psychoanalysis (Hinshelwood, 1996), which has a long tradition, but also with behaviorism (Ulman, 1996). Despite attempts to reinvigorate Marxist theory for psychology in English-speaking contexts (e.g., Dobles, 1999), the most significant impact of Marxism in North America came through Vygotsky. There exist also neo-Marxist, or better progressive reflections on the impact of society on psychological distress (see Sloan, 1996a).

7

The Feminist Critique

The feminist critique of psychology is extensive, multifaceted, sophisticated, but also contentious, which makes it impossible to provide a complete and systematic overview in a single chapter (see Benhabib, Butler, Cornell, & Fraser, 1995). From a feminist historical point of view the development of psychology appears male-dominated because women have been excluded from the institutions of psychology and their contributions have been neglected. According to feminist critics, the subject matter of psychology, its methodology, and the relevance of the mainstream are gender-biased. Feminist historians have studied the historical context of women in North American psychology and have identified the hurdles that women have had to overcome in order to be successful in psychological research (see Austin, 2003; Febbraro, 1997; Furumoto & Scarborough, 1986; Scarborough & Furumoto, 1987; Unger, 2001). Although textbooks have begun to incorporate women into the history of psychology (e.g., Benjafield, 1996), knowledge of the history of women's contributions to the discipline remains fragmentary (Bohan, 1990). Yet, as McDonald (1994) has argued, women founders of the social sciences have played an important role in the development of research and research methods, including quantitative ones.

Exclusionary techniques, perpetrated by institutions and individuals, were often unsophisticated and obvious as reflected in arbitrary barriers that systematically prevented women from pursuing academic psycho-

logical careers or from becoming members of professional societies. For example, Mary Whiton Calkins (1863–1930) had very limited opportunities to pursue advanced education and she remained an unofficial guest at Harvard University, which refused to grant her a PhD despite her innovative research and despite being recommended by leaders of the discipline (see Scarborough & Furumoto, 1987). Edward Bradford Titchener (1867–1927), to name one individual, excluded women from his experimental club, a decision which had a negative impact on Mary Whiton Calkins, Margaret Floy Washburn (1871–1939), and Christine Ladd-Franklin (1847–1930), who were among the most eminent psychologists at the beginning of the 20th century. These segregating practices forced women to address issues of gender and Ladd-Franklin vehemently and actively challenged and fought the exclusion of women from the *Experimentalists* (Furumoto, 1988; Scarborough & Furumoto, 1987).

Intellectually, the challenge of sexist beliefs and practices goes back to the classical Greeks and includes male and female thinkers. Plato (427–347 BCE) believed in women's equality, despite his hierarchical view of society. In his *Republic*, Plato (1997)[1] had his protagonists suggest that women should be trained in the same way as men when it came to mind and body, and that both should be taught the art of war, carry arms, ride on horseback, and receive the same treatment. Accordingly, women were expected to take the full share of work, and, because women had the same nature as men, every occupation should be accessible to them. Because of the identity of male and female nature, there should be only one education for both sexes, for example, in training to become a guardian. The difference, according to Plato, was that women were not quite as strong as men. Being weaker, however, was an insufficient justification for excluding them from any impending tasks. L. Lange (2003) argues that the apparent inconsistency in Plato's theory between equal opportunity and difference in ability can be reconstructed in terms of Plato's theory of justice and the sociohistorical features of Greek society.

A similar argument to Plato's theory was put forth by the German teacher Fischhaber (1824), who wrote a textbook of psychology for high schools shortly after Kant (1797/1968)[2] had argued that men were naturally superior to women in accomplishing the common interest. Fischhaber radically suggested at the beginning of the 19th century that there was no substantial natural difference between men and women in terms of physical and mental faculties and that existing differences could be explained by different expectations, educational experiences, and lifestyles. The learned differences showed that men possessed stronger feelings whereas women had more tender ones. He also believed that men train the faculty of thinking more and were self-oriented, whereas women focused cogni-

tively on external events, which allowed them to have a more accurate judgment of others, and that men's volition was determined by principles whereas women's volition was regulated by feelings.

Well known examples of feminist critique include Wollstonecraft's (1792/1985) critique of Jean Jacques Rousseau's (1712–1778) thoughts, and of the long list of philosophers who degraded women in their world-views. Wollstonecraft, operating within an Enlightenment perspective, and believing that reason distinguished humans from animals, pointed out that men used reason in order to justify their prejudices, instead of using reason in order to eradicate them. Wollstonecraft, categorized as a liberal feminist because of her focus on reason, pointed out that ingenious arguments had been developed to justify the characterization of women as inferior. She emphatically rejected women's submission to man while promoting submission to reason, believing that independence could only be achieved through exercising one's own intellect. Gender differences that could be observed on a superficial level such as softness of temper, obedience, cunningness, sweet attractive grace, pleasingness, and so on, could be explained by understanding the education of women beginning in early life and by the treatment of women by men.

Another example of feminist critique was expressed by Mill (1869/1985) who was one of the first male philosophers to understand the injustice and oppression against women, and who, based on a psychology of gender, advocated women's right to vote, equal opportunity in training and education, equality in marriage, and so on. Beauvoir's (1949/1961) thesis that women had been defined as being "not men," meaning that they were understood in opposition to men, with men being the norm, could be easily applied to the history of psychological research on gender (see Tavris, 1992). Beauvoir herself found confirmation of the thesis in literature, mythology, and philosophy, whereby in most contexts women and the world were represented through a male perspective. Significantly, this representation was taken for truth about women.

For the purpose of presentation, I have focused on feminist critiques of psychology that came together around the question of epistemology, ontology, ethics, or, in psychological terms, that targeted the subject matter, methodology, and relevance of psychology. In many feminist critiques of psychology these dimensions interact conceptually: Missing the psychological subject matter by assuming that male mental life represents human psychology, that women's mental life is inferior, or that it is sufficient to speculate about women's experiences, leads to a psychology that is irrelevant to women. Weisstein (1992) phrased it most appropriately when she identified the "uselessness of present psychology" (p. 75) to women. Subject matter and relevance might also interact with methodology. Methods that

might make sense in assessing male mental life, behavior, and experience, might not be adequate in understanding psychological dimensions relevant to women's lives.

Several suggestions have been made in the literature as to how to systematize the feminist critique of psychology. Textbooks on the psychology of women identify perspectives such as liberal feminism, cultural feminism, and radical feminism, or difference versus similarity perspectives from which arguments against the mainstream were launched (see Matlin, 2000). For example, based on the concept of difference, one could argue that traditional psychology misunderstands the specificity of women's psychological life. From a concept of similarity one could argue that men and women have been constructed as different when in fact they are much more alike than assumed (see Febbraro, 2003). Kimball (2001) argues that any comparison of similarity or difference is constructed and will always be partial.

Wilkinson (1997) distinguished among five traditions of feminist psychology that critiqued the mainstream[3]: The first tradition argued that mainstream psychology had wrongly measured women and treated them as inferior because of an application of poor science. She mentioned the works of Caplan (e.g., 1991) who had suggested that the *Diagnostic and Statistical Manual* (DSM) reflected a male-centered culture. The second tradition accepted women's "weaknesses" as a result of internalized oppression. For example, if empirical research found that women showed low self-esteem, then this fact was an understandable result of oppression. The next perspective listened to women's voices and agreed upon the differences between men and women while at the same time it celebrated these differences (see the discussion on Gilligan later in the chapter). The fourth tradition displaced the question of sex differences by refusing to compare men and women, and the final critical perspective deconstructed the question of sex differences based on social-constructionist and postmodern thought.

However, consistent with the notion of three themata of psychology (subject matter, methodology, relevance) (see Chapter 2), I have followed Harding's (1991) original and Riger's (1992) adaptation of Harding's system for a phenomenology of the feminist critique of psychology. The feminist empiricist critique of psychology targets the subject matter and relevance of psychology; whereas feminist standpoint theory criticizes those two dimensions but also the methodology of psychology. And the feminist postmodern critique of psychology challenges the epistemological and ontological assumptions that make these distinctions and problematizations meaningful. Wilkinson (2001) reconceptualizes these three theoretical perspectives in psychology as feminist positivist empiricism,

feminist experiential research, and feminist social constructionism. All feminist critiques challenge the relevance of mainstream psychology for women and despite improvements in some areas there exists the conviction that sexism is still prevalent in psychology (see Gannon, Luchetta, Rhodes, Pardie, & Segrist, 1992). Before I move into the discussion of those programs it is necessary to discuss the feminist critique of science in general, which nourished the feminist critique of psychology in particular.[4]

THE FEMINIST CRITIQUE OF SCIENCE

Kuhn (1962) had demonstrated that research was influenced by the paradigm that guided one's practices. Before Kuhn, Marxists had emphasized the class-biased character of knowledge. Feminists argued that truth was biased in andocentric terms and that the gender of researchers influenced the concepts, theories, methods, interpretations, topics, and goals of science (Harding, 1986; E. F. Keller, 1985; Merchant, 1980). According to some feminist critiques of science, the preference for variables, the celebration of quantification, the usage of abstract concepts, the focus on separation and compartmentalization (as opposed to the study of interaction and interdependence), and the rigid objectivism of science, might reflect a masculine way of control and a masculine worldview (see also Griffin, 1978; Lott, 1985; Millman & Kanter, 1975).

At this point I would like to draw attention to the changing role of auxiliary disciplines for understanding and critiquing the sciences. Whereas positivist philosophies of science, which still represent the self-understanding of most contemporary mainstream psychologists, suggested that in order to comprehend science one needed the tools of mathematics, logic, and physics, social epistemologies, beginning with Marx, suggested that one should include history, sociology, political science, and psychology. This distinction between positivist and social epistemologies also reflects the conflict between internalism and externalism in the philosophies of science. Internalism holds that it is sufficient to focus on the logical and mathematical conceptualizations of science in order to assess the "logic" of science, whereas externalism suggests that one should analyze the sociohistorical context for a final understanding of scientific knowledge (see also Chapter 1).

Researchers who specifically incorporated psychological thought into their epistemological reflections were Jean Piaget (1896–1980), Thomas S. Kuhn (1922–1996), and, from a feminist perspective, Evelyn Fox Keller (1936). Because the human sciences, including psychology and psychoanalysis, are prone to sociocultural fluctuations, critical

studies that depended on those disciplines, have risen and fallen. Keller (1985) had incorporated and applied psychoanalysis into her critique of science, but psychoanalysis itself has been on a steady decline in reputation and fashion, so that Keller's reflections are often considered outdated. Of course, there also exists an extensive literature on the feminist critique of psychoanalysis (e.g., Caplan, 1985; Weisstein, 1992; from a feminist psychoanalytic perspective, see Chodorow, 1978; Millett, 1969/1978). Despite these issues, Keller's reflections on science have been extremely important to the feminist critique of science, especially in terms of the questions she raised.

Keller (1985) explored the association between objectivity and masculinity and defended the thesis that scientific thought was based on masculine discourses, ideals, metaphors, and practices. She argued that the emphasis on power and control, widespread in the rhetoric of Western science's history, represented the projection of a male consciousness. The language of science expressed a preoccupation with dominance and an adversarial relationship to nature (see also Merchant, 1980). Keller (1985) pointed out that science divided reality into two parts, the knower and the known, with an autonomous knower in control, distanced, and separated from the known (see also Code, 1993). According to Keller, the masculine separation of scientist and subject matter opposed the feminine idea of connectedness and at the same time reinforced beliefs about the naturally masculine character of science.

In order to understand how objectivity and gender identity were related, and how a gendered emotional substructure was linked to cognition, Keller (1985) incorporated developmental psychoanalytic knowledge, more specifically, *object relations theory*, into her theorizing on the development of gender and objectivity (see also Chodorow, 1978; Flax, 1983). For Keller (1985, 1987), feminine and masculine concepts of the social and natural worlds developed within the context of early psychosocial experiences with the mother. Accordingly, infants had no sense of separation from their mothers. Children learned to distinguish between themselves and others, and in early childhood they developed a sense of autonomy from their mothers. The development of autonomy was accompanied by emotional conflict, and in defense against anxiety, some children overidentified with the mother, whereas others moved into a rigid state of separation, rejecting connectedness and identification. The latter was responsible for an objectivist stance in which the object was radically divided from the subject and separation and disengagement were valued at the expense of empathetic understanding, connectedness, love, and creativity.

Moreover, the development of autonomy was accompanied by the development of gender identity. Keller (1985) argued that boys in

Western culture established autonomy but in addition went through a process of "disidentification" (p. 88) from their mothers, so that they could develop a masculine gender identity. This process made boys more likely to develop an exaggerated autonomous identity. For the male child, who achieved his identity in opposition to women, femaleness, and femininity, development was characterized through separation, autonomy, and defensiveness. Boys and later men viewed objects and events outside of themselves as disconnected from the self and they were more likely to have an association with a more objective worldview. For Keller, such a stance was expressed in the theories, concepts, and methods of masculine mainstream science, which aimed for abstraction, control, and the domination of nature. The development of the female child followed a different path, because the girl assumed, in most cases, an identity in relation to a same-sex maternal figure. Girls were inclined to identify with their mothers' gender, and developed an identity in which they understood themselves as connected to objects and events outside of themselves; they were less likely to develop a strong affiliation with an objective and objectifying attitude towards the world. The psychological development of women was characterized through connection, similarity, and relatedness.

As a consequence, Keller (1985) argued that girls and women were also less likely to choose careers in science. They understood their own way of relating to the world as incompatible with science. Boys and men were more comfortable with objectivity and embraced the classical objectivism of scientific research. Throughout history, objectivity, science, and masculinity had been linked so that science and masculinity were valued and women were denigrated (Keller, 1987). Because men had more power in society and men dominate science, the masculine way of relating to the world had a higher value than the feminine one. However, the association of objectification with the masculine was for Keller not an intrinsic process reflecting natural differences between men and women, but rather a system of cultural beliefs. Identity development and the capacity for objectivity were established rather than inborn gendered processes through which individuals developed an epistemology that conformed to an idealized masculine or feminine perspective. Keller made recommendations that could alter the course of masculine objectivity, including alternative child-rearing practices, changes in beliefs about science (e.g., value-neutrality), and studies from a critical and historical perspective (Keller, 1985, 1987).

Keller (1985) suggested that many women scientists found it important to establish a relationship between themselves (the subjects of study) and what they were investigating (the objects of study), that is, between the knower and the known. She also argued that theories generated

by women scientists might be qualitatively different from those of men. Theories generated by women might be characterized by interconnectedness, contextuality, and interaction, whereas theories generated by men might be identified by hierarchical relationships, abstraction, and prime causes. As a theoretical opposition to the traditional concept of objectivity (labeled as *static objectivity*), which separated subject and object, Keller proposed the concept of *dynamic objectivity* (pp. 115–126), which referred to subjectivity, connectedness, and empathy toward the subject matter.

As an example of dynamic objectivity, Keller (1983, 1985) analyzed the work of Barbara McClintock (1902–1992), winner of the Nobel Prize in Medicine for her discovery of mobile genetic elements and who described her approach towards science as empathetic towards the plants she studied. Keller suggested that in her studies of maize McClintock adopted a more feminine approach towards the object of her study in which she not only rejected the subject–object dualism, but in which she also challenged the predominant hierarchical theory of DNA as the master molecule that controls gene activity, and focused instead on the interaction between organism and environment as the location of control. Keller, although aware that this approach was not typical of all women, suggested that this interactive, nonhierarchical model might represent a theory that was more reflective of feminine values than was the theory proposed by James D. Watson (born 1928) and Francis H. C. Crick (1916–2004) (see Febbraro, 1997; Rosser, 1987, 1990).

It is clear that Keller's criticism of science has immediate relevance for mainstream psychology, which celebrates static objectivity and rejects any attempts to assimilate ideas of dynamic objectivity into the field as unscientific. Pervasive in feminist critiques of science, with the exception of feminist empiricism, is the rejection of positivist assumptions, including the assumption of value-neutrality or that research can only be objective if subjectivity and emotional dimensions are excluded, when in fact culture, personality, and institutions play significant roles (see Longino, 1990; Longino & Doell, 1983). For psychology, Grimshaw (1986) discussed behaviorism's goals of modification, and suggested that behaviorist principles reinforced a hierarchical position between controller and controlled and that behaviorism was in principle an antidemocratic program. Code (1993), a philosopher of science, specifically demonstrated the necessity to include researchers' interests in order to understand the context of discovery.[5] She, too, challenged the idea that research was value-free, neutral, and objective and argued that scientific inquiry could not be separated from the social and political contexts in which it arose. Credibility of research was not understood as an individual characteristic but applied to institutional practices and would be determined if the sources of research were disclosed.

In this context, Code (1993) provided an epistemological analysis of Rushton's psychological work. Rushton (1995), the widely debated Canadian psychologist, suggested, using empirical methods, that there was (among many other differences) an inverse relationship between intelligence and penis size among "Blacks," "Asians," and "Whites." Blacks as a "race" were at one end of the spectrum, Asians as a "race" were on the other end, and Whites established the good Aristotelian middle ground (see also Aalbers, 2002). Rushton, who included a variety of psychological and biological variables in his research suggested that Asian males had the smallest penis size but the highest intellectual capacity, whereas African American males had the largest penises but the lowest intellectual capacity (for a critique see also Winston, 1996). Code (1993) argued that Rushton's results were interpreted and believed to be reliable because they were products of so-called "objective" research. Yet, she pointed out that "facts" did not just pop up but had a history and were "always infused with values" (p. 30). Rushton participated in the idea of an autonomous and objective researcher but this rhetoric was deceptive and dangerous because it neglected the cultural, political, and institutional contexts that encouraged his research.

CRITIQUE OF THE PSYCHOLOGICAL SUBJECT MATTER AND ITS RELEVANCE

All feminists in psychology are committed to overcoming stereotypes regarding gender and to eliminating the biases that oppress women (see Davis & M. Gergen, 1997). However, the identification of problems and programs for the solution of these problems vary significantly. For the feminist empiricist critique of psychology, the most influential perspective in the field of women's psychology (see Wilkinson, 2001), psychology lacked relevance to women because this discipline was empirically not sound. Sexist claims, biases, and errors regarding women (and men) were considered the result of inadequate science. The solution was the rigorous and systematic application of the highest standards of science. Thus, feminist empiricists criticized feminist thinkers such as Keller (1985) or Gilligan (1982) for the lack of scientific rigor and objectivity in their work and for their essentialism (see Peplau & Conrad, 1989). In contrast to Keller, who intended to transcend traditional scientific inquiry, feminist empiricism remained committed to scientific traditions. Peplau and Conrad (1989) argued that feminism could be assimilated into traditional methodological views of science, and that all methods could be feminist. Similarly, Weisstein's (1992) celebrated argument on the fantasies of male psychologists suggested that theories on women lacked evidence, by

which she meant a lack of empirical data, obtained by following the strict rules of psychological methodology.

From a historical point of view, the work of many early women psychologists could be subsumed under the category of feminist empiricism because these psychologists were using traditional methods for challenging sexist beliefs about women. For example, Mary Whiton Calkins conducted research that demonstrated no difference in intelligence between women and men (see Furumoto, 1980). Reinharz (1992) reported that Helen Thompson Woolley (1874–1947) completed a study in 1903 on the psychology of gender using meticulous laboratory techniques, and that Leta Stetter Hollingworth (1886–1939) used experimental methods to demonstrate that women did not have learning or performance deficits while menstruating (see also Unger & Crawford, 1992). In the meantime there exists a huge literature on gender differences and similarities (Maccoby, & Jacklin, 1974), which has grown in reputation through the application of more sophisticated statistical techniques such as meta-analysis (for example, Eagly, Johannesen-Schmidt, & van Engen, 2003; Hyde, 1990). Based on empirical studies, it seems to be the case that sex has become less relevant as an explanatory variable, that sex differences have diminished over time, and that many psychological studies have had a hard time finding statistically significant gender differences (see Riger, 1992)—findings that support liberal feminism with its emphasis on gender similarities.

Matlin (2000) emphasizes that the research process can be influenced by gender bias in terms of formulating the hypothesis (e.g., using a biased theory such as Freud's), designing the study (e.g., use of only male or female participants), performing the study (e.g., expectancies), interpreting the data, and in communicating the findings (pp. 14–21). However, psychology of women textbooks, which have the task of socializing students into a disciplinary milieu, often endorse an empiricist perspective and suggest that neutral science that produces unbiased knowledge is possible if research is improved. Sexist bias is attributed to psychological theories, but also evident is the empiricist hope that inappropriate science will be overcome through a rigorous commitment and execution of scientific methods. This would lead to an objective, gender-neutral description and explanation of human mental life. Or as Riger (1992) so fittingly characterized it, from the perspective of feminist empiricism, biases seem to be expressions of irrationality in a rational process. If applied correctly, rigorous empiricism would produce objective scientific knowledge, a goal that could be achieved by either feminist-empiricist women or men. Feminist empiricism does not consider the scientific method itself to be male-biased or androcentric (see Harding, 1986).

There has been some attention towards what Matlin (2000) considers one source of bias in research: the choice of participants. From an empiricist perspective, Peplau and Conrad (1989) and many other researchers have argued that psychology has relied too much on male subjects in research or that male or female participants were chosen depending on the topic of research. For example, men were more often involved in studies of aggression, whereas women were chosen in studies of social influence (see also McHugh, Koeske, & Frieze, 1986). The question remains whether using male subjects characterizes sexist research and warrants a critique of psychology and whether feminist research should use mostly female subjects. Feminists have argued that research should not be defined by the sex of research participants, but that it is more important to identify the sexism expressed by either male or female participants (Peplau & Conrad, 1989; Unger, 1989), or that studying members of both sexes and their relationship provides important information (Davis & M. Gergen, 1997). Empirical research has also shown a relationship between the sex of the investigator and the effects that were looked for and found. Signorella, Vegega, and Mitchell (1981) observed that female researchers in developmental and social psychology were more likely to perform routine analyses for sex differences than were male researchers. Eagly and Carli (1981) found that the sex of the researcher determined research findings: for example, male researchers obtained larger gender differences in the direction of greater influenceability of women than women researchers found.

From a theoretical point of view, feminist empiricism has been informed by liberal feminism whose aim is gender equality by providing women and men with the same rights and duties. Like liberal feminism, which works for a change in legal, institutional, and private inequalities, but which does not intend a radical change of the foundations of society, feminist empiricism seeks change but not radical change in research because it is dedicated to the accepted standards of science. Harding (1986, 1991) argued that feminist empiricism was appealing to many academics precisely because it did not challenge the dominant methodological principles of science. And feminists who worked within this research program could count on institutional and disciplinary acceptance because their research identified problems of inadequate science but not of science itself.

Unger (1988) pointed out that the psychological establishment would not take feminists who did not use the standard empiricist research practices of science seriously. Once research neutrality would be established, and attention would be paid to the role of the experimenter and inequities of participation, scientific methodology would provide truth (see Riger, 1992). The important recognition of sexism in psychology from a feminist

empiricist perspective has led to useful suggestions for establishing a fairer discipline that is aware of sources of sexist biases (McHugh, Koeske, & Frieze, 1986). Peplau and Conrad (1989) emphasized the importance of guidelines for avoiding sexism in psychotherapy and academic publications. The Publication Manual of the American Psychological Association (2001) discusses and recommends avoiding sexist bias in language. However, one could argue that avoiding sexist language does not reduce sexism and that the basic structure of scientific inquiry remains intact (see Cixous, 1976).

Of concern from a feminist empiricist point of view have also been gender differences regarding participation in scientific disciplines (see Rossiter, 1982). In North America, there are relatively few women in the traditional natural sciences, in mathematics, and in engineering, whereas there exists a disproportionate greater number of women in the social sciences and humanities (Zuckerman, Cole, & Bruer, 1991). In psychology, disproportionately more women could be found in the applied areas, in particular, in areas associated with children, families, and education (Bohan, 1990; Rossiter, 1987; Scarborough & Furumoto, 1987). These differences might reflect differences in interest, systemic discrimination against women, or different concepts of science and objectivity.

Philbin, Meier, Huffman, and Boverie (1995) studied gender differences in learning styles and educational experiences. The results suggested that there were some differences between men and women. Men tended to display a reflexive and abstract learning style that promoted theory development and experimental design, whereas women learned better in practical contexts. They also found a significant gender difference regarding whether concern for oneself or concern for others was a topic in the participants' educational decision-making process. The majority of women, but only a minority of men, suggested that this was an issue. However, no significant gender differences were found for many other questions and the study provided only mixed support for the "women's ways of knowing" hypothesis (see below). In summary, the feminist empiricist critique of psychology seeks a greater share of the "scientific pie" for women, but does not question the scientific pie itself. It assumes that gender bias could be eliminated through greater adherence to gender neutrality and objectivity.

CHALLENGES TO SUBJECT MATTER, RELEVANCE, AND METHODOLOGY

The feminist standpoint critique, especially in its earlier versions, claimed that women (or feminists), but not men, are the ideal creators of scientific

knowledge. Borrowed from a Marxist concept of class-biased knowledge and transferred to gender, women were considered less partial and more objective in understanding the social world because it was in their interest to disclose the truth (Hartsock, 1987). Feminist theorists have suggested that women possess a unique "feminist standpoint" from which they approach knowledge and scientific inquiry, a position that has been contrasted with the perspective of men, or other socially, politically, or economically dominant groups, a perspective considered partial because of men's dominating position in social life (Harding, 1986, 1987, 1991; H. Rose, 1987; D. Smith, 1987). Philosophers of feminist standpoint theory (e.g., Harding, 1987, 1991) have emphasized the idea of beginning with women's lives in order to explore repressed aspects of social reality and in order to develop a politically involved theory that operates from the social experience of subjugated women.

H. Rose (1987) identified a unique female perspective because of women's activities in which mental (brain), manual (hand), and caring (heart) labors were unified. When *caring labor* was applied to research, women would challenge masculine forms of inquiry that rested on the dualism between thinkers and doers, mind and body, reason and emotion, object and subject. Ruddick (1989) proposed maternal thinking as her feminist standpoint, which could make a significant contribution to peace politics. Hartsock (1987) analyzed the sexual division of labor and suggested that feminism should be based on women's concrete material activities. A political struggle based on these activities would not only change academic structures, but social life in general. Based on developmental experiences, Flax (1983) identified a specific female mode of relating to the world, but did not consider women's experiences "an adequate ground for theory" (p. 270) because women had issues with differentiation. D. Smith (1987) suggested that women's socially invisible labor did not fit the conceptual schemes of social science. She labeled the process of subsuming women's experiences under traditional categories as "conceptual imperialism" (p. 88). The hypothesis that women and men might approach science from different perspectives has been attributed to different socialization experiences of women and men within a male-dominated society (Gilligan, 1982; Lott, 1985). According to Unger (1983), social experiences sensitized women and men to different problem aspects. It is important to point out that many feminist standpoint theorists reject the idea of a biologically determined basis for women's perspectives.

One of the most influential feminist studies in the history of psychology, from the perspective of feminist standpoint theory, has been Carol Gilligan's (born 1936) deconstruction of Kohlberg's theory of the development of

moral judgment. Kohlberg (1981, 1984), who based his ideas on Piaget's studies of morality in early and middle childhood, proposed a theory of moral development in adolescence and early adulthood (see also Teo, Becker, & Edelstein, 1995). In his longitudinal research he studied American boys aged 10, 13, and 16, for over 20 years. In order to assess moral judgment, Kohlberg used moral dilemmas in which one value was in conflict with another (for example, the right to live versus the right of property). As a Piagetian, Kohlberg was less interested in the subject's decision regarding what the protagonist should do in the dilemma, than he was interested in the underlying rationale, the thought structures that his participants used in order to justify a certain decision. Based on this research he proposed a theory of moral development that included invariant universal stages of development—two stages on each of the preconventional, conventional, and postconventional levels.

Gilligan, of course, noticed that Kohlberg used only male participants in his original study, but she argued even more significantly that his and other psychologists' theories and conceptual frameworks did not capture the experiences of women. Of particular interest for Gilligan was Kohlberg's conceptualization of Stage 3, which was described as an orientation that reflected a "good boy" or a "good girl," a person that meant well, and in which morality was understood as something that helped, pleased and was approved by others. Stage 4 developed, according to Kohlberg, out of Stage 3, and incorporated and integrated the lower stage on a higher plane. Stage 4 represented a social-order-maintaining morality during which the individual abstractly considered the will of society. Right was considered that which conforms to the rules of legal authority, not fear of punishment (which would be preconventional). The belief in laws as maintaining a valuable social order motivated the person at this stage.

Gilligan (1982) argued that women appear deficient in Kohlberg's theory of moral development because they exemplified Stage 3 at which pleasing was considered central. She pointed to the paradox that women, who had been defined by and celebrated for their care and sensitivity, were considered lacking in moral development. Thus, according to Gilligan, in psychology, women's voices of morality were unheard and constructed as inferior in comparison to their male counterparts. She not only challenged dominant theories of development, but also suggested alternative theories. According to Gilligan, if one were to begin with developmental constructs from women's lives, one would find a different description of moral development, in which moral issues arose from conflicting responsibilities and not from competing rights. Reasoning on moral issues would be contextual and narrative and not formal and abstract. Instead of a morality of

rights there would be responsibility and instead of autonomy there would be care and personal relationships. Women focused not on exercising one's rights but on how to lead a moral life. Although Gilligan did not do justice to Kohlberg's intentions (he did not seek to introduce a ranking in terms of moral judgment), and although more recent research has shown that gender differences are negligible when it comes to providing rationales in response to moral dilemmas (see Walker, 1984), Gilligan raised a legitimate critical question: "Do traditional theories of psychology (mis)represent women's experiences and voices?" I do not think that such a question can be answered a priori in any direction. Yet, it would be the task of psychologists who propose general theories to prove the gender validity of theories.

Gilligan, who emphasized specific female qualities (thus the term *difference feminism*), has been criticized by other feminists. Riger (1992) argued that there are problems with the assumption of a commonality to all women's experiences. In fact, there are huge differences among women of various cultural, racial, and ethnic backgrounds and social classes. From a postcolonial perspective (see Chapter 9), one could argue that instead of Kohlberg's middle-class white boys, Gilligan used middle-class white girls. Others have argued that feminist standpoint researchers have focused on women's special natures rather than on sex differences that have been traditionally used for discrimination (see Davis & M. Gergen, 1997). And postmodern feminism rejects the idea that one social group's perception is more valid than another group's and more radically rejects any concept of objective truth (see Chapter 8).

Indeed feminist standpoint theory and Gilligan-type psychological analyses seem to echo the Marxist thought that social characteristics determines a person's understanding of reality with the dominant group having a more distorted view. Accordingly, feminist standpoint theorists have argued that gender structures the perception of reality in everyday life as well as in the social sciences (see also Campbell & Wasco, 2000). In order to survive, the working class must understand the social reality of both the working and the ruling classes, whereas women must comprehend the world of women and men. According to feminist standpoint theory, this double perspective gives women a less distorted view of reality. Greater objectivity could be achieved by starting with women's experiences, giving voice to their lives, and by viewing the world from women's perspectives (Harding, 1987; Riger, 1992). In that sense, mainstream psychology could be critiqued for male-centered biases and for being more distorted than psychology from the margins.

According to feminist standpoint theory a new epistemology and ontology should be created for psychology. In this new perspective, the

researcher and the researched, the knower and the known, the subject and the object are recognized in relation to one another, and everyone's experiences and perspectives should be taken into account. Further, participants and not researchers should become the experts concerning their mental life, rejecting the notion that the researcher has a more comprehensive and objective perspective than the researched (see also Davis & M. Gergen, 1997). In practice, feminist standpoint psychologists use a variety of methodologies, including quantitative and qualitative approaches, while at the same time engaging participants in reflections on how gender has shaped their experiences (Campbell & Wasco, 2000). And more recently, based on an increased recognition of the impact of the social characteristics of researchers on research, feminist standpoint theorists have included reflections on "race," class, and subcultural experiences in their research (see Harding, 1998).

An application of standpoint theory, including Gilligan's (1982) work on moral development and Chodorow's (1978) ideas on object-relations theory, has been performed by the psychologists Belenky, Clinchy, Goldberger, and Tarule (1986), who suggested a feminine alternative to masculine knowledge generation, or as they referred to it in the title of their book: "women's ways of knowing." It has also been referred to as "female-friendly science" (see Rosser, 1990), and has been viewed as an exemplar of feminist standpoint theory (see Crawford, 1989). When Perry (1970) studied the ethical and intellectual development of male students during their undergraduate years at Harvard, he assumed that the Radcliffe women followed the same developmental pattern as the Harvard men, and he did not report the results for women and men separately. Belenky et al. (1986) challenged this work and identified five different epistemological perspectives for women, which they neither considered exhaustive nor universal nor limited to women (see Febbraro, 1997).

Belenky and her colleagues, who decided to study women because they believed that they could hear women's voices more clearly if men were not included, suggested that science, with its emphasis on objectivity and distance, was only one way of knowing, used by only a small number of women, whereas at the same time it explained why most scientists were men (see also Rosser, 1990). The emphasis on women's ways of knowing and womens' voices suggests that Belenky provided an essentialist understanding of women (see Crawford, 1989). Despite problems such as not including men in their studies (which makes conclusions about gender differences difficult), using questions very different from Perry (1970), not applying a developmental interview research strategy (although the title suggests a focus on the development of self, voice, and

mind), and not controlling for age, ethnicity, and class, important questions regarding gender differences in knowledge generation were raised.

Belenky et al.'s (1986) research stimulated further empirical studies, for example, with regard to gender differences in learning styles and cognition. Magolda (1989) found mixed support for gender differences in cognitive structure and approaches to learning among women and men. On one hand, it was suggested that the female pattern of listening to and relying on authority, which was followed by a shift to reliance on one's own and peers' views, matched a perspective described by Belenky et al. On the other hand, the male pattern of more consistent reliance on authority was interpreted as matching certain positions within Perry's scheme. However, no gender differences were found in other aspects of learning orientation such as the preference for abstract or concrete conceptualization and the preference for reflective observation or active experimentation. These examples also showed that some aspects of feminist standpoint theory could be reconciled with a feminist empiricist perspective, or that arguments developed by feminist standpoint theorists could be tested in the form of empirical hypotheses (see also Philbin et al., 1995).

REFLECTIONS ON METHODOLOGY

I have argued that the subject matter, methodology, and relevance are core issues in the critique of psychology (see Chapter 2). Feminist empiricism and feminist standpoint theory both support the critique of traditional psychology which suggests that the discipline has a limited understanding of the psychological subject matter and thus, might not be relevant to women. They disagree on the problem of methodology. Feminists dissatisfied with empiricism in general and feminist empiricism in particular argue that the critique of psychology should not only focus on biased research results and practices outside of research but that it should include a critique of practices in research, and thus, a critique of psychological methods and methodology. The significant question is: If research is biased in terms of gender, then why should one exclude methods from a critique?

Harding (1987) has argued that the gender of the investigator (or of participants) should be irrelevant if science is objective and neutral. But if empirical research is objective and neutral, then how were all the numerous instances of androcentric bias in research possible (see Riger, 1992)? It is an empirical fact that the application of scientific rigor in hypothesis-testing did not eliminate androcentric bias in the selection of problems and did not include a shift of focus to understand women's experiences

(Harding, 1991). It seems that scientific methods did not prevent sexism, and did not eradicate researchers' values regarding gender research. If empiricism were true, then feminist values as embraced by feminist empiricism should be irrelevant to science, and true empiricism should subvert any feminist empiricist program.

Based on such reflections some feminists have suggested that psychology needs a unique feminist methodology. They have proposed that instead of experiments, questionnaires, and tests, feminist research should primarily use interviews and personal documents; instead of quantitative data analysis, they should use qualitative methods; and instead of male subjects, they should use mostly female participants. Other recommendations include establishing trust between the researcher and participants, the recognition of the sociocultural influences on mental life, and reflections on the relevance of values in research practices (see M. M. Gergen, 1988; Riger, 1992). Other feminists have argued that the isolation of a distinctive set of feminist methods for psychological research is futile and that any kind of methodological orthodoxy would not enhance but limit the growth of feminist psychology (Peplau & Conrad, 1989).

As mentioned above, one focus of feminist methodological discourse concerns the distinction between quantitative and qualitative approaches in psychology. Traditional quantitative methods have been criticized for creating a non-egalitarian hierarchy of power in research practices, for removing context from behavior, and for translating women's experiences into masculine categories (E. F. Keller, 1985; McHugh et al., 1986; Parlee, 1979; Riger, 1992). Qualitative methods have been favored in some feminist reflections because they have been understood as correcting biases in quantitative methods and useful in identifying and representing women's experiences, while at the same time legitimating women's lives as means of knowledge. But some feminists have pointed out that qualitative methods do not protect against sexist bias. Peplau and Conrad (1989) have argued that sexist beliefs could influence verbal accounts and that there is "nothing inherent" (p. 388) that would protect qualitative methods from sexism.

In addition, from a Marxist and postcolonial feminist perspective, qualitative methods have not protected against racial and class biases because participants of in-depth and self-reflective studies have often been white, middle-class women (Cannon, Higginbotham, & M. L. Leung, 1988). Thus, some feminist researchers have suggested that psychology should not abandon the research methods that have been central to the discipline of psychology (Campbell & Wasco, 2000; Peplau & Conrad, 1989; Unger, 1988). They have argued that quantitative analyses have been valuable tools in fighting sexism, for example, when quantitative results showed that males and females did not differ significantly on

standardized measures of personality and performance abilities, and the development of new statistical techniques such as meta-analysis have enhanced feminist empiricist research (Peplau & Conrad, 1989). A critic might argue that it seems that neither quantitative nor qualitative methods guarantee bias-free research, that neither is inherently "more feminist" than the other, and that both seem necessary for understanding psychosocial phenomena (Campbell & Wasco, 2000; Peplau & Conrad, 1989; Riger, 1992).

Another less known distinction concerns communal and agentic research. The idea of a potential relationship between gender and research practices might have originated with Carlson's (1972) modification of Bakan's (1966) theory of agentic and communal modalities of human existence (see Febbraro, 1997). Carlson (1972) proposed two distinctive approaches to research. The agentic approach to research was reflected in experimental and quantitative approaches to research, and used core characteristics of scientific operations such as separating, ordering, quantifying, manipulating, and controlling. The communal approach reflected nonexperimental and qualitative approaches, naturalistic observation, and sensitivity to intrinsic structures and qualitative patterning of phenomena. This approach also implied a personal participation of the investigator.

Peplau and Conrad (1989) summarized these ideas regarding gender and psychological research, and have argued that agentic methods included a manipulation and control of subjects and the environment, a distance between researcher and subjects, a separation of behavior from real contexts, a repression of mental life, and quantification. Communal methods refer to cooperation between researcher and participants, the researcher's personal involvement, natural contexts, a free expression of mental life, and qualitative methods (p. 392). Carlson (1972) and Mackie (1985) have suggested that women researchers preferred communal approaches, because they were compatible with the relational and emotional skills that have been traditionally associated with women. Qualitative methods also demanded less abstraction from context and less statistical analysis, which were approaches thought to be more compatible with men than with women (Carlson, 1972; Gilligan, 1982). Other feminists have argued that the agentic approach fails to represent important features of the social world (see Millman & Kanter, 1975).

In line with the critique of an agentic mode of research, feminist psychologists have challenged the concept of objectivity that denies basic human qualities of participant and researcher (Wilkinson, 1986). They have also criticized the laboratory experiment for simplifying concepts, environments, and social interactions, and for decontextualizing and reducing the complexity of the social world (Parlee, 1979). On the other

hand, Peplau and Conrad (1989) have criticized the communal and agen-
tic distinction as essentialist when experimental and quantitative
psychology is associated with masculinity and patriarchy, and nonexper-
imental, qualitative psychology is promoted as feminine. Such attributes
might reproduce traditional gender stereotypes and lead to the belief that
women and men possess different essential natures. Change would be
impossible because the status quo would accurately reflect gender differ-
ences (for a discussion of these issues, see Crawford, 1989; Jayaratne &
Stewart, 1991; McDonald, 1994; Peplau & Conrad, 1989; Rosser, 1990).

The problem of method disappears in feminist postmodernism,
because the problem of method is embedded in larger conceptual net-
works that should be rejected completely. The feminist postmodernist cri-
tique rejects modernist, Enlightenment assumptions such as rationality,
objectivity, and universality. Any science project, including a feminist one,
would appear to be embedded in distinctly masculine modes of thought.
Thus, the projects of feminist empiricism or feminist standpoint theory
only make sense from a privileged perspective, but postmodernism rejects
the privileging of any vantage-point, whether masculine or feminist, and
rejects all successors to the science project (see Harding, 1987). From a fem-
inist postmodernist perspective, there is no truth or reality, and science is
just the production of a text, which is always located within a historical
and cultural context. Thus, anything goes and everything is relative. From
a Foucauldian perspective, psychology is part of a huge power structure in
which everyone and everything is entangled. For psychology, Hare-
Mustin and Marecek (1988) laid out that postmodernism meant an end to
the search for absolute and universal truths, the rejection of objective
knowledge, the existence of an autonomous knower, and the concept of
logic, rationality, and reason when conceptualized as independent from a
specific sociohistorical context. Identity, a psychological category, and the
knower, an epistemological category, were seen as fragmented and multi-
ple (see Chapter 8).

Feminists have also shared and developed arguments for a postcolo-
nial critique of science (see Harding, 1998). From a psychological per-
spective, Moane (1999) developed a feminist liberation psychology, in
which she related social issues such as power and oppression to individ-
ual thoughts, emotions, the self, identity, interpersonal relationships, and
mental health. In line with feminist methodology she has suggested that
oppression and liberation should be described from the perspective of
those who experience it. Traditional psychology has not sufficiently paid
attention to psychological patterns that are connected with social condi-
tions, power differentials, or the relation between those who are in positions
of dominance and those who are dominated. Because mental life is con-

nected to social conditions it is necessary to understand hierarchical systems of domination (patriarchy and colonialism) and to identify the psychological issues that are associated with hierarchy and domination, including internalized oppression.

After psychological processes and practices of oppression were identified, Moane suggested that one would be able to transform psychological damage associated with oppression, to take action to resist domination, and to work for social change. Strengths could be built on the personal, interpersonal, and political level. Implicit in her studies was the notion that traditional psychology has not addressed the issue of overcoming oppression, a problem of relevance, which could be achieved for Moane on a political level through community activism, sex-strikes or traditional forms of political participation with the final goal of achieving an egalitarian society. There also exist combinations of feminism and antiracism, for example, as developed by Collins (1991) who has challenged mainstream methodology in the social sciences but who has also critiqued feminist standpoint theory as focused too much on white women.

Another line of critique suggests that sex/gender is an artificial construction and that there is a huge overlap between women and men in terms of gendered (so-called feminine or masculine) behavior. Such an argument can be motivated by an empiricist perspective based on the argument that the variation within one gender is much greater than the variation between genders, and that gender differences, when found, are usually small and often related to social context (Unger & Crawford, 1992). Such empirical evidence implies that sex/gender is an artificial dichotomy, that the biological aspects of sex are neither fixed nor universal, and that biological sex may exist on a continuum (see Butler, 1989; Stoltenberg, 1989). Finally, some critics have argued that sexual or gender dichotomies are a result of androcentric biases, and that sexual or gender dichotomies have been used to maintain the existing social order. In this sense the concept of sex/gender becomes a social-political construction that has been used in psychology and elsewhere to serve the interests of patriarchy (Penelope, 1990).

8

The Postmodern Critique

Postmodernism is loaded with conflicting notions, which make it difficult to talk about its discourses in a precise way (Harvey, 1990; Rosenau, 1992). The distinction between postmodernity as postmodern era, postmodernism as its cultural expression, and postmodern thought as its reflection (Kvale, 1992a, 1992b) has been conceptually beneficial, but has not solved the problem that these terms are used differently in philosophy, architecture, literature, feminism, politics, and psychology. Jean-Francois Lyotard (1979/1984), one of the leaders of postmodern thought, underlined that postmodernism was a problematic concept and its ideas were implied in modernity. Michel Foucault (1926–1984), often counted as a postmodern philosopher, could only ambiguously be subsumed under this label because in his later works, Foucault (e.g. 1985, 1986) rehabilitated *subjectivity* and *Enlightenment*, which used to be core targets of postmodern reflection. Derrida (1994), who considered himself a descendent of the Enlightenment, referred to the modernist Karl Marx as a precursor for his deconstruction. Many postmodern thinkers have strong affiliations with modern traditions, theories, methods, and goals (see also Teo, 1996).

For a more comprehensive understanding of these issues it seems important to distinguish between a North American and a Continental European tradition, where central issues of the postmodern discourse acquire very different meanings. Rosenau (1992) introduced the distinction

between skeptical (negative) and affirmative (optimistic) postmodernists, with the latter being more prevalent in North America. In North American psychology, it seems that anyone who provided a critique of positivist methodology was considered postmodern. For instance, Habermas (born 1929) was associated with postmodernism (see Gergen, 1990), when in fact he was one of its staunchest critics (see Habermas, 1987).

Simple attributions are neither doing justice to the long history of the critique of positivism nor to the intellectual background of continental postmodern thought. Many French postmodern thinkers (e.g., Foucault) were engaged in their earlier careers in Marxist groups. European postmodern traditions emerged partially from a critique of Marxism, its systematic character, and the failure of social utopias. From a psychological perspective, M. B. Smith (1994) has pointed out that postmodernism reflects many of the Euro-American intelligentsia's experiences. Psychologists could focus on the individual level, but if the sociohistorical reality constructs intellectual thought, then postmodern thought should also be understood in the context of the social, economic, and cultural transformations of Euro-American societies since the 1960s (Harvey, 1990; Jameson, 1991).

To understand the rise of postmodern psychology, it is necessary to realize that psychologists have tended to overvalue metatheoretical constructions from outside the discipline. Natural-scientific oriented psychologists have often accepted the metatheoretical prescriptions of the philosophy of science derived from the study of physics, for example, more recently embracing chaos theories (Barton, 1994). Human-scientific oriented psychologists have adopted developments stemming from the humanities, and, when Marxism was still influential, psychologists discussed alienation, historical materialism, and dialectics (for instance, Riegel, 1978). With the rise of postmodern thought, concepts such as construction, deconstruction, narratives, discourse, plurality, difference, and aesthetics were embraced. The rejection of grand narratives, a core feature in Lyotard's (1979/1984) version of postmodernism, is more complex in psychology because traditional academic psychology has always been skeptical towards grand narratives regarding the subject matter such as the emancipation of the person, while it has been unaware that embracing a totalizing methodology also constitutes a metanarrative.

In terms of timeframes one could argue that postmodernity is the time that follows modernity, the historical period that spanned the 16th to the 19th or the 20th century. Modernity coincides with the Enlightenment project but also with the rise of colonialism and slavery, so that modernity has been equated with racism (see Mills, 1997; see also Chapter 9). In epistemological terms, modernity led to the rise of empiricism and later pos-

itivism, and therefore had been associated wrongly with positivism. One could arguably locate the beginning of postmodern reflections with Friedrich Nietzsche's (1844–1900) writings, or with Lyotard's (1979/1984) report on knowledge, or with the critical developments of the social movements of the 1960s and 1970s, and in psychology, in terms of its impact, with the writings of Kenneth Gergen (e.g., 1985). In addition, historians should answer the question of whether the move from modernity to postmodernity (if it exists) is continuous or discontinuous, if there is more or less overlap between these two eras, or whether postmodernity is the next logical and necessary step in historical development.

Rosenau (1992) has provided an excellent overview of the discourses surrounding modernity and postmodernity. Modernity has been characterized through the principles of reason and progress with the goal of liberating humanity from ignorance. For postmodernists it has been easy to challenge the track records of reason and progress: slavery, wars, genocides, Auschwitz, and Hiroshima. With many counterexamples modernity no longer appeared as a source of liberation but rather as a means of oppression. North American postmodernists also challenged various pathologies of Western civilization and held modernity responsible (Marxists held capitalism responsible, feminists patriarchy, and postcolonial theorists imperialism). Based on Lyotard's (1979/1984) rejection of metanarratives and the argument that answers and questions seemed to be predetermined in all totalizing thought systems, postmodernists challenged worldviews such as Christianity, Islam, Marxism, fascism, but also capitalism, liberal democracy, feminism, and science. For the sciences, Feyerabend (1978) had argued that science was not much different from astrology or primitive cults, and that scientists used rhetoric in order to support their position. External criteria were more important in the history of science than empirical facts. After deconstructing terms such as reality, objectivity, and truth, and based on the idea that any strict methodology was hindering the course of science, he pled for a single rule: *Anything goes*.

Rosenau (1992) also pointed to the influence of postmodern architecture, literature, politics, anthropology, and philosophy in culture and science. Modernism held, exemplified in the *Bauhaus* program, that the function of a building should determine its form. Postmodernism, on the other hand, focused on the aesthetic dimension rather than on the functional one; it preferred appearance to efficiency, which meant the end to the rational layout of space. In literature, postmodern novelists gave up the linearity of the story while they demanded from their readers to construct their own organization of the story. In politics, postmodernism challenged the authority of hierarchical decision-making in bureaucratic structures.

In anthropology, primacy was given to indigenous rather than to Western cultures that aimed to reinvent these cultures rationally.

In philosophy, Deleuze and Guattari (1980/1987) applied the metaphor of a root in order to describe various forms of thought. Metaphysics was described as the root of a tree in which everything was derived from a single source or a first cause. Modernity was characterized as favoring a fasciculated root, a system of small roots with many sources. However, postmodernity was described as a rhizome, a stem organ, in which branches in the air could grow again into the soil, where old parts died out, and where new branches were formed elsewhere. One could question whether such metaphors are valid for the characterization of psychology since the 19th century. Certainly, the discipline did not represent a tree's root and one could argue that the attempt for a unification of psychology was nourished by metaphysical intentions. Psychology might be characterized as a fasciculated root, a field of study with many different systems with different worldviews.

It is not clear what psychology as a rhizome would look like. One could argue that conceptual networks in psychology should not work hierarchically but as a rhizome (Teo, 1998b) or that the idea of a rhizome would involve a new concept of reason (Welsch, 1995), in which plurality could be conceptualized adequately as operating in a mode of constant transformations. Some postmodern influence in psychology can also be attributed to Derrida (1976), who intended to challenge the *logocentrism* of Western thought, the belief in reason and rationality, while deconstructing the many hierarchical oppositions that pervade the history of Western thought (e.g., cause and effect). Sampson (1989) applied Derrida's ideas to the deconstruction of psychology's subject and challenged the idea that the person was the center of awareness, an integrated whole, and an entity that opposed other entities.

THE END OF METANARRATIVES

Lyotard (1984) specifically focused on the epistemological dimension of postmodernity and defined the postmodern as the incredulity towards metanarratives. Drawing on Wittgenstein's (1953/1968) theory of language games, he suggested that society could be understood as a web of communications, composed of multiple language games, with incommensurable rules and undefined relationships. He then suggested that *scientific knowledge* was neither more nor less necessary than *narrative knowledge.* Narrative knowledge was tolerant of scientific knowledge but not vice versa. This problem is exacerbated in psychology

because the border between scientific and narrative knowledge is much more flexible, which has led proponents of natural-scientific knowledge in psychology to be much more strict in drawing borders. According to Lyotard, because acceptable rules in one type of knowledge did not apply to the rules of the other, and good moves in one game were not considered good in the other, it was impossible to determine the validity of narrative knowledge on the basis of scientific knowledge criteria. Moreover, narrative knowledge did not question its own legitimation and understood scientific knowledge as a variant in the family of narrative possibilities.

Scientific knowledge, on the other hand, required legitimation because science could not legitimize its own activity and it relied on narrative knowledge to support scientific knowledge. There existed, according to Lyotard, two grand narratives for legitimation, a political and a philosophical one. The *political metanarrative* suggested that through knowledge humanity became the agent of its own liberation. With science humanity was relieved of superstition, bondage, ignorance, and oppression in order to emancipate into freedom and dignity. The *philosophical metanarrative* referred to the idea of the progress of knowledge and the progressive unfolding of truth. In Hegel's (1807/1986) terminology the subject of knowledge was not humanity but knowledge itself. Because modern institutions tended to be governed and guided by general rules and regulations that derived their legitimacy from the methods and findings of science, the progress of society depended on the progress of the sciences. According to Lyotard, since WWII both metanarratives had lost their credibility and the notion of science as a liberating and progressive instrument appeared meaningless. The postmodern condition rang in the end of the grand narratives.

In traditional psychology, the *political metanarrative* never played a significant role. The political metanarrative had explicit impact only at the fringes of the discipline such as Marxist, feminist, or postcolonial psychologies, for example, most significantly in Holzkamp's (1983) program (see Chapter 6), which was embedded in the narrative of the liberation of the working subject (see also Welsch, 1992). Natural-scientific psychologists even rejected political goals and ethical ideals (see also Kendler, 1993), despite the fact that many pioneers of psychology had utopian ambitions (Morawski, 1982). The *philosophical metanarrative* played an important part in traditional psychology with the conviction of the possibility of progressive knowledge. However, this possibility was dependent on the unification of the field (see Chapter 2). Postmodern critics argued that the idea of unification might represent a mania of totality and that unification became totalitarian when objects and events that were too heterogeneous to be

unified were forced into such a program. Instead of trying to establish a distinct subject matter and methodology for psychology, researchers should be critical of such endeavors and be comfortable with uncertainty, lack of explanation, and relativism. Instead of universal truths one should embrace local truths (see Gergen, 1985).[1]

But from a critical perspective, one could argue that natural-scientific psychology developed one disciplinary metanarrative that was central to its self-understanding, and which was described as *methodolatry* or *methodologism* (see Chapter 2). Instead of a foundation or unification of psychology, which seemed too difficult to accomplish, the discipline developed the idea that if one followed the strict rules of psychological methodology (with the focus on progress in statistics and experimental technology), then one would automatically contribute to knowledge, truth, and progress in the discipline. Danziger (1985), sympathetic to postmodern principles, called it the methodological imperative in psychology, by which he meant the domination of psychology by methodology. Theoretical assumptions were embedded in methodology, but these were not tested by the application of methodology. As a result one finds generalizations in psychology that describe relations among variables, but these relations as well as the variables are predetermined by the methodology. In any case, the end of metanarratives in psychology would imply that psychologists give up the centrality of positivist methodology.

THE PROBLEM OF KNOWLEDGE

Lyotard (1924–1998), Derrida, and even Foucault, all of whom were skeptical of the presumed objectivity of knowledge, had less impact on North American psychology. Kuhn (1962), Feyerabend (1978), Rorty (1979), and Berger and Luckmann (1966) received more attention (they should not necessarily be described as postmodernists). Berger and Luckmann, who also influenced the direction of Gergen's (1985) writings, were interested in what was considered knowledge, the process in which knowledge became established as reality, and how subjective meanings were transformed into objective facts. They began with the premise that the development, transmission, and maintenance of knowledge could be understood as social actions and that reality was socially constructed. In my assessment, Gergen's (1985, 1990, 1994a, 1994b, 2001) brand of postmodern psychology, although acknowledging the French tradition (Derrida, Foucault), was less influenced by French than by English-speaking and maybe also German-speaking thinkers. Gergen (1990) credited

Paul Feyerabend (1924–1994), Kuhn, Habermas, feminist theorists, Gadamer and others as provoking the postmodern turn.

The basic principle of postmodern epistemology, as endorsed by psychologists, stated that knowledge was not a reflection or map of the world but an artifact of interaction (Gergen, 1985). Instead of an objective reality, psychologists encountered social artifacts. In addition, psychological reflection and research should shift from the presumed ahistorical character of psychological objects and events to the historical dimension. History taught that psychological objects and events had undergone significant changes over time as well as across cultures. Thus, knowledge could not be conceptualized as something that people possessed somewhere in their minds, but as something that people produced together. Such a position led to a variety of critiques of mainstream psychology and of the positivist-empiricist conceptualization of knowledge.

Gergen (1990) did not believe in an independent subject matter of psychology because objects were not real, but rather constructed according to conventions and rhetorical rules. The dominance or acceptance of an existing form of understanding did not primarily depend on empirical validity but on social processes. For Gergen empirical evidence did not constitute an understanding of the world. Psychological methods, which were critiqued for separating subject and object and producing alienated relationships, were understood as a "misleading justification device" (p. 30). Instead of the traditional-psychological focus on methods, Gergen (1985) advocated for a focus on language. The decision and identification of what researchers observed depended on categories and language, which were both embedded in culture and history (Gergen borrowed from Wittgenstein as did Lyotard) (see also the program for a discursive psychology, Harré & Gillett, 1994).

Psychological concepts were not derived on an ontological basis, and they did not correspond to real psychological entities, but they were related to the historical process and developed meaning in social contexts. Psychological concepts could not be analyzed with the means of positivism but rather with the tools of ethnopsychology, because they were historically and culturally situated, and they deteriorated in the historical process. Concepts were seen as being sustained in a particular context, as long as they were useful in particular institutions. In everyday life, understandings were negotiated in a process whereby people interacted and made decisions together. Thus, for Gergen, emotions were not real objects but socially constructed in the context of language use, and anger was, according to Gergen, not a mental state but a social role. Similarly, scientific rationality was not meaningful because of data or because it could be identified in the minds of independent individuals, but because it was

part of a sociohistorical context. Individual experiences were not at all unique, but embedded within constructions that depended on culture and history.

There have been several reflections on the limits of postmodern thought by psychologists sympathetic to some of the postmodern goals (Parker, 1998; see also Simons & Billig, 1994). Some commentators have even suggested that the star of postmodernism has already passed (see Teo & Febbraro, 2002). Indeed, Gergen's (2001) more recent version of a postmodern psychology has become more moderate and, instead of deconstructing mainstream psychology, he focuses on the positive consequences of postmodern reflections in psychology. For example, he mentions the pragmatic questions about the implications of research, the intensification of critical deliberations, the historical restoration and revitalization of psychology, the need for intercultural dialogue, the flowering of methodology, which now includes the usage of qualitative methods, and the enrichment of practice, as outcomes of postmodern reflections. However, in my view it is difficult to attribute all those developments to postmodern thought, as it is difficult to attribute all the shortcomings over the last centuries and the flaws of psychology to modernity (see Teo & Febbraro, 2002). Gergen (2001) also identifies developments of psychology that may indicate that psychology is becoming a commodity, wherein epistemological issues are no longer relevant. Kvale (2003) argues that the market, and not the method, provides unification for psychology and that the market dominates psychological conceptions in the postmodern world. Whatever the source, for a postmodern critique it is evident that methodology cannot be the first cause of knowledge.

SUBJECT AND POWER

Modernity and modern society depend on the notion of the individual and this concept is considered more significant than the concepts of group, community, or society. Postmodernism, which was a reaction towards the ideas of modernity, intends to discard the concepts of a subject and subjectivity. Postmodern thought challenged the idea of the subject as a center of meaning, intention, and action as individualistic, Eurocentric, and outdated, a part of modernity's unreflected past. Lyotard (1979/1984), who did not focus specifically on a critique of the subject, argued that the self was not isolated, and that each individual existed in a network of relations that increased in complexity and mobility in the course of history.

The postmodern discourse on subjectivity is more ambiguous than a plain rejection. Rosenau (1992) argued that affirmative postmodernists in

the social sciences have a hopeful and optimistic view of the individual, whereas skeptical postmodernists provide a gloomy evaluation that includes fragmentation and a lack of meaning in subjectivity, and an end to the human subject. The subject, invented by the Enlightenment, has been criticized as a fictitious construction, and certainly not the source of action, will, language, and writing. I suggest that the situation is even more complex in psychology because large parts of psychology would be considered, based on a critical assessment, as already following a postmodern tradition: natural-scientific psychology gave up the concept of subject probably at the end of the 19th, certainly by the beginning of the 20th century. Instead of individual subjective accounts, psychology requires samples, and instead of subjects the discipline looks at a distribution's central tendencies. On the other hand, the loss of subjectivity has been lamented in many ethical-political and in human-scientific programs such as Holzkamp's (1983) critical psychology (see Chapter 6), which specifically intended to rehabilitate subjectivity in psychology, without reproducing an individualistic notion of the subject, by emphasizing that an individual's actions, thoughts, and emotions, were always embedded and mediated through culture and history.

Some of the most important studies in this area of research have been published by Foucault whose studies are epistemologically, but also psychologically, highly significant. Foucault (1985) did not provide a social history of truth, but a political history of the production of truth, focusing on the shift of different interests of problematization (see Foucault, 1996). For example, he demonstrated in his early studies that the history of mental illness, the definition of normality, the division between reason and unreason, and the establishment of social and medical practices, did not follow a rational process of knowledge accumulation, as traditional disciplinary historians have suggested, but a practice of exclusion (Foucault, 1961/1988). Foucault, who was trained as a psychologist (see Eribon, 1991), demonstrated that during the *Middle Ages* and in the *Renaissance* madness was an accepted fact of daily life and of not much concern for academia. The exclusion of madness in the 17th century and the emergence of psychiatry should be understood in the context of rationalist philosophy, whereby reason needed madness for its own self-understanding (see also Dreyfus & Rabinow, 1982).

The importance of external factors for theory development, rather than internal problem solutions or the production of facts, was also emphasized in Foucault's (1969/1972) archeology of knowledge, in which he analyzed the problematizations of the human sciences. In modernity, contrary to previous ages, humans became the measure of all things (Foucault, 1966/1970) and the epistemological subject grew to be

sovereign. Modernity invented the human subject and made it existent in Western knowledge. But instead of the presumed role of the human sciences to solve problems, the human sciences made humans into problems; instead of the liberation of subjects, the human sciences contributed to their disappearance. There are many examples demonstrating that psychology in fact did not solve problems but produced problematizations in which neutral issues were turned into highly problematized objects. This process becomes evident in the construction of "race" (see Chapter 9) (also in the construction of women, gays, lesbians, etc.).

Foucault is also important for a new analysis of power, which, as a structural phenomenon, has been widely neglected in psychological research and in traditional discourses of psychology. Postmodernists such as Gergen (2001) address the topic of power and blame modernism for its oppressive potential but locate power primarily within language, and not in objective social realities. For Marxists such as Holzkamp (1983), power was an objective structural entity emerging out of unequal access to the means of production or control over one's life conditions. Habermas (1981) located power in the system and in the life-world, but he hoped to overcome power through a process of communication (see also Teo, 1998b). Freud (1969–1975) located power in repressed sexuality. Foucault's arguments against Marxism, psychoanalysis, and other traditional theories of power, centered on the problem that traditional conceptualizations of power entailed repression, but modern power, according to Foucault, was positive and productive. Drawing on Nietzsche, Foucault analyzed power's positive function in the administration of life and power's connection to the production of knowledge in the human sciences. For Foucault, power was an all-encompassing reality in which everyone was caught and participated. Critically, one would have to add that reflections on the role of such power in the institutions of psychology are rare.

When Foucault (1975/1977) analyzed power in the context of criminal behavior, power's connection with punitive practices, and the modifications of practices of power over time, he found that there was a relationship of space and power, and that space was significant in the exercise of power. He argued that direct punishment, an old form of discipline, was superseded by a new form of punishment, namely surveillance. He used J. Bentham's (1748–1832) *panopticon* as a prototypical example of the principle of subjects' totalizing visibility under centralized surveillance, where every prisoner was watched but distrusted everyone else. At the same time this power through transparency did not require high expenditures, because each subject exercised surveillance over himself or herself without any additional financial burdens. Power was circulated through finer channels, targeting individuals' bodies and gestures

during their daily activities. For Foucault, the end of torture was not accomplished through an enlightened process, but through a new, more efficient type of power that introduced disciplines.

According to Foucault, the 18th century became more and more concerned with the organization and construction of architectonic infrastructures as tools for the governing of modern societies. On this background, the history of spaces, housing, schools, hospitals, military installations, and prisons represented a history of power with its many different techniques. For example, one could study the development of working class housing and how the assignment of space such as a living room and bedrooms prescribed a certain form of morality (see Foucault, 1996). Although disciplinary technologies existed throughout history, only in the 17th and 18th centuries did they become common forms of domination. According to Foucault, disciplinary power goes through the body, without conscious cognitive processes. The body can be manipulated, formed, trained, changed, partitioned, and calculated. Discipline focuses on the distribution of individuals in space, which includes the enclosure of certain places from other places, the construction of monasteries, boarding schools, army camps, hospitals, and factories. Discipline defines behavioral procedures, the coordination of bodies, and the relationship between body and gesture, body and object, and body and time. The body learns from the disciplinary and spatial arrangements of power and nourishes one's sense of self. The individual is also coordinated with other individuals in a precise system of order in which everything is planned.

The focus on power, body, and space is not an explicit criticism of traditional psychology, rather an implicit one, which identifies neglected topics in psychology and a new understanding of the psychological subject matter. The many studies on the body in feminist literature have not necessarily been driven by Foucault (see also Bayer & Malone, 1996; Hartsock, 1990; Ussher, 1989). However, Foucault's analyses have been welcomed in some feminist perspectives because of the connection and transformation of power and the body (see Sheets-Johnstone, 1994). For instance, beauty standards might work as Foucault has described them. If women can be brought to survey their weight, beauty, health, and social behavior constantly, then there would be no need for patriarchy to impose demands. Corporeal power and control of femininity could be rephrased as individual choices (see also Morgan, 1991). In addition, power could be analyzed in the construction of buildings, tunnels, sidewalks, and so on.[2]

Foucault's studies have opened many critical questions and reflections in psychology. For instance, becoming a psychologist reflects disciplinary power. Students require certain grades to enter university and

4 years for an honors bachelor's degree. The bachelor's degree is planned in detail and demands certain courses and the writing of a thesis, which itself follows specific criteria such as adhering to publication manuals.[3] Students are carefully selected for graduate school, guided by supervisors, who they work under, and committees decide, based on disciplinary and university standards, whether an individual deserves the title of a master or doctor. Students on the graduate level are also divided into different programs with each individual having a place, and each place requiring an individual. Each place and individual call for specific training and evaluation mechanisms. Discipline also controls the activities of students through time. There are allocated times for finishing a master's and doctoral degree, there are forced participations such as taking statistics courses, and there are clear program regulations. Progress also involves the allocation of functions and ranks throughout an academic career, from a master's student, to a Ph.D. student, from an assistant, associate to full professor, or from being a student member, to a full member, to a fellow in professional organizations. The subject's move from one to the next stage are controlled and monitored and power has the ability to intervene at each moment. Psychology usually does not reflect on its own disciplinary power in institutions and the techniques by which psychologists' *body* is manipulated, trained, and formed.

Foucault suggested a complete revision of how researchers should understand human subjectivity, which would include a revision of the psychological subject matter. For Foucault the human being is made into a subject through self-discipline. Power constitutes the person, produces individuality, and constructs the self. Not only is a human being turned into a subject, but a human being turns into a subject through power. From a historical point of view, power, which previously had the right to take life, moved into something that fostered and cultivated life and secured the survival of a population (Foucault, 1978). Power not only targeted the human body but also the species body, when it focused on reproduction, birth, health, longevity, life expectancy, mortality, and so on. Foucault, who rejected the idea of agency or that power was exercised by an individual, and who saw power as a complex machine in which everyone, victims and perpetrators of power were trapped, suggested that power produced permanent mechanisms of regulation and control.

In this context sexuality and sex became significant topics, because sex belongs to an individual as well as to the society (life administration). According to Foucault (1978), sexuality was not repressed (at least repression was not the central feature within this domain), but engendered medical and psychological examinations and surveillances (regarding individuals). Sex (regarding society) produced statistical calculations and

policies that concerned the whole of society or some of its subgroups. "Pastoral power" (Foucault, 1992, p. 309), which was modeled after the Christian pastor who takes care of the community, emerged in this context. It was a form of power that looked after each individual, and knew the inside of members' very thoughts, emotions, and volitions. This new power expanded outside churches, and was exercised by philanthropy, family, medicine, psychiatry, education, work, and of course, psychology (see also Ward, 2002).

Pastoral power was complemented by the subject's confession, which includes all the procedures by which a subject produces a discourse about his or her sexuality (Foucault, 1980). Confession, which has sex as its privileged topic, unfolds within a power relationship because a person confesses to another and is regulated by procedures for confession. However, power was not nourished from outside; there were no agencies, bad guys, or conspiracies. Rather power emerged from within oneself when it was expressed in the form of compulsions (Foucault, 1978). For Foucault, Western society is a confessing society and the Western subject is the "confessing animal" (p. 59). I would like to add that professional psychology plays a central role in the context of confession regarding sexuality, but also regarding all issues that are of interest to society. Applied psychology is the confessing discipline.

As pointed out (Chapter 1) Foucault-based analyses in psychology are rare. Danziger (1990), who embraced the critical and methodological spirit of Foucault in his innovative studies, demonstrated that the concept of an experimental research subject was not all natural but has undergone significant historical and cultural changes. Danziger identified a *Leipzig model*, in which the role of the experimenter was less important than the role of the subject, with Wundt often being the subject and his students the experimenters. This model was based on the idea that the role of experimental subject requires psychological expertise and sophistication. Still, the roles of experimenter and research subject were interchangeable and students took on different roles at different times. In addition, there was collaboration among friends and colleagues, and subjects were not required to be strangers. In contrast, the *Paris model* evolved in the context of medical psychology and experimental hypnosis. Thus, the roles of subject and experimenter were rigidly defined (not interchangeable), a status difference which could also be explained by the fact that most subjects were women (and children). Another model was developed in England, where Galton no longer studied experts or clinical subjects but the general population. Roles of experimenter and subject were clearly defined, money was charged for psychological services, and participants received results. Galton was interested in large numbers on the

background of the scientific organization of society (with the ultimate goal of eugenics).

Danziger (1997b) not only pointed to the research subject's historical and cultural construction, but also to the historical formation of selves. Emphasizing that there was little historical continuity on the concept, that mainstream psychology for a long time repressed the topic of a self, and drawing partially on Foucault, he rejected the representational theory of language that suggested that words mirrored and represented a nonlinguistic reality. This representational theory assumed, according to Danziger, that there was a reality of the self, a natural object that remained the same independent of how one described it. However, a *formative theory of language* suggested that the way one conceptualized the self could not be separated from what the self was. The introduction of new conceptualizations of the self could lead to new organizations of experiences of the self. What one did with words affected what one was in the public sphere. The self was the object and subject of descriptions and determined the boundaries of what the self could be (see also Taylor, 1989).

Similarly, the idea of identity as a stable, coherent, individual, and continuous sense of self (Erikson, 1959) was challenged (Gergen, 1991). For example, N. Rose (1996a) identified a crisis of the self, based on a multiple, transient, nonsubjectified, disorganized, decomposing, and a more plural concept of identity. Drawing on Deleuze and Guattari (1980/1987), Rose suggested that subjects should be understood more appropriately as metamorphosing assemblages that increase and decrease their connections and properties. He also rejected any representational theory of language and conceptualizations of selfhood were interpreted as conversations and grammars of speaking. Rose was also critical of human-scientific psychological studies on the self that relied on interactional narratives because they put the subject back into the seat of agency, which contradicted the assumptions of multiple identities. Indeed psychologists, under the demand of clinical practice, had favored narrative approaches (e.g., Freedman & Coombs, 1996).

ETHICS

Gergen (1985), who rejected the idea of *truth through method*, embraced the notion that moral criteria should play an important role in psychological research (p. 273). This is noteworthy because a postmodern relativism regarding epistemology seemed to be complemented by an ethically binding approach. Emphasizing that postmodern thought in psychology did not reject moral reflections, and more specifically, that psychology should actually participate in developing conversations on "ought,"

Gergen (1994a, 1994b), however, rejected moral principles and universal human guidelines as modernist. Gergen (1992a), who seemed to mistake positivism for modernism, suggested that modernism remained incompetent on questions of value. However, moral philosophy has been a central topic for modern philosophers from Kant (1797/1968) to Habermas (e.g. 1990).

Gergen's emphasis on morality indicates again the difference between North American and continental European, and between philosophical and psychological, postmodern thought. In philosophical postmodern discourses the study of morality was a neglected topic, barely acknowledged, or even used as the prototypical example of a misguided universalism. Readers on postmodernism rarely provided for a special section or discussion on ethical or moral problems (e.g., Docherty 1993; Natoli & Hutcheon, 1993). An ethical turn has only slowly occurred in postmodern philosophy (see Honneth, 1994). Welsch (1995) called it a shift from theoretical to practical reason in contemporary postmodern critiques of reason. Lyotard (1987) developed a theory of justice, Foucault (1985, 1986) immersed himself in an ethics of subjectivity, Derrida (1988) introduced an ethical concept of friendship in his philosophy, and Bauman (1993) published a monograph on postmodern ethics.

The ethical turn in postmodern philosophy was not experienced as a significant event in psychology because moral issues have been addressed in postmodern psychological discourses in North America. This fact can be attributed to the postmodern rejection of the positivist-empiricist logic of research, which rejected value judgments. Based on the idea that the enemy of one's enemy is one's friend, it seems that postmodern psychologists embraced the moral domain as an increasingly important issue to be dealt with in psychological reflection and practice. I have been critical of some of the attempts to inject postmodern moral reflections into psychology (Teo, 1996), not because of the traditional idea of a separation between "is" and "ought" but because I believe that postmodern ethical concepts can be reconstructed within a modern or neomodern framework (see also Honneth, 1994).

Ethical considerations for teaching, research, and practice have become central issues in psychological discourses (see, e.g., Friedrich & Douglass, 1998; Pope & Vetter, 1992). Nevertheless, several postmodern psychologists have challenged mainstream psychology's lack of reflection on morality, not as an object of study, but as a reflexive principle in psychological theory and practice. Challenging the primacy of truth, Polkinghorne (1992) argued that practicing psychology was not true and that practicality should guide the interventions of therapists. He favored a pragmatic solution for psychology with the goal of serving mentally

distressed persons in the most beneficial way. What was considered most beneficial should be based on the knowledge and techniques of skilled practitioners (not on ivory tower researchers) and should be communicated to other mental health experts. Kvale (1992b) also demanded a regeneration of the ethical and aesthetic domains and felt that systemic therapy would be apt to include those dimensions in psychology. Shotter (1992a) emphasized the importance of morality for psychology, but warned of universal principles in the application of morality. Challenging mainstream psychology, he argued that ethical questions should have the same significance as methodological and epistemological issues.

Many postmodern thinkers specifically addressed the ethical-political domain. Gergen (1992a) invited psychologists to participate in the political domain and Kvale (1992b) favored an ethical-political solution for psychology in suggesting that pragmatic effects of knowledge in interaction with the values of the community should be central to psychology's concern. Parker (1989) suggested explicitly that social psychological theory and research should be driven by political concerns. He provided a practical solution for the crisis of social psychology in proposing a list of rules. They included psychological reflections on the individuals or groups one wants to help politically, the practical effects of research for the oppressed, and the capacity to understand political issues. I think that such demands radically challenge mainstream psychology's self-understanding and there is no reason why ethical-political issues should not be incorporated into psychology (see Chapter 10). However, I also have concerns that postmodern psychology lacks concepts that have concrete implications in the domain of practical reason and that these concepts could be developed outside of modern traditions. Without sophisticated concepts this road might lead to an abstract relativism, an arbitrariness of values, or to the loss of reflexive activity. I suggest that existing norms, conventional morality, ethics, and pragmatics should be challenged in critical discourses.

AESTHETICS AND "LIBERATION"

The postmodern critique of psychology targets mainstream psychology's epistemology, ontology, and relevance. However, there is also an implicit critique of postmodern thought that focuses on neglected topics and issues, which have not been, for mostly historical reasons, considered appropriate for traditional psychological research. One group of topics concerns liberation, resistance, and struggle, which are issues that are absent in natural-scientific psychology, unless they are operationalized

and subsumed under individual goals in clinical practices (for instance, empowerment). I have suggested a psychology of liberation that was based on sociohistorical contexts, on the experiences of oppression, but also on the options that are available to an individual in order to overcome domination (Teo, 1998b). For the purpose of this book, I will use an example from aesthetic liberation, which as a topic requires a complete reconceptualization of the subject matter and of methodology. Aesthetics of liberation does not necessarily lead to a cynical attitude that is helpless in the face of suffering subjectivity or to an aestheticism of poverty, alienation, homelessness, or disempowerment (see Harvey, 1990).

Aesthetic dimensions of liberation have been discussed in literature, and indicate boundary shifts between philosophy and literature. Psychology may need a methodology shift by including literature (or art in general) as part of a new methodology. For instance, Weiss's (1975) novel covered the aesthetically inspired resistance of the book's protagonists, workers of 1937, who appropriated scenes from the Altar of Pergamon in a Berlin museum for their interpretation of resistance. The Pergamon Altar was built more than 150 years before the Common Era in Pergamon, an important Greek city in Asia Minor (now Turkey), with a library second only to Alexandria. The scenes depicted on the altar, made of high-quality marble, shows the struggle of the Greek Gods against the Titans (Titanomachia). As Zeus defeated the Titans, who were, according to the myth, banished to the underworld, the novel's protagonists interpreted the scenes as motivating them to fight German fascism.

For Foucault, aesthetics is not just a means for resistance but a domain. In order to understand his position, it is necessary to describe traditional theories of *liberation*, a term that Foucault rejected because of its traditional social-philosophical connotations. For example, in Marxist theory, liberation was conceptualized as liberation from oppressive production relations (see Teo, 1998b). However, groups engaged in struggles such as women, ethnic minorities, people with disabilities, gays and lesbians, psychiatry survivors, and so on, did not necessarily experience power in the domain of labor. Experiences of interaction, and problems concerning awareness, esteem, consciousness, image, perception, body, and sexuality could not be subsumed under a Marxist labor paradigm. Foucault, aware of the microphysics, techniques, strategies, and procedures of power, and in contrast to Holzkamp or Habermas, analyzed this aesthetic dimension of resistance, which included space, body, and the self.

Foucault (1996) rejected traditional concepts of power because power was constantly occurring, everywhere, in each relationship; power was a machinery that no one has the agency to control, a permanent action upon action, so that a society without power is not possible.[4] He also discarded

the concept of liberation because it served the idea that there existed a human nature that had been repressed by history, economy, or society (p. 433). Instead of liberation, Foucault (1992) allowed for resistance, struggles, and practices of freedom.[5] With his concept of resistance and struggle, Foucault (1996) developed the notion that we could not completely free ourselves from power relations, but that we could always change them (p. 386). There was always the possibility of resistance, disobedience, and opposition.[6] For Foucault (1961/1988) the struggle against the submission of subjectivity has become more important and prevalent.

In terms of space, Foucault (1996) was skeptical about resistance (or liberation) in architecture and about the relationship between a structure and freedom (see pp. 335–347) because he tied resistance to the practice of freedom and not to the liberating intentions of an architect. Architects such as Le Corbusier (1887–1965) were described as having good intentions, but architecture could be oppressive when occupants made it oppressive. Foucault did not think that an architect, even when architecture expressed techniques of power, could be put on the same stage of domination as a psychiatrist, who acted in a context of sophisticated power relations, or as a prison warden, or as a priest in the Catholic Church. However, a person can oppose spatial arrangements, when, for instance, a walk-through tunnel that elicits experiences of danger and anxiety is challenged, and suggestions for a different spatial organization are made. This is as liberating as just saying "no," which is a form of resistance for Foucault (p. 386).[7]

Foucault (1970), who in his earlier writings preferred concepts such as *experience structure*, *episteme*, and *dispositive* to the one of a subject, returned in his later writings to subjectivity and to the idea that a subject was able to install his or her life as a piece of art which would liberate the subject from individualizations linked to the *state*. The *arts*, which are related to objects and not to subjects, allowed for new forms of subjectivity. Foucault (1984) believed that everyone's life could become a work of art[8] and challenging power meant defining one's own life as art. Such aesthetics of existence was envisioned in the areas of sexuality, body, and other forms of self-expression. In contrast to clinical psychology, which conceptualizes so-called deviations in terms of perversions, Foucault (1996) defined marginalized sexuality as a possibility for a creative and innovative life (pp. 382–390). A subject's resistance could be realized by redefining technologies of the self.

Foucault mentioned that pleasure and drugs should become part of culture, and just as there were good and bad movies or books, there existed good and bad drugs. The relationship with oneself should be based on differentiation, creation, and innovation, because identity, in the

sense of being the same, was considered boring. In the context of pleasure and sexuality, Foucault mentioned the sado-masochistic subculture, which he defined, not as disclosing tendencies in the subconscious, not as being aggressive, but as something that allowed for new possibilities of satisfaction through the eroticisation of the whole body as a source for pleasures. He also mentioned that lesbian S/M actually got rid of stereo-types of femininity, and that in the eroticisation of power in S/M, a relation that was always fluid, power could be acted out in a game that was able to provide sexual or bodily pleasure. In doing so sado-masochistic practices could be understood as liberating (see also, Kögler, 1994). Such subcultural ideas or experiences hardly find their way into mainstream psychology's repertoire of legitimate issues (in the mainstream they are understood as pathologies). Finally, based on postmodernism's idea that disciplinary boundaries are arbitrary, there have been attempts to trans-form academic styles of presentation and to develop new aesthetic forms of delivery, research, and practice, labeled as *performative psychology* (M. Gergen, 2001). Holzman (2000) argues that performative psychology, based on the idea that the potential to perform is not utilized adequately, could contribute to education, learning, and development.

Postcolonial thinkers such as Dussel (1992/1995) were critical of modernism as well as of postmodernism. Postmodern ideas appeared to him as concerns that were mostly relevant to Euro-Americans and that did not cope with the injustices of the past and present in the periphery. Deconstructions and reconstructions, the rejection of metanarratives, the death of the subject, and so on, despite their significance for a critique of psychology, did not help concrete individuals, the majority of humanity, in the postcolonial world. It would also be cynical to argue that every metanarrative had the same epistemological and ethical-political poten-tial for emancipation. Resistance against tax burdens by affluent members of the North do not have the same ethical-political status as resistance against environmental destruction in the South. Instead of being trapped by an arbitrary inflation of what is significant, postmodern discourses require a new perspective. Elements of this new perspective could be gained from the postcolonial critique of psychology.

9

The Postcolonial Critique

In the ascent of Western colonialism, which was central for the rise of Europe (Mills, 1997), an interest in "understanding" non-Western groups of people flared up. This sociohistorical process gave rise to the construction of the concepts of *race* and *racism*. The history of racism (and its academic expression in scientific racism) is long and multifaceted and cannot be repeated here (see Banton, 1987; Barkan, 1992; Geiss, 1988; Hannaford, 1996; Miles, 1989; Weingart, Kroll, & Bayertz, 1988). On the background of modernism versus postmodernism debates, authors have linked racism with modernity. For instance, Goldberg (1993) associated the rise of the concept of "race" with modernity. Yet, Malik (1996) vindicated modernity and identified romanticism as being responsible for the reaction against the egalitarian principles of the Enlightenment philosophers, whose principles romanticism betrayed.

From an internalist perspective on science's history, one could argue that "race" emerged in the context of an obsession with classification, which was consequently applied to human populations (see Mills, 1997). From a sociohistorical standpoint, the concept of "race" allowed for the justification of colonialism, domination, and slavery, because non-European groups (and certain European populations) were not just constructed as different, but also as inferior. For a historically informed perspective there is enough evidence that the interest in human variety

was not a value-neutral endeavor, but involved moral, aesthetic, and intellectual assessments, which engendered exploitation, humiliation, and denigration.

Francois Bernier (1625–1688), one of the historical pioneers of the term "race," avoided evaluative characterizations for his four "races," but already Carolus Linnaeus (1707–1778) combined in his human taxonomy of four varieties temperament and moral features (see Bindmann, 2002). Linnaeus came to the conclusion that the sanguine Europeans were governed by law, the choleric Americans by custom, the melancholic Asians by opinion, and the lazy and phlegmatic Africans by the arbitrary will of their masters. Kant, who was so influential in the development of psychology (see Chapter 3), and one of the greatest epistemologists and moral philosophers of all time, divided humankind into four races (the white race, black race, Mongol race, and Hindu race). He did not shy away from including moral and aesthetic criteria. For example, Kant suggested that the Africans were foolish, vain, and lazy, and that their unpleasant odor could not be avoided through any hygiene (see Teo, 1999b). Kant is also an interesting prototype for the logic of scientific racism, when he explained the skin color of Africans using phlogiston theory. He demonstrated that difference had to be explained by all means necessary (Teo, 1999b; see also Bernasconi, 2001; Mills, 1997). Aesthetic arguments were expressed in the writings of the German art expert Johann Winckelmann (1717–1768), who deplored the shape of Chinese eyes, and compared the facial features of Africans to monkeys (Bindmann, 2002).

The term *Caucasian*, still popular in North American contexts and used in psychological studies, was developed by Johann Friedrich Blumenbach (1752–1840), who divided humanity into five types: Caucasians, Ethiopians, Malays, Mongols, and Americans (Augstein, 1999; Bindmann, 2002). Blumenbach shifted the idea of the origin of European culture from Africa (Egypt) to the Caucasus and suggested, using craniometry, that the skull of a Georgian woman represented the white ideal (Georgia was part of the Caucasus). The Caucasian hypothesis was refined by the French naturalist Georges Cuvier (1769–1832), who spread the idea that the Caucasian variety divided into the two branches of Semites and Aryans (see Bindmann, 2002; Gould, 1996). This theory was more influential in Europe than in North America and led to well-known consequences in German fascism (Mosse, 1978). Given the pseudo-scientific nature of the term *Aryan*, this concept is not used in current psychological studies. Yet, the same argument must be made for the concept *Caucasian*, which should not be employed anymore in psychology due to its unscientific status.

Psychology has been transformed from a philosophical into a natural-scientific discipline on the background of colonialism, slavery, and

exploitation. Thus, it is not surprising that important pioneers of psychology assimilated or actively contributed to scientific racism. Paul Broca (1824–1880), who is celebrated in psychology for his location of speech loss (aphasia) in an area of the brain (now known as Broca's area), was one of the leaders of scientific racism. He was convinced that non-European races were inferior in terms of intelligence, vigor, and beauty (see Teo, 2004). It is also remarkable that Broca gave up all standards of scientific inquiry when he "handled" research on human "races." At the beginning were his conclusions, which were followed by data collection and selective reports. Criteria were changed and abandoned when the results did not fit his original conclusions (see Gould, 1996). He embraced "confirming" evidence and repressed disconfirming information. The pioneer of social psychology Gustave Le Bon (1841–1931), who divided, based on psychological criteria, humans into primitive, inferior, average, and superior races, suggested vehemently that races were physiologically and psychologically distinct, that races were different species, and that all members of a race shared an immutable race soul (see Teo, 2004).

In England, Galton (1869/1962, 1874/1970) expressed his contempt for non-Europeans and suggested quantifying levels of racial intelligence based on the conviction that the natural ability of Europeans was higher than of non-Europeans. Galton's scientific racism was not just a matter of research, but rather, as Richards (1997) reconstructed, a result of his expeditions to Africa when he was in his 20s, before any scientific data had been collected. Galton also practiced racism with his native servants on his expeditions, when he performed punishments that included pouring boiling water on his servants in a court of justice (see Richards, 1997). For Galton (1822–1911), who did not alter his racist beliefs in his later works, scientific racism was embedded in his larger project of eugenics that played, as Fancher (2001) shows, the role of a secular religion. Eugenics replaced Galton's conventional faith, which had been shattered by his conversion to evolutionism.

Academics in the United States were more concerned with the black population and with immigration than with native peoples in remote countries. G. S. Hall was one of the most eminent figures in American psychology and first president of the American Psychological Association. G. S. Hall (1904) argued that lower races were not in a state of arrested development, but in adolescence, and would eventually reach maturity. The argument provided a scientific justification for segregation and the separate education of Black, American Indian, and White children (Tucker, 1994). Henry Goddard (1866–1957), who translated the Binet–Simon scale into English, suggested that feeble-minded persons, among them a higher proportion of African Americans, should not be allowed to marry. Lewis

Terman (1877–1956) proposed that children with low intelligence, for him, typical among African Americans, should be segregated into special classes. They should be provided with instruction that was concrete and practical. Robert M. Yerkes (1876–1956) found that European immigrants could be ranked according to their country of origin and that Blacks lacked initiative, displayed no leadership, and could not accept responsibility. Based on the scientific findings of these American pioneers, many states passed sterilization laws. The Immigration Restriction Act of 1924 enforced quotas against European countries with high numbers of so-called mentally defective immigrants (see Gould, 1996; Richards, 1997; Tucker, 1994).

Scientific racism was performed by many pioneers of psychology but this fact has not become standard information in history of psychology textbooks. The same applies to the history of particular terms such as *Caucasian* or *mongolism*, now labeled *Down syndrome* (caused by the presence of an extra chromosome). John Langdon H. Down (1829–1896), who was a physician in an asylum at Earlswood, published in the 1860s works on the structures and functions of the various organs in *idiots and imbeciles* (see Jackson, 1999). He described a specific group among these idiots and imbeciles as possessing round faces, flattened skulls, extra folds of skins over their eyelids, protruding tongues, short limbs, retardation of motor and mental abilities, and so on. Yet, Down not only described these individuals, but also labeled them based on their resemblance to ethnic groups. Those persons with facial features such as round faces and protruding tongues and the behavioral attributes of these "idiots," represented for Down typical Mongols, hence the term *mongolism*. It is an important task for a postcolonial critique of psychology to identify and trace the history of racially laden concepts.

THE PROBLEM OF ONTOLOGY

The problem of ontology, or subject matter, in the context of a postcolonial critique of psychology concerns the issue of whether "race" is a meaningful natural-scientific category as opposed to a concept that has developed relevance in historical, political, cultural, and economic contexts, and should be treated accordingly as a construction (Montagu, 1974; Tate & Audette, 2001). Despite recent evidence that the concept of "race" has no natural-scientific value, that "race" is not a scientific-biological but a sociohistorical concept, this knowledge has not infiltrated psychological research, which still treats "race" as a natural category. Such an assessment not only applies to current followers of scientific racism such as Rushton (1995), whose whole theory is based on the assumption of the

reality of biological "races," but also to regular psychological studies published in mainstream journals.

Morphological critics of the concept "race" have focused on the lack of agreement on the number of "races," which points to scientific arbitrariness, and to the social fact that many race systems have been developed in the context of specific sociopolitical environments (Teo, 1999b). The arbitrariness of racial classification has led to a failure to distinguish groups, and there exists also no racial correspondence to linguistic or cultural groups (Levin, 1997). Genetic critics have argued that genetic analyses demonstrate that there is a greater variance within than between populations and that researchers have been unable to discover a single characteristic that could be associated exclusively with one racial population. Thus, instead of discrete separate groups, scientists have found a continuity of variation (Levin, 1997).

Ground-breaking in the context of the advancement of genetic research were the studies by Lewontin (1995) who demonstrated that the genetic diversity that is contained within populations is around 85% and that less than 15% could be explained by differences between human groups ("races"). In addition, differences between populations within a "race" account for an additional 8% so that only 6% is explained by traditional racial classifications. Thus, there has been no genetic support so far for "race" as a category of evolution, or as a term that denotes biological divisions of the human species. Other leading geneticists such as Cavalli-Sforza and Cavalli-Sforza (1995) have made the same argument, namely that the differences between individuals are much greater than "racial groups." They have concluded that the traditional biological definition of "race" has no scientific meaning. Corcos (1997) pointed out that human beings do not inherit "race" but genes, which establish skin color, hair, the shape of the nose, and so on. Because of the genetic studies in this field of interest, the *American Anthropological Association* (1998) decided to release its *Statement on Race* in the late 1990s and criticized the concept of a biological "race" as a myth (see also the American Association of Physical Anthropologists, 1996). Unfortunately, psychology as a discipline has not dealt sufficiently with the concept of "race" and the scientific developments that have occurred (see also Yee, Fairchild, Weizmann, & Wyatt, 1993).

One could argue that the concepts of the classical natural sciences are different from objects and events that are studied in the human and social sciences (Danziger, 1997a, 1997b; Holzkamp, 1972). In physics, the concept of "gravity" is considered to be of a natural quality, meaning that this event actually occurs in nature (independent of the mind and independent of whether one can explain it). In psychology, it is assumed that concepts such as "race" and traditional categories of mental life such as

emotion, cognition, identity, consciousness, motivation, morality, and so on, are of a natural quality, which justifies the use of natural-scientific methods. However, concepts such as identity are largely of a sociohistorical quality. Such an assessment does not imply that identity has no biological basis, rather it means that how identity is conceptualized can only be understood through an analysis of the meaning of this concept in various sociohistorical contexts.

The idea that one can simply export Euro-American psychological concepts into other cultures is based on a naturalist ontology. However, already Dilthey (1883/1959) had argued that there were significant differences between the natural and human sciences and that the subject matter of the human sciences was the sociohistorical reality. This ontological difference necessitated a different methodology than the one of the natural sciences (see Chapter 5). Danziger (1997a) pointed out that one takes many psychological concepts for granted because they are embedded in one's culture. However, a historical or a cultural investigation shows that concepts that appear natural to a community that shares language, culture, and practices, are not at all natural, but rather culturally specific.

Based on sociohistorical analyses, *physicalism* must be identified as a limited program when suggesting that everything in the empirical world can be studied with the concepts and methods of physics (Carnap, 1928/1967, 1932). There should be no differences in the phenomenon of electricity in the *West* or *East*, but there is a difference when identity is studied in various cultures. The human sciences and psychology have specific ontological (and methodological) problems that are unique to them. The universalization of Western psychological concepts to non-Western cultures is an unwarranted practice that requires further examination (see below). This practice also shows that the concept of inferiority is no longer applied to the nature of human groups, but it relates to conceptualizations of psychological topics. It is assumed that non-Western theories of mental life are not worthy of examination because they are assumed to be inferior. This is the current face of neo-colonialism in psychology.

The term *postcolonial* has a descriptive meaning as it refers to a period during which overt colonialism has faded (after WWII). The term has also a normative meaning that suggests that colonial ideas and practices should not play a role in academia, science, and psychology. Postcolonial thought as critical reflection identifies the problems of colonization, takes an ethical-political stance on colonialism, and considers the life conditions of the world's marginalized peoples (Harding, 1998; Shome & Hegde, 2002). A postcolonial psychology should incorporate critical postcolonial

thought into the discourses and practices of psychology and aim at developing alternative theories of mental life. A postcolonial psychology from the "center" reflects on the history and theory of colonialism in Western psychology. It also develops new theories and practices based on an integration of peripheral psychological thought. A postcolonial theory from the "periphery" emerges from the experiences of marginalized peoples. Because I focus on the center, my definition of "postcolonial" is much broader than in the humanities.

Postcolonial psychology differs from cross-cultural psychology. Cross-cultural psychology began with applying Western categories and methodologies to other cultures, but rarely in order to challenge Western psychology's foundation. Although cross-cultural psychology identifies the role of culture in mental life, it continues to be based on mainstream ontology and epistemology. This makes it less relevant to those who live outside Western conceptual networks. For example, Laungani (2002) argues that American mainstream psychology is not relevant to the cultural needs of peoples around the world. This lack of relevance is due to the unbridled acceptance of mainstream methodology. But, according to Laungani, neither experimental studies nor psychometric instruments nor taxonomies provide knowledge of mental life's specificity in other cultures. Laungani even goes so far as to suggest that the experiment may be a "fruitless exercise" (p. 395) in other cultures, because people may not have been socialized into the meaning of psychological experiments (see also Chapter 2).

Cross-cultural psychology can be understood as part of the globalization of psychological theories and practices. Intellectual globalization accompanies economic globalization, which has been criticized in terms of not keeping its promise to eradicate poverty, disease, and environmental damage (Harding, 1998). Globalization is a historical fact, but it remains to be seen whether psychological globalization with the promise of a better understanding of non-Western mental life will indeed lead to a better comprehension of the psyche and to culturally adequate practices. Unfortunately, given the track record of psychology, it is more likely that Euro-American concepts will be imposed on other cultures—without authentic mutual learning processes. Bhatia (2002a, 2002b) suggests that cross-cultural psychology continues to see the *Other* as inferior and that psychology assumes that theories, methods, and results can be exported to anywhere in the world. These practices imply that the world must be understood from a Western psychological perspective.

Psychologists should also acknowledge that so-called *Third World* diasporas in Europe and North America are the results of colonization, imperialism, and slavery (Bhatia & Ram, 2001). On this background the number of ethnic minorities has increased and will augment over the next

years in many European countries, the United States, Canada, and Australia. This social reality is the source of the emergence of a *multicultural psychology* (G. C. N. Hall & Barongan, 2002). In contrast to cross-cultural psychology, which attends to different cultures or different contexts, multicultural psychology discusses different cultures or subcultures within one sociopolitical or geographical context such as Canada. It studies the mental life of multicultural individuals within this context.

Multicultural psychology, based on population changes and the increase of visible and invisible minorities, challenges the relevance and meaningfulness of traditional psychological theories. However, multicultural psychology does not challenge traditional psychological methodology (G. C. N. Hall & Barongan, 2002). Multicultural psychology is similar to the perspective of feminist empiricism, which does not question the methodological foundations of traditional psychology (see Chapter 7). Because multicultural psychology does not extend the critique of psychology to methodology and does not analyze whether a methodology represents a particular cultural perspective, it receives more acceptance in the mainstream than a radical postcolonial perspective. A similar problem constellation can be found in *cultural psychology*, in which one faction is critical of the unicultural quality of American psychology but accepts its methodology (e.g., Matsumoto, 1996), whereas another faction challenges theories and methodologies (e.g., Shweder, 1995).

THE EPISTEMOLOGICAL ARGUMENT

The question of ontology, the problem of whether psychological concepts are of a natural or a sociohistorical quality, has an impact on epistemological and methodological issues. We have argued that ethnocentrism (used descriptively and not normatively) could be understood as a Kantian form of intuition (a cognitive structure) that plays a knowledge-producing role (see Teo & Febbraro, 2003).[1] All cultures have developed their particular forms of intuition, but a critique of Western psychology, based on a postcolonial reflection, focuses on Western ethnocentrism. From a social-epistemological point of view, we argue that instead of a priori physical principles such as space and time (Kant), and instead of human physiological determinants of knowledge (neo-Kantianism), one should focus on social structures (class, gender, paradigm, episteme, colonialism, subcultures) as *forms of intuition* (i.e., culture produces cultured knowledge). Space and time can be understood *sociohistorically* as factors that structure what human beings are qualified to know. Physical time is then reconceptualized as *historical time*, and physical space is understood

as *cultural space*. Following Kant (1781/1998) we recommend focusing on sociohistorical appearances and on the structures that precede and contribute to empirical processes. Accordingly, the time in which one lives, and the context that socializes human beings, for instance, periphery versus center, become sociohistorical *forms of intuition* that inform and structure everyday experiences. Without these *forms of intuition* knowledge would not be possible.

We argue that sociohistorical *forms of intuition* can be characterized through their "centrism": "Time-centrism" means that a given time ("our time") is the criterion from which knowledge is developed and understood (Teo & Febbraro, 2003). Current knowledge is not judged in terms of the future, which is impossible, and knowledge is usually not evaluated in terms of the past, which is possible, but, with the exception of historians, present knowledge is not compared to previous knowledge. It is implicitly assumed that current knowledge is superior to earlier knowledge. Culture-centrism means that one's own culture is the criterion from which knowledge is produced and understood. Culture-centrism, in an epistemological sense, is a *form of intuition* and a precondition for the production of knowledge. Yet, culture-centrism also assumes that knowledge from outside a given culture is inferior.

Forms of intuition are not limited to everyday life but play a significant role in psychological research. Psychologists usually perceive, understand, and interpret psychological phenomena in the way that they have learned in their particular contexts, including their educational institutions, to perceive, understand, and interpret them. In this sense, culture-centrism is an epistemological a priori principle before empirical research is conducted. But this also means that empirical research, including methodology, represents a particular cultural perspective. Culture-centrism was made into an explicit program when it developed, on the background of colonialism, into scientific racism. But it also developed, without any bad intentions, into a hidden form of culture-centrism, which holds that Western *forms of intuition* and Western *categories* are superior to non-Western ones.

Culture-centrism may be a universal *form of intuition* in the sense that all cultures have their specific structures for developing knowledge and producing experiences. In addition, cultures have developed their own particular *categories* with which psychological issues are addressed (see Danziger, 1997a).[2] In middle-class Western everyday life, for example, one might use the concept of a *temperament* or *IQ* in order to explain the behavior of a child, and, in academic contexts, one might refer to *reliability* in order to assess the quality of a psychological study. Usually psychologists are not aware that psychological *categories* are located within a

particular sociohistorical tradition, and this fact does not help challenging one's research practices. Although culture-centrism is an a priori in all cultures, any critique of traditional psychology should focus on "Western" psychological theories and research practices and their eurocentrism.[3]

The same argument could be derived from Gadamer's (1960/1997) philosophical-hermeneutic reflections on *tradition*. Gadamer argued that everyone (including psychologists) is embedded in a particular tradition, which determines one's *horizon*, meaning the extent of one's perspective. Because of a particular tradition, psychologists will necessarily possess certain prejudices through which knowledge will be produced, organized, and interpreted. The development of understanding requires the extension of one's horizon. Yet, in the case that one encounters two or more different horizons, one (if one has the power) often imposes one's views on others. In such a case we cannot speak of a *fusion of horizons*, but of the coercion of horizons. Such coercion does not allow for a true understanding of the *Other*. This could only be accomplished through a postcolonial transformation of previously accepted horizons. The central epistemological problem rests not in any particularism, because any *form of intuition* starts in a particular tradition, but in the assumption that Western views are universal, which implies that it is unnecessary to learn from *Others'* perspectives.

SCIENTIFIC RACISM

The most obvious expression of culture-centrism is scientific racism, which, as an important research program in academia, has influenced the spirit of Western society and provided an academic justification for colonialism, slavery, segregation, and so on. In scientific racism certain human groups are constructed, using theoretical and empirical means, as inferior, while at the same time Europeans are conceptualized as the guardians of civilzation or evolution. The history of psychology shows abundant evidence for scientific racism's research, and pioneers of psychology and *American Psychological Association* presidents were among its leaders (see Gould, 1996; Guthrie, 1998; Richards, 1997; Tucker, 1994; Winston, 2004). Although scientific racism has been on the decline, researchers such as Rushton (1995), who called upon objectivity and truth in order to promote his research, without recognizing that this research is part of a worldview that is constructing empirical results (see Winston, 1996), confirm a continuity into the 21st century.

Scientific racism follows a specific "logic" (i.e., certain cognitive rules), that can be described (see Memmi, 1982/2000; Teo, 1999b; Teo &

Febbraro, 2003), despite the existence of a variety of racisms (see Ernst & Harris, 1999). The logic begins with the assumption of "races" as natural kinds, followed by the *construction of differences*, which can be based on empirical studies. These differences are then *evaluated* in favor of Europeans and in terms of explicit or implicit inferiority. Evaluations range from explicit judgments of inferiority, to the choice of labels that render Europeans as the norm, to emphasizing characteristics that are relevant to the European worldview. The logic is cognitively completed when these evaluated differences are attributed to different biological natures and not to cultural, historical, or political-economic developments. This process can be identified as the *naturalization of differences*.

The cognitive process of scientific racism is often accompanied by recommendations for concrete practices, actions, or policies. The historical analysis of the concept of "race" shows that "race" systems and racism were not just concerned with the qualitative variety of humans, but that these discourses were established in order to legitimize political, economic, military, educational, and ideological purposes and to justify practices of exclusion and domination (see Mecheril & Teo, 1997). In terms of ideology, scientific racism has provided and produced "knowledge" that has formed a worldview for the academic elite in particular and for Western cultures in general (see also Mills, 1997). Scientific racism in psychology is still a powerful research program because it uses the cherished standards of scientific psychology, including operational definitions, variables, and statistical analyses.

HIDDEN NEO-COLONIAL THINKING

Scientific racism is to colonialism as hidden culture-centrism is to neo-colonialism. Economic and political neo-colonialism is expressed in practices that make "Third World" countries dependent on rich nations, while at the same time poor countries are exploited (Harding, 1998). Hidden culture-centrism is expressed in the belief that Western forms of intuition and concepts are superior, that Western knowledge claims are superior, and that Western approaches to knowledge in the social and human sciences are the only reasonable ones, while at the same time alternative forms of knowledge are rejected (see Dussel, 1992/1995; Fay, 1996).[4]

It is important to emphasize that hidden colonial thinking is not an individual prejudice as much as a *psychology of knowledge* (e.g., Müller-Freienfels, 1936), or many social-psychological and personality studies might suggest (see Jones, 1997). It is not sufficient to examine researchers' motivations, Bacon's (1965) *idols of the cave*, or the group dynamics of

research programs, but rather it is necessary to look at the underlying cultural assumptions that have formed over the course of history. Although historical studies on the racism of significant psychological pioneers (Weidman, 1999), on prejudices (Dovidio & Gaertner, 1986), and on right-wing personalities (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950) are informative, they do not address the cultural-historical background, traditions, and horizons that mediate and inform individual culture-centrism, and more importantly, the hidden assumptions that operate in mainstream research. Despite the significant shift from "race" research (which was often racist) to prejudice research (which challenged racism) in the first half of the 20th century (Samelson, 1978), a second shift from individual to sociohistorical dimensions of prejudice is missing. Gaines and Reed (1995) have argued that the move of mainstream research to the sociohistorical dimension of prejudice would have challenged the notion of racism as a universal feature of human nature. It would have focused on exploitation and the consequences of exploitation.

Notwithstanding that there exists ample evidence of the social pervasiveness of everyday racism (Essed, 1991), I suggest that most contemporary psychologists view scientific racism and blatant racial prejudices and actions as aberrations of the discipline's past. However, from a postcolonial perspective the major problem nowadays is not scientific racism, whose psychological proponents are not marginalized in terms of access to psychological journals and public attention, and who form a small minority in the discipline, but hidden colonial thinking. Hidden colonial thinking in psychology, as hidden culture-centrism in general, expresses itself in terms of exclusion or disregard of non-Western psychologies. In addition, the assimilation of peripheral psychological thoughts, without a general reconceptualization of Western views of the psychological, perpetuates hidden colonial thought. Hidden colonial thinking is based on the assumption that Western conceptualizations of mental life are superior and have universal validity, that only Euro-American perspectives of a psychological object, event, or story need to be discussed, and thus, that non-Euro-American views or ideas, which have been developed in peripheral intellectual and cultural contexts, are irrelevant for the theory and practices of psychology (see also Harding, 1998).

Hidden colonial thought in psychology cannot be overcome as long as it is based on the idea that Western psychology is superior. Hidden colonial thinking is often performed without any "bad intentions" in a process of exclusion or neglect and many psychologists even have good intentions when they attempt to assimilate non-Euro-American perspectives into Western psychology. However, this assimilation will not overcome hidden colonial thinking if it remains what Sampson (1993) called

accommodative, meaning that other voices are just added to the mainstream rather than fundamentally transforming the foundations of psychology, including its methodology (this is also a feminist argument). Historical and cultural studies show that there are different perspectives on important psychological issues. Thus, academic psychology should routinely study other cultures' conceptualizations, which has been accomplished in an exemplary manner, from a historical point of view, by Danziger (1997a).

If psychologists know that different conceptualizations of psychological objects or events exist, but report only a particular conceptualization, or suggest that only one particular conceptualization makes sense, or imply that the Euro-American one is superior, then they participate willingly or unwillingly in hidden colonial thinking. If researchers are not aware of "peripheral" conceptualizations and instead universalize Euro-American conceptualizations, then they inadvertently privilege hidden culture-centrism. If psychologists are not willing to inquire about alternative conceptualizations in other cultures or subcultures, then they must admit from the beginning that their knowledge is particular, Western-focused, and eurocentric. They must accept the assessment that they participate in and perpetuate the *hidden* colonial thinking of Euro-American psychology.[5]

When it comes to sociohistorical psychological concepts such as subjectivity, identity, intelligence, emotion, motivation, personality, and so on, Euro-American researchers tend to teach, write, and act as if they have told the whole story of human mental life. In fact, they tell only a few parts of the story, a story that is largely influenced by the history and context of Euro-American history, culture, and science (see Spivak, 1999). In order to deal with psychological colonialism, psychologists should study and disclose as many conceptualizations as possible and develop a comprehensive understanding of mental life. These conceptualizations may (or may not) differ from Euro-American ones, but researchers cannot answer this problem a priori. It is premature to assume that Euro-American conceptualizations of personality are universal.

When psychological conceptualizations are applied empirically to other cultures they supposedly support the cross-cultural meaning of these conceptualizations. However, they do not confirm the cultural validity of the concepts, only their universal administrative applicability.[6] For example, Howitt and Owusu-Bembah (1994) remarked that Ghanaian personality structure could be assessed through Western concepts. But then it would not be understood in terms of that particular culture's ideas. Sampson (1993) noted that psychologists have been trained to subsume all mental life under existing mainstream categories. Psychology can be

described, as Said (1993) suggested for Western thought in general, through universalizing discourses, the assumption of silence of the non-European world, direct rule, and coercion. Unfortunately, psychologists rarely demand that psychology should listen to colonized people's ideas. This would require openness to a complete revision of Euro-American conceptualizations of mental life.

Howitt and Owusu-Bempah's (1994) assessment that "eurocentrism describes the orientation of much of the social sciences, especially psychology" (p. 114) was based on evidence, and any sober analysis of psychology shows that most of mainstream psychology falls under the notion of hidden colonial thought. Psychologists may even be aware of this problem and delegate their academic duty of sharing horizons to the field of cross-cultural psychology. As important as cross-cultural research has been in advancing psychology's knowledge of culturally varying behaviors (e.g., Choi, Nisbett, & Norenzayan, 1999), the hope that natural-scientific driven cross-cultural psychology could overcome hidden colonial thought is shortsighted, as long as cross-cultural psychology does not seriously consider the development of new categories and methodologies for psychology (Bhatia & Ram, 2001; see above for a critique of cross-cultural psychology). It is important not only to look, for example, at different patterns of attribution but also to study the meaningfulness of the concept of attribution in other cultures. It should be clear that different cultures have different ways of gaining knowledge, and that these ways contribute to the specificity of these cultures, their knowledge, and also their neglect in Western psychology (Harding, 1998). A cross-cultural psychology that addresses these specific ways as well as the hidden colonial thinking of Western psychology would be transformed into a postcolonial psychology.

A good example of hidden culture-centrism was reported by Paranjpe (1998) in his book on Indian and Western psychology (see Teo & Febbraro, 2003). An international psychologist argued that the concept of falsification was a Western invention. He assumed a priori that there was no need to look at other cultures' ideas or conceptualizations. Paranjpe showed that this was incorrect and that Indian philosophy had developed sophisticated epistemological concepts, including the notion of falsification. Paranjpe's (1998) analyses, which described knowledge of the epistemological, ontological, and ethical foundations of psychology in both the West and India, showed similarities and differences between culturally diverse contexts regarding mental life. In order to overcome hidden colonial thinking, books that inform about other cultures' philosophies, such as that by Harré (2000), who includes Indian, Chinese, Japanese, and Islamic thought systems without assimilating them into Western con-

cepts, represent an important first step for a postcolonial project (see also Fay, 1996).

Psychoanalysis and many other developmental theories indicate significant cultural limitations. Prototypical is Kohlberg's theory, which has been criticized from a feminist perspective (Gilligan, 1982; see Chapter 7) but is also susceptible to postcolonial critiques. Kohlberg (1981, 1984) had good intentions when he developed a stage theory of moral development and when he assessed the cross-cultural validity of his theory in various cultures. However, the ability to respond to a Euro-American theory did not establish the global validity of a theory; rather, it confirmed that human beings could respond to cognitive material. For a global theory of morality, one would have had to understand the conceptualization of morality in diverse cultures. It is also evident that the focus on moral judgment itself (instead of moral behavior, emotions, etc.) is a cultural choice that influences methodology and the interpretation of results.

Even critical theories are not exempt from the problem of culture-centrism when they establish new theories and practices. As pointed out earlier (see Chapter 6), Holzkamp (1973, 1983) promoted a new approach for the construction of psychological categories. Because a real understanding of psychological concepts would only be possible by including the natural history, the prehistory, and the history of humanity, Holzkamp developed three steps in analyzing psychological concepts. The steps move from an analysis of the natural history, which identifies general evolutionary-biological characteristics of a concept, to the reconstruction of a transitional period, in which prehuman life-forms developed into human life-forms, and which allows one to recognize the general societal-historical characteristics of a concept, to the last step, in which a concept is related to a specific historical-economic reality such as bourgeois society (see Teo, 1998a). The hidden culture-centrism can be identified in the assumption that an analysis of Western bourgeois societies, which are based on capitalist modes of production and vary substantially, is sufficient to understand mental life all over the world. Such an analysis does not do justice to the sociohistorical specificity of various political-cultural and sociohistorical contexts, which are the horizons for the conceptualizations of mental life. Sloan (1996b) was well aware of the problem when he argued that Western psychology not only exported psychological concepts to the rest of the world, but also core assumptions. Individualism and scientism are such central suppositions in traditional psychology; yet, psychologists do not see their own ideology when operating in non-Western countries.

Because Euro-American psychologists assume that psychological concepts that have been developed in Euro-America are universally valid,

they perform poorly in understanding mental life in other cultures. Unfortunately, in the process of academic and intellectual globalization, one can expect Western psychologists' fading interest in non-Western psychologies and an increased interest of non-Western psychologists in powerful, affluent, and influential Western perspectives. Indigenous psychologists might give up their understanding of their own culture or subculture, their contexts, history, concepts, and forms of intuition, for an imported psychological theory. Thus, Moghaddam (1996) suggested that psychologists on the periphery should overcome their dependency on an inadequate mainstream psychology, if, indeed, they wanted to develop their societies.

If our argument that ethnocentrism is a *form of intuition* is meaningful, then one must presume that all psychological concepts are culturally determined. This does not mean that no universal psychological concepts exist. Yet, it would be the task of psychologists to demonstrate that psychological concepts have global significance, and not the opposite, that is, to assume a priori that they have universal validity. Unfortunately, psychology's natural-scientific-based methodology does not address the sociohistorical nature of psychological concepts nor does it allow for a test of universal validity, which can only be accomplished through historically and culturally sensitive hermeneutic approaches. Critical psychologists should be aware that in the process of academic globalization, during which Western psychological ideas become more dominant, it might become more difficult to promote any alternative *forms of intuition* and *categories*.

It seems that identifying explicit culture-centrism, in which some of the greatest Western thinkers, including Immanuel Kant and Georg Wilhelm Friedrich Hegel, took part, and which has become so influential in the spirit of Western society, is just a matter of theory. It seems that talking about hidden colonial thinking, which includes the assumption that Western conceptualizations of human subjectivity are superior to others (which seems so self-evident that it requires no further explanation and has become part of the collective unconsciousness of Western psychology) is just a matter of academia. However, psychology on the periphery as well as in the center has always had a practical dimension, and hidden colonial thinking becomes relevant when dealing, for instance, with mental health issues in non-Western cultures.

Kleinman (1995) pointed out that researchers tend to emphasize similarities between cultures (even if they find differences *and* similarities), because seemingly universal features could be understood as support for biological causes of mental illness, which conforms to a medical model of psychiatric disorder. There would be no need to take culture into account. His critique of psychiatric research in other cultures has also focused on

the essential but neglected issue of translation, while at the same time he believed that culturally sensitive psychiatric research was possible. Schumaker (1996) emphasized the close relationship between culture and psychopathology, which often renders Western models of disease irrelevant and practices based on them unhelpful (for studies on the construction of the other in the history of psychiatry, see Ernst, 1999; R. Keller, 2001).

The limitations of mental health psychology have not only been pointed out in the context of a postcolonial world, but also in the context of multicultural societies. Sue and Zane (1995) have argued that ethnic minorities are neglected in the mental health system within the American context because of a lack of knowledge of these diverse subcultures. However, they have also argued that it would not be sufficient to develop cultural knowledge and culture-specific techniques in order to do psychological justice to minorities. Instead they emphasized new concepts such as *credibility* and *giving* as necessary (but not sufficient) dimensions of treatment. C. C. I. Hall (1997) demanded that American psychology would have to undergo substantial revisions in order to keep up with the changing cultural and ethnic composition of America (see also Azibo, 2003).

Hidden culture-centrism is also expressed in academic practices such as publishing papers, presenting ideas, applying for research grants, participating in various peer-review processes, communicating with colleagues, and in teaching. Psychology as a field neglects, excludes, or assimilates peripheral psychological knowledge, and psychological institutions neglect, exclude, or assimilate experts that may have different conceptualizations of psychological topics or even different ways of knowing (see also Collins, 1991). These experts are not hired, or, if they are hired, they must follow the path of a successful career with its emphasis on peer-reviewed journal publications. There is not much room for any deviation from a traditional course.

Howitt and Owusu-Bempah (1994) reported that journal editors told them that their language use would be unacceptable in an academic journal. They were encouraged to substantially change their tone if they wanted to get accepted for publication. Of course, sociologists of science (Kuhn, 1962) have emphasized the significance of streamlined institutional behavior for the production of normal science. Science is not just about science but also about a particular behavior in a particular institution, embedded in a particular society, within which research and activities that accompany research are performed. The demand for change in tone, streamlining arguments, and other revisions, can be used as an instrument to socialize a Western voice. Indeed, Western academia accepts alternative contributions as long as they are palatable to the mainstream. Laungani

(2002) reported that psychometric tests are frequently used in non-Western cultures, because they made it easier to get published, yet, often with no relevance to the native populations. Sloan (1990, 1996b) remarked that psychological studies performed in the developing world and published in industrialized countries often seem to benefit the researcher's career aspirations, but not the developing country. The opposite is true for research that benefits the "Third World" community, which is often not written for publication in refereed journals.

The socialization into hidden culture-centrism in academia also occurs in teaching. A eurocentric history of psychology may be of interest to all students because pioneers such as Freud have reached cultural significance. The problem of hidden culture-centrism is manifest in the practice that Euro-American history of psychology is taught as if no other psychologies existed. It is not suggested that every psychologist should become an expert on world psychologies, but rather to endorse epistemological modesty, in which psychologists admit that instead of a *History of psychology* they teach a *History of Euro-American psychology*; instead of a theory of personality they focus on *Western* theories of personality; instead of an introduction to human nature they teach a *Western* introduction to human nature; instead of writing a textbook of developmental psychology they write a textbook of *Western* developmental psychology. This would be another small step in overcoming hidden colonial thinking.

However, in order to change the culture-centric character of mainstream psychology it will not be sufficient to have *good intentions*, or to listen from time to time to peripheral ideas and conceptualizations. It is naive to assume that alternative forms of intuition will prevail without institutional support. Thus, concrete practices and policies are needed to change the structure of academia. One could envision a process of affirmative action for peripheral forms of intuition and its categories, which includes unheard voices, excluded and suppressed knowledge, and neglected ideas from other cultures and subcultures. Such affirmative action may even be more important than affirmative action for traditional groups—although at the moment some of those experiences go hand in hand. It is clear that affirmative action for experts from postcolonial countries would require not only academic, but also major political and legal changes.

THE PROBLEM WITH PROBLEMATIZATION

K. Popper (1972) suggested that science is not inductive because the progress of science could be characterized as *problem solving*. But are the human sciences and psychology about problem solving or problem mak-

ing? In the context of the construction of the *Other* there exist attempts to make different groups of people into problems, instead of listening to their problems (a similar argument could be made with regard to women). A classic example of problematization is the construction of the Orient (Said, 1979), a problematization that made colonization appear as a necessary consequence. Psychology contributed to the problematization of the East and perpetuated the idea of the superiority of the West (Bhatia, 2002b). Problematizations occurred in the British and French Empires (see R. Keller, 2001), in German colonies (see Grosse, 1997), and in the context of slavery and the domination of Blacks in America (Gould, 1996). A history of the critique of psychology has vast materials available for analyzing the processes of problematization in this discipline.

The problematizations of Africans and African Americans has a long history, based on the assumption that "Blacks" are morally, aesthetically, motivationally, and cognitively inferior, which placed Blacks into a position of needing control, guidance, segregation, or domination. Gould (1996) reminded his readers that African American slaves who ran away from slavery were labeled as mentally ill, their disease called drapetomania (p. 103). Psychology provided conceptual and empirical tools that contributed to the problematization of Blacks. Empirical differences were interpreted as biological differences, and reflections that challenge the dubious concept of "race" (see above), or the dubious concept of "IQ," and the many unknowns that surround it, must always catch-up with new empirical results. Indeed the literature in this area is extensive (e.g., Helms, 1995; Neisser, Boodoo, Bouchard, Boykin, Brody, Ceci et al., 1996). Problematizations of the cognitive ability of Blacks receive widespread attention, based on widely cited books and articles (Herrnstein & C. Murray, 1994; Jensen, 1969; Rushton, 1995), and because there exists a long history of racism.

The history of Western human science, when it comes to the characterization of non-European populations, is a history of problematization. As a case example of this problematization, I have examined human-scientific techniques of problematization in the context of so-called race-mixture (Teo, 2004).[7] Hitler's infamous problematizations relied on ongoing discourses in the human sciences. Hitler (1927/1999) used a constative technique of problematization, meaning that he stated that mixture was a problem because it was against nature and culture and because it would shift the superior race to a lower level. His argument as to why race mixture was against nature was based on the argument that different species in the animal world did not mix, while at the same time different human races were conceptualized as different species. What makes Hitler unique in this process of problematization was his combination

of problematizations, for instance, in a conspiracy theory that suggested that the Jews were responsible for the *Rhineland Bastards* (who materialized from the union of white German women and black French soldiers).

"Mixed race" was also the topic of the legal colonial discourses, which provided fines for men who had children with their black slaves. It was also a topic in literature and played a role in Enlightenment novels. Kant (1798/1968) objected to the intermarriage of nations, because it would extinguish the specific character of nations and because it would not be good for humankind in general. Royce (1906) addressed the issue from a nonracist perspective, but contributing to the discourse even in this way prolonged the problematization of "mixed race." Historians such as Long (1774) have hoped that white men "would abate of their infatuated attachments to black women" (p. 327) and suggested various techniques that would make white women more attractive to white men.

On the background of scientific racism it was not sufficient to state problems, but also to provide arguments and seemingly logical and empirical justifications for these negative assessments. Gobineau (1854/1966) had learned that native women in certain parts of Oceania who had become mothers by Europeans could no longer become pregnant by their native men. Based on this "evidence" Gobineau (1816–1882) concluded that civilizations that were based on racially distinct groups should never come together. Broca (1864) cited a medical argument to the effect that the large African penis coincided with the size of the African vagina. This meant that a white man could have sex with an African woman because intercourse would be easy and without any inconveniences for the African woman. However, sex between an African man and a white woman would make sex painful for the white woman. In addition, such a union would often not lead to reproduction and thus should be avoided.

Psychologically interesting are psychoanalytic interpretations of mixed marriages. For example, the psychoanalyst Lehrmann (1967) has suggested that mixed marriages were based on an intense Oedipus conflict, because in mixed marriages partners were chosen in defiant hostility towards one's parents or because of an intense neurotic fear of incest. In such discourses "race mixture" is not a problem of biology or even culture anymore, but in line with the individualizing conceptualization of psychology, a problem of personal pathology and personal neuroses. What makes this problematization so heinous was the fact that the patients, according to Lehrmann, specifically addressed issues of social contempt, but they were rejected in favor of a psychoanalytic interpretation that sustained the level of problematization.

One of the masters of problematization was the anthropologist Charles Davenport (1917) who suggested that "hybrids" in the second generation of Northern and Southern European unions would develop inadequate viscera, insufficient circulation, and thus, would be put into physical danger through "race mixture." Davenport emphasized the concept of *disharmony* as a means for problematizing "mixed race." For example, he suggested that a wide separation of teeth was due to a disharmonious union between a large-jawed, large-toothed race and a small-jawed, small-toothed race. Davenport and Steggerda (1929) found in their empirical studies that some "mixed race" individuals do well on their tests. Yet, because they found a much larger number of "mixed race" individuals who were completely incompetent, it would not be beneficial to society to accept "race mixture." The "mulatto" was characterized as being intellectually inadequate and at the same time ambitious, which would make the "hybrid" unhappy and a nuisance to other people.

Similar arguments can be found earlier in Eugen Fischer's writings (1913/1961) and in his empirical studies of the "bastards" of Rehoboth. Just like in the children's game "telephone," Jennings (1930) relied in his problematizations of mixed race on the problematizations of Davenport. Critics such as Castle (1930) and Herskovits (1934), who challenged the idea that breeding a Dachshund with a Great St. Bernard dog led to more disharmonies than expressed by the Dachshund itself, were trapped in the quandary of whether or not to respond to these constructions, even with empirical studies, and thus contributed to the problematization of "mixed race." To make this point clear: Let us assume that we are successful in dividing humanity into "large-eared" and "small-eared" people and that there exists a whole academic literature on differences between these two groups. By performing studies on differences between these groups, we contribute to a problem that actually is no problem.

Whereas biology and anthropology, which have used many psychological measures in their studies, promoted, as part of their problematization, the idea that "race mixture" would lead to a biological problem, sociological and social-psychological discourses in the first half of the 20th century would encourage the view that, although "mixed race" might not lead to a biological disaster, it would produce social disharmony. Obviously, discourse that focused on social disharmony would not transform the problematization of "mixed race," but rather transferred it to the social and cultural domains. In this context, researchers developed and conceptualized the notion of a "marginal man," a human being who must live in two worlds, which by itself was a notion that contributed to problematization (see Park, 1928; Stonequist, 1937).

Pioneers of psychology developed strong views about "mixed race." Broca (1864) suggested that "mulattos" appear inferior in terms of fecundity and longevity, because mixture among remote races would be harmful. Yet, he promoted the thesis that race mixture among closely related races would be beneficial (e.g., between Germans and French). Galton (1874/1970) argued that there would be a greater number of men of science in pure races. Spencer (1972) suggested in the 19th century that the Chinese, if they were allowed to settle in America, would mix and form a bad hybrid. G. S. Hall (1904), who suggested that Eurasians were the fruits of sin, identified characteristics such as hereditary languor and constitutional laziness. Le Bon (1924) argued that black and white "half-breeds" would constitute an inferior population, which would be incapable of creating or continuing a civilization, because the "interbreeding" of races would lead to an inferior population. German pioneers such as Wilhelm Wundt (1832–1920) were actually less interested and less dogmatic on these issues (see also Brock, 1992, on the false assumption that Wundt's *Völkerpsychologie* was a precursor for German racial psychology; Teo, 2004).

Psychologists might argue that these assessments are based on speculative arguments developed by some individuals who were trapped in the *Zeitgeist*. Although it is true that the majority in the 19th century did not use strict empirical methods to foster their views on "mixed race," later studies used extensive empirical methods, which did not prevent them from problematizing "mixed race." On the contrary, empirical methods contributed to the problematization of "mixed race." Good examples are the many empirical studies produced in psychology. It is important to understand that the conceptual problematization (e.g., disharmony) was not overcome through empirical research but complemented it. The primacy of theory over empirical research suggests that empirical methods are not an assurance against problematizations of "mixed race" or racism in general. Even more consequently: If empirical methods contribute to the problematization, then these methods have an ideological quality (see also Tseelon, 1991).

For example, Strong (1913) compared 34 dark children, 45 medium-in-color children, and 43 light colored children. In the discussion of her results she emphasized the problematic interpretation of her results, but also argued that she would report them anyway. This was done because her results fitted the academic problematization of "mixed race." Ferguson (1916) compared, based on Strong's results, pure negroes, negroes three-fourths pure, mulattoes proper, and quadroons and obtained results that reinforced the problematization of "mixed race." Interestingly, many studies were conducted on "mixed-blood Indians."

Hunter and Sommermier (1922) compared the level of intelligence of individuals of pure Indian blood, three-quarters Indian blood, one-half Indian blood, and one-quarter Indian blood. Garth (1923) compared Mexicans, mixed-blood Indians, plains and Southeastern full-blood Indians, Pueblo full-blood Indians, and Navajo and Apache full-blood Indians. The results were irrelevant but contributed to problematization. It is evident that based on a seemingly unlimited number of taxonomies, and an ever increasing number of psychological variables, an indefinite number of psychological studies are possible that could sustain a whole research industry. Based on knowledge of the history of the problematization of mixed race in these empirical studies, one cannot just perform objectively empirical studies as Scarr and Weinberg (1976) pretended, when they compared interracial children (with one black and one white parent) with children with two black parents in terms of IQ. Such studies, regardless of their results, contribute to the continuous problematization of "mixed race."

Widespread studies on "mixed race" did not stop because of empirical results, but because of the intellectual change after WWII and the knowledge of the consequences of racial theories. It was only in the 1990s that a significant shift from understanding hybridity as a problem to understanding the problems that multiracial individuals encounter in a given sociocultural context occurred (Root, 1992, 1996). The history of research on "mixed race" shows that research can be part of violence, part of *epistemic violence* (see Spivak, 1999). This epistemic violence was based on a category mistake that conceptualized hybridity as a natural kind. Psychology as a field should reflect on its share in the history of epistemic violence and not hide behind the concept of a value-free science. Psychology must be criticized for how it has contributed to making groups of people into problems instead of transforming social and psychological reality.

AN EXAMPLE OF A POSTCOLONIAL PSYCHOLOGY

The failure and incompetence of Western psychology to understand or help the "Third World" has lead to the call for the development of indigenous psychologies. However, in the course of globalization many indigenous psychologies have been abandoned. Instead many "Third World" psychologists start out with a Western perspective, and imitate, and perpetuate Western ideas of mental life (Bhatia, 2002b). Indeed, authentic indigenous psychologies may be hard to find because of the long process of colonization and globalization. For example, Latin America is the product of colonization and it would be difficult to rely on pre-Columbian

indigenous psychologies. It is more reasonable to develop a postcolonial psychology based on the lives and experiences of the currently most oppressed, who represent the result of colonialism, and of neo-colonial economic, political and social practices (Harding, 1998).

There have been attempts to develop such psychologies, beginning with classical thinkers such as Fanon (1952/1967) or Memmi (1957/1965) (for more recent ideas, see Azibo, 2003; Carr & Schumaker, 1996; Holdstock, 2000; Howitt & Owusu-Bempah, 1994; Owusu-Bempah & Howitt, 2000; Paranjpe, 1998). However, I would like to limit the discussion here to one of the most famous Latin American psychologists, Ignacio Martín-Baró (1942–1989), whose psychology represents a unique amalgamation of Western and postcolonial thought. In fact, Shouksmith (1996) pointed out that Latin America was more open to Western psychology than other "developing" regions. Martín-Baró's psychology was unique in combining liberation theology, a critique of psychology, and local practices.

Martín-Baró was a Western-trained Jesuit priest and psychologist who lived in El Salvador and devoted his life to the mental health and social justice of the Salvadoran people (see also Montero, 2003). Supporting and defending the poor and describing and explaining oppression in El Salvador made him a subversive individual in the eyes of the elite and those who supported it. As Vice-Rector of his University, and Director of the University's Center for Public Opinion, Martín-Baró was murdered in 1989 with five other Jesuit priests and their housekeepers by the military on the campus of the University of Central America in San Salvador.

In the book *Toward a Liberation Psychology,* Martín-Baró (1994, pp. 25–30) argued that psychology should make a contribution to the social development of Latin America. He labeled his contribution, which would only be possible from the standpoint of suffering people, a liberation psychology, which he intended primarily as a practical (and not a theoretical) program. Critically, he also suggested that a liberation psychology should liberate itself from the perspectives of Western Europe and North America. Being a Jesuit priest, he incorporated Christian ideals into his psychology, which he borrowed from liberation theology, the movement that developed in the 1960s in Latin America combining religious faith with political action. This program was based on the assumption that the structures that caused poverty, inequality, and distress should be changed.

His liberation psychology contained religious ideas such as the notion that God was a God of life and that the promotion of life was a primordial religious task. The concept of sin was not applied to atheists but to structures that prevent the liberation and emancipation of the poor

and oppress the majority of the population. Indeed, the structures that produced poverty were seen as sinful. In line with the argument that Jesus opted for the poor, Martín-Baró argued that the Christian faith demanded a preferential option for the poor, the majority in El Salvador, and poverty was understood as the location where salvation would be possible. However, he made it clear that practices that liberated people from structures that oppressed, denigrated and humiliated them, had primacy over theory, a principle that he also applied to religion (statements of faith are secondary to practices of faith).

His vision for a liberation psychology entailed a critique of mainstream Euro-American psychology, because he rejected the idea of value-neutral science and the primacy of research and theory in academia. Martín-Baró was very explicit when he argued that Latin American psychology should not be concerned about whether it would be recognized in the rich countries, but rather whether it provided a service to the majority of Latin America. His own psychology was based on an ethical-political standpoint of psychology and the primacy of practice. The object of psychological work should be the problems of the peoples of Latin America and the liberation of the majority from oppressive social structures; not Euro-American discourses. He pointed out that personal liberation was acknowledged as a goal in traditional psychology, but he rejected its limited conceptualization, and argued that there should be a move to social liberation, because personal and social existence were intertwined. He also rejected concepts such as "external control" or "learned helplessness" which, from the perspective of liberation psychology, represented an existential fatalism, rather than providing an analysis of objectively based structures that oppress and deprive peoples and force them into submission. As examples of liberating practices in Latin America he mentioned the *conscienticizing* literacy practices of Freire (1997) in Brazil.

Martín-Baró advocated a new epistemology, by which he meant a new way of seeking knowledge, for the Latin American peoples. He suggested looking at psychosocial processes from the point of view of the dominated; developing educational psychology from where the illiterate stand; studying industrial psychology from the standpoint of the unemployed; researching clinical psychology from the standpoint of the marginalized; focusing on mental health from the perspective of a tenant farmer on a hacienda; conceptualizing personal maturity from the perspective of a person who lives in the town dump; and defining motivation from the perspective of a woman on a street market. This meant that instead of studying psychological issues from the standpoint of government, managers, health care experts, and so on, psychology should look at those issues from the perspective of the oppressed, or as he phrased it,

psychology should not be "of" or "about," but should be a *psychology from the oppressed*. Such a position has significant implications for epistemology, because he argued that it would only be possible from the perspectives of the poor to discover the truth of the Latin American peoples. This also meant that North American and European knowledge in psychology would be relativized from the perspectives of Latin American masses.

Finally, Martín-Baró advocated a new practice, which not only began with the perspective of the oppressed, but required activities in which reality was transformed so that we "know not only about what is but also about what is not, and by which we may try to orient ourselves toward what ought to be" (p. 29). He specifically mentioned participatory action research, because such research would transform the asymmetrical relationship between researchers and participants in traditional research. It also meant that psychologists no longer entered into research from the perspective of the powerful, but from the perspective of the oppressed. Such a change, which would require some time, would transform researchers as well as social reality and could contribute to the liberation of the masses. He rejected traditional psychology's assumption that having such a perspective would contradict scientific objectivity. For Martín-Baró such an argument confused bias with objectivity, and he emphasized that a conscious ethical choice would be different from subjective and unconscious influences of which researchers were not aware. As an example he mentioned torture where one could be objective with regard to understanding the torturer and the effect of torture, but still condemn such an act. According to Martín-Baró, it was possible to maintain objectivity and to be ethical at the same time.

10

Reflections on the Ethical-Political Character of Psychology

It would be possible to provide a metacritique of the history and theory of the critique of psychology from Kant to postcolonial theory. However, I find it more important to reflect on an issue that the Marxist, feminist, postmodern, and postcolonial critique of psychology, and in a different way, the human-scientific critique of psychology, share. Critics address the issues of the relevance of traditional psychology, for practice, for understanding the complexity of human subjectivity, and for doing justice to particular groups within and between cultures. Relevance is an ethical-political topic and a problem of value. Yet, natural-scientific psychology has a long tradition of trying to eliminate value from research, derived from positivist or critical-rationalist philosophies of science.

Critical theory has a long tradition of identifying shortcomings of positivist perspectives. Habermas (1968/1972) argued that any knowledge was anthropologically founded in interests and that knowledge without interest, knowledge devoid of value, and knowledge lacking ethical-political foundation, did not make sense. Horkheimer (1937/1992)

criticized positivist theory for not understanding that science takes place in society and for not analyzing its social function. For Horkheimer, facts were socially formed through the historical character of the object and the historical character of the perceiving organ, and they change with historical development. Thus, the separation of value and research, knowledge and action, and individual and society should be overcome. Instead of repressing one's values in research, instead of denying that values guide one's research, instead of hiding one's interests, Horkheimer specifically laid out values that should guide critical theory. He envisioned an organization of society that should meet the needs of the whole community, and in the end, should lead to the end of social injustice.

The field of psychology finds its defenders of the separation of value and science (e.g., Kendler, 1993). Yet, an increasing literature acknowledges the role of the ethical-political domain for theory and practice (for instance, Fox, 1985; Kurtines, Azmitia, & Gewirtz, 1992; Morawski, 1982; Prilleltensky, 1994, 1997; Sampson, 1993, 2003; Tolman, 2001; Walsh-Bowers, 1995). However, I am not providing a critique or evaluation of these discourses in terms of the science-value dimension, but rather offer a heuristic, conceptual toolbox, that enables psychologists to think about these issues. This is particularly important in psychology, because some of the discussions do not move beyond a simplified and polemical endorsement or rejection of the problem.

Such an evaluation is justified in the context of the discussions surrounding the Rind, Tromovitch and Bauserman (1998) article in APA's *Psychological Bulletin*, which, among other findings, suggested a weak link between child sexual abuse and later psychopathology. The alleged support for pedophilia in this article led to formal congressional action against APA, the distancing of APA from the paper, and the condemnation of the findings by the US congress (see Baird, 2002; Lilienfeld, 2002). In addition, embedded in this discussion was the Lilienfeld manuscript, submitted to *American Psychologist*, which summarized and analyzed the Rind et al. controversy and the alleged politically motivated editorial peer-review process by APA regarding the manuscript (see also Garrison & Kober, 2002).

In March 2002 the *American Psychologist* focused on the interconnection of science and politics and published a special issue on *Interactions Among Scientists and Policymakers: Challenges and Opportunities*. Sternberg (2002) suggests that almost everything one needs to know in order to understand the "Rind and Lilienfeld controversies" one should have learned from psychological research. I suggest that in order to understand these controversies and the science-politics nexus, one must know much more than psychology, in particular, one must be aware of

political theory, history, sociology, and certainly philosophy. Indeed, Albee (2002) emphasizes the need for political, sociological, and historical contextualizations of these problems.

The problem of the relationship between politics and science (politics and psychological science) requires a historical and systematic theoretical reflection. The proposed heuristic seeks to provide a phenomenological understanding of psychologists' implicit models of the interaction between science and politics, a consideration of the evaluative scenarios that are expressed in relation to the science-politics nexus, and the problem of facts and decisions in the natural versus the human sciences. I want to emphasize that the problem of designing research and evaluating results, in short, interpretation, can be directly influenced by one's political orientation. Expressing the need for an ethically and politically informed psychology is highly significant because social reality guides values and science. The conceptualization of politics as the domain of politicians is shortsighted. The idea that society and science should achieve the good for a community (the term *ethical-political* expresses this relationship) cannot be excluded from psychological reflections.

MODELS FOR THE SCIENCE-POLITICS RELATIONSHIP

Apparently, implicit and explicit conceptualizations of the science-politics relationship resemble models of the mind–body problem. *Dualists* believe that science and politics are two fundamental realities with each having its own reality in life. Researchers live in the academic as well as the political world. There are also science-politics monists, whereby *political monists* (some Marxists, feminists, and postmodernists) suggest that only politics is the fundamental reality, that politics is everything, and that science does not really have meaning outside of politics. Science is then the result of, or reducible to politics, and politics is the only meaningful reality in life. If that is the case, then science can be exhaustively analyzed with the help of political categories. Such identity theorists believe that there is no real science-politics problem because science and politics are the same and in fact only politics exists. *Scientific monists* may argue that "everything is chemistry" or "everything is biology" but most proponents of such views would admit that there is a political reality, which cannot be reduced to chemistry or biology. Similarly, researchers who wish that everything should be scientific, that politics should be based on science, and that people should focus on science instead of politics, are dualists rather than monists.

Within dualism one can identify a *science-politics parallelism*. Although no longer admired in the mind–body controversy, this position seems to be idealized by some hardcore scientists. Parallelists desire a sort of pre-established harmony between science and politics. Both exist, but politics should not influence science and science should not participate in politics if it is to remain pure. Scientific results influence science, and political decisions should influence politics, but not science. Science and politics should run in parallel like two Leibnizean clocks on the wall that are left alone. Science and politics should be independent and, in best-case scenarios, both domains may agree with each other without influencing each other.

Science-politics interactionism is probably the most popular dualistic model in psychology. Interactionists believe that there is a mutual influence of science and politics. It is suggested that science influences science, and politics influences politics, but also that politics influences science and that science influences politics. Conscious interactionists prefer to identify the processes and institutions in which politics influences science and science influences politics. Politics influences science, for example, in the allocation of governmental grant money. Psychological science influences politics in decisions that deal with human behavior (smoking-cessation programs, for example).

Finally, one should not forget another position: *science-politics emergentism*. Emergentists believe that scientific processes are produced originally by political needs. Yet, scientific processes are qualitatively different from the political system from which they emerged. For instance, behaviorism might originally emerge from a political context of controlling and predicting human behavior. The critique of behaviorism is not necessarily determined by a political desire but by academic reflection. Science in that sense is more than politics, and the rules of politics do not necessarily determine the rules of science. Moreover, the rules of science cannot be reduced to political ones.

EVALUATIVE SCENARIOS FOR THE SCIENCE-POLITICS RELATIONSHIP

Dualistic models, especially interactionist ones, do not operate on the assumption that the two domains (science and politics) are equally valuable. Based on the assumption that the mind–body problem structures the understanding of the science-politics interaction, one might wonder whether based on a long tradition, the mind (science) is conceptualized as "good" and the body (politics) is conceptualized as "bad." Indeed, I suggest

that many psychological judgments are based on the scenario that *science is good and politics is bad* and therefore, the influence of politics on science is bad. Consequentially, it is demanded that there should be no politics in science. Proponents of this scenario can list important examples from the history of the process of liberating science from the politics of the church. Nicolas Copernicus (1473–1543) was ostracized for his heliocentric discovery; Giordano Bruno (1548–1600) was burned in Rome for his commitment to science; Galileo Galilei (1564–1642) was terrorized by ignorant church officials for discussing facts; and Charles Darwin (1809–1882) was ridiculed for his scientific justification of evolution. Less heroic already appear the masterminds of the human sciences: Karl Marx's (1818–1883) exposition of the accumulation of capital through the exploitation of workers is not considered knowledge, and the role of unconscious motives in human behavior as outlined by Sigmund Freud (1856–1939) is regarded as outdated.

Even postwar examples in the Unites States show the negative influence of politics on academia when during the McCarthy era, for example, the University of California at Berkeley demanded from faculty members an oath declaring that they were not communists (see Albee, 2002). Another contemporary case in point is the requirement by some school boards to present Biblical creationism along with the theory of evolution. Less reflection is spent on the commodification of science. The critical spirit emerging from the *good science and bad politics* scenario often evaporates when an individual scientist is promised hundreds of thousand of research dollars. Grant awards are seen solely as an individual achievement and not part of an ethical-political decision-making process. It may well be that the *good science and bad politics* scenario is popular among academics because it idealizes individuals and groups who spend a lot of their time at desks or in laboratories as the last real truth fighters.[1]

Yet, history also shows the willingness of scientists to produce bad science in the context of bad politics. I would label this the *bad science and bad politics* scenario where scientists were not upholding truth against influences from politics, but rather were developing, based on their own convictions, pseudoscience. Examples can be found in Stalinism and German fascism where scientists led bad science in a bad political context. However, it is shortsightedness to suggest that the many scientists who supported German fascism were forced into producing bad science. Indeed, bad science and bad politics collaborated. One can also use examples from Western democratic societies. The many studies on racial inferiority are examples of bad prejudiced science. In England Galton proposed pairing couples "scientifically," and demanded government intervention for the improvement of humankind through selective breeding (see

Richards, 1997). Psychologists suggested at the beginning of the 20th century that many immigrants from Europe to the United States were mentally inferior. Based on research and testing the rate of deportation increased dramatically and the Immigration Restriction Act of 1924 was passed in the United States supported by data from the army tests and the expertise of important psychologists (see Chapter 9; Gould, 1996; Richards, 1997; Tucker, 1994).

An observer might argue that both scenarios (good science and bad politics; and bad science and bad politics) confirm the necessity to keep politics out of science. However, such an argument is based on the idea that politics and science are independent factors, an assumption that does not hold up historically (see Taylor, 1985). The idea that because something was problematic in the past, it will be problematic in the future, is a nonempirical argument. Finally, these two scenarios are not exhaustive. Let me point to the *good politics and bad science* scenario. I can think of political initiatives that helped to overcome the segregation of American children, while bad science in the Garrett-Jensen-Shockley era (see Guthrie, 1998, p. 107) was used to counteract good political decisions. There are also many examples in the history of women in which bad science supported the exclusion of women from universities and professions while at the same time good political initiatives promoted equality.

Finally, psychologists should not refuse to envision a *good politics and good science* scenario in which a commitment to good politics goes hand in hand with a commitment to good science. Again there are examples of German fascism in which progressive academics in their opposition to Hitler became politically active and developed their academic endeavors differently from the mainstream (members of the *Weisse Rose*, for example). Also the conservative Eduard Spranger opposed Hitler's policies (see Geuter, 1984/1992) and continued his academic studies. Anticolonial researchers such as Frantz Fanon (1925–1961) or Albert Memmi (born 1920) combined their radical political and scientific visions. Martín-Baró (1942–1989) gave his life for his political and academic convictions. Paulo Freire (1921–1997) developed a political agenda and a research program that went hand in hand. A philosophy for the oppressed (Dussel, 1985) specifically combined ideas in which good politics was part of good science and vice versa. Empirical and nonempirical research on women, based on the political assumption that equality and liberation are important political goals, also shows us examples of how good politics and good science can be combined.

There is no *scientific reason* why such a *good politics and good science* scenario should be rejected, which is often based on a political decision itself. There is no *logical reason* that the commitment to such a scenario

would lead to something inconsistent. There is no a priori reason why the combination of political engagement and science should turn negative. There are instances of negative outcomes based on the influence of politics, but there are many instances where the combination of science and politics led to positive results; and scientists should not only look, from a philosophy of science perspective, at confirming but also at disconfirming cases for their hypotheses. Moreover, if it is the case that the sociopolitical context informs psychological research, then an ethical reflection of what one is doing must be described as an important dimension in psychological methodology. Indeed, there is an obligation to reflect ethically on social demands.[2]

It is also clear that psychological science can inform political processes. An early example was F. A. Lange (1875) who suggested applying Weber's law to social and political phenomena when he argued that a society with generous freedom would react with strong discontent towards a moderate deterioration of rights (see Chapter 4). Lange himself was politically active in the labor movement. It is also known that W. Wundt, one of the core founders of experimental psychology, was politically active in the labor movement (see Diamond, 2001). Several early pioneers of American psychology such as G. S. Hall, H. Münsterberg, and even J. B. Watson were politically motivated to use psychology for the improvement of American society (see Morawski, 1982). B. F. Skinner developed political visions in his novel *Walden Two* and in *Beyond Freedom and Dignity*.

On the other side political theorists have included psychological ideas. There has always been a close relationship between political and psychological thinking in Western thought. For example, Plato (1997) constructed the state according to his model of the human soul with its three parts: a rational component, a courageous component, and an appetitive component. In his personality psychology, Plato suggested that those individuals who were dominated by the appetitive aspect of the soul should become workers. Persons in whom the courageous aspect of the soul prevailed should become soldiers. Humans who were ruled by the rational aspect of the soul should rule and become philosopher-kings. Other philosopher-psychologists such as Thomas Hobbes (1588–1679), John Locke, Niccolo Machiavelli (1469–1527), or Jean Jacques Rousseau (1712–1778) developed their political ideas in concordance with their philosophical–psychological understanding of human beings.

A final word on the *science is good and we do not know enough about politics* attitude. In fact such an attitude may be dangerous and irresponsible, as German fascism has shown. Interestingly, early pioneers of psychology were confronted with this problem in the upheavals of the first half of the

19th century. Whereas Waitz could not be active in political matters because he did not understand enough about politics, Beneke (1845) suggested that political problems could be overcome with the help of psychology (see Chapter 3). Of course, Waitz's position did not prevent politics from influencing science, it just made researchers ignorant about the science-politics dialectics (contemporary examples concern, for example, homosexuality and the concept of disorder).

FACTS AND DECISIONS IN THE HUMAN AND NATURAL SCIENCES AND POLITICAL AFFORDANCES

I suggest that one cannot discuss ethical-political issues meaningfully without reflecting on the character of psychology as a natural or as a human science in terms of its subject matter and its concepts. Assuming that there is an ontological specificity to human mental life, it is clear that the overarching use of the methods of the natural sciences does not make psychology a natural science. There are certain levels of psychology (physiological psychology) that allow psychology to be treated as a natural science. However, significant parts of psychology belong to the domain of human science. For example, I can study my thoughts with experimental methods, but in order to capture the very content of my thoughts as they relate to my experiences as a human, my biography, or my meaning structures, hermeneutic methods are required. Many critical programs in the history of psychology suggest that the specific subject matter of psychology requires an alternative methodology to natural-scientific techniques.

Danziger (1997a) demonstrated the historical dimension of psychological categories, confirming that concepts such as intelligence are not of a natural quality. But if psychological concepts are of a sociohistorical kind then they are necessarily embedded in politics in its widest sense. Politics and human sciences were (and are) always intertwined. Even Galtonian statistics emerged from a political agenda of eugenics, colonialism, and racism. In fact, the idea that psychology is value-neutral and politically impartial, and, as a natural science, discovers universal laws, is historically untenable.

The distinction between natural and human sciences has also had an impact on the classic distinction between *facts and decisions, is and ought, value neutrality versus partisanship*, and so on. The traditional idea suggests that one cannot derive ought from is. But if one thinks carefully about this issue, then one realizes that delineation from is to ought may not make sense in many parts of the natural sciences but is central in the human sciences. A statement such as the earth is not the center of the universe makes sense

and can be true or false. The statement that the earth should be the center of the universe is indeed meaningless. In psychology, on the other hand, one might find research that identifies risk factors for psychological problems. If poverty is identified as a risk factor for unhealthy development, then there is also the implication that this could and should be changed. In psychology, research and ethical-political considerations go hand in hand.

I also want to draw attention to the problem of political orientation and political affordances. In Western culture the distinction between the left and the right, and in North America the distinction between liberal and conservative, has become a meaningful reality that structures one's experiences. Views and research questions may be structurally located within such a political dualism. In addition, there are certain research topics that have political affordances and in which it is predictable what research will be done and how research will be evaluated. For example, homosexuality, single parents, day care, premarital sex, gender equality, and so on, all have political affordances. It can be predicted how conservatives or liberals, for example, will react when positive outcomes of homosexuality are identified. A purist might want to argue that psychologists should not study these politically charged topics, and focus only on seemingly neutral issues. Of course, this is itself a political decision that has consequences for disadvantaged groups.

TRUTH, POLITICS AND AN ETHICAL-POLITICAL PSYCHOLOGY

Politically conscious psychologists must be aware of important issues when trying to develop an ethical-political psychology: There is the power of the status quo, and the belief that because things are a certain way they should be a certain way. This is indeed the place where one must reflect on *is* and *ought*. Aristotle (2001) suggested in his *politica* that every community was established with a view to do some good. The good that the scientific community espouses is, in its idealtypic version, *truth*, not money and not politics. However, the traditional correspondence theory of truth, as seductive as it may be, and as necessary as it may be in the natural sciences, does not do justice to the reality of truth production in the human sciences and psychology.

The notion of the interconnection of truth and power has been raised since Marx and Engels (1932/1958), and more recently Foucault (1980) has invigorated a whole research program on this topic. Even if one separates money and politics from truth, truth itself has come under attack. Aquinas' (1265–1273/1947/1948) notion that truth is the correspondence

of *thought and thing*, turned out to be more complex than assumed. Truth is of a historical nature. What psychologists considered true at the beginning of the institutionalization of psychology as an academic discipline is mostly not considered true anymore. What psychologists will consider true in 100 years will not include the same empirical evidence that current psychology has compiled in its prestigious journals. Truth is of a cultural nature. What is considered true in one psychological context is not necessarily true in another culture. This statement even applies to subcultures and theoretical frameworks: What a psychoanalyst considers true is not what a behaviorist considers true.

The spatial and temporal relativity of truth challenges any substance theory of truth. Thus, psychologists should admit that they participate in a consensus theory of truth (Habermas, 1984). For example, it is a consensus in traditional psychology that truth can be disclosed when researchers follow strict methodologies. But truth as a matter of consensus is, by its very definition, a political process.[3] The ideas that one should achieve pure truth devoid of any politics, that there should be no politics in science, and that research is truthful are value judgments themselves that did not fall from the sky and cannot be derived from science, but only from a political or ethical framework. The idea that psychology emerged within the concrete life-experiences of humans, and thus, psychology and politics are both part of the life-nexus of humans, and the idea that psychological science should be developed according to human rights or universal ethical values (for instance, that the treatment or construction of people as inferior is unacceptable) are also value judgments. But the former cannot claim scientific superiority over the latter. These reflections emphasize the necessity to develop a *good politics and good science* scenario, which may be based on a history of the critique of psychology, but does not end with it.

Notes

CHAPTER 1

1. The terms *traditional* and *critical* are used descriptively and not prescriptively.Both traditional and critical histories contribute to an understanding of the dynamics and complexity of psychology. The idea that only a critical history would be able to do justice to the past is not endorsed here.
2. Indeed, there is a less frequent focus on "she" (see also the feminist critique of psychology in Chapter 7).
3. The label *traditional* was, of course, not part of those historians' self-understanding.
4. R. I. Watson and R. B. Evans (1991) added the spiritualistic prescientific theory of history to this list.
5. For instance, Palermo (1971) suggested introspective-experimental (Wundt), behaviorist, and cognitive periods of psychology.
6. Woodward (1980) suggested that critical historiography meant the application of critical thinking to historical research.
7. Marxist historians could be divided into subgroups such as orthodox Marxists, neo-Marxists, or New Left Marxists, and so on.
8. Historicist means interpreting the past from the past's horizon and not from a present one. Presentism means interpreting the past from the perspective of the present (see also Richards, 1996).
9. There have been colonial attempts to develop pseudo-indigenous psychologies for Africans that would do justice to their "limited psychological capacities" and would protect them from harm (see Grosse, 1997).
10. I intend to use the past tense for publications before the year 2000.

11. *Paradigm* refers sociologically to an academic worldview; yet, Kuhn has used the concept in many different, even contradictory ways (see Masterman, 1970).

12. A postcolonial history would have to deal with the problem of separating racist parts of work from other parts, and also work from person. It might be more difficult to explain such a separation under a historical-biographical account than under a sociohistorical framework. It is common to contrast works written early in the career with works completed later in life. It is often suggested that in the humanities and social sciences, later works are more mature and thus more representative of an individual than earlier ones. But it also happens that researchers think that the younger philosopher is more important than the older one (examples are Karl Marx and Ludwig Wittgenstein). In the history of sciences, it seems that significant works have been published quite early in a researcher's career. It becomes more complicated to separate parts of works when they were written at the same stage of a career, and even more so, when certain parts relate to other parts. Proponents for a great man approach might argue that the scientific psychologist must be separated from the political one, or deny that the parts are interconnected. Opponents might want to show the interconnection of problematic and unproblematic works. The problem with an antiantiquarian critical history is that it might lead to a "biased man" approach, meaning that significant pioneers are considered *only* in terms of their individual biases. Such an attitude would reproduce the problems of a great-men-based-history of psychology, and prevent an understanding of the societal, historical, and cultural mediation of thoughts and practices. Racism as a societal problem is then personalized in terms of a single pioneer. Another problem might include the tendency to evaluate all contributions of biased pioneers as biased themselves. The argument could be that if a pioneer was so wrong about ethnic groups, then one cannot take this individual's research in other fields seriously! This might lead to the dismissal of research innovations in other areas.

13. Emancipation is a term that Foucauldians problematize (see Chapter 8).

14. I see how some postcolonial and feminist critiques produce Rose's *guilty verdicts* but I would also argue that excellent books have been published in this context (see Fox & Prilleltenksy, 1997).

15. For the defense of a rational consensus theory of truth, see Habermas (1973/1984).

16. Exceptions are Marxist historians who follow a correspondence theory of truth, which allows them to evaluate the "veracity" of "various" historical constructions.

17. As an example of a truly critical historian of psychology, Harris mentioned Danziger.

18. Metatheory includes a reflection on theory and, in my view, requires, for the purpose of the book, historical knowledge.

CHAPTER 2

1. Berlin edition, Metaphysics vii. 4–6. 1029b–1032b.

2. Natural-scientific psychology has changed over time significantly as have the natural sciences. Early 19th century psychology that understood itself as natural-scientific would be labeled philosophical (for instance, Drobisch, 1842).

3. Descartes could be used as a pioneer for the establishment of a natural-scientific but also human-scientific psychology. This ambiguous role is due to his dualistic division of reality into *res extensa* (body) and *res cogitans* (mind).

4. I am not using the notion of psychology as a social science because a social-scientific psychology can follow the lead of the natural or the human sciences.

5. The terms *critical psychology* and *ethical-political psychology*, although the latter is only a part of the former, are sometimes used interchangeably in this book because the focus is on ethical-political critiques of psychology.

6. This phenomenology is based on my particular experiences at York University.

7. I have also observed that students who receive a science degree are often keen to emphasize that their degree is not part of the soft sciences.

8. However, Fortlage distinguished more than these two psychologies (for instance, he also listed phrenology as a form of psychology).

9. Völkerpsychologie has been translated as folk psychology, social psychology, collective psychology, and cultural psychology.

10. My translation.

11. This description indicates that human-scientific psychology follows an ethical-political imperative.

12. Speculation and metaphysics have not been eradicated from contemporary psychology. This does not necessarily mean the death of psychology, but that psychology requires an analysis of these issues rather than their repression.

13. The term crisis has been used in an inflationary way for different and incompatible matters in different and incompatible contexts. Two basic features of the term crisis are *suddenness* of the beginning of the event and *brevity* of duration. However, the crisis discussion of psychology is a *permanent* one. From a Kuhnian perspective, the notion of a permanent crisis does not make sense. Indeed, it might be better to describe psychology as a preparadigmatic discipline.

14. I have suggested (Teo, 1999a) that this third system appears in the three functions of deconstruction, reconstruction, and construction.

15. Frictions between the systems of psychology are often framed as basic versus applied research (which from my perspective are misleading), and also find expression in the establishment of new academic organizations (e.g., the founding of the *American Psychological Society* as an organization specifically aimed at supporting concerns of scientists, and not practitioners).

16. Some authors have argued that the subject matter of psychology is the central factor in the crisis of psychology (see Holzkamp, 1983). Moreover, one could divide the relevance factor into several subfactors.

17. I do not think that the theory–practice issue is the substance of the crisis because psychology has been very practical (see Ward, 2002).

18. More promising are positions such as that of Herzog (1984) who argued that a unification of psychology would be possible only for theories that were based on the same model of human nature.

19. Suppose there is a political initiative against the experiment in psychology arguing that people are often deceived in experiments. This initiative invites people to participate in experiments in order to deceive the experimenters themselves. The experimenter would obtain results, but would the results be caused by independent variables? The experiment depends on an implicit inter-subjectivity of meaning. The experimenter expects that a person will demonstrate a certain behavior, the role of a subject in an experiment. The experiment allows only a limited range of behavior (e.g., the person should not get up and suggest that the experiment is nonsense). The experiment needs the cooperative, nice, naïve, and in a way uneducated subject (see Holzkamp, 1972).

CHAPTER 3

1. These discussions are still ongoing when it comes, for example, to sex education, with an emphasis on information (liberal theory of human nature) or on character building (conservative theory of human nature).
2. My translation.
3. English translations prefer the term "power," whereas in the German tradition the term "Vermögen" (faculty) was used (e.g., Drobisch, 1842, pp. 298–302).
4. Berlin edition, de anima, ii. 3. 414a.
5. Faculty psychology also produced discourses in the English-speaking world [e.g., Thomas Reid (1710–1796)].
6. Besides discourses on faculties there were also discussions on the concept of association. Yet, the principle of association in Germany during that time was limited to simple psychological processes (see Dessoir, 1902).
7. In contemporary terms one would label these three basic faculties as cognition, emotion, and motivation. Kant's three critiques cover those issues (reason, aesthetics, and morality).
8. It should not be forgotten that Kant and Herbart intended metaphysics as a science.
9. Translation from Wolff (1912, p. 229).
10. Recent scholarship has focused on Kant's transcendental psychology (Kitcher, 1990; Kitchener, 1999).
11. He divided the categories into four groups: the first group *quantity* included unity, plurality, and totality; the second group *quality* contained reality, negation, and limitation; the third group *relation* contained substance-and-accident, cause-and-effect, and reciprocity; and the fourth and final group called modality contained possibility-impossibility, existence-nonexistence, necessity, and chance.
12. For Kant the concept of *causality* was of specific interest. David Hume (1711–1776) (1748/1988) had argued that causality was not a necessity and could not be derived from experience or logic. Because human experience did not prove that one thing caused another, causality was based on the association of repetition, was customary, and solely a subjective necessity. Kant could show with his system that Hume was wrong and that causality was not based on subjective experience, but that *causality* was an a priori principle, which the mind added to sensory information. Causality was imposed onto perception and was not found in perception.
13. Berlin edition, poetics, 24. 1460a.
14. Dessoir (1911) listed earlier critics of faculty psychology (pp. 155–161).
15. My translation.
16. His pragmatic psychology was very theoretical.
17. My translation.
18. It may surprise readers that Schilling still found it necessary to challenge faculty psychology after Herbart's devastating critique. However, faculty psychology was still living on. Even James (1890/1983) found it important to refute faculty psychology (see pp. 16–17).
19. My translation.

CHAPTER 4

1. The following characterization of Lange's position represents a partial summary of Teo (2002).
2. Lange divided this section into four chapters: The relation of man to the animal world; Brain and soul; Scientific psychology; The physiology of the sense-organs and the world as representation.
3. My translation.
4. Lange referred to the German *Völkerpsychologie* as inaugurated by Steinthal and Lazarus. They started their *Zeitschrift für Völkerpsychologie* (Journal for Völkerpsychologie) in 1860 (see O. Klemm, 1911). Wundt (1921), with whom *Völkerpsychologie* is now usually associated, credited H. Steinthal and M. Lazarus for giving this research program its name and vision (see p. 30).
5. My translation.
6. Psychology as a field cannot, at least for the moment, exist without speculation. I would argue (within the logic of the natural sciences) that speculations as they appear in hypotheses are not a problem as long as they are tested. However, the speculative content of concepts cannot be tested, and hypotheses are open to speculation in the interpretation of results. Facts do not speak for themselves.
7. From a feminist perspective one would wonder why Lorenz used this example (see Chapter 7).

CHAPTER 5

1. The following characterization of Dilthey's position represents a partial summary of Teo (2001).
2. In Dilthey's later writings, after he assimilated some of Brentanos thoughts on psychology, the role attributed to psychology as the core of the *Geisteswissenschaften* changed.
3. All Dilthey quotes translated from German into English are my responsibility.
4. Rickman (1988) suggested that understanding is not a method. However, Dilthey (1958) argued that understanding and interpretation are *methods* for the human sciences (p. 205).

CHAPTER 6

1. Different spellings for the Russian names are found in the literature.
2. My translation.
3. The following characterization of Marx's position represents a summary of Teo (2001).
4. All translations of Marx and Engels in this section from German into English are my responsibility.
5. Natural history (Naturgeschichte) has the meaning of natural science.
6. *The German Ideology* was written by Marx and Engels. Engels (1888/1962) admitted that Marx was more significant in developing the central thoughts.
7. Haug (1984) pointed out that the *camera obscura* was a common epistemological metaphor in the 19th century. Dilthey (1977) also compared the workings of the eye with a camera obscura (p. 98).

8. There is also an English version of this important paper available (Vygotsky, 1997). Yet, my reconstruction of Vygotsky's arguments on the crisis of psychology is based on the German translation.

9. A complete list of Holzkamp's works can be found in the journal *Forum Kritische Psychologie*, 36, pp. 180–193. The list is based on Jaeger and Osterkamp (1987).

10. The following characterization of Holzkamp summarizes Teo (1998a).

11. Why Holzkamp was influenced by the student movement cannot be answered here.

12. The title "Grundlegung der Psychologie" is translated in this book as "Foundation of psychology." Tolman (1989) translated it as "Laying the foundation for psychology." Another possible translation: "Groundwork of psychology."

13. Another work emerging from the Psychological Institute, significant for a critical history of psychology, yet not written within the framework of Holzkamp's critical psychology, was published by Jaeger and Staeuble (1978).

14. Holzkamp (1987) also studied the notion of pseudo-empiricism by arguing that psychology confuses reasons with causes (Holzkamp, 1987). Accordingly, empirical hypothesis-testing is not a test, but rather the application of good reasons (see also Chapter 2).

CHAPTER 7

1. See book V.

2. AB 109 (§ 26)

3. My paraphrasing.

4. I am particularly thankful to A. Febbraro for her suggestions in this chapter.

5. Reichenbach (1938) confined the philosophy of science to the *context of justification* and attributed the *context of discovery* to the psychological domain.

CHAPTER 8

1. One could also look at metanarratives in subdisciplines of psychology. For example, Walkerdine (1993) identified the concept of development as one of the metanarratives in developmental psychology (see also Teo, 1997).

2. For example, if a person is afraid of walking through a tunnel, for which alternative non-threatening options exist, spatial power is exercised.

3. For the power of the *Publication Manual* see Walsh-Bowers (1999).

4. Habermas (1987) pointed to problems of Foucault's totalizing theory of power.

5. Foucault distinguished struggles against forms of ethnic, social, and religious domination, from struggles against forms of exploitation in the production sphere, and from struggles against what ties the individual to himself or herself.

6. Foucault was also involved in political activities outside of academia. For example, he was interested in the prison movement and in integrating this societal fringe into political struggles. This idea stemmed from the anti-Marxist notion that prisoners, women, prostitutes, homosexuals, and drug addicts were the true revolutionary forces. Foucault participated in actions against racism, fought for K. Croissant, the counsel of the Baader-Meinhof group, to stay in France, where he had asked for political asylum. He defended the German psychology professor P. Brückner who was dismissed from the university for his radical activities. He took part in actions against Spanish fascism. Foucault par-

ticipated and organized actions against the Shah regime in Persia, and reported about the prerevolutionary events there. He was involved in the Solidarnosc movement in Poland (see Eribon, 1991).

7. Subjects can also reflect on the system of power's differentiation (Foucault, 1992). One can ask whether power is based on economic, linguistic, or cultural differences. One can identify the objectives of power (privileges, making profits, exercising a certain function, establishing justice, equality), the means of power (weapons, words, technologies, law), and the institutionalization, the rationalization, and organization of power.

8. Foucault suggested that power could only be exercised over free subjects. Thus, slavery is not a power relationship because there is no freedom.

CHAPTER 9

1. This argument on epistemology follows closely the ideas of Teo and Febbraro (2003). The following reflections are examples of postcolonial reflections from the "center" and are Western-biased.

2. Holzkamp (1983) considered this problem of concepts the central problem of scientific psychology (see also Tolman, 1994; see Chapter 6).

3. The term *eurocentrism* includes the notion of *americacentrism*. In addition, only a few countries (e.g., Germany, France, Great Britain) have dominated the academic constructions of Europe.

4. The following arguments summarize Teo and Febbraro (2003).

5. There is a conceptual similarity between Gaertner and Dovidio's (1986) notion of "aversive racists" who believe that prejudice is wrong and that they are egalitarian, yet are unaware of their negative racial attitudes.

6. The experience of administering, for example, intelligence tests in other cultures, confirms the administrative applicability of the test in this culture, but does not say anything about the meaning of the test for the culture.

7. The following represents a short summary of Teo (2004).

CHAPTER 10

1. Academics are epistemology's troops using methodology, objectivity, and neutrality as weapons.

2. It is clear that there will be no final consensus on what constitutes *good politics*. However, this should not hinder psychologists to work on their vision of good politics. The same applies to good science where there is also no final consensus. Important is that psychologists lay open their ethical and epistemological ideas and make them available for critical discussion.

3. I assume that researchers are truthful and honest in their endeavors. This assumption is based on an ethical consensus.

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