

Chapter 2

Psychology Without a Soul

2.1 The Lure of Metaphysical Longings

Edgar Rubin enrolled at the University of Copenhagen in autumn 1904. He originally intended to read history but quickly shifted to philosophy and psychology. At this time, the only option open to those who wanted to study psychology at the University was to read it as part of a master's degree in philosophy, the *magister artium* degree. As mentioned in [Chap. 1](#), the name of this degree had been kept as an honorary designation in the University statutes from 1788. In 1848, it was re-established as an academic degree, for a course of study lasting five or more years. In the 1870s, it became possible to take psychology as one of the major subjects for the *magister artium* in philosophy, the others being epistemology, ethics or the history of philosophy (Pind [2009](#)).

Studying for the master's degree in Copenhagen was no easy task. With one exception, there was just the final examination, taken after five or more years of study. The students were more or less left to their own devices over a long period, though they were of course expected to follow the relevant seminars and lectures given by the professors. No regular assessment of their progress was, however, made during their years of study. This chapter and [Chap. 3](#) will describe the education in philosophy and psychology offered at the University of Copenhagen at the turn of the twentieth century in some detail. Additionally, some important trends in early psychology will be described since they had great influence on the development of psychology in Denmark at the end of the nineteenth century and thus form the background of Rubin's own later approach to psychology.

At the outset of their studies, the students in the philosophy program received a long list of books, approximately 100 in all, which they were supposed to have mastered by the end of their studies. This list contained many of the classical works of philosophy, starting with Plato and Aristotle, through Descartes, Locke, Spinoza, and Kant onto more recent works—including those of contemporary psychology. Students were given some leeway in their syllabi and were allowed to add works from their more specialized fields of interest, perhaps exchanging them for some others which had been on the list provided by the professors.

The first year of study at the University of Copenhagen was an exception from the freedom associated with the other years. In their freshman year, their *rus*-year as it was known in Danish, all students at the University of Copenhagen were required to partake in the course for the *examen philosophicum*. This course had a long history at the University having originally been established in 1675 as a lesser version of the baccalaureate, more or less the baccalaureate without a finishing thesis and disputation. Gradually, the course for the philosophical examination became shorter, serving as a kind of introduction to University studies (Blegvad 1977; Thomsen 1975). Under the influence of Frederik Christian Sibbern, who was professor of philosophy at the University of Copenhagen from 1813–1870, the *examen philosophicum* took on the shape it would keep for the following century and a half (Fig. 2.1). Psychology was given pride of place as the major subject for the examination with logic and the history of philosophy as subsidiary topics. Sibbern published a two-volume treatise, *The spiritual nature and being of humans: An outline of psychology*, later shortened to a one-volume work, *Psychology: A concise introduction through general biology*, which went through numerous editions and was required of students studying for the *examen philosophicum* during a substantial part of the nineteenth century (Sibbern 1819–1828, 1843).

Sibbern was philosophically an idealist, as was his philosopher colleague Rasmus Nielsen. In the 1880s, the two philosophy chairs at the Faculty of Philosophy fell to two positivistically minded philosophers, Harald Høffding in 1883

Fig. 2.1 Frederik Christian Sibbern, professor of philosophy at the University of Copenhagen 1813–1870. He made psychology the core subject for the introductory course for the *examen philosophicum* (Royal Library, Copenhagen)



and Kristian Kroman in 1884. They, especially Høffding, would dominate the philosophical scene in Copenhagen for the next three decades. One of their major obligations, as for their predecessors, was to give the annual course for the *examen philosophicum*. Here, they followed Sibbern's lead and gave psychology pride of place as the major subject in the course.

The lectures for the *examen philosophicum*, four lectures a week throughout the academic year, were given concurrently by Høffding and Kroman in the two largest auditoria of the university, located in an annex to the main building. The students were free to choose whose lectures they opted for. Høffding was the more popular of the two professors, with roughly two-thirds of the students following his lectures, the remaining taking Kroman's. Students of the natural sciences were somewhat more inclined to follow Kroman, the humanists usually opting for Høffding.

When Rubin entered the University in the fall of 1904, Høffding had a sabbatical term which he spent in the United States, England, and Holland. He had been invited to give a lecture on "The present state of psychology" at the Congress of Arts and Sciences in St. Louis held to commemorate the incorporation of Louisiana into the United States a 100 years earlier (Høffding 1905). His course for the *examen philosophicum* was taken over by Claudius Wilkens, a professor of sociology and philosophy, who occasionally stood in for Høffding or Kroman. Edgar Rubin opted for Kroman's version of the *examen philosophicum*.

Kroman was a man of formidable intelligence and sharp critical bent. Though not a prolific author, his publications are highly readable and stand in sharp contrast to his idealistic predecessors in the philosophy chairs at the university: "To come from [their] philosophical works to those of Kroman is like emerging into the clearest sunshine from a foggy dusk" (Koch 2004, p. 90).

Kroman (born 1846) was educated as a teacher but then moved to Copenhagen to gain a university education. Originally he intended to read natural sciences at the University but after reading Kierkegaard and following the many lively philosophical discussions in Copenhagen in the 1860s, e.g., on the relationship between religion and science, his interests turned to philosophy. "I came to the conclusion", he later wrote,

that whatever subjects one would later want to study, one should preferably at the outset gain some insight into their philosophical or epistemological foundation. All sciences are based on human mental abilities, whose mode of operation and value need to be ascertained ... I therefore immersed myself in philosophy, though having but little faith in its numerous far-reaching "results" (Kroman 1924, pp. 92–93).

During his student years, Kroman gave private tutorials for first-year students reading for the *examen philosophicum*. He later recalled these tutorials with great pleasure:

When I gave my tutorials on beautiful spring days in the *Regensen* College under the famous lime tree, many students would gather, listening silently during the lecture, and after it was finished we would often continue the philosophical discussions for hours on end (Kroman 1924, p. 93).

After finishing his master's degree Kroman continued to give private tutorials and also embarked on a doctoral dissertation on "the existence of the soul". In particular, he wanted to explore what the *sciences* could contribute to answering the vexing question of the soul's existence.

At this time there were two professors of philosophy at the University. One of them was Rasmus Nielsen who had been appointed professor in 1841. The other was Sophus Heegaard. Heegaard was dean of the Faculty of Philosophy when Kroman handed in his thesis in November 1876. Heegaard asked him what the topic of the thesis was. "The existence of the soul," answered Kroman. "Then I hope", Heegaard replied "that you have come to the conclusion that we know hardly anything about this." Kroman answered Heegaard in the affirmative, leading the professor to exclaim: "You do not say! So I am not the only person in town who is skeptical about philosophical results" (Kroman 1924, p. 94).

Though the dean was positive, Kroman ran into great difficulties in getting his thesis accepted because of resistance from the other professor of philosophy, Rasmus Nielsen. Nielsen had in his writings also dealt with the question of the soul's existence but Kroman found Nielsen's contribution a useless exercise in "lyrical speculation," Kroman's *bête noir*. So as not to offend the aging professor, Kroman opted for leaving out any discussion of Nielsen's idealistic take on the problem. This Nielsen found unacceptable, though in other respects approving of the dissertation. He thus suggested to Kroman that he should submit the thesis to another University, perhaps the University of Oslo, which Kroman declined.

The stalemate, which had here arisen, came to the attention of the classicist Johan N. Madvig, the Nestor of the Faculty of Philosophy, former minister of culture, a man of immense influence in academic matters, a knighted scholar entitled to that rarest of Royal privileges of being addressed as "Your Excellency." Madvig thought Nielsen's behavior unacceptable for a professor and suggested that since the philosophy professors were at odds over the merits of Kroman's thesis the faculty should appoint an arbitrator, offering to take on the role himself. Nielsen accepted this suggestion. When Kroman sought out Madvig at the latter's request, Madvig greeted him on the doorsteps with Kant's *Kritik der reinen Vernunft* in hand. "I am boning up on my philosophy so as to be able to partake with greater honor in your defence," Madvig jestingly told Kroman (Kroman 1924, p. 97). With Madvig's support, Kroman's thesis was accepted by the Faculty. Kroman later described the public dissertation defence:

Naturally, professor Nielsen's opposition was as trenchant as possible. But it was not difficult to refute since basically it only consisted of daring assertions for which I only needed to ask for proofs. The position seemed much more difficult with the subsequent opponents, Madvig, Steen and others, since they mostly took my side and opposed that of Nielsen. He looked more and more displeased and I thought to myself: You will never receive the doctorate after this, if only they would attack me and leave him alone. But at last, professor Heegaard turned the whole thing around in the most beautiful manner. After wholeheartedly approving my work, he suddenly turned to R. Nielsen and exclaimed: "But where do we find the reason why philosophy has found exactly this direction? It is the old general sitting here who originally set out to challenge careless speculation and we move forward now only in his footsteps. He fired the first salvos at the enemy when it was

still a dangerous undertaking and, when all is said and done, to him belongs the honor for the fact that we have now progressed this far.”—This warm eulogy visibly cheered professor Nielsen and everything ended in perfect harmony. Thus, I became doctor in the fall of 1877 (Kroman 1924, pp. 98–99).

Kroman’s dissertation was an attempt to clarify to what extent the *exact sciences*—as opposed to *lyrical speculation*—can answer the question of the existence of the soul. The book is full of sparkling wit and pithy remarks, written with one eye on Immanuel Kant’s early work, *Träume eines Geistersehers* (Dreams of a Spirit-Seer) from 1766, described by one authority as “perhaps Kant’s most curious book” (Kuehn 2001, p. 170).

In this work, Kant tells of his attempt to come to grips with the works and ideas of the Swedish mystic Emanuel Swedenborg. Kant’s curiosity had been aroused by the numerous wondrous stories of Swedenborg’s visions so he decided—after the encouragement of some friends—to look into the matter himself and found “what one usually finds when one has no business searching at all, exactly nothing” (Kant 1992, p. 306).

At the outset, Kant points out the various evasive explications and meanings attached to the term “spirit,” reflecting the fact that “the easy and generally reasonable answer ‘I do not know’ is frowned upon in the academies” (p. 307). Kant himself is inclined to believe in the existence of an immaterial world and would like to see his own soul as inhabiting this world. “But in that case, how mysterious is the community which exists between a spirit and a body; and yet at the same time, how natural is that incomprehensibility” (Kant 1992, p. 315).

Swedenborg’s visions appeared to take the mystery away from the world of spirits, so common and well attested were they, also by witnesses which Kant found reliable. Thus, Swedenborg was reported to have told his companions of a great fire which had just broken out in Stockholm, two days before news reached him and his company in Gothenburg. Kant’s first inclination was to dismiss these stories but can a philosopher reject out of hand such stories attested by truthful observers? So Kant decided, at some expense as he drily noted, to acquire Swedenborg’s “hefty volumes” coming to the conclusion that the “lengthy work is completely empty and contains not a single drop of reason” (Kant 1992, p. 346).

We are sometimes, Kant argues, forced to recognize the limits of our reason. Thus, I know that I can move my arm at will. Though I am able to recognize this fact, I am at a loss to understand it, indeed the fact “that I move my arm is no more intelligible to me than someone’s claiming that my will could halt the moon in its orbit” (Kant 1992, p. 356). We are thus left with the conclusion that there are limits on our understanding, but perhaps that is something we can and should be able to live with:

When science has run its course, it naturally arrives at the point of modest mistrust and says, dissatisfied with itself: *How many are the things which I do not understand! But reason, matured by experience into wisdom, serenely speaks through the mouth of Socrates, who, surrounded by the wares of a market-fair, remarked: How many are the things of which I have no need* (Kant 1992, p. 355).

These words of Kant formed one of three quotations with which Kroman prefaced his dissertation. The others were from John Stuart Mill—"The most opposite opinions can make a plausible show of evidence, while each has the statement of its own case and it is only possible to ascertain which of them is in the right, after hearing and comparing what each can say against the other, and what the other can urge in its defence"—and Søren Kierkegaard: "In the last years, a particular lady is the only one who has proved the immortality of the soul—a book which along with Christiane Rosen's Cookery book has served to keep many alive" (Kroman 1877, p. 4).

Kroman notes at the outset of his thesis that many have tried to solve the riddle of the existence of the soul, usually with little success, mainly because "the metaphysical longings of the heart have been stronger than the working capacity of reason" (Kroman 1877, p. 3). So it becomes necessary for any endeavor in this direction to be constantly guided by self-criticism.

What do we mean when we talk of the soul? Here, it is necessary to distinguish three different conceptions. The word can refer to phenomena of consciousness, to its *essence* [*Væsen*] or to the soul as an immaterial substance. We need to tackle all these different meanings in order to clarify our conception of the nature of the soul.

Kroman carefully elucidates the three conceptions of the soul then enjoying the favors of well-known scholars. Firstly, there are the ideas of materialism which in fact come in two varieties, a starker and a laxer version. The first one conceives of thinking as related to the brain in a similar manner as bile is to the liver or urine to the kidneys. The representatives of this school of thought, however, have only managed to show that there is a close relationship between brain and thought which no one doubts. But they have been utterly unsuccessful when attempting to explain psychological phenomena with reference to the properties of matter. That is to be expected, states Kroman, since these thinkers are of a "highly doubtful rank" (Kroman 1877, p. 62).

A different picture emerges when we turn to the laxer materialists who count among their ranks some of the most distinguished natural scientists of the nineteenth century such as Gustav Theodor Fechner, Wilhelm Wundt, Thomas Huxley, and Hermann von Helmholtz among others. They have advanced the view that the mental and the material are like two sides of a coin or that mind follows neural activity like its shadow. These scientists have postulated a kind of double substance—*Dobbeltvæsen*—appearing on the one hand as matter, on the other as spirit. For this reason, Kroman designated this position—now often termed psychophysical parallelism—with the ironic term *Duplicism*.

The duplicists argued their position from the law of the conservation of energy according to which all movements have physical causes and thus also the movements of the body's muscles. If these movements are to be explained, we have to consider their physical antecedents. The soul, as a non-material thing, does not have any independent powers to control or instigate such movements.

Kroman finds curious the paradox that the duplicists, all self-avowed Darwinists, usually think along decidedly non-Darwinian lines:

What role does [consciousness] play in the world? Absolutely none! It is utterly powerless to generate a single movement; it is a totally incomprehensible luxury, without meaning in nature's well-furnished household and only explicable as the malicious cruelty of a capricious demon who enjoys himself by smiling at the seriousness with which the human automata in good faith carry out their mechanically necessary movements (Kroman 1877, p. 91).

If we assume that such a consciousness were to arise in the course of evolution it would either long since have disappeared or have substantialized itself and become a positive and useful characteristic of the organism.

Here, Kroman challenged the ideas of the British biologist Thomas Henry Huxley who had dealt with this question in 1874, arguing that animals are properly conceived of as “more or less conscious, sensitive, automata.” But this consciousness is simply a collateral of the body's working and “as completely without any power of modifying that working as the steam-whistle which accompanies the work of a locomotive engine is without influence upon its machinery.” Similarly, it would be natural to view humans as conscious automata. Again, this consciousness is without causal efficiency. We feel that our volition causes us to move, but in fact this feeling is not the cause of the voluntary act “but the symbol of that state of the brain which is the immediate cause of that act” (Huxley 1893, pp. 238, 240, 244).

Kroman was not alone in his criticism of Huxley's views. The American psychologist William James voiced similar sentiments in an article called “Are we automata,” published in *Mind* in 1879, two years after Kroman defended his thesis. It is generally agreed, writes James, that men and at least many of the higher animals possess consciousness. Darwin's theory postulates that the body and behavior of animals have evolved, because they serve some function for the animals and are of some use in their struggle for existence. But if we find consciousness in the more highly evolved animals and man, then it too must serve some purpose. In this respect, consciousness functions like an organ of the body, it is “a fighter as well as a standard-bearer” (James 1983, p. 45). Just as the eyes and ears lend animals a helping hand in their struggle for survival, so does consciousness. It does so because it enables the animal to *choose* among the various possibilities which it constantly faces.

James notes that if the spinal cord of the frog is cut at the base of the brain, the frog no longer has any choice and the physiologist can easily predict its responses to different irritants. “Over a frog with an entire brain”, however,

the physiologist has no such power. The signal may be given, but ideas, emotions or caprices will be aroused instead of the fatal motor reply, and whether the animal will leap, croak, sink or swim or swell up without moving is impossible to predict (James 1983, pp. 41–42).

Kroman found further arguments against duplicism in the fact that we have knowledge of the external world, and this he considered sufficient reason to accept the possibility of an interaction between the mental [*sjælelige*] and the physical [*legemlige*]. He later wrote:

When we find reason to believe in the body it is not on the strength of a revelation but simply because the body has made itself known to our consciousness, has affected us. The mental and physical units must thus be capable of interacting ... A study of the natural sciences by no means forces us to rule out the possibility of an interaction between the physical and the mental... Physiology and the physician, whose research also concerns mental territories, are quite often led to postulate physical phenomena as causes of mental states and vice versa (Kroman 1888, pp. 108, 113).

Such eminently sensible statements about the interaction of the mental and the physical would, in Kroman's opinion, be utterly nonsensical from the viewpoint of duplicism.

The third theory of the relationship of mind and matter, idealism, Kroman also found wanting. The main expositor of this theory was the German philosopher and psychologist Hermann Lotze who had argued for this viewpoint from the "I's reflexivity," the possibility of the self to reflect on itself. But, confronted with this ability, Kroman states, we must simply admit "how infinitely incomprehensible the mental in all respects is to us." So we are left with the only possible answer to the question as to the nature of the soul, the answer must necessarily be, echoing Kant, "the uncomfortable: I really do not know" (Kroman 1877, pp. 133, 169).

Kroman's thesis is written in a sharp and witty style. Is it, for instance, a mark of *intelligence* in frogs when they use the left foot to remove a drop of acid which has been placed on their right thigh when that foot has been removed below the knee?

The frog did not get a wooden leg instead of the amputated limb, thus this simply implies that the frog has learned to use one foot when the other for some reason is otherwise engaged (Kroman 1877, pp. 104–105).

Kroman thus considered the study of decapitated and variously amputated frogs useless for investigating the nature of the soul.

It is interesting that Kroman and William James should both refer to frogs when discussing the nature of the soul and consciousness. This is no coincidence, and here, they were simply reflecting the role which the hapless frog had come to play as a favored specimen in nineteenth century medicine and physiology. This role of the frog even surfaced in one of the great novels of the century, Turgenev's *Fathers and Sons*. The main protagonist of the novel, Yevgeny Bazarov, is a medical student who does not acknowledge anything which cannot be weighed, measured or put under the dissection knife. One day, Bazarov comes across some boys as he is looking for frogs in a field:

"What do you want frogs for, mister?" one of the boys asked him.

"I'll tell you," answered Bazarov, ... "I shall cut the frog open to see what goes on inside him, and then, since you and I are much the same as frogs except that we walk about on our hind legs, I shall know what's going on inside us too" (Turgenev 1975, p. 90).

Bazarov "has no faith in principles, only in frogs," another character in the novel notes (Turgenev 1975, p. 96). This was perhaps understandable. At this point in time experiments on frogs had given many scientists pause for thought. If the spinal cord is cut from the brain but a drop of acid is then placed on it's right foot

the frog will use that foot to attempt to remove the irritant. If the right foot is removed beneath the knee, the frog uses the left foot to try to get rid of the acid. The frog's response seems to illustrate "intelligent" behavior though it no longer has the use of its cerebral hemispheres (as the spinal cord has been detached from the brain). The fact that the frog used the right foot when irritated on the right thigh seemed like a simple reflex of the kind Descartes had originally described (Fearing 1930). Something different, however, seemed to be taking place when the brainless frog used the left foot to remove the acid. Did this not require some intelligence, might one even be justified in postulating, as some did, a *spinal soul*? It was thus perhaps understandable that Bazarov had greater faith in frogs than principles. Here, he enjoyed the company of some of the greatest scientists of the nineteenth century.

Kroman's skepticism also extended to attempts to locate mental faculties in the brain by investigating the effects of head injuries such as Paul Broca had pioneered and many investigators had taken up (Finger 2000). Kroman was unimpressed: Researchers look for the seat of intelligence in the brain, but concepts such as intelligence, emotion, imagination, and will refer to enormously complex mental activities. It is futile to think that one can locate them in any one area of the brain, "we could just as well assume that a man was born with a particular organ or aptitude to become postmaster of [the small town] Ebeltoft" (Kroman 1877, p. 107).

Kroman's thesis can rightly be considered a landmark work in modern Danish philosophy and psychology, one of its most enchanting works. In 1883, Kroman published an impressive book on epistemology, considered by many his major philosophical work (Kroman 1883b). The following year, he succeeded Heegaard as professor of philosophy. Kroman was a pioneer of positivism in Danish philosophy and psychology and thus one of the pioneers in the intellectual changes taking place in Denmark at the end of the nineteenth century. Above all, he passionately believed in free will and sided toward indeterminism as noted by Edgar Rubin many years later (Rubin 1923).

Kroman was an excellent stylist who used his sharp pen to combat "lyrical speculation" in philosophy and elsewhere. In addition to the works mentioned above, Kroman wrote a textbook of logic and psychology for his *examen philosophicum* course as well as numerous biographical essays on Danish philosophers for a multivolume national biography. Some of these, such as his article on Kierkegaard, caused him immense efforts to write. In this article, Kroman brilliantly managed to give a succinct account of the enormous production of this tormented philosopher in less than twenty pages (Kroman 1895).

It was to this sharp critical thinker's classroom that Rubin turned up for his first lecture at the University (Fig. 2.2). In his introductory lecture, Kroman set out his philosophical program. "What is philosophy," Kroman asked at the outset and then continued, "what should philosophy be?" (Kroman 1883a, p. 429). When we consider philosophy as it reveals itself to us through its history we are immediately struck by the fact that we never meet philosophy as we do, say physics or chemistry, but always *philosophies*, every philosopher has his own philosophy.

Fig. 2.2 Kristian Kroman, professor of philosophy at the University of Copenhagen, Edgar Rubin's teacher for the examen philosophicum (Royal Library, Copenhagen)



The contrast with the natural sciences shows that philosophers have not proceeded in a scientific or critical manner but have been led “more or less by untrammelled, subjective fantasy,” with just a handful of exceptions. In contrast to the natural sciences, philosophy never cumulates, it is not possible to deduce the philosophy of Fichte from that of Kant, nor that of Leibniz from Spinoza. Each philosophical system mainly reflects the personality of its author.

Philosophy distinguishes itself from the sciences in another way. While the different sciences are full of open questions and unsolved problems, philosophers usually provide us with final answers. To what do we owe this well-known omniscience? It can only be to the lack of methodological rigor:

The swallow flies more adeptly than the sparrow. When the wings of thought carry him no further the scientist stops; but the philosopher additionally has his wings of longing spread out and for them no air is too thin, no ravine too wide. Answers to many questions are in other words found because one makes light of the method used to find them. Where logic no longer suffices one resorts to lyrics—not on purpose of course but driven by one's longing for results, results of a specific color (Kroman 1883a, p. 436).

If we want to proceed in a scientific or logical manner, we must face the fact that we will have to set aside many problems, including many burning issues which we perhaps find to be of utmost importance. Of course, this does not prevent

us from forming opinions on such issues, e.g., on the existence of God, on the proper conduct of one's life and so on. We may, quite rightly, think that our answers to such questions are of greater value than the answers of science. But such answers have one limitation, I cannot force my neighbor to accept my solution, it will remain a *subjective truth* and must be grasped as such. Kroman left his students at the end of the first lecture to ponder these lessons.

Kroman's textbook for his course, *Kortfattet Tænke- og Sjælelære* [An Introduction to Logic and Psychology], was originally published in 1882 and appeared in an expanded second edition in 1888 and a third edition in 1899. Kroman used the quaint Danish term *Sjælelære* [soul science] for psychology. Kroman's conception of psychology entailed a threefold division of mental phenomena into *representation* [Forestilling], *feeling* [Følelse] and *will* [Vilje], a division common in nineteenth century psychology. *Impressions* [Fornemmelser] form particularly important constituent of representations, those most closely tied to the sensory organs. This threefold division, in Kroman's eyes, mainly serves a pedagogical function, since the mind never merely represents, feels or wills, these three facets of mental life are continually interacting (Kroman 1888, p. 124).

Kroman finds a unifying thread for his psychology in the notion of the *association of ideas*. The train of associations is the material from which recollection, fantasy, and thought draw. These ideas, closely linked to the English tradition of psychology running from Thomas Hobbes to John Stuart Mill, were also known to an older generation of Danish psychologists, such as Sibbern. In his textbook of psychology Sibbern had criticized the view that it is possible to postulate *laws* of association since "they only reveal possibilities and are only valid as particular, not general statements" (Sibbern 1843, p. 193).

In Kroman's psychology—and to a somewhat lesser extent in the work of his philosopher colleague Harald Høffding—the theory of association was of paramount importance, reflecting the turn away from the earlier idealistic bent of Danish philosophy. Indeed, the merits of an associationist psychology would seem to have been widely acknowledged in Denmark in the final decades of the nineteenth century. Georg Brandes toyed for many years with the idea of writing a book on psychology along associationist lines, though nothing came of it (Knudsen 1985).

Though most clearly identified with the English tradition of psychology, the concept of association can be traced back at least to Aristotle. In Aristotle's remarkable work *De memoria et reminiscencia* it says:

Acts of recollection occur because one change is of a nature to occur after another. If the changes follow each other of necessity, clearly a person who undergoes the earlier change will always undergo the later one. But if they follow each other not of necessity but by habit, then for the most part a person will undergo the later one ...

Whenever we recollect, then we undergo one of the earlier changes, until we undergo the one after which the change in question habitually occurs.

And this is exactly why we hunt for the successor, starting in our thoughts from the present or from something else, and from something similar, or opposite, or neighbouring (Sorabji 2004, p. 54).

Thomas Hobbes made “trains of thought” a cornerstone of his psychology and John Locke put a term to this conception—*associationism*—by using the term association for phenomena such as these. David Hume in turn grappled with the problem of whether all associations could be explained in a unified manner. Earlier writers—including Aristotle—had commonly posited at least three kinds of associations, namely association by *contiguity*, *similarity*, and *contrast* (Warren 1921).

Another aspect of the English tradition that appealed strongly to Kroman was its empiricism, the importance attached to sensations. This is forcefully put near the beginning of Hobbes’ masterpiece, *Leviathan*: “The original of [the thoughts of man] is that which we call SENSE, for there is no conception in a man’s mind, which hath not at first, totally, or by parts, been begotten upon the organs of sense” (Hobbes 1996, p. 9). And in another work by Hobbes we read that “all knowledge beginneth from experience” (Hobbes 1994, p. 57).

Hobbes, Locke and Hume grappled with the idea of association as part of their investigation into the nature of human knowledge. In David Hartley’s (1749) *Observations on man, his frame, his duty and his expectations*, we find a different focus. Here, the ideas of association are put forward as a psychological explanation of human thought. Hartley attempts to bring together Isaac Newton’s speculative ideas on the role of “vibrations” in sensation and those of Locke and others on the association of ideas. He writes:

Any sensations *A, B, C, &c.* [etc.] by being associated with one another a sufficient number of times gets such a power over the corresponding ideas *a, b, c, &c.* that any one of the sensations, *A*, when impressed alone, shall be able to excite in the mind *b, c, &c.* the ideas of the rest (Hartley 1749, p. 65).

Hartley here draws out the connection between sensations and ideas and invents a notational system—ubiquitous in psychology for at least a century and a half following the publication of his book. Sensations or impressions are denoted by uppercase letters *A, B, C, ...*; to each sensation there is a corresponding idea, denoted with the lowercase letters *a, b, c,* Only sensations call forth the appropriate sensory impressions, *A, B, C, ...* and these are not associated (*A* can thus not directly call forth *B*). The ideas, on the other hand, can associate. If *A* calls forth *a*, associations can then call forth *b, c* and so on.

Complex ideas, according to Hartley, are made from simpler ideas which have often arisen simultaneously or together in consciousness. Hartley acknowledges that many questions remain unresolved but is convinced that further studies will reveal the great use to which the theory of association can be put:

One may hope, therefore, that by pursuing and perfecting the doctrine of association we may some time or other be enabled to analyse all that vast variety of complex ideas, which pass under the name of ideas of reflection and intellectual ideas, into their simple compounding parts, i.e., into the simple ideas of sensation, of which they consist (Hartley 1749, pp. 75–76).

Hartley postulated that all associations could be explained through the principle of contiguity; it was unnecessary to give status to similarity or opposition as independent principles of association.

The theory of association probably reached its pinnacle in the work of James Mill, in particular, in *Analysis of the phenomena of the human mind*, originally published in 1829 and released in a revised edition by his son John Stuart Mill in 1869. James Mill emphasizes the mechanical nature of the associations. Like Hartley, he wanted to explain all associations with a single mechanism, namely association by contiguity, or by frequency, to use his term. Associations are strengthened through repeated exposure:

A sound heard once in conjunction with another sensation; the word *mamma*, for example with the sight of a woman, would produce no greater effect on the child, than the conjunction of any other sensation, which once exists and is gone for ever. But if the word *mamma* is frequently pronounced, in conjunction with the sight of a particular woman, the sound will by degrees become associated with the sight; and as the pronouncing of the name will call up the idea of the woman, so the sight of the woman will call up the idea of the name (Mill 1869, p. 88).

Kristian Kroman subscribed to these tenets of associationism and explained them with clarity in his textbook of psychology. Yet the book is curiously old-fashioned in that Kroman, with a couple of exceptions, mostly bypasses the new experimental psychology coming out of Germany in the last decades of the nineteenth century, preferring to base his exposition on the older philosophical traditions, in particular, the English school of philosophical psychology. Rubin later wrote of Kroman's textbook of psychology that it had "a remarkably firm and clear character but was somewhat lacking in farsightedness and depth" (Rubin 1940, p. 7). Kroman was, in fact, skeptical about the merits of experimental psychology. Psychologically, he would remain an associationist.

2.2 A Bon Papa Sort of Man

By December 1904, Harald Høffding had returned from his sabbatical in the United States and England. He stayed for some weeks with William James, both in Cambridge, Massachusetts and his summer residence at Chocorua in the White Mountains in New Hampshire. Høffding later recalled his visit with James:

He belonged to a type few would expect to meet in America, possessing a sense of the inner life, wherever and in whatever form it was to be found, a type that stands in strange contrast to the restless up-and-coming business type one so often considers the real American. James's own nature agreed with nature in the "White Mountains". One day, when the woods "were quiet and silent", not a wind stirring and a solemn mood enveloped the landscape, James said: "This is an American day" (Høffding 1921, p. 68).

James, for his part, wrote in a letter to the Swiss psychologist Théodore Flournoy of his meeting with Høffding, "a dear *bon papa* sort of man, whom everyone loves

in spite of his fabulous erudition. Have you read his little *Philosophische Probleme*? The most sensible, empiristic, individualistic philosophy I know—I value it greatly, in spite of its rather dull and ineffective manner of statement” (Skrupskelis and Berkeley 2002, p. 488). In another letter, to Ferdinand Schiller in Oxford, James wrote:

Make much of dear old Høffding, who is a good pluralist & irrationalist. I took to him immensely, and so did everybody. Lecturing to my class he told against the Absolutists an anecdote of an “American” child who asked his mother if God made the world in 6 days. “Yes.”—“The whole of it?”—“Yes.”—“Then it is finished, all done?” “Yes.” “Then *in what business* now is God?” If he tells it in Oxford you must reply: “Sitting for his portrait to Royce, Bradley, & Taylor,”

showing that even for the quick-witted James, jokes occasionally needed some time to materialize (Skrupskelis and Berkeley 2002, p. 494; Royce, Bradley, and Taylor were all philosophers of an idealist ilk)!

In 1905, Harald Høffding had gained a position as a leading intellectual figure in Denmark. He had also received international recognition for his books, many of which were translated, first into German and then into other languages. Two works in particular stood out. The first was his textbook of psychology, *Outlines of psychology based on experience* (Høffding 1882), soon translated into German and then other languages (Fig. 2.3). It was to become, worldwide, one of the most popular introductions to the new science of psychology at the end of the nineteenth and beginning of the twentieth century. The second edition appeared in an English translation (Høffding 1891). The other work to achieve international recognition was his great history of modern philosophy, a monument to Høffding’s “fabulous erudition” to quote James. In this work, Høffding views the history of philosophy as part of general cultural history, driven not least by progress in science and the changing conception of man’s place in nature found after the Renaissance in the works of such thinkers as Machiavelli, Montaigne and others. A long introduction setting the stage is then followed by a careful analysis of the works of the major philosophers of modern times, Descartes, Hobbes, Spinoza, Leibniz, Locke, Hume and Kant among others (Høffding 1894–1895, 1900). The book is characterized by Høffding’s guiding idea—the “personality principle” in philosophy—that all serious thinking is closely bound up with the personality of the thinker. It contains numerous delightfully written biographical sketches of the major philosophers, by the way of introducing their contribution to the history of philosophy.

Edgar Rubin was later to write of Høffding that “he immersed himself so deeply in the works of the old philosophers and pioneers of science that their world, stretching over more than 2,000 years, was the world he belonged to, for him nothing of this was the distant past but living reality” (Rubin 1935, p. 7).

Høffding’s history of philosophy became a standard work for many decades; indeed, one finds it still being cited at the beginning of the twenty-first century (Grant 2001, pp. 328–239). Here, as in his psychology, he was no doubt helped by the fact that he stood outside the major philosophical traditions, English, French,

Fig. 2.3 Harald Høffding around the time he finished his book *Outlines of Psychology* in 1882 (Royal Library, Copenhagen)



or German and thus was able to deal with them from some distance and in a reasonably even-handed manner.

Harald Høffding was born into a prosperous family in Copenhagen in 1843. The family lived at the corner of *Nørregade* and *Gammeltorv* just a stone's throw from where Søren Kierkegaard was born in 1813, in *Nytorv*. Their homes have long since been torn down, replaced by drab buildings. Commemorative plaques now mark the birthplaces of these two philosophers. It is unlikely that many have noticed the Høffding plaque located, as it is, high on the wall. Even if someone were to glance its way, it is even less likely that they would now recognize the name of Harald Høffding. In the case of Kierkegaard, this is, of course, completely different, he is now counted among the most outstanding thinkers of the nineteenth century.

Høffding finished grammar school in 1861 and matriculated in the Faculty of Theology at the University of Copenhagen, intending to become a priest. It never came to that. He immersed himself in the works of Kierkegaard and went through a religious crisis in which he came to acknowledge Kierkegaard's conception of Christianity—faith as an incomprehensible paradox—while simultaneously rejecting it since he thought it life-denying. Høffding's struggle with the correct understanding of the nature of faith proved difficult for him. These were "the heaviest and darkest years of my life," he later wrote in his memoirs. He ended up, however, affirming Spinoza's exhortation, a free man's wisdom is a "meditation, not on death, but on life." Høffding decided, though, to finish his theological

studies although he had by this time rejected the possibility of priesthood, turning toward philosophy (Høffding 1928, pp. 44–46, 129).

After finishing his university education in 1865, Høffding spent his entire career as a teacher, first in a grammar school where he taught Danish, History, Latin and Greek for 17 years. He spent the winter 1869–1870 in Paris and wrote his doctoral thesis on the concept of will in ancient philosophy. At the same time, he came under the influence of recent French philosophy, and in particular, the works of Auguste Comte, the founder of positivism. Earlier, Høffding had leaned toward German idealism which was highly influential in the first half of the nineteenth century in Denmark. Now, he turned his back on this movement and became the best known spokesman for positivism in Denmark (Koch 2004).

After defending his thesis in 1870, Høffding turned toward modern philosophy and wrote books on contemporary German and English philosophy (Høffding 1872, 1874). The work on English philosophy from 1874, dealing with such thinkers as John Stuart Mill, Alexander Bain and Herbert Spencer marked a breakthrough in his turn toward positivism. After finishing these two books, Høffding took up psychology, which became his main interest for the next few years and played an important part in his teaching at the University of Copenhagen. In one of his last articles, he wrote that the fact that he had adopted “a thoroughly psychological view of the human mind” had been of paramount importance for his teaching at the university since here “was a field open to everyone” (Høffding 1932, p. 199). His work on the textbook of psychology was partly supported by a two-year grant from the recently founded Carlsberg Foundation. Shortly after the book was published, Høffding in 1883 became professor of philosophy at the University of Copenhagen, a position he would hold for 33 years. Joined by Kroman the following year, philosophy at the University of Copenhagen shed what remained of its earlier adherence to idealism.

Høffding’s views on psychology were shaped by his studies of the English associationists: “Through a critical examination of English philosophy, especially as it was represented by Mill and Spencer, I came to see the importance of a thought which had lain behind Kierkegaard’s philosophizing and had much earlier been deliberately emphasized by Kant, namely the idea of the assembling and unifying character of human consciousness. Later I found here the hypothesis on which I based my psychology” (Høffding 1928, p. 69).

Høffding’s psychology was a mixture of two older traditions, British associationism on the one hand and the philosophical traditions of mainland Europe on the other. From the British associationists, Høffding took the idea of the lawfulness of mental life, as revealed in the processes of associations. Another tenet of British associationism which strongly appealed to Høffding—as it had to Kroman—was its empiricism.

Though Høffding was greatly impressed by the English philosophical tradition, he read it with spectacles colored by continental philosophy, being in particular influenced by Spinoza, Kant and Kierkegaard. In Spinoza, he found the solution to the problem of the relation of mind to body, by adopting the *identity hypothesis* according to which the mental and physical are like two sides of a coin. To each

mental state, there corresponds a particular brain state and vice versa. In Kant and Kierkegaard, Høffding found the unifying thread of his psychology, the notion that the ultimate nature of the mental is to be found in its *synthetic activity*, wherever analysis takes place in the mind it is coupled to a synthesis which reveals the personal *self*. The aim of psychology is to shed light on the concept of personality, that is, one of the major tasks for psychology (Høffding 1902, p. 10).

Høffding criticized those who wanted to rid psychology of the concept of will, a crucial concept for psychology in Høffding's view. Those who wanted to banish the concept from psychology argued for this on the ground that introspection never revealed the will, only its effects. By looking into our own minds we find impressions, ideas, thoughts and feelings but will inaccessible to us, emerging only through the activity of the mind. Høffding thought this argument unconvincing, if will is an important and independent part of mental life it matters little whether it can be reached through introspection or not (Høffding 1902, p. 26).

Høffding drew a distinction between active and inactive psychology. British psychology was an inactive psychology, according to which mental associations followed each other mechanically, embracing the whole of mental life. The German philosopher Albert Lange had named this "psychology without a soul"—*Psychologie ohne Seele* (Lange 1915). This concept gained wide currency and many took it after Lange. One of them was William James in his *Principles of psychology*:

The "associationist" schools of Herbart in Germany, and of Hume, the Mills and Bain in Britain, have thus constructed a *psychology without a soul* by taking discrete "ideas," faint or vivid, and showing how, by their cohesions, repulsions, and forms of succession, such things as reminiscences, perceptions, emotions, volitions, passions, theories, and all the other furnishings of an individual's mind may be engendered. The very Self or ego of the individual comes in this way to be viewed no longer as the pre-existing source of the representations, but rather as their last and most complicated fruit (James 1981, p. 15).

The concept "psychology without a soul" was not to be understood as a disparaging term. On the contrary, as Høffding pointed out, a major achievement of the British tradition was to establish the independence of psychology from metaphysics. It was indeed possible to do psychology without worrying about the ultimate nature of the soul (Høffding 1891). Høffding was, however, critical of some aspects of the British tradition, especially the notion that impressions and ideas can be viewed as isolated mental elements, which then can be combined in a kind of mental chemistry as John Stuart Mill had posited. According to Høffding, impressions and other mental elements always occur in a particular context which is of crucial importance for their nature. For this reason a *Forholdslov* [relational law] holds for all of mental life. Høffding thought this idea of such importance that in a later work, *Philosophical problems*, he flatly stated that this had been the guiding idea of his psychology (Høffding 1902). In this respect, his ideas are quite closely related to those elaborated by William James in his criticisms of introspective psychology, though expressed, it must be admitted, with little of the stylistic elegance of James.

Though paying due respect to what he considered the achievements of the English school, Høffding was in many respects critical of it and was therefore understandably “astonished to find myself frequently described, without any qualification, as an adherent of the English School” (Høffding 1900, Vol. 2, p. 590).

“Psychology is the science of the soul—that is the shortest description we can give of the subject of the present inquiries” (Høffding 1891, p. 1). This is the opening sentence of Høffding’s textbook of psychology. (In the English translation it actually says “Psychology is the science of the mind.” However, in the original Danish the word Høffding uses is “sjæl”, soul. I have changed the translation to reflect this.) He then adds that with this sentence the subject matter of psychology is only stated in broad outlines as the science of that which thinks, feels and wills in contrast to physics which deals with things that move in space and fill it. The statement is in no sense to be taken as implying any position as regards the ultimate nature of the soul. In the book, psychology is presented as an empirical field of study.

Human consciousness is the proper subject of psychology which we get to know through what is most accessible to us, our own mind. Høffding was acutely aware of the problems associated with pursuing a science based on self-observation or introspection. Impressions, ideas, and feelings pass fleetingly in the mind and if we manage to turn our attention to them they are inevitably changed in the process. Thus, a better way is to base one’s introspections on reminiscences. Also, in this case, it is necessary to proceed with caution and compare the data thus obtained with the findings of “objective psychology”, by which Høffding meant physiology and sociology.

Høffding wholeheartedly embraced the idea of a psychology without a soul: “Psychology as here conceived is so far a ‘psychology without soul’ that it makes no assertions about the question of whether such an absolute nature exists” (Høffding 1891, p. 14). This paradoxical statement has no doubt made his young listeners prick up their ears. Høffding also emphasized that there was not one psychology, but many, a statement no less true today than when his book first appeared.

Like Kroman, Høffding also worked with a threefold division of the subject matter of psychology into representations, feelings and will. In his textbook, Høffding writes that this division had replaced Aristotle’s earlier twofold division into representations and will. Jean-Jacques Rousseau had argued for the primacy of feelings, influencing the thinking of Johann Georg Sulzer and Johann Nicolaus Tetens. After Immanuel Kant had adopted this threefold division, it eventually came to enjoy wide support.

Høffding’s textbook enjoyed wide circulation and was used in numerous universities throughout the world, being translated into almost a dozen languages. William James used it with his students. One of them, the eminent psychologist Woodworth (1932), later recalled how he was impressed by Høffding’s views on the mind–body problem: “Every phenomenon of consciousness gives occasion for a twofold inquiry. Now the psychical, now the physical, side of the phenomenon is

most accessible to us” (Høffding 1891, p. 70). Woodworth further notes that James took issue with Høffding on this point, to him the interaction of the physical and mental was the important thing. In this respect, James stood much closer to Kroman than Høffding.

Høffding’s textbook was also used in the laboratory of another pioneer of American experimental psychology, that of Edward B. Titchener at Cornell University, where the “thick and meaty little text” was affectionately known as the *sausage*, and “diligently studied”, as later noted by a former student (Bentley 1950, p. 650). Høffding’s psychology textbook would even serve as the first introduction to the new scientific psychology in China (Hsueh and Guo 2012).

Høffding became *docent* (associate professor) of philosophy at the University of Copenhagen in 1882 and *professor ordinarius* the following year. He had taught as a *Privatdocent* at the University since 1871.

Høffding became a nationally known and admired professor in Denmark. He was a prolific writer and most years he gave lecture courses at the University which were open to the public and often drew hundreds in attendance. To some, Høffding was too *tame* a thinker when compared with such firebrands as Kierkegaard or Georg Brandes. Viggo Hørup, politician, journalist and one of the founders of the radical newspaper *Politiken*, who wielded an acerbic pen, once gave the following characterization of Høffding:

When the Gods in their wisdom concluded that the petty shopkeepers also needed their prophet they took from what was available in the shops and created Høffding to bear witness to them. An honest rapporteur of the thoughts of others, a knowledgeable understanding of everything without significance or importance to anyone. He tells of large and offensive matters, without offending anyone ... makes them harmless, sets them aside to soak, removing the poison (Mørch 2004, p. 168).

This was a harsh judgment, written in a private letter. Høffding was perhaps not a particularly original thinker but an outstanding teacher as well as a serious and highly competent popularizer.

2.3 A Quality of Familiarity

Høffding’s psychology, as primarily presented in his textbook and to some extent in his history of philosophy, was mostly based on summarizing the results and theories of other researchers. He was not an experimentalist himself and though he was impressed by the progress being made in “the new psychology,” i.e., experimental psychology, he was of the opinion that this was just one avenue along which psychological research could be pursued. Still, Høffding was the originator of one idea, which led to considerable discussion and research among psychologists. This was his idea of *unmediated recognition*. This was originally put forward in the second edition of his psychology on which the English

translation is based, and was more extensively described in a work entitled *Psychological investigations* (Høffding 1889).

Høffding's discussion of his theory is couched in associationist terminology. Impressions, A, B, C, \dots give rise to ideas a, b, c, \dots . Impressions that follow each other regularly lead to associations of their respective ideas, association by contiguity. It was a common idea among associationists that when we recognize something an "expectation" is fulfilled, or "gratified" to use James (1981, p. 635) term. Consider thus the Icelandic saying *Þar á ég úlfs von er ég eyrun sé*, "there I can expect a wolf when I see the ears", originally found in the ancient poems of the *Edda*. Assume that I see the ear of a wolf. We can follow the example of the associationists and denote this impression with the letter A . The impression A , is also associated with the idea of the ear, a . This idea, through association by contiguity, calls forth another idea, or expectation, that of the wolf, b . When the wolf finally emerges in full view, the impression of the beast, B , happily agrees with the previously aroused idea b and is therefore recognized.

Høffding concurred that very often, perhaps even in most cases, recognition proceeds in the manner just described. But besides this type of *mediated recognition*, as Høffding called it, there is another kind of *unmediated recognition* where we recognize some sight, sound, smell or other sensory object without a concurrent independent idea of the object arising in the mind. We know that we have seen or heard something before but cannot explain where or in what circumstances, we just know and feel that this is so since the object is accompanied by a *Bekendtheds kvalitet* [quality of familiarity]. This difference between what is familiar and what is unfamiliar is so clear that it cannot be elucidated any more than it is possible to describe the difference between yellow and blue. As an example, Høffding mentions the following:

I am asked: "Have you ever visited Les Plans?" The name Les Plans is familiar to me and yet I can associate no idea with it ... and this quality of familiarity in its sound is the *whole phenomenon*. Though I notice the psychological interest of this phenomenon, I am unable to notice even the faintest trace of associated impressions or ideas. While it is clear that the quality of familiarity must stem from me having earlier heard the word, this quality can only be explained by assuming that my earlier state is somehow reawakened alongside the repeated impression, but without emerging as a separate element in consciousness besides the impression itself (Høffding 1889, pp. 8, 12).

Høffding describes the psychological state as

$$\begin{pmatrix} a \\ A \end{pmatrix}.$$

Here, A refers to the impression aroused by the sounds of the words whereas a refers to the accompanying quality of familiarity. This quality is tied to the impression, not a separate idea, and therefore, Høffding represents the elements in this manner within parentheses. This, briefly, is Høffding's theory of unmediated recognition. The phenomenon is much simpler than those cases where recognition occurs because expectations are fulfilled where five steps are involved: (1) We

sense *A*, which (2) calls forth the idea of *a* which then (3) leads to the idea *b*, then (4) we sense *B* which (5) finally is compared with *b* leading to recognition if *b* matches *B*.

William James wrote of these problems in his *Principles of psychology*, discussing for instance that state of consciousness where we are searching for a name which we cannot recall though we seem to be on the brink of finding it: “It tingles, it trembles on the verge, but does not come. Just such a tingling and trembling of unrecovered associates is the penumbra of recognition that may surround an experience and make it seem familiar, though we know not why.” James further finds Høffding’s explanation “a very tempting one where the phenomenon of recognition is reduced to its simplest terms” (James 1981, p. 634).

Høffding’s theory implied that unmediated recognition was a kind of association by similarity. The notion that such association by similarity is a necessary first step in all kinds of recognition later became known as the “Høffding function” or “Høffding step” (Rock 1962). While association by contiguity could in many cases explain recognition, there was a first step which it ignored, namely the step which would set the associative chain in movement:

This ... relation [association by similarity] ... comes into effect in sensuous perception, when the sensation arouses an (implicate) idea and fuses with it. Here lies the starting-point of all the influence which a sensation can exercise in consciousness. For whatever states and farther effects it may be able to call up afterwards, the first condition is that there shall be an instinctive recognition, in other words that the sensation shall have a point of attachment in consciousness (Høffding 1891, pp. 152–153).

2.4 Food for Thought

Kroman and Høffding were the two professors mainly responsible for teaching philosophy, including philosophical psychology, at the University of Copenhagen at the turn of the twentieth century. Both were pioneers of positivism, with them the last vestiges of idealism disappeared from Danish philosophy, much earlier than in the other Nordic countries (Heidegren 2004). Categorizing them both as philosophers of a positivist persuasion, however, glosses over some profound differences, both personal and intellectual.

Though colleagues for over 30 years, Høffding and Kroman were not close, perhaps because they were temperamentally very different. Høffding was a prolific but sometimes “dull” author (to borrow William James’ term), Kroman the consummate stylist. For Høffding his intellectual quest was always a matter of utmost personal urgency: “Science is itself a personal task, born of the innermost needs of the personality” (Høffding 1928, p. 70). Høffding sought a comprehensive philosophy, tackling in turn psychology, ethics, human thinking and religion. Kroman did not view philosophy as a *personal* quest. It was an *intellectual* task which should only deal with those problems where there was hope of positive results.

Religion was outside the bounds of what could be discussed in scientific terms, which did not mean, however, that it had no place in human life.

Kroman kept students at arms length, lectured in a cool and dry manner, was at “pains to avoid the swings of passion” in his lectures (Hansen 1955, p. 9). One student later recalled that Kroman knew nothing of the students “except for their performance in the examinations” (Bjarnason 1901).

Høffding had a completely different approach to teaching and was widely known as “a friend of the young” in Denmark. More than any other professor at the University of Copenhagen, he treated his students with great respect, was always ready to listen to them, react to their views and counsel them. One student later recalled his years as a student in the philosophy and psychology program in the last decade of the nineteenth century:

The teaching was organized in such a manner that each professor went through one book in a semester or two and the students prepared for particular chapters, which they would elucidate, this being followed by discussions which the professor would direct. The professors were all gentlemen and well educated. The discussions were usually liveliest in professor Høffding’s class. He was very amiable, always prepared to deal with the subject at hand, cheerful and had a way of encouraging participants to voice their opinions and thoughts (Finnbogason 1939).

Another student later recalled that few understood as Høffding “the art of discussing questions with his students, always willing to enter their mindsets, never impatient with their questions” (Thomsen 1908, p. 720).

After publishing his last book on ethics in 1903, Kroman seems gradually to have lost his passion for philosophy. His interests turned among other things to music—his wife and sons were musicians—and to sailing, his ancestors’ profession: “I am descended from 23 generations of skippers; when I grab a tiller I can feel them all” (Hansen 1955, p. 97).

Høffding kept his passion for intellectual work into old age. This was in keeping with his philosophical position of “critical monism,” where critical was taken to imply that there would be no end to man’s explorations for knowledge, since man is simultaneously an actor and spectator of the world. Final answers are therefore not forthcoming; results, which have been reached, have to be constantly revised with the advancement of knowledge (Høffding 1928, pp. 304–305). Høffding’s emphasis on man’s unending quest for knowledge was the trait that would most impress the young Rubin (Fig. 2.4) and to which he would later return at some length in a commemorative article written after Høffding’s death (Rubin 1932).

Høffding’s and Kroman’s approaches to psychology also had their differences. Kroman was a disciple of English associationism and showed little interest in the new experimental psychology, thought that it all too often entailed a wasted effort in trivial experiments or fanciful theoretical speculations. Høffding admired the English associationists but thought that their psychology had to be supplemented by notions from continental philosophy, in particular the notion of an active, synthesizing self. He followed with great, though critical, interest, experimental research carried out in the new laboratories of psychology in Germany and discussed them in successive revisions of his textbook of psychology, undoubtedly a

Fig. 2.4 Edgar Rubin, the young student of philosophy and psychology at the University of Copenhagen (Inger Rubin Lauritzen)



major reason for its great success. Høffding thought that psychophysical parallelism (the identity hypothesis to use his term) provided a solution to the mind–body problem, Kroman found this idea muddled and opted for a commonsensical viewpoint of an interacting mind and body. Høffding was at heart a determinist, Kroman an indeterminist.

Between them, Høffding and Kroman provided their students with plenty of food for thought.

2.5 Tutorials in the Philosophical Factory

Only the flimsiest of sources tell of Edgar Rubin’s first year at University. We do know that he attended private tutorials in philosophy in the spring of 1905 as the time of the final examination for the first-year *examen philosophicum* course drew closer.

Private tutorials—*Manuduktion* as it was called in Danish—had a long tradition at the University of Copenhagen. The philosopher and naturalist Henrik Steffens, who spent the years 1790–1792 as a student in Copenhagen, gave the following description of the origins of this tradition:

The examinations were public, a professor who twice a year every day for a few weeks had to examine large numbers of students was easily led to confine his examination to a small circle of questions, and the old gentlemen were usually particularly content when these question were answered in the same manner. The manuductors did not fail to turn up at the examinations, making careful note of the dozen or so recurring questions and the

answers expected by the professors. So the candidates were drilled for the examinations in the most efficient manner without learning anything (Thomsen 1975, pp. 194–195).

This tradition was alive and well at the turn of the twentieth century. This was partly due to the paucity of lectures and the total lack of discussion groups accompanying large courses, such as the one for the *examen philosophicum*. This gave older students the chance to earn some money giving private tutorials to small groups of students where they would discuss difficult parts of the curriculum with the students and prepare them for the upcoming examinations. Kroman gave such tutorials for a number of years as already mentioned. University records show that few students failed each year to pass the *examen philosophicum*, presumably the tutorials played here an important role with a majority opting for some if they could afford them. Edgar Rubin could certainly afford the price and he took tutorials with Cai Viale who was at that time a student reading for the *magister artium* in philosophy.

Only a handful of students read philosophy for the master's degree at the University of Copenhagen. From 1850 to 1950, a total of 49 students finished this degree, on average one student every other year (Pind 2009). The 12 months from May 1900 to April 1901 were exceptional in the history of philosophy education at the University. In that period, four students graduated with master degrees. They belonged to a group of seven students who had started their studies four or five years previously, one of these being Cai Viale, Rubin's tutor.

Anton Thomsen was the undisputed leader of this "centennial class," bright, studious, loud-mouthed, garrulous, charmingly arrogant to some, disgustingly so to others. His uncle was the linguist Vilhelm Thomsen, internationally recognized as one of the finest scholars of the University of Copenhagen. Vilhelm was as introvert as Anton was extrovert. When Vilhelm had studied at the University, he was known among friends as the student who could keep silent in twenty different languages (Thomsen 1924, p. 115)!

Anton Thomsen kept a diary from early adolescence (Thomsen 1877–1915). In his diary for Saturday, 20 March 1897, Anton writes of a dinner party he had attended. His companion at table was a young woman, Ada Adler. Adler, born in 1878, was of Jewish descent. Her father was Bertel Adler son of the banker David Baruch Adler. She was Niels Bohr's niece and thus also related to Edgar Rubin. Anton confides to his diary that he had conversed solely with her the whole evening, "I am immensely taken by her". Two months later, he writes in his diary that he thinks incessantly of her. "That is strange, am I then really the hard-headed, cold, cynical, realistic, egoistic, uncomfortably cunning, emotionally insensitive schemer most people think I am?" Thomsen was in love and after vacillating between hope and despair he finally confides to his diary that they have been secretly engaged in October 1898.

When embarking on his *magister artium* examination, Anton Thomsen wrote combatively in his diary (2 November 1900):

The time of the examination has drawn closer. I am calm, though I can expect the worst. This is my most important examination ... Five years of study are behind me, much has

been read, most of it understood, less of it unfortunately clearly remembered ... For my examination I will receive an immediate verdict ... you can give me what you want for my examination—posterity will give me *Praeteritis* [outstanding]!

Thomsen finished his examination successfully in January 1901. A few months earlier, Herdis Krarup, the only woman in the “centennial class”, had finished her degree, in April it was the turn of two students from Iceland, Ágúst H. Bjarnason and Guðmundur Finnbogason, see Pind (2008). Cai Viale was, however, struggling, partly because of ill-health. He was not yet ready to undertake the examination.

After finishing his examination in 1901 Thomsen, along with Viale, set up a “Philosophical Factory” in an apartment in *Skindergade* in central Copenhagen, offering private tutorials for first-year students reading for the *examen philosophicum*. Interestingly, Thomsen’s first private student was Herbert Rubin, Edgar’s older brother (Thomsen 1877–1915, November 24, 1901).

In the academic year 1904–1905, more than 140 students turned up for private tutorials in the Philosophical Factory in *Skindergade*. By this time, the tutorials were “big business,” as Thomsen wrote to his friend Finnbogason. At this time, Thomsen was busily working on a doctoral dissertation, and thus, it fell to Viale to give the lion’s share of the tutorials. One of his *manuductees* was Edgar Rubin (Finnbogason 1873–1944, Thomsen to Finnbogason 15 June 1905).

The month of June was the time of the *examen philosophicum*. Rubin was eager and ready to go. The examination was oral, held in public, and often well-attended, especially by students who were yet to take the examination. Kroman started his examinations on June 6 and carried on until June 28, with a week-long intermission. Thirteen or fourteen students were examined every day, Saturdays included. On Saturday, June 17, it was Edgar’s turn, he was the eleventh student examined that day. It is not known what question Kroman put to him at the green table. It could have been *duplicism*. In that case the examination might have proceeded in the following manner, with the student (I) setting out, somewhat hesitantly:

I: Duplicism is one of a number of different theories of the mind or mental states. It postulates that mind and matter have two different appearances ...

Kroman: “Have?”

I: are two different appearances, two different sides of one and the same issue which inwardly appears as mental states, outwardly as physical changes, especially in the nervous system. The duplicist dares not consider this as an interaction, since he ...

Kroman: Yes, let us now consider how this system in general has been developed?

I: Yes, he has noticed that there is something physical and something mental, he has noticed that changes take place in both the physical sphere and the mental, and that these changes are often related in a peculiar manner.

So.

The simplest manner to explicate this in the view of a number of philosophers is as an interaction but that will not do in the opinion of the duplicist, because firstly ...

Indeed; but what follows from this, what conclusions does he draw?

Silence.

There must be an argument; we need to have the conclusion from this?

Silence.

Which is this, that since we cannot assume an interaction and they do seem to interact, then the two things must be identical.

Then I continue: Yes and the duplicist find his proof from three sources: (1) From the natural sciences, (2) From the law of inertia, (3) From the law of conservation of energy. First, from the natural sciences. These, he claims, forbid us to assume any interaction. To this we answer: We couldn't care less. We will have absolutely nothing to do with a science which lays down prohibitions, such an enterprise we do not consider science, science can only tell stories, never lay down prohibitions.

...

The natural sciences have a law which says "No change without force," which is sometimes changed to "No change without an *external* force." The duplicist understands this *outer* as "coming from the material." In this way he certainly manages to incorporate his whole psychology into this sentence, but that is no art when he reinterprets the sentence after his own whims. The natural sciences do not understand "outer" in the manner of the duplicist ... Physics and chemistry are only concerned with material things.

Yes, exclusively, right.

But when we go to the physician and the psychologist the relation is immediately quite different. Though again here we find something which serves as an excuse for the assumption of the duplicist. Since we are not able to reach the great exactitude in the mental as in the physical where we are able to weigh, measure, and count, the physician will, as far as possible, seek bodily causes in the physical sphere. But no real doctor or scientist will claim that he always finds them there but readily concede that he often needs to invoke mental causes.

Kroman (with a very big smile): "Yes, even if he does not need to resort to your contorted manner of expression (the audience applauds wildly), then ..."

Yes, then he feels himself compelled to seek them there and will also often find them there.

Well! But could one not say: "Since the mental knows that there is something physical, then we need to accept that both the mental and the physical exist."

Yes, we could indeed. But we know nothing about the soul. It is conceivable that it has certain bodily characteristics and in that matter it could interact with the body.

Yes, but could one not conclude from that, that there is indeed interaction between mind and body.

Yes, one could very well.

But then duplicism cannot be true.

Yes, that is correct, that is precisely the case.

...

And now we can consider the second and third arguments, from the law of inertia and conservation of energy.

Enough!

Thus, the Danish author Munk (1947, pp. 247–249) recalled his examination with Kroman, taken a few years after Rubin had sat for his. It resulted in the highest grade of *ug*, “udmærket godt,” outstandingly good. That was also Rubin’s grade.

After finishing his *examination philosophicum* with the top grade, Rubin was ready to begin his studies for the *magisterkonferens*, the degree of *magister artium* in philosophy with psychology as his major. Here Kroman would continue as one of his professors, but Rubin would eventually form much closer ties to the other two professors, Harald Høffding and especially the experimental psychologist, Alfred Lehmann, whom we will meet in the Chap. 3.

As Rubin was embarking on his studies for the master’s degree, in September 1905, let us catch a glimpse of Kroman and Høffding exercising their critical skills as opponents at doctoral defences. First is Kroman in his role as unofficial opponent, *ex auditorio*. The doctoral candidate, who had written a thesis on Nordic athletics in the middle ages, was most certainly taken aback when Kroman—a keen sportsman himself—asked to put a question at the defence. The newspaper *Berlingske Tidende* reported:

A lively commotion swept through the auditorium when professor Kroman stepped forward, bow and arrow in hand, and then, with the arrow pointing at the doctoral candidate’s breast, stated emphatically that the candidate was clearly mistaken in his description of the hand used by our ancestors in handling the bowstring. Professor Kroman showed great dexterity in grasping bow and arrow and the candidate had to surrender to this compelling argument (*Berlingske Tidende* 1905, September 28, evening ed. p. 1).

The following day, it was Anton Thomsen’s turn to defend his thesis. Despite the heavy private tutorial schedule, he had managed to finish his dissertation on *The young Hegel*, which was to a large extent based on a collection of letters from Hegel’s younger days which scholars had not dealt carefully with before. Ada Adler, by this time his wife, helped him transcribe the letters which Thomsen had borrowed from Berlin through the Royal Library in Copenhagen (Thomsen 1905).

The defence took place on September 29, 1905. The newspaper *Politiken* was present. The journalist took note of the fact that such a young man—“26 years of age, but has the looks of a sixteen year old”—should have been able to come to grips with the complex thought of Hegel. Of even greater note is the fact that in the preface to his book, he thanks his wife for her assistance and critical acumen: Just imagine, having a wife who is able to pose critical questions on a thesis about Hegel and is additionally young and attractive. The learned and beautiful Mrs. Thomsen *née* Adler sat in the middle of the first row in the auditorium ... and savored her husband’s triumph which to a large extent was really her own. The first opponent was professor Høffding: “He spoke for one and a half hour without any of the audience—except Mrs. Thomsen—understanding a word. So learned was his discourse, so profound, so philosophical.” Høffding’s concluding remarks were, however, grasped by all: “You have sat for too long in the study, young man. Broaden your horizon ... live life ... The world is bigger and richer than you think, bookish candidate” (*Politiken* 1905, September 30, p. 6).

References

- Bentley, M. (1950). Brief comment upon recent books. *American Journal of Psychology*, 63, 642–650.
- Berlingske Tidende. (1905, September 28, evening ed.). Nordboernes legemlige Uddannelse i Oldtiden, p. 1.
- Bjarnason, Á. H. (1901). Application for Hannes Árnason grant. Ministry of Iceland, (Diary 1, 226). Icelandic National Archives.
- Blegvad, M. (1977). Filosofikum. In S. E. Nordenbo & A. F. Petersen (Eds.), *Dansk filosofi og psykologi 1926–1976* (Vol. 2, pp. 11–32). Copenhagen: Københavns Universitet, Filosofisk Institut.
- Fearing, F. (1930). *Reflex action: A study in the history of physiological psychology*. Baltimore, Maryland: Williams and Wilkins.
- Finger, S. (2000). *Minds behind the brain: A history of the pioneers and their discoveries*. New York: Oxford University Press.
- Finnbogason, G. (1873–1944). Correspondence of Guðmundur Finnbogason, (Lbs 12 NF). National Library of Iceland.
- Finnbogason, G. (1939, March 31). *From my student years in Denmark: Lecture in the Danish-Icelandic Society*. Guðmundur Finnbogason papers (Lbs 12 NF). National Library of Iceland.
- Grant, E. (2001). *God and reason in the middle ages*. Cambridge: Cambridge University Press.
- Hansen, V. (1955). *K. Kroman: Træk af en dansk filosofis liv og tankeverden*. Copenhagen: Skandinavisk Bogforlag.
- Hartley, D. (1749). *Observations on man, his frame, his duty, and his expectations*. London: S. Richardson.
- Heidegren, C.-G. (2004). *Det moderna genombrottet i nordisk universitetsfilosofi 1860–1915*. Gothenburg: Daidalos.
- Hobbes, T. (1994). *The elements of law (1640)*. Oxford: Oxford University Press.
- Hobbes, T. (1996). *Leviathan (1651)*. Oxford: Oxford University Press.
- Høffding, H. (1872). *Philosophien i Tydskland efter Hegel*. Copenhagen: Gyldendalske Boghandel.
- Høffding, H. (1874). *Den engelske Filosofi i vor Tid*. Copenhagen: P. G. Philipsens Forlag.
- Høffding, H. (1882). *Psykologi i Omrids paa Grundlag af Erfaring*. Copenhagen: P. G. Philipsens Forlag.
- Høffding, H. (1889). *Psykologiske Undersøgelser*. Copenhagen: The Royal Danish Academy of Sciences and Letters.
- Høffding, H. (1891). *Outlines of psychology*. London: Macmillan and Co.
- Høffding, H. (1894–1895). *Den nyere Filosofis Historie. En Fremstilling af Filosofiens Historie fra Renaissansens Slutning til vore Dage* (Vol. 1–2). Copenhagen: Det Nordiske Forlag.
- Høffding, H. (1900). *A history of modern philosophy*. London: Macmillan.
- Høffding, H. (1902). *Filosofiske Problemer*. Copenhagen: Københavns Universitet.
- Høffding, H. (1905). The present state of psychology and its relations to the neighboring sciences. *Psychological Review*, 12, 67–77.
- Høffding, H. (1921). Minder fra en Rejse. *Gads Danske Magasin*, 15, 65–82.
- Høffding, H. (1928). *Erindringer*. Copenhagen: Gyldendalske Boghandel og Nordisk Forlag.
- Høffding, H. (1932). Harald Høffding. In C. Murchison (Ed.), *A history of psychology in autobiography* (Vol. 2, pp. 197–205). Worcester: Clark University Press.
- Hsueh, Y., & Guo, B. (2012). China. In D. B. Baker (Ed.), *The Oxford handbook of the history of psychology* (pp. 81–124). Oxford: Oxford University Press.
- Huxley, T. H. (1893). On the hypothesis that animals are automata and its history (1874) *Collected essays* (Vol. 1. Method and results, pp. 199–250). London: Macmillan.
- James, W. (1981). *The principles of psychology (1890)*. Cambridge: Harvard University Press.
- James, W. (1983). Are we automata? (1879). In F. H. Buckhardt, F. Bowers, & I. K. Skrupskelis (Eds.), *Essays in psychology* (pp. 38–61). Cambridge: Harvard University Press.

- Kant, I. (1992). Dreams of a spirit-seer elucidated by dreams of metaphysics (1766). In D. Walford & R. Meerbote (Eds.), *Theoretical philosophy 1755–1770* (pp. 301–359). Cambridge: Cambridge University Press.
- Knudsen, J. (1985). *George Brandes: Frigørelsens vej, 1842–77*. Copenhagen: Gyldendal.
- Koch, C. H. (2004). *Dansk filosofi i positivismens tidsalder*. Copenhagen: Gyldendal.
- Kroman, K. (1877). *Den exakte Videnskabs Indlæg i Problemet om Sjælens Existens*. Copenhagen: J. H. Schubothes Boghandel.
- Kroman, K. (1883a). Om Filosofiens Væsen og Betydning. *Vor Ungdom*, 430–453.
- Kroman, K. (1883b). *Vor Naturerkjendelse*. Bidrag til en Matematikens og Fysikens Theori. Copenhagen: Andr. Fred. Høst & Sønns Forlag.
- Kroman, K. (1888). *Kortfattet Tænke- og Sjælelære*. Copenhagen: Andr. Fred. Høst og Sønns Forlag.
- Kroman, K. (1895). Kierkegaard, Søren Aaby. In C. F. Bricka (Ed.), *Dansk biografisk Lexicon, IX* (pp. 152–167). Copenhagen: Gyldendalske Boghandels Forlag.
- Kroman, K. (1924). Fra studietiden. In E. Rindom (Ed.), *Minder fra Studenterdagene* (pp. 90–104). Copenhagen: G. E. C. Gads Forlag.
- Kuehn, M. (2001). *Kant: A biography*. Cambridge: Cambridge University Press.
- Lange, F. A. (1915). *Geschichte des Materialismus und Kritik seiner Bedeutung in der Gegenwart*. Zweites Buch. *Geschichte des Materialismus seit Kant* (9th ed.). Leipzig: Friedrich Brandstetter.
- Mill, J. (1869). Analysis of the phenomena of the human mind (New ed.). London: Longmans Green Reader and Dyer.
- Mørch, S. (2004). *Hørup er med*. Copenhagen: Ekstra Bladets Forlag.
- Munk, K. (1947). *Foraaret saa sagte kommer: Erindringer*. Copenhagen: Westermann.
- Pind, J. L. (2008). Guðmundur Finnbogason, “Sympathetic understanding”, and early Icelandic psychology. *History of Psychology*, 11, 75–100.
- Pind, J. L. (2009). An education in psychology: The development of psychology as a field of study at the University of Copenhagen 1850–1950. *Nordic Psychology*, 61, 46–61.
- Politiken. (1905, September 30). En Doktordisputats om Hegel, p. 6.
- Rock, I. (1962). A neglected aspect of the problem of recall: The Høffding function. In J. M. Scher (Ed.), *Theories of the mind* (pp. 645–659). New York: Free Press of Glencoe.
- Rubin, E. (1923). Kroman, Kristian Frederik Vilhelm. In C. Blangstrup (Ed.), *Salmonsens Konversationsleksikon* (2nd ed., Vol. 14, pp. 736–737). Copenhagen: J. H. Schultz Forlagsboghandel.
- Rubin, E. (1932). Erkendelsens Uafsluttedhed som et Grundmotiv hos Høffding *Harald Høffding in memoriam*. *Fire taler holdt paa Harald Høffdings 89 Aars dag 11 marts 1932* (pp. 5–15). Copenhagen: Gyldendalske Boghandel—Nordisk Forlag.
- Rubin, E. (1935, December 12). Ogsaa nogle Nytaarsbetragtninger, *Berlingske Aftenavis*, p. 7.
- Rubin, E. (1940, January 6). En ny bog om Sjæleliv. Anm. af J. Byskov: *Sjælelivet*, *Berlingske Aftenavis*, pp. 7–8.
- Sibbern, F. C. (1819–1828). *Menneskets aandelige Natur og Væsen. Et Udkast til en Psychologie, I–2*. Copenhagen: Paa eget Forlag.
- Sibbern, F. C. (1843). *Psychologie, indledet ved almindelig Biologie i sammentrængt Fremstilling*. Copenhagen: Paa eget Forlag.
- Skrupskelis, I. K., & Berkeley, E. M. (Eds.). (2002). The correspondence of William James (Vol. 10, 1902–March 1905). Charlottesville: University Press of Virginia.
- Sorabji, R. (2004). *Aristotle on memory* (2nd ed.). Chicago: University of Chicago Press.
- Thomsen, A. (1877–1915). *Diaries*. Professor Anton Thomsen papers (NKS 4703, 4°). Copenhagen: Royal Library.
- Thomsen, A. (1905). *Hegel: Udviklingen af hans Filosofi til 1806*. Copenhagen: Nordiske Forfatteres Forlag.
- Thomsen, A. (1908). Harald Høffding som lærer 1883–1908. *Tilskueren*, 717–729.
- Thomsen, V. (1924). Nogle minder fra min studentertid. In E. Rindom (Ed.), *Minder fra Studenterdagene* (pp. 105–118). Copenhagen: G. E. C. Gads Forlag.

- Thomsen, O. B. (1975). *Embedsstudiernes universitet: En undersøgelse af Københavns universitets fundats af 1788 som grundlag for vores nuværende studiestruktur*. Copenhagen: Akademisk Forlag.
- Turgenev, I. (1975). *Fathers and sons (1862)*. (R. Edmonds, Trans.). Harmondsworth: Penguin.
- Warren, H. C. (1921). *A history of the association psychology*. New York: Charles Scribner's Sons.
- Woodworth, R. S. (1932). Robert S. Woodworth. In C. Murchison (Ed.), *A history of psychology in autobiography* (Vol. 2, pp. 359–380). London: Humphrey.

Edgar Rubin and Psychology in Denmark

Figure and Ground

Pind, J.L.

2014, X, 228 p., Hardcover

ISBN: 978-3-319-01061-8