

Psychotechnics in the Netherlands: Uncovering the deeper personality

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ABSTRACT

This paper contributes to the discussion of a “turn towards personality” recognised in the history of psychotechnics, through a microhistorical study that touches on larger disciplinary issues of professionalisation, epistemology, and the nature of (psychological) science. I investigate how two psychotechnical institutes in the Netherlands incorporated personality into their testing in the 1920s and 1930s, in their attempts to uncover the deeper personality of their clients. Paying attention to the social and political context in which these institutes operated, I follow their directors, H. J. F. W. Brugmans and D. J. Van Lennep, who approached the topic of personality from different angles. While Brugmans sought to combine inferences about personality with forms of laboratory and performance testing of psychological functions that were common in the 1920s, Van Lennep employed a broader spectrum of tools, including projection tests and intuitive approaches that gained greater popularity during the 1930s. I argue that while these directors began on a professionally amicable basis, Brugmans later denounced Van Lennep’s testing practices for being non-scientific. In other words he rejected the way how Van Lennep assessed a person’s personality, and, particularly, “character.” This case study invites further exploration of how the desire to analyse personality shaped psychotechnical practice and how interest in testing character, understood here as a person’s motivations and values, fit into the broader societal and political context.

Psicotécnica en los Países Bajos: Descubriendo la personalidad más profunda

RESUMEN

Este artículo contribuye a la historia de la psicotécnica, y más concretamente, al debate sobre el “giro hacia la personalidad”. Usando un enfoque microhistórico aborda cuestiones disciplinares amplias como la profesionalización, la epistemología y la naturaleza de la ciencia (psicológica). La investigación se centra en cómo, en las décadas de 1920 y 1930, dos institutos psicotécnicos de los Países Bajos incorporaron la personalidad en su trabajo diario en un intento por descubrir la “personalidad profunda” de sus pacientes. Tras ubicar estos institutos en el contexto social y político en el que operaban, sigo a sus directores, H. J. F. W. Brugmans y D. J. Van Lennep, en sus diversas formas de abordar la personalidad. Mientras que Brugmans hacía inferencias sobre la personalidad a partir de las mediciones de las funciones psicológicas elementales en el laboratorio (una práctica común en la psicología experimental

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de la década de 1920), Van Lennep empleó un espectro más amplio de herramientas, incluyendo pruebas proyectivas y valoraciones intuitivos que ganaron popularidad durante la década de 1930. Mi investigación muestra que, si bien estos directores comenzaron su relación profesional de forma cordial, Brugmans posteriormente denunció las prácticas psicotécnicas de Van Lennep por considerar que su manera de evaluar la personalidad, y en particular el “carácter” no es científica. Este estudio de caso invita a explorar con mayor profundidad cómo el deseo de analizar la personalidad influyó en la práctica psicotécnica y cómo el interés por evaluar el carácter, entendido aquí como las motivaciones y los valores de una persona, conecta con el contexto social y político de la época.

Introduction

If one had to identify the peak of public interest in psychotechnics in the Netherlands, it would likely be the year 1936, when the Dutch Ministry of Industry and Trade organised the First National Psychotechnical Exposition.¹ Many psychotechnical institutes took part, and the exposition was considered a great success, attracting over a thousand attendees.² However, when invitations went out for another iteration, the organising committee was confronted with an unpleasant surprise: several institutes refused to participate alongside one particular institute. It appeared to be a coordinated boycott.³ Initially, the committee⁴ was hesitant to exclude anyone, arguing that “every quack can only thrive within a carefully curated isolation. Whereas his position within an exact, scientific, and serious company will quickly become untenable.”⁵ In the end, the Second Exposition went ahead without the objectionable institute.

This dispute was not an isolated incident but part of a broader clash of perspectives that had emerged in the late 1920s regarding the role of personality in psychotechnics. It reflected a growing interest in personality among psychologists, psychiatrists, and psychoanalysts. However, the established testing practices were not well suited to the investigation of this new interest. As Van Dael (1938) explained, when attempting to capture a person’s personality, the methods of experimentation commonly employed in psychotechnics seemed to fall short. In other words, the new subject matter required new methodology. Following the Fifth International Psychotechnical Congress in Utrecht in 1928, the necessity of this shift was articulated by one of the attending psychologists:⁶

That is why psychotechnics now needs to start, after its broad investigations, to investigate in greater depth. The *deeper layers of the personality* need to be addressed. Only then will it be possible to improve the diagnosis of the person’s potential, leading to more successful vocational guidance. (De Quay, 1929, p. 9; my emphasis)

This sentiment was also expressed by a group of psychotechnicians⁷ who began to publicly reject the “elementaristic-quantitative approach” that had characterised early psychotechnical practice. They called for a more “holistic approach” that would deal with the individual in their entirety (Van Strien, 1993, p. 77). To achieve this goal, psychotechnicians should no longer be concerned with the superficial testing of independent functions (i.e., the separate “elements”), but rather with gaining insight into the “deeper personality” (Roels, 1928, p. 88).

The first article in this special issue (Mülberger & Vermeij, 2026) has pointed towards this early interest in personality among psychotechnicians, a topic that has already received some attention (see Rabinbach, 1990; Geuter, 1992; Shimmin & Van Strien, 1998; Killen, 2007; Derksen, 2014). This literature addresses quite general and global themes, drawing on German and American authors, such as the transition from natural-scientific methodology towards *geisteswissenschaftliche* approaches, professional development and industry demand, economic crises, and the rejection of Taylorism. These texts explore the notion that this shift towards a more holistic and personality-focused psychotechnics did not occur in a vacuum, but must be understood in the context of broader societal developments. In the history of the Netherlands, Van Strien (1993) and Haas (1995) have characterised it as a shift from “psychotechnics to psychodiagnostics.” However, the existing literature focuses on the changes in *methodology*, while the accompanying change in *subject matter* is marginal to their discussion: the authors do not delve into the specifics or significance of psychotechnicians’ attention to personality.

¹ The First National Psychotechnical Exposition took place in Amersfoort on 18–22 February 1936 (Letter Bijdendijk, 7-1-36).

² Letter (Brugmans, 20-11-1936).

³ Letter marked confidential (Steffelaar, 3-6-1936) from the Dutch Ministry of Trade to Brugmans: “One of the participants in the exhibition in Amersfoort has already informed us that they will withdraw from participation if we invite Utrecht. If you take the same position, we will *not* invite Utrecht.” Emphasis in original.

⁴ The committee’s members were drawn from the Ministry of Industry and Trade as well as the Rotterdam Committee for Pedagogical Lectures (Letter De Kanter, 8-4-1937).

⁵ Letter (De Kanter, 11-6-1936).

⁶ J. E. de Quay (1901–1985) received his doctorate from F. Roels in Utrecht in 1927 and was appointed professor of business administration and psychotechnics at the Catholic Applied University in Tilburg in 1933.

⁷ Vocal advocates included A. A. Grünbaum, appointed special professor (*buitengewoon hoogleraar*) of developmental psychology in Utrecht in 1927 (see Grünbaum, 1928); F. Roels, organizer of the Fifth International Psychotechnical Congress and professor of psychology in Utrecht from 1932; and Ph. Kohnstamm, who was named special professor of pedagogy in Utrecht in 1932 (see Kohnstamm, 1931).

In this paper, I investigate the development of a personality-centred psychotechnics in the Netherlands by examining the boycott mentioned in the introduction, in particular, the two opposing psychotechnical institutes at the heart of the dispute: first, the Dr. D. Bosstichting (Dr. D. Bos Foundation), led by Henri Brugmans (1884–1961), which was the driving force behind the boycott; and their target, the Nederlandse Stichting voor Psychotechniek (NSvP; Dutch Foundation for Psychotechnics) under the direction of David Van Lennep (1896–1982). This conflict has received some historical attention, albeit in a fragmentary manner. Van Strien & Dane (2001) discuss it briefly in their history of the NSvP, and Veldkamp and Van Drunen (1988, p. 10) highlight its significance for the professionalisation of the discipline, noting that it sparked the formation of the Dutch National Association of Psychologists (NIP). I integrate this literature with archival sources to present a more complete picture of this conflict, casting it in a new light. What has not yet been studied, and what I demonstrate in this paper, is how the conflict arose directly from the psychotechnicians' search for the "deeper personality." Thus, this case is helpful for shedding light on the move towards a personality-centred psychotechnics in the Netherlands.

For this purpose, after broadly sketching the Dutch psychotechnical landscape, I discuss how the two clashing psychotechnical institutes incorporated personality into their testing practices. Drawing on original archival sources⁸ and secondary literature, I highlight their particular positions and methodological views. In doing so, I also position the psychotechnicians within the Dutch political context to explicate its relevance to their day-to-day practices. In the final section, I circle back to the boycott to pinpoint exactly what triggered it. This microhistorical approach allows for concrete questions such as: What did these psychotechnicians mean when they wanted to study a "deeper" personality? Why did some psychotechnicians think a shift was necessary, and why did others resist it? And what did the shift mean in practice?

The rise of psychotechnics in the Netherlands

Up to the 1920s, psychology in the Netherlands had been dominated by the natural-scientific, measurement-oriented approach of Gerard Heymans, who had established the country's first psychological laboratory (Dehue, 1995). Internationally, Heymans was one of the first psychologists to conduct experimental research on individual differences, conceptualising these personality characteristics as positioned along three dimensions. This "analytic-descriptive" model of psychology came under criticism from psychologists who preferred the humanistic-holistic approach—the "psychology of expression" (*Ausdruckspsychologie*)—promoted by Wundt's followers in Leipzig, F. Krueger and L. Klages (Geuter, 1980; Lagrou, Merriman, & Winter, 2006). These views became preeminent in the Netherlands throughout the 1940s and 1950s, pushing Heymans' empirical-analytical psychology into the background (Eisenga, 1978). Dehue

(1995) points to Van Lennep from the NSvP as an exemplar of this new approach. However, some psychotechnicians rejected this shift in favour of the "established paths" of experimentation, notably Heymans' student and successor, Brugmans of the Dr. D. Bosstichting.

In addition to these developments in the academic discipline of psychology, it is also helpful to briefly review how psychotechnics arose in the Netherlands. Industrialisation took off relatively late in the Netherlands (Dehue, 1995), but by the 1920s and 1930s, the number of job types was increasing rapidly, and the traditional methods for determining one's career path—by family or social background—were no longer the norm. This triggered a new approach to personnel selection and vocational guidance, and led to the extreme popularity of psychotechnics in this period, which was also apparent in the surrounding countries. Van Strien (1993, p. 72) notes that Stern's broad conception of psychotechnics (including applications in jurisprudence and psychiatry) did not come to fruition in the Netherlands. In this context, the term mainly became synonymous with vocational guidance and selection (Van Strien, 1998).

The Netherlands is geographically located at the crossroads of Germany, the United Kingdom, and France. Dehue (1995, p. 9) argues that the Dutch are traditionally very internationally oriented and that widespread multilingualism facilitated the importation of knowledge and methods. Eisenga (1978, p. 14) observes that many of the important Dutch psychotechnicians studied in Germany, so the strongest intellectual influence on the field came from that direction. Derksen (1999, p. 81) adds that there was no national forum in which psychotechnicians could debate their practices and techniques. Many institutes published their findings in their own in-house publications⁹ or in one of the many popular journals catering to various audiences, some of which were founded in collaboration with psychotechnicians.¹⁰

Between WWI and WWII, pillarization began to shape the Dutch democratic landscape and societal life (Haas, 1995, p. 31). As Bank and Van Buuren (2000, p. 15) explain, the rapid development of science and secularisation that had been supported by liberal governments in the late 19th century met with a strong counterreaction from both Reformed and Catholic circles. Historians typically identify four pillars: Catholic, Protestant, liberal, and socialist. Schools, news outlets, and labour unions began to be organised along these divisions. The development of psychotechnics was also affected by pillarization. Derksen (1999, p. 81–82) points out that Catholic and Protestant readers largely limited themselves to the psychotechnical literature produced within their respective pillars, although psychotechnicians themselves often had greater freedom to converse and debate across political divides. According to Pere (1986, p. 49), in some institutes, vocational guidance was understood to be a matter of Christian upbringing and took on connotations of deep religious belief. Van Strien (1993, p. 83–84) even argues that the critiques of Heymans' earlier psychological model should be understood in light of this

⁸ Located at Special Collections at the University Library of the University of Groningen, Broerstraat 4, 9712 CP Groningen.

⁹ For example, this paper draws from the *Mededeelingen van de Dr. D. Bosstichting* (*Announcements from the Dr. D. Bos Foundation*). Often, university-based psychological laboratories had their own publications, such as the *Mededeelingen uit het Psychologisch Laboratorium der Rijksuniversiteit te Utrecht*.

¹⁰ Two examples are *Aanleg en Beroep* (1925) and *Jeugd en beroep* (1925).

societal change—the growing importance of a confessional discourse that was increasingly incompatible with a natural-scientific outlook.

It is unsurprising that histories of the Netherlands often devote considerable attention to pillarization. However, it should be noted that Kennedy and Zwemer (2010) problematize the term on several levels. Pillarization is often characterised as a uniquely Dutch phenomenon, although the creation of tight communities based on similar political and religious views was certainly a broader pattern across Western Europe and North America (p. 260). The authors also point out that the question of whether the non-religious groupings, such as the liberals and social democrats, can truly be called pillars remains unsettled among historians. Liberals tended to be only loosely organised and did not generally build or belong to pillarised institutions, while some organisations were deliberately “neutral” and rejected any pillarised identity (p. 260).¹¹ These nuances are important to keep in mind for the following discussion and will help situate the first party in our conflict: Brugmans and the Dr. D. Bosstichting.

Brugmans and the Dr. D. Bosstichting

In this case, the institute's name makes evident its political affiliation. The Dr. D. Bosstichting was founded in Groningen in 1920 and named after Dr. Dirk Bos (Brugmans, 1921, p. 3), one of the founders of a progressive party, the Vrijzinnig-Democratische Bond (VDB, Liberal-Democratic Union), which existed from 1901 until 1946 (Klijnsma, 2007, p. 94). This party was among the first to argue for universal suffrage and advocated for the introduction of a state pension, helping lay the foundations for a social-security program. It had liberal roots and was concerned about the effects of unbridled capitalism, seeking to reform it through state intervention (see Klijnsma, 2007). Bos was a passionate and persistent advocate for public education and played an important role in resolving the *schoolstrijd* (p. 95, an episode in Dutch history centred on the question of whether the state was obliged to fund religious education). This *schoolstrijd* is widely recognised as an important, century-spanning episode (Exalto, 2017, p. 7) that gave rise to pillarized societal structures in the Netherlands.

Upon Bos's death in 1916, the Dr. D. Bos-Fonds (Bos-Fund) was established to honour his memory (Brugmans, 1921, p. 3). The fund decided that the best use for its resources was to found a psychotechnical institute (initially referred to more generally as a social-pedagogical institute). In the opening speech of the resulting Dr. D. Bos-Stichting (Bos-Foundation) four years later, the board explained their reasoning as follows:

In the deeds of Dr. Bos lies the explanation of the choice of the board of the Dr. Bos-Fund for the Social-Pedagogical Institute. This institute will be able to extend its activities to the broad field of popular welfare and development. It puts itself at the service of the study of social questions of the first rank. [...] The questions surrounding labour, seen from the point of view of both workers and employers, present numerous topics for

investigation which have not yet been studied, or hardly been studied at all. (*Algemeen Handelsblad*, 4-12-1920)

The institute's goal was thus formulated as the investigation of questions about labour, in pursuit of the common good.

The institute intended to “promote the social and pedagogical cause, for all of society—regardless of religion and beliefs” (Brugmans, 1921, p. 6). It is worth pointing out this explicit intention to act as a “neutral” institution, rising above the pillarising tendencies that were shaping Dutch society. Indeed, Brugmans worked with Christian schools and even took on a prominent member of the Reformed political party as a volunteer assistant. About the latter, Brugmans was pleased to observe that his “political and religious convictions did not yield objections to participating in the activities of the Dr. D. Bos-Stichting.”¹² Brugmans went on to remark that he had “not experienced [the assistant's] political religious convictions as a barrier.” These reservations about the political (in)compatibility of an assistant from the Protestant party underscore the apparent assumption that such convictions could be a potential barrier to the day-to-day psychotechnical practice of a “neutral” institute.

As mentioned above, Brugmans had been a student of Heymans and an assistant in his laboratory (Draaisma et al., 1983, p. 19), before gaining a position as lector in pedagogy at Groningen University in 1919. His studies with Claparède and Stern in 1913 prepared him well for his role as psychotechnical director (Ten Have, 1961, p. 174), which the Bos-Fund offered him in 1920. Historians of Dutch psychology have often characterised Brugmans as a loyal follower of Heymans' natural-scientific approach (Draaisma, 1992, p. 24). This fits well with the Fund's announcement that the Dr. D. Bos Stichting would be first and foremost a laboratory that would investigate scientific questions relating to labour. Given the Stichting's social function, it was not run as a for-profit business. Its fees were based not on the costs of the research, but on the extent to which the services corresponded with the mission of social welfare. Archival documents show that, in effect, this meant that potentially profitable research contracts were sometimes refused because they conflicted with the institute's social aims.¹³ Other socially beneficial investigations were carried out despite the financial burden on the institute,¹⁴ while individual advice was often provided for free.¹⁵

Brugmans' approach to vocational testing

The initial tests that Brugmans conducted primarily measured psycho-physiological qualities such as visual acuity, reaction speed, and motor skills (Van Strien & Dane, 2001, p. 48). For these, he used

¹² Brugmans' letter to Groenewegen (22-10-1925).

¹³ Report of activities June 1926 – February 1927.

¹⁴ Report of activities April 1925 – June 1926: “Cooperation of the Bos Foundation in the [...] investigation concerning chauffeurs has required us a lot of time and also financial sacrifices. [...] Although the Bos Foundation could not break even in this work, I accepted the request in light of the great social significance of the research.”

¹⁵ Letter containing the results of an individual assessment (Brugmans, 9-12-1925): “As for the costs, we will not charge you anything.”

¹¹ The Dr. D. Bosstichting could be seen as an example of these.

traditional laboratory equipment, such as the chronometer and tachistoscope. With the introduction of the Binet-Simon test and Stern's popularisation of the "IQ," the intelligence test also became an indispensable part of Brugmans' analyses (Van Strien, 1993, p. 77). In addition, he devised some tests of his own. For example, when developing a procedure to test chauffeurs, he tried (and failed) to introduce "distracting stimuli" using a hair dryer,¹⁶ and his investigation of employees at a machine factory included sorting screws by thickness (Brugmans & Prak, 1926). Thus, his preference was for performance-based tests, in which the participant's goal was to provide the correct answers and score as highly as possible. Brugmans explained in his public lectures that he would pick and choose the tests he deemed useful and revealed how he made those selections for each battery of tests (Brugmans, 1939, p. 74). While this method of composition was somewhat "eclectic," he did emphasise the need to establish the validity of the tests and items used, dismissing procedures whose applicability and accuracy could not be verified.

Brugmans' procedures were strongly reliant on statistics. When a company invited him to analyse a range of jobs, as he explained in his *Mededeelingen* (Announcements), Brugmans insisted on producing a *bedrijfsoordeel* (company assessment) as a starting point (Brugmans, 1937, p. 23). This entailed selecting an assortment of high- and low-performing workers, who would then be ranked by several different workplace managers, teachers, and, if possible, any examinations already conducted. For example, if the company used an admissions test or graded their apprentices, these scores would be taken into account. If the rankings were consistent across the assessments, this would provide a satisfactory basis for the research. In the following steps, Brugmans would assess which tests correlated highly with the *bedrijfsoordeel* and which indicators seemed most important for the assessment of their workers. In other words, he sought to isolate the specific "elements" of performance that the data suggested led to greater performance in the particular workplace. Subsequently, he would develop customised selection tests, typically focused on the jobs that were important to the company in question (Brugmans & Prak, 1926).

Brugmans' definition of personality

In addition to performance tests, Brugmans also emphasised the importance of assessing personality for vocational guidance and adapted his procedures accordingly. However, he never adopted the holistic approaches that were growing more popular and believed there were serious limitations as to which parts of the personality could reliably be tested. Brugmans distinguished between two components: temperament and character.¹⁷ He explained that temperament is

the "outward-facing" part of the personality, concerned with how a person reacts to their environment; for example, whether someone tends to be impulsive or contemplative when faced with a decision (Brugmans, 1939, p. 85). Although no instruments could evaluate it directly, it could be addressed systematically and scientifically through tests designed for other purposes.

If temperament referred to how a person tended to act, then character was concerned with why. Brugmans provided two short definitions: "The 'character' can be described in Klages' terminology as a composite of motivations, or in Heymans' terminology as a relative strength of tendencies or drives [*sterkteverhouding van neigingen*]. This composition of motives is what drives all of our actions" (Brugmans, 1939, p. 85). Thus, the "core" of the personality, the character, refers to the motivations that drive a person to act. Brugmans argued that while temperament can be assayed, character is much more complicated to capture reliably, because it is "hidden" from outside view. A psychotechnician would need to rely entirely on his intuition rather than on measurable results (Brugmans, 1939, p. 91). Therefore, for Brugmans, character cannot be assessed because exact measurements should always form the basis for psychotechnical advice (Brugmans, 1939, p. 92).

How Brugmans tested temperament

Throughout the 1930s, Brugmans inferred temperamental qualities from patterns of accuracy and speed during performance tests. For this, as he explained in a public lecture (Brugmans, 1939, p. 77), the Bourdon-Wiersma test for attention was especially suitable. This test consisted of rows of dots that had to be crossed out or skipped according to the number of dots that appeared. In this simple yet tedious task, the ability to maintain concentration could reveal a lot about someone's temperamental makeup. Brugmans outlines how the results could inform such a judgement, providing an example from his practice:

Here, I show you the typical curve of the nervous temperament: starting quick, regular, and faultless; then later, he becomes slower, irregular, and less precise; at the end, it gets better again. The pupil is a 15-year-old high school student.

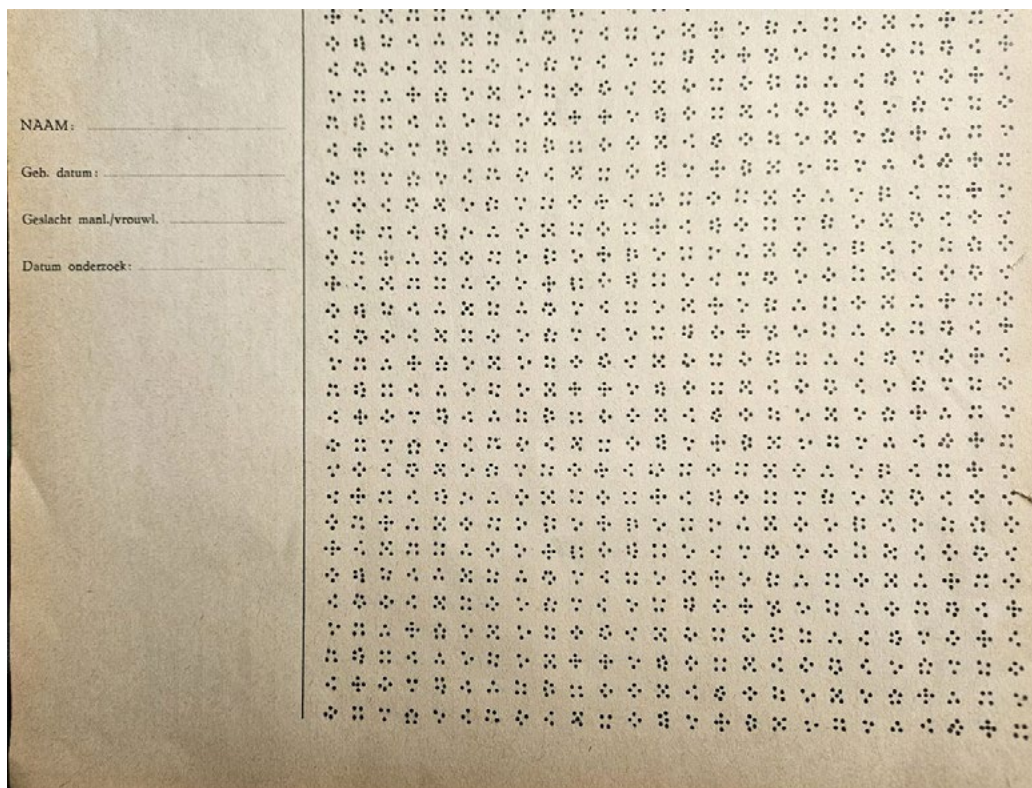
He starts working quickly, gives it everything he has got—all his energy, but he cannot maintain this pace. He continues to exert himself, but the energy slackens; now and then, he breaks down; he grows restless, impatient. Only the extra impulse of being nearly at the end of the task will again invigorate him somewhat.

We can see that the first paragraph of Brugmans' description focuses solely on the performance metrics of speed and precision. However, in the second paragraph, he introduces a more qualitative type of description and interpretation. Here, Brugmans interprets the data, identifying particular patterns with temperamental qualities such as impatience. Brugmans' manner of observation does resemble the "holistic" conceptions of the personality curve discussed in the third article by Mülberger (2026) in this issue, although it was still far removed from the approach of Van Lennep and his institute.

¹⁶ Letter (Brugmans, 20-3-1925): "The hair dryer was purchased in connection with reaction tests on drivers where disturbing stimuli are introduced. [...] In the meantime, it appears the device has insufficient capacity to achieve the intended effect. So it is an expense for the Bos Foundation, although redundant, as it turns out, in connection with the intended purpose. [...] We now use the hair dryer on occasion for the speedy drying of negatives."

¹⁷ This way of defining personality was quite common at the time, although there were also competing conceptualizations, such as Allport's personality made up of traits.

Figure 1. The Bourdon-Wiersma test, photographed from the ADNG collection at the University of Groningen.



Brugmans characterises the student's pattern of output as typical for the nervous type, referring to the temperamental typology developed by Heymans (Vermeij & Vroomen, 2023). This typology, firmly grounded in empirical investigations, enabled Brugmans to operationalise temperament in his individual assessments.

In summary, Brugmans was undoubtedly looking for ways to incorporate personality into his assessments, though only within the bounds that Heymans had established. The institute's social nature and aims, as set out in its founding documents, stipulated "laboratory"-oriented testing practices, which accorded with the views of its director. However, this natural-scientific approach imposed restrictions on the methods available to assess personality. While temperament could be studied through the use of performance metrics, Brugmans deemed character to be inaccessible due to a lack of verifiable methods. Brugmans refused to abandon his metrics and rely solely on intuition to reach this "deeper personality," a view shared among early psychotechnicians in the Netherlands.¹⁸ However, towards the turn of the decade, other psychotechnicians increasingly began to argue for the importance of intuition in their work (Derksen, 1999, pp. 96–97). Derksen notes that the concept of "intuition" used in these arguments was often used interchangeably with "*mensenkennis*" (people skills) and remained notoriously ambiguous,

sometimes referring to a unique or innate talent and at other times to a common skill that could be learned (p. 99). We now turn to the institute that favoured a more intuitive approach and was ultimately targeted by the boycott.

Van Lennep and the Nederlandse Stichting voor Psychotechniek

D. J. Van Lennep (1896–1982) was a *jonkheer* (nobleman) from a Protestant family. Expected to follow in his father's footsteps as a minister, he studied theology in Groningen, but his interests quickly shifted toward psychology (Van Strien & Dane, 2001, p. 36). Thus, Van Lennep also attended Heymans' lectures, but this vision of psychology did not appeal to him. At the age of 23, he took an internship in the laboratory of the psychiatrist Jelgersma in Leiden, and spent time at the Valeriuskliniek of the Free University in Amsterdam with Rümke. When the municipality of Utrecht established a Bureau voor Beroepskeuze (Vocational Guidance Centre) in 1924, Van Lennep was hired as its director. After a few years, the strong dependence on an uncooperative municipality began to limit the Bureau's activities, prompting Van Lennep to found his own independent psychotechnical institute, the Utrechtse Stichting voor Psychotechniek (Utrecht Foundation for Psychotechnics). Initially, Van Lennep held a double role as director of both the Bureau and the Stichting, until the Bureau was eventually closed in 1934 (Van Strien & Dane, 2001, p. 28).

While the Bureau mainly provided vocational guidance (with testing focused on an individual's skills and competencies), the Stichting also handled personnel selection (oriented towards the requirements of a

¹⁸ Among the Dutch psychotechnicians who remained sceptical of intuition as a basis for psychotechnical advice and allied themselves with Brugmans in the boycott were: G. Revész, appointed extraordinary professor of psychology at the University of Amsterdam in 1932, and R. Biegel, founder and director of the Psychotechnical Laboratory of the National Postal Office in The Hague from 1933.

specific employer or company). In contrast to the more common focus on lower-level factory workers, the Stichting specialised in selecting for “higher-level” occupations such as engineers and managers (Van Strien & Dane, p. 27). It thus catered to an upper-class clientele, in line with Van Lennep’s own noble background. This approach was not only distinct from most of the psychotechnical institutes in the Netherlands, but especially incongruous with the Dr. D. Bos-Stichting’s social mission.

When Van Lennep outlined the approach of his institute in the popular journal *Maatschappij-Belangen*, he gave it the title: “De beoordeling van het Karakter” (“The evaluation of the character”). He opened the article by describing the recent shift that had taken place in the field of psychotechnics:

Even psychotechnics has experienced how difficult it is to change one’s reputation. To this day, arguments are being made against the use of psychotechnics based on the assumption that temperament and character are not included in the examination. [...] At present, however, the factors

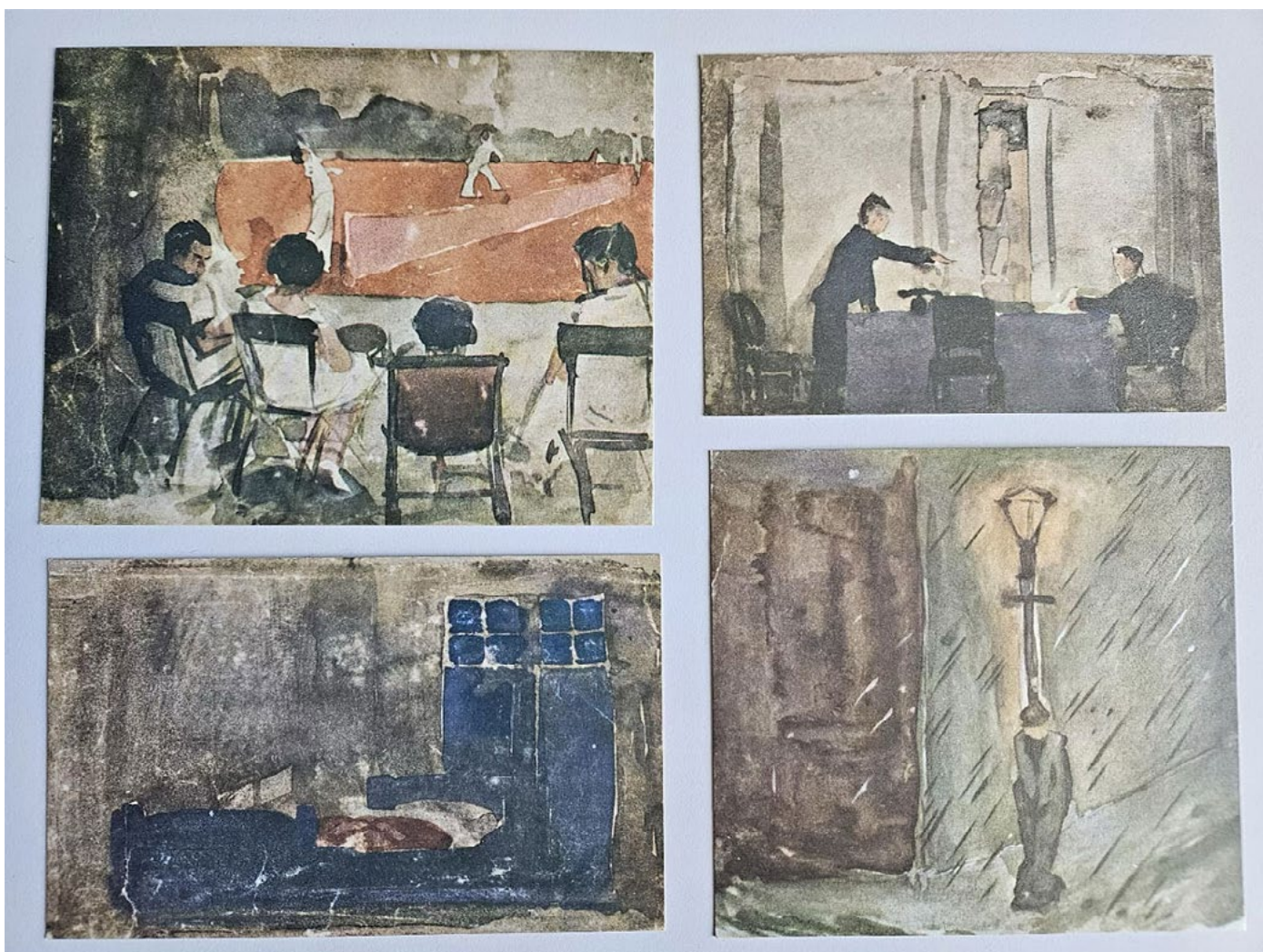
of temperament and character are emphasised in modern psychotechnical research.¹⁹

This passage indicates that Van Lennep placed considerable weight on personality in psychotechnical research, describing it as part of a general trend. As such, their respective publications reveal that Brugmans and Van Lennep had similar missions. Both engaged in this effort to promote psychotechnics to the public, showcasing its utility in general and the significance of personality in particular.

However, the two directors held different views on how psychotechnicians should best be trained. When Van Lennep received his psychology degree in 1943, it was only after more than 15 years of experience in the field of psychotechnics. Increasingly throughout

¹⁹ He continues (Van Lennep, 1936, p. 17): “How could it be otherwise. After all, a simple analysis [...] already shows that in these professions it is not primarily a question of a certain talent in the narrow sense, but that success depends on character traits, or if you will, on the entire structure of the personality.”

Figure 2. *Four Picture Test* by Van Lennep, photographed from the ADNG collection at the University of Groningen.



the 1930s, most other psychotechnicians emphasised that the work should only be undertaken by academically trained psychologists. In contrast, Van Lennep preferred professionals who had experience working in the field of employment that they would analyse, and then received practical psychological training at the Stichting (Veldkamp & Van Drunen, 1988, pp. 9–10). In popular journals, he argued that being a good judge of character was much more important than knowledge of experimental procedures (Van Lennep, 1936, p. 18).

Van Lennep's approach to vocational testing

Van Lennep's focus on "high-level" vocations impacted the testing practices he employed. As Geuter (1992, p. 93) has pointed out, workers performing simple tasks could usually be selected through classical methods of performance testing, whereas characterological methods were more common for leadership positions. This specialisation, therefore, had two implications for the type of evaluations. In the first place, the group testing used in classical performance-based methods was not well-suited to evaluating leadership capabilities, so individual research became the defining approach for the Stichting. In turn, these individual tests allowed more room for personality to take centre stage.

Van Lennep made use of a wide variety of tests, including the typical pen-and-paper tests and apparatus tests common in other psychotechnical institutes. However, the performance results were deemed less important; rather, the test was mainly used to observe *how* the participant completed it (e.g., hesitant, tense, or focused). Van Lennep soon moved away from using apparatus, as he felt they did not meet the expectations of exact measurement that the equipment invoked in his staff and clientele. He rather encouraged his staff to invent their own tests (Van Strien & Dane, 2001, p. 56). After all, he explained, "the psychological test situation is no longer an answering of impersonal questions, but an encounter between one person and another" (Van Lennep, 1949, p. 14), and the test was only an aid to systematically observe and understand the participant. The most important instrument, Van Lennep often proclaimed, was the psychotechnician himself.

Van Lennep invented various tests, one of which became one of the most popular tests produced in the Netherlands (Van Strien, 1993, p. 78). In 1930, he developed the *Vier Platen Test* (Four Pictures Test), a projective test that involved four images painted by Van Lennep himself, each depicting an ambiguous scene. Participants were invited to write a story that included all four images. In his manual, Van Lennep explained that "The process [of analysis] consists of interpreting the elements in the story by all the means available from clinical experience, theoretical knowledge, and psychological intuition. [...] One should try to arrive at a deeper dimension of his personality" (Van Lennep, 1948, pp. 7–8). Van Lennep places a clear emphasis on the psychotechnician's tacit knowledge, experiences, and intuition to reach into the "deeper personality." He also applied graphology in his characterological analysis, maintaining that handwriting was informative, as were the movements that produced it. Therefore, he developed a device in order to more closely study the process of writing, which consisted of a sound-sensitive surface

(like a drum) through which the psychotechnician was able to hear what the writing sounded like (as if through a stethoscope; Van Strien & Dane, 2001, p. 54). Briefly put, whereas Brugmans primarily used performance tests and the resulting metrics, Van Lennep favoured a wider variety of methods, such as observation, projection tests, and graphology, relying on a more qualitative assessment of performance.

While different from Brugmans and his quantitative methods, Van Lennep also wanted to promote psychotechnics to the public as a reliable method. However, his understanding of what constituted a "systematic" approach to testing differed greatly from that of Brugmans, who emphasised experimental validation. For Van Lennep, only information independently confirmed by multiple observers and methods could be included in a characterological report.²⁰ This was a rather unique requirement, especially given that individual testing by a single psychologist was already relatively expensive.²¹ Therefore, using multiple trained observers for a single report was extremely uncommon, and the fact that Van Lennep was able to maintain this standard suggests that his institute was financially well-off. Indeed, Van Lennep was often approached by interested individuals who would become long-term collaborators and help him establish good business connections. The Stichting soon became the most successful psychotechnical institute in the Netherlands, as reflected in the addition of "*Nederlandse*" to its name in 1930.²²

In 1934, Van Lennep's institute caused outrage in the press for using an unconventional assessment method. In a brochure, Van Lennep wrote that, in addition to graphology and physiognomy, they also employed astrology in their characterological analyses (Van Strien & Dane, 2001, p. 30). His public proclamation that it was "perfectly evident" that there is a connection between the starry sky and life on earth" was met with a flood of news coverage. National newspapers such as the *Haagse Post* and *Telegraaf* condemned this unscientific approach with titles such as "Verdwaasde Sterrenwichelarij" ("Misplaced Star Divination") and "Voortwoekerend Kwaad" ("Propagating Evil"), accompanied by caricatures of psychotechnicians wearing magicians' hats. In response, Van Lennep explained that astrological readings were used only to complement and compare with results obtained through other types of observations (Van Lennep, 1935, p. 14). According to Bunjes (2025), Van Lennep's pursuit of a doctorate in psychology during the following decade can be interpreted as a reaction to the accusations of unscientific conduct during this affair.

Despite the public criticism, Van Lennep's institute would continue to include astrology among its diagnostic methods. Van Strien & Dane (2001, p. 31) observe that, while one might expect the critical press

²⁰ "Therefore, an institution where people are regularly assessed will preferably adhere to the principle that every subject must be assessed by more than one experimenter, sometimes more than two or more than three, and in some cases more than five. The chance that someone will be assessed homogeneously by multiple experimenters is immeasurably smaller than when only one experimenter is involved" (Van Lennep, 1949, p. 17).

²¹ "Where observation is conducted, it should be performed by an experienced psychologist. This makes the observation costly—too costly for professions where the testing per person examined should not be too expensive" (Biegel, 1936, p. 73).

²² As well as the fact that, while other psychotechnical institutes soon closed or were renamed after World War II, the NSvP still operates under this name today.

coverage to have tarnished the institute's reputation, the opposite appears to have been the case. For many companies, the public attention on the astrology debacle seems to have only made the institute and its services more visible and attractive; for example, the KLM (Dutch Royal Airlines) was secured as a client in 1935. The success of the Nederlandse Stichting voor Psychotechniek quickly surpassed that of the Dr. D. Bosstichting in its numbers of both clients and personnel (p. 65). The central location of Utrecht was certainly more favourable than the remote Groningen, which may have been relevant. However, the contrast between the economic viability of the two institutes is difficult to overstate. As Bootsman and Haas (1990) note, the Dr. D. Bosstichting, dependent on the waning support of the Bos-Fund, was financially in a poor state during the 1930s. Brugmans, since his appointment as professor of psychology in 1928, had served as an unpaid director with only one part-time assistant until the Stichting closed in 1938—a stark contrast to Van Lennep's 22-person staff in 1939. We can only speculate as to how much these asymmetric levels of success influenced the conflict between the two institutes, which is discussed in the final section of this analysis.

The Conflict

The relationship between Brugmans and Van Lennep appears to have started on amicable terms. In the mid-1920s, they had pursued the same mission: to “sell” psychotechnics to the public. Brugmans' accounts to the Bos-Fund even note that Van Lennep approached Brugmans in this period, asking for help in establishing national guidelines for psychotechnical practice.²³ Moreover, based on their publications, it is clear that both agreed that personality was important and that temperament could reliably be captured. They also appear to have worked with similar definitions of personality, temperament, and character. Both took Klages as a reference point in their definitions of character (see also Van Lennep, 1936, p. 18), and they followed the same lectures from Heymans (1929), who defined it as the collection of a person's drives or motives (*drijfveren/neigingen*).

It was on the practicalities of testing character that differences of opinion started to arise. While Van Lennep focused his attention on character, Brugmans maintained that it was inaccessible to the psychotechnician. Their early correspondence offers insight into Brugmans' views and doubts about the feasibility of testing this aspect of personality. Already in 1925, he wrote to Van Lennep:

In giving this part [psychotechnical analysis of companies] more weight than you probably do, I do not overlook the fact that the propensity [*neigingen*] for the profession is of the greatest significance, both for the individual and, finally, for society. I am very curious what method you are using to find out about propensities in a systematic way, and to compare the manifesting tendencies [*neigingen*] with the character of the individual and the nature of the profession in question.

After agreeing on the importance of the character and wondering how Van Lennep was planning to assess it, he presented his own stance:

In the midst of my other work, however, I feel an obligation to confine myself to the occasional analysis of a company. This is not out of disregard for the other problems, but due to lack of time, and also perhaps because I find this other thing too complicated. What you bring up may not escape intuition in diagnosis, but as far as I can see, for the time being it will escape scientific treatment in general form. (Letter to Brugmans, 22-12-1925)

In response to Van Lennep's suggestion to include character in psychotechnical assessments, Brugmans expressed doubt about the possibility of a “scientific treatment” of the topic, citing the need to rely on intuition. This strongly resembles the view he expressed in his lectures 14 years later, namely, that character is only accessible intuitively and not scientifically (see “Brugmans' definition of personality,” above). However, this letter also shows that Brugmans' position on character was ambivalent. On the one hand, he stressed the importance of assessing character for individuals as well as for society, but on the other hand, he questioned whether a systematic and scientific approach to testing it was attainable. Furthermore, he noted that the considerable resources required for this type of investigation were not available to him (“lack of time”), while also admitting to finding the issue “too complicated”: it might be accessible through intuition, but not through science. The exchange is helpful in setting the stage for the conflict to come. This letter shows that the two psychotechnicians had some contact and that the issue of testing personality was on their minds at least as early as 1925. At the same time, their different views were already apparent, but these did not stand in the way of a polite exchange of ideas.

By the time the conflict occurred one decade later, their relationship had changed. The First National Psychotechnical Exhibition, organised by the Ministry of Industry and Trade in 1936, was an enormous success and attracted broad public interest. However, when the organising committee invited Brugmans back the following year, he responded with a firm rejection. After further inquiries, Brugmans confidentially informed the organiser of his reasons:

From the letter, which I received from Mr. De Jeu, I saw that the Psychotechnical Laboratory in Utrecht will be invited. I suppose that this refers to the Nederlandsche Stichting voor Psychotechniek in Utrecht. If this assumption is correct, then this invitation will present your Committee with difficulties regarding other invitations. The leaders of this Institute are not doctors of psychology, nor are they doctors of psychiatry. This lack of official competence is made to weigh heavily by the fact that they have compromised themselves by including astrology in their psycho-diagnostic work. I, too, find this irresponsible, because there has been no publication of any research by them concerning astrology, research which should have preceded its application [in practice]. They will be working based on personal impressions, which already gives them a weak methodological basis [...]. I have reasons to be convinced that if the Bos-Stichting were to participate

²³ Report of activities April 1925–June 1926: “Information provided [...] to Mr. Van Lennep, Director of the Bureau voor Beroepskeuze in Utrecht, in connection with a central national regulation of psychotechnical requirements for vocational guidance.”

in an exhibition in which the Utrecht Institute was also participating, this would be interpreted as an endorsement by me, suggesting that I recognise the leaders of this Institute as fully-fledged psychologists. This I must prevent. (Letter to de Kanter, 9-6-1936)

Not only did Brugmans seek to distance himself from Van Lennep's work by avoiding the 1937 exhibition, but he furthermore proclaimed that he would not participate in any future psychotechnical events to which Van Lennep or his institute were invited. Brugmans did not want to endorse the way psychotechnics was practised at the Utrecht institute, because he felt that the work carried out there did not accord with prevailing scientific standards. In a later letter (Brugmans, 27-7-1936), Brugmans explained that the "boycott" of Van Lennep's institute was coordinated with other invited psychotechnicians. In response, the organisation put the exposition plans for 1937 on hold and decided to organise it the following year, with Brugmans on the organising committee (De Kanter's letter to Brugmans, 8-4-1937).

Brugmans' objections here are the same as those in his letter to Van Lennep 11 years earlier. Brugmans had expressed doubts about how Van Lennep would assess character in a reliable manner, and now complained that the validity of the latter's methods had not been confirmed in publication prior to being used in practice. As in the earlier letter, Brugmans again dismissed personal impressions as a sound basis for psychotechnical advice, and additionally pointed out that Van Lennep was running his institute without a proper degree.

This incident would have long-term consequences, shaping the professional landscape of psychology in the Netherlands. Together with his allies in the boycott, Brugmans founded the Dutch National Association of Psychologists (NIP) one year later. On 26 September 1938, the members assembled for the first time, with the aim of ensuring that the public would not fall victim to charlatanism (Veldkamp & Van Drunen, 1988, p. 10). Brugmans was elected president and held the position until his retirement in 1954. Given the society's *raison d'être*, it comes as no surprise that when Van Lennep applied for membership, he was quickly denied (p. 12). Van Lennep, in his effort to understand the character and reach into the "deeper personality," had crossed the lines of scientific acceptability and suffered academic excommunication.

Conclusion

This paper has analysed how two Dutch psychotechnical institutes incorporated personality into their daily practice, offering insight into two divergent approaches. There was, however, some common ground. Brugmans and Van Lennep shared a similar understanding of personality, following Heymans and Klages, and stressed its importance. They also agreed that, while there was no test specifically designed for it, a person's temperament could be reliably assessed from observations. It was considered the "outward-facing" part of the personality, involving an individual's responses to situations or stimuli. In other words, it dealt with characteristics that could be directly observed and were difficult or unlikely to be feigned. The methods of observation differed between the institutes, though:

Van Lennep emphasised intuition and personal connection, while Brugmans's analysis focused on data from performance-based tests.

A more fundamental difference between the two institutes was that assessing the temperament was not enough for Van Lennep, who maintained that "one should try to arrive at a deeper dimension of personality" (Van Lennep, 1948, p. 7). This seems to refer to what Brugmans identified as the "inward-facing" or "core" part of the personality. Answering the primary question of this paper, what this "deeper" personality referred to, my analysis of the sources suggests that it refers to "character," which was often described as the complement of temperament within the personality.²⁴ The metaphors that both directors used to describe these counterparts—the surface and the depths, outward and inward—show a considerable overlap. Although they are not entirely identical, both indicate the overt and hidden nature of temperament and character, respectively, with the surface–depths metaphor invoking the iceberg image often associated with psychoanalysis. Another important similarity is the notion of character as the subject of moral judgment, which both Van Lennep²⁵ and Brugmans endorse, in accordance with Heymans' (1914) work. It concerns someone's values, work ethic, and motivations. This helps to explain why Van Lennep deemed it an essential component in evaluations for leadership positions (*hoogere beroepen*), in which his institute specialised.²⁶ In contrast, Brugmans found the topic "too complicated" for his natural-scientific framework. While Brugmans maintained that the character was inaccessible to the psychotechnician due to the lack of objective, verified methods, Van Lennep pursued it by using diverse observers and techniques, ranging from the more typical apparatus and pencil tests to physiognomy, projection, graphology, and—to the dismay of other directors—even astrology. The topic was important enough to cause conflict between the two directors and was the primary focus of some of Van Lennep's public speeches promoting his institute. Judging from the institute's success, he may have played into a considerable public interest in this topic.

This case thus offers insight into the international turn towards character testing (Baumgarten, 1941). Van Lennep's views and practices, and by extension those expressed by the broader "holistic" movement in the Netherlands, were in line with Geuter's (1992, p. 89) statement that "talk was of the totality of the individual and the need for diagnostics of the entire personality [...]. The limits imposed by classical experimental psychology, whose concentration on basic psychological functions had been appropriate for psychotechnical diagnostics, were no longer accepted." At the same time, however, this Dutch case nuances this finding by showing that some psychotechnicians did, in fact, reject the notion that a

²⁴ For example, during the Fifth International Psychotechnical Congress, one of the three main sections was dedicated to the topic of "Temperament and Character"; see De Quay (1928).

²⁵ "The word character [...] indicates a person's moral will to determine their actions by a constant scale of values" (Van Lennep, 1936, p. 18).

²⁶ For example, in the following description that concludes a longer characterological report, Van Lennep (1936, p. 19) recommends the candidate for a leadership position based on his "honest character": "The impression he gives is one of absolute honesty, but he certainly possesses the ability to deceive. One could say that the instrument for dishonesty is present, but that the person himself is unwilling to use it, his entire character ultimately being too generous. We can certainly recommend him as an organiser and especially as a manager of staff."

focus on personality necessitated rejecting classical experimental psychology. Instead, they sought to combine the testing of basic psychological functions with inferences about personality. Brugmans' efforts to incorporate personality were limited to the temperament and the experimental approach. While Van Lennep's institute enjoyed considerably greater public interest and clientele, the boycott illustrates that professional psychotechnical opinion in the Netherlands remained decidedly in Brugmans' favour.

In line with the broader themes of this special issue, this story raises the question of what suddenly made character so important, and how this desire related, if at all, to the particular political developments of the time. Geuter (1992, p. 105) points out that descriptions of character were used to render a value judgment about examinees, and writes: "In my opinion [...] psychologists were affected by military ideals and the military concept of the individual." However, Heymans had been concerned with values and ethics since the 1880s and was vehemently opposed to war (Van Raalten, 1983). In the Dutch context, the pillarized societal structures might have played a role, though their influence is not as clear-cut in this case as histories of the Netherlands often suggest. The mission statement of Brugmans' institute defied the pillarized structures, and Van Lennep was not as outspoken about his religious beliefs as one might expect.

Rather than offering definitive answers, I hope this paper will help open the conversation about the role of personality in psychotechnics. This study is certainly limited, and there are still concepts and connotations that would benefit from a more informed and in-depth study. Although I believe my paper has captured both extremes of the psychotechnical spectrum in the methodological sense, the institutes in this case study do not necessarily offer a representative picture of psychotechnics internationally, or even of psychotechnics in the Netherlands. My access to the archival records of the Dr. D. Bosstichting has allowed me to provide a more detailed insight into its workings, with public lectures and brochures, as well as private correspondence, that shed light on its relationship with the Nederlandse Stichting voor Psychotechniek. When dealing with the latter institute, I have focused exclusively on its director, using Van Lennep's own publications, together with investigations of his work by others. This case study invites exploration of how personality shaped psychotechnical practice elsewhere, as the question of how this field of interest fits into broader societal and political contexts warrants further investigation.

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