

## THE HISTORY OF PSYCHOLOGY IN YUGOSLAVIA: AN OVERVIEW

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The development of psychology in the country formerly known as Yugoslavia reflects different paths in the three republics of Croatia, Serbia, and Slovenia due to their distinct cultural and historical backgrounds. The establishment of psychology in academe and experimental work between the two World Wars were initiated by Yugoslavia students who were educated in prestigious laboratories in the West—Austria, England, and Germany. Immediately after World War II Yugoslavian psychology was influenced by Soviet rule, but when Tito refused to be dominated by Stalin, and with the aid of the West, developed a unique nonaligned and non-dogmatic form of communism, Yugoslavian psychology grew rapidly, providing contributions to diverse and primarily applied fields. A view of the history of psychology in Yugoslavia contributes to an understanding of developments in psychology in similar countries, particularly those whose political and economic progress has been largely controlled by a one-party communist system.

Yugoslavia, a patchwork-country in the Balkans put together in 1918 survived many difficult times, wars, different occupying forces, and unjust political regimes. However, unable to find a peaceful way out of the post-communist labyrinth of nationalist ideology and territorial appetites, it is undergoing a process of bloody disintegration. The differences among the constituent republics of former Yugoslavia are primarily due to their distinct cultural and historical backgrounds. While the southern part of the country (principally Serbia) was a part of the Ottoman Empire for almost five hundred years, the northern republics (Slovenia and Croatia) were dominated by the Austro-Hungarian and Venetian Empires. The modest but promising development of scientific psychology after WWI was arrested by WWII, and then severely restricted by the subsequent Marxist regime. Under Tito's liberal form of communism, Yugoslavian psychology has nevertheless evolved into a respectable, primarily applied science.

Being thus seriously disadvantaged in its development by the restrictive political context for the past 50 years, Yugoslavia did not contribute any major theories or important schools of psychology. In short, Yugoslavian psychology probably epitomizes development of psychology in a number of small developing countries, especially the ones whose political and economic progress has been stalled and largely controlled by a one-party communist system.

Due to their distinct cultural and historical backgrounds, the early development of psychology took independent paths in Croatia, Serbia and Slovenia which will be described separately and in turn.

### CROATIA

During the Renaissance, Croatian writers and Latinists published numerous essays, tracts, and discourses on psychological topics including, among others, the mid-fifteenth century works of Juraj Dalmatinac's "De Animae Potentiis," and Juraj Dragićić's "De Animae Regni Principe."<sup>1</sup> A Croatian philosopher, Marko Marulic (Marcus Marulus, 1450–1542) has been credited with the introduction of the term "psychology"<sup>2</sup> about 1517 in his treatise "Psichiologia de Rationae Animae Humanae, lib 1."<sup>3</sup>

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The earliest book on psychology in the Croatian language was written by Stjepan Basaricek in 1877, based on a series of lectures given at Zagreb University.<sup>4</sup> At that time, as was common elsewhere, psychology was taught as a part of philosophy. It was not until 1920 that psychology as an experimental, objective discipline would appear in Yugoslavia under the direction of Ramiro Bujas (1879-1959).

### *The Bujas School*

Bujas studied philology, literature, and psychology at the University of Graz, Austria with Alexius Meinong (1833-1920), a student of Franz Brentano who, although not an experimenter himself, founded the first psychological laboratory in Austria in 1892.<sup>5</sup>

Several years after receiving his Doctor of Philosophy degree from the University of Graz, Bujas enrolled in the Zagreb School of Medicine where he became an assistant professor in the Physiology Department and in 1920 founded the first psychological laboratory in the Balkans. He is also credited with founding a psychological library that subscribed to most of the major psychological journals at the time.<sup>6</sup> The only other psychological literature readily available was primarily self-help and pseudoscientific material.

Bujas became chairman of psychology at the High Pedagogical School in Zagreb and founded the Psychological Institute in 1922 where experimental activity replaced the prescientific era of psychology in Croatia. In 1929 he became chairman of the newly established Psychology Department at the University of Zagreb.<sup>7</sup> This marked the end of psychology as an ancilla philosophiae in the Croatian academic curriculum. Having shed the idealistic, introspective influence of Meinong's school of psychology, Bujas established psychology as a natural science in Yugoslavia.

It was not easy for Bujas to bring about this change, as the prevailing views of "psychology" during the period between the two World Wars included religious philosophy, commercial parapsychology, hypnosis, and similar emphases; the importance of psychology as an empirical science was refuted with claims that it did not advance knowledge about the soul. To emphasize the importance of physiological processes in subserving psychological phenomena, Bujas introduced the term "psychocortical process," thus classifying the "body and soul" problem as a religious metaphysical concept.<sup>8</sup>

In his determination to promote psychology as an experimental discipline he advanced a theory of sensation proposing that a sensation is determined by the balance between the "organismic" and "environmental" factors constituting a dynamic system with an emphasis on adaptation. For example, a visual system adapts to a certain quality and intensity of a visual stimulation. When the stimulation ceases, the visual afterimage is formed as yet another sensation, as a result of imbalance between the physiological status and the stimulation. With experiments derived from his theory he accounted for various perceptual phenomena.<sup>9</sup> Bujas also studied the GSR (galvanic skin response) and its relationship to skin temperatures and suggested that the parameters of direction, amplitude, and latency and related to pleasantness, intensity, and the course of emotional changes respectively.<sup>10</sup> The initial results of this series of experiments he presented at the Seventh International Congress of Experimental Psychology in Marburg in 1921 and later at the Eleventh Congress of Experimental Psychology in Vienna in 1929.<sup>11</sup> He proposed the application of the GSR measures in the criminological context, studied phenomena of fatigue and suggestive analgesia, and published articles in the field of developmental psychology.<sup>12</sup>

In addition to his research activity, R. Bujas was instrumental in initiating other, primarily applied, aspects of psychological activity. He was one of the founders of the Vocational Guidance Center in 1931. The Center, having developed from the Committee for Aptitude Assessment in School Children, established at the Psychological Institute in 1922, continued a very close collaboration with the Institute which supplied the Vocational Guidance Center with the instruments and norms for measuring intelligence, personality, and aptitudes.<sup>13</sup> Regional government facilitated the initial activities of the Center by providing training grants for visits to similar centers in several German cities.<sup>14</sup>

A decade after he founded the Psychological Institute in Zagreb in 1922 R. Bujas began *ACTA INSTITUTI PSYCHOLOGICI UNIVERSITATIS ZAGRABIENSIS* and served as Chief Editor until his death in 1959. He was also the official Yugoslavian contributor to the *Psychological Register* between 1932 and 1959.<sup>15</sup>

The Bujas experimental tradition was carried on by Ramiro Bujas's son, Zoran Bujas (1910-) who shared his father's interest, determination, and *elan vitale*. The younger Bujas studied in Paris with Henri Pieron (1881-1964), Binet's successor and a major French experimental psychologist. In contrast to the general emphases of French psychology which were abnormal psychology, sociopsychology, and phenomenological psychology, Pieron's contributions were in the field of comparative psychophysiology, sleep, memory, and particularly sensor psychophysiology. Also, as a firm proponent of a strictly objective psychology, he was considered one of the early behaviorists.<sup>16</sup>

Z. Bujas continued research in the tradition of Pieron's physiologically-oriented rigorous experimental psychology.<sup>17</sup> His main research emphasis was the psychophysics of taste sensations,<sup>18</sup> which originally emphasized the classical Fechnerian approach. He later studied Steven's "subjective" psychophysics in gustatory and olfactory modalities. Bujas's most notable contributions were his studies of the encoding of the sensory quality and intensity, and the psychopharmacology of taste and olfaction, as well as questions of psychophysical scaling and signal detection.<sup>19</sup>

Another productive area of research was developed in the late 1940s through the collaboration of Z. Bujas, Boris Petz and others. The group investigated problems related to work and fatigue, particularly the evaluation and detection of early signs of fatigue, the effectiveness of various resting schedules, the influence of different instructional sets, motivational factors, and the effects of pharmacological stimulants on working abilities.<sup>20</sup> Although psychological scientific endeavor was stifled in the early postwar years by the communist regime, Z. Bujas and colleagues were able to continue their research, partly due to its "apolitical" physiological orientation and its "politically-correct" emphasis on a problem of the working class.

In addition, the group continued the earlier efforts in the area of psychometrics. They constructed and validated various tests and surveys, constructed an original series of intelligence tests that provided a qualitative measure in the form of a "problem solving profile" in addition to the IQ, modified Raven's Progressive Matrices and published numerous articles, books, and textbooks.

Within Croatia, Z. Buja's lectures and contributions to popular literature helped to dispel pseudoscientific views of the earlier "psychology." As the younger Bujas and his colleagues continued experimental research at the Psychological circles throughout Yugoslavia there were frequent references to the experimentally oriented "Bujas school" of psychology.

## SERBIA

In the latter part of the nineteenth century several Serbian psychologists studied with W. Wundt, E. Meumann (H. Ebbinghaus's successor and a founder of educational psychology), W. Köhler and others. Despite their training in experimental psychology, when they returned to Yugoslavia these psychologists focused primarily on teaching and educational psychology mainly influenced by the idealistic philosophy of I. Kant, G. W. F. Hegel, and particularly J. F. Herbart.<sup>21</sup>

An exception to this educational/idealistic emphasis was the experimentally-oriented Serbian psychologist, Pavle P. Radosavljević (1879-1958), who taught at the Teachers' College in Sombor, Vojvodina. He started a small laboratory there in 1905, but because of the lack of support for his experimental work, he left for America in the same year.<sup>22</sup>

Branislav Petronijevic (1875-1954) studied with W. Wundt, returned to Belgrade and taught psychology at the University there for more than thirty years. Consistent with his introspective orientation, he defined psychology as the "science of consciousness that investigates internal experience."<sup>23</sup> He published philosophical tracts<sup>24</sup> and contributed nothing to experimental psychology, but was one of the founders of the Psychology Area within the Faculty of Philosophy at University of Belgrade in 1927.

Whereas the Bujas school was experimental, the primary emphasis in Serbia was on developmental and educational psychology. The "Serbian Society for Child Psychology" was founded in 1906 by a group of enthusiastic teachers who were strongly influenced by Herbart's theory. Perhaps because of this early emphasis and long tradition, child psychology continued to be, with clinical psychology, the most popular and influential area of the Psychology Department in Belgrade to the present time.<sup>25</sup>

The true founder of Serbian psychology was Borislav Stevanović (1891-1971) who first studied philosophy and psychology with Petronijevic in Belgrade and then continued with F. Aveling at King's College in London. In 1926 he defended a dissertation<sup>26</sup> based on the investigation of the development of meaning and conceptual thought using the introspective reports method advanced by the Wurzburg school of psychology. Initially developed within Structuralism, the Wurzburg school broke away from the Wundtian tradition.<sup>27</sup>

When the Psychology Area within the Philosophy Department at the University of Belgrade was established in 1928, Stevanović was offered a position as senior assistant professor of experimental psychology. Some of the courses taught by Stevanović were: Introduction to experimental psychology, Assessment of aptitudes of children and adults, Instincts, character and temperament, educational psychology, and child psychology.<sup>28</sup>

Within the context of investigating higher intellectual processes, Stevanović studied the development, assessment, and structure of intelligence using the ideas from Spearman's factorial theory of intelligence.<sup>29</sup>

In the 1930s he published the "*Belgrade Revision of Binet-Simon Scale for Children*" as well as the results of extensive research of intelligence in children drawn from urban as well as rural backgrounds.<sup>30</sup> Stevanović argued that the obtained differences favoring the city children were due to testing bias. This was contrary to some of the contemporary psychologists, e.g., Cyril Burt who claimed that the urban-rural difference in intelligence is a real phenomenon and is due to the natural selection of populations.

Stevanović supported the idea of "culture-free" intelligence tests, introduced different norms for the assessment of intelligence for children coming from rural vs. urban areas, constructed a test for the assessment of "thinking ability," collected data from several thousand high school and University students and published some articles before the outbreak of WWII.<sup>31</sup> He reported on some of his findings at the International Congresses of Psychology in Copenhagen in 1932 and in Paris, in 1937.

Within the onset of WWII in 1941, Stevanović was considered to be "unreliable" by the new pro-German puppet government in Belgrade and was forced into retirement. After the war, due to his refusal to collaborate with the occupying German forces, he was reinstated as a professor of psychology by Tito's communist regime.<sup>32</sup>

#### TOTALITARIAN YEARS

Pressure to model Yugoslavian psychology (as well as other academic fields, political and economic life) after Soviet experiences was very strong immediately after the Second World War throughout Yugoslavia. Most of the psychology books in the first few years after the War were translations from Russian.<sup>33</sup> Bolsevik influence was stronger and lasted longer in Serbia than in the northern republics of Croatia and Slovenia. Particularly strong was the pressure to abandon all types of testing since the Stalinist dogma preached against subjective individualism and the measurement of interindividual differences.<sup>34</sup> Thus, under the communist theology, the study of subjective psychological phenomena was a *terra prohibita* outside of the boundaries of applied educational psychology.<sup>35</sup>

Psychology was portrayed as a bourgeois discipline accused of dangerous "spreading of subjective idealism with the goal of maintaining and supporting capitalism."<sup>36</sup> Psychological testing was especially against communist dogma. Moreover, even the Soviet-proclaimed task to study the physiological bases of higher nervous activity remained a declaration rather than a true scientific endeavor, since the interpretations of mental processes were, to a large degree, regulated by the prevailing ideological concepts. In addition, there were tendencies to reject and disregard scientific results obtained in countries with a capitalistic system.

This dogmatic climate led to the discontinuation of subscriptions to international scientific journals and the elimination of the Psychology Area at the University of Belgrade—*de facto* in 1945 and *de iure* in 1947 within the process of restructuring of the Faculty of Philosophy. It was divided into the divisions of Philosophy and Natural Sciences. Psychology was not included in the program of either Faculty. Stevanović and his colleagues continued to teach some courses (e.g., Educational Psychology and Child Psychology) but their research largely stopped.<sup>37</sup>

After the politically unstable times of the Cominform crisis<sup>38</sup> and breakup with Stalin in 1948, the Psychology Area was reinstated at Belgrade University at the end of 1950. However, the negative atmosphere regarding intelligence testing—formerly their primary focus of interest—remained unchanged for quite a while. For that reason, Stevanović had no publications between 1940 and 1950. Moreover, his revised and standardized version of the Binet-Simon scale, widely used before the War, was not utilized again until 1953, when the Vocational Guidance Center (former Psychotechnic Institute) was revived.<sup>39</sup>

In the 1950s, when the political situation somewhat normalized, Stevanović continued his research focusing on phenomena of learning, memory, literacy and tests of knowledge. In addition, he became interested in sociometrics and he published some articles on its uses in educational, clinical and industrial settings. The founding of the

Institute of Psychology in Belgrade in 1961 marked the beginning of the more active opening toward the West and the "thawing" of the politically unfavorable situation for psychology. Psychologists, however, never completely abandoned the Marxist party line.<sup>40</sup>

The Stalinist dogmatic hard line was more prevalent in Belgrade than in the north of the country (i.e., Croatia and Slovenia), where there were also some pressures to back away from psychology as a "subjective" science, but research never stopped. Approximately at the same time when the Psychology Area was disbanded in Belgrade, the Division of Psychophysiology of Labor within the Institute of Industrial Hygiene was established in Zagreb in 1947 in the framework of the Yugoslav Academy of Sciences and Arts.<sup>41</sup> The psychologists in Zagreb were more successful at continuing their research in these difficult times, primarily because of their more physiological and therefore more politically acceptable, orientation and also because their research—which shifted toward investigation of the phenomena of work and fatigue—was very much in accord with the communist party line which was officially concerned with workers' wellbeing. This is a particularly important point since postwar Yugoslavia, formerly an agricultural country, was trying to move toward heavy industrialization based on the Soviet model. Establishment of the Industrial Hygiene Institute was indicative of importance given to their work by the communist government in Croatia. Finally, Croatia and Slovenia have historically maintained much stronger ties with the West, whereas Serbia, sharing the Christian Orthodoxy tradition and the Cyrillic alphabet with Russia, has been more oriented toward the East.

A very fruitful and intensive collaboration of Croatian psychologists Z. Bujas, Petz and others resulted in numerous publications<sup>42</sup> and a book by Bujas and Petz: "*Osnove Psihofiziologije rada*" published in Zagreb in 1959. Reviewers of the volume, J. Brožek, and A. Krkovic<sup>43</sup> note that among the 200 references, the Anglo-American sources account for 68% while Russian sources account for less than 2%. They reviewed this book favourably in comparison to the contemporary American textbooks of industrial psychology.<sup>44</sup> This bibliographic information illustrates that the northwestern republics (i.e., Croatia and Slovenia) were less entrapped in the Stalinistic thought.

An indication of the definite "Westward" shift in Yugoslavian psychology was the organization of the Fifteenth International Congress of Applied Psychology in Ljubljana in 1964 with Z. Bujas as the main organizer and the president of the Congress.<sup>45</sup>

A final example of this turning toward the West is seen in the development of Clinical Psychology in Yugoslavia which began in 1949 with the employment of the first clinical psychologist at a hospital in Zagreb.<sup>46</sup> The examination of neurological patients suspected of cerebral damage with psychological instruments started in 1962 at the department of Neurology in Zagreb, followed by the founding of the Neuropsychological Laboratory in 1937, the first one in the country.<sup>47</sup> The Laboratory's activities include both research and clinical assessment.

In the 1950s and 1960s there were very few psychologists working in clinical field. In the last two decades, however, an increasing number of psychologists have been employed in general and psychiatric hospitals, clinics and counseling centers, addiction treatment centers and penitentiaries.<sup>48</sup> Psychotherapy is especially prominent as a part of the curriculum at the University of Belgrade where psychoanalysis, Gestalt, behavior therapy and transactional analysis have been successfully engaged in diagnosis and counseling.<sup>49</sup> No private clinical practice has been allowed in the country, although legislation in collaboration with the Psychological Association is now under consideration.

## SLOVENIA

The oldest psychological publication in the Slovenian language was written in 1872 by Josip Krizan (1841-1921) who discussed topics such as memory, forgetting, and sensations.<sup>50</sup> Most of the Slovenian writers/philosophers of that era who published psychological books discussed the issues pertaining to psychology in keeping with the Western points of view at the time. The first extensive and multi-volume psychological manual/textbook was published in the late nineteenth century by Francisek Lampe (1859-1900), a philosopher, theologian and psychologist, who presented all the achievements of contemporary psychology, A. Weber, F. Brentano, H. von Helmholtz, C. Stumpf, and E. Kraepelin, with special emphasis on Wundt's work.<sup>51</sup>

One of the founders of the University of Ljubljana in 1919 was Mihajlo Rostohar (1878-1966), a Slovene who studied philosophy in Graz with A. Meinong, and received his doctorate in Vienna in 1905. Having decided to develop a scientific career, Rostohar continued his studies in Prague, with W. Wundt in Leipzig, with O. Kulpe in Wurzburg and at Stumpf's Institute in Berlin.<sup>52</sup>

His first position was at the University in Prague where in 1911 he established the first experimental psychology laboratory in Czechoslovakia within the Institute for Physiology of the School of Medicine.<sup>53</sup> Several years later he returned to Slovenia and was actively involved in the founding of the first Slovenian University in 1919. Although he was expected to become a professor of psychology in the Philosophy Department, he suddenly went back to Czechoslovakia. According to some conjectures, he was offended by some political moves at the newly founded University, particularly Meinong's proposal to employ Franc Veber as a psychology professor instead of Rostohar.<sup>54</sup> It has also been reported that Rostohar published some politically dangerous articles not approved by the conservative regime in the newly founded Yugoslavia.<sup>55</sup>

Unfortunately, for the next twenty years the development of psychology in Ljubljana was largely determined by Veber's "analytical psychology" which accepted the Wundtian structuralistic approach, but rejected the experimental method advanced by Wundt. Meinong continued to have a strong influence on Veber's teaching.<sup>56</sup>

Meanwhile, Rostohar founded the Institute for experimental Psychology in Brno in Czechoslovakia in 1924 which he headed until 1939 when Germans occupied the country and closed the University.<sup>57</sup> Most of the war he spent at the University of Zagreb and was active in the anti-Fascist partisan movement.<sup>58</sup> He returned to Czechoslovakia but refused to publicly denounce the anti-Stalinist Yugoslavian government. As a result he was forced to return to Yugoslavia. After many years of exile, he returned to teach psychology in his native Ljubljana, revived the *reliquiae reliquiarum* of psychological activity and helped to establish the Psychology Department in 1949 becoming its first chairman.<sup>59</sup> He continued experimental research on the developmental aspects of learning processes, attention, perception of colors, development of concepts and imagination,<sup>60</sup> and helped to found the Slovenian Occupational Guidance Center in 1952.

## CONCLUSION

The development of psychology in Yugoslavia has been a slow and discontinuous process. Before WWII, psychology was applied to educational settings where philosophers taught about psychological processes mainly from the speculative, prescientific point of view.

The period between the two wars (1918–1941) was characterized by struggling for the establishment of psychology as an empirical, scientific discipline, independent of philosophy. In 1920, a Psychological Laboratory was founded in Zagreb and in 1928, the Psychology Area was established at Belgrade University. Ljubljana, however, was still very strongly influenced, via Veber, by the previous century's ideas and methods so that experimental work in Slovenia did not start until after WWII with Rostohar.

The first several years of the postwar era were strongly marked by the Communist and dogmatic political situation which resulted in rigid Soviet influence and general stagnation in psychological research, antibourgeois and anti-Western attitudes. Psychological activity was buoyed again by the relaxed political situation in the late fifties,<sup>61</sup> especially in the north of the country, and was primarily focused on the University education of psychologists enabling them to work in applied (i.e., industrial, educational) settings. Research (at first predominantly applied) also intensified and in the last three decades progressed throughout the country. Currently, the "Bujas school of psychology" in Zagreb is still very much characterized by a strict, methodologically exact, experimentally oriented approach with special emphasis on psychophysics. However, other psychological areas developed as well. Particularly noted are achievements in social psychology, personality, ergonomics, and developmental psychology. The "Belgrade school of psychology" is usually described as less experimental and more "person-oriented," developing research in the educational, social and especially clinical areas. Slovenian psychology is primarily oriented toward applied (i.e., industrial and educational) psychology, with research in the areas of personality, conceptual development, and creativity. However, applied psychology has had much more impact than academic psychology overall. The great majority of psychologists are employed in industrial psychology, educational, and clinical settings. About thirty percent of psychologists work in the educational field, usually employed as school psychologists.<sup>62</sup>

In spite of the recent tragic political disintegration of Yugoslavia stemming partly from separate and distinct historical contexts in each republic, successful postwar efforts to establish a unified Yugoslavian psychology should be noted. The Psychological Association of Yugoslavia was founded in 1950; it was constituted by six Psychological Associations, one in each of the republics. The first Congress of Yugoslavia Psychologists took place in Slovenia in 1960 and the Congresses have been organized every three years in different republics.<sup>63</sup> Since 1970, the Psychological Association of Yugoslavia has been publishing its journal, *Revija za Psihologiju* and has published bibliographies of Yugoslavian psychological literature.<sup>64</sup> Among the most prestigious Yugoslavian psychology journals are: *Acta Instituti Psychologici Universitatis Zagradiensis*, *Primijenjena Psihologija*, *Revija za Psihologiju*, *Psihologija*, *Anthropos*.<sup>65</sup>

The School Psychological Service in Yugoslavia was established in 1958 and has since actively supported the development of educational psychology.<sup>66</sup> Similar associations of other subfields have followed.

During the 1970s new psychology departments and laboratories were established in the republics of Macedonia, Skopje (1975) and Bosnia and Herzegovina, Sarajevo (1977), as well as additional psychology departments in Serbia (Nis, 1971; Novi Sad, 1982), and Croatia (Rijeka, 1978; Zadar, 1979).<sup>67</sup>

Unfortunately, psychology in Yugoslavia remains largely isolated from current international psychological schools. Due to a pervasive "inbreeding" in each department, coupled with the strong authoritative and autarchic hierarchy, and in addition, the extremely meager financial support, ventures into new areas of psychological research are



almost impossible. Thus, animal and physiological research are virtually nonexistent principally due to a lack of funding for the investigation of fundamental questions or for research involving complex equipment. The situation is aggravated by the lack of a research tradition and expertise in that area. Overshadowing all of these problems, of course, is the war now raging between Serbia and other former republics of Yugoslavia.

Currently, psychologists in the former Yugoslavia are focused on the practical problems raised by the war: for example, Croatian psychologists are helping the children of Vukovar recover from months of bombardment, and Serbian psychologists are helping heal the soldiers who were ordered to conduct that bombardment.<sup>68</sup> Hopefully, when the war and its wounds have been healed, changes in the political and, especially, economic situation in the new republics, and the influx of foreign experiences in the form of collaborations or stipends, will help psychologists in the now sovereign republics of the ex-Yugoslavia to overcome their provincialism and develop into active contributors to international scientific psychology.

#### NOTES

1. Vladimir Kolesarić, Želimir Pavlina, "Razvoj Psihologije na Zagrebačkom Sveučilištu," in *Sveučilište u Razvoju Znanosti od 1669 do Danas* (Zagreb: Sveučilište u Zagrebu, 1990), pp. 39-48; Vid Pečjak, "Kratki Prikaz Razvoja Psihologije u Jugoslaviji, 1 dio," *Primijenjena Psihologija* 1 (1980): 205-216.
2. It was thought at one time that Philipp Melanchton (1497-1560) first coined the word "psychology," and that Rudolf Goeckel (1547-1628) was the first to publish a book on the subject. Abraham Aaron Roback, *History of Psychology and Psychiatry* (NY: Greenwood Press, 1961), p. 21; Rudolf Goeckel, *Psychologia, hoc est, de hominis perfectione* (Marburg, 1590).
3. Although Marulić's book is lost, the title was registered in his biography by his contemporary compatriot, Franciscus Natalis Bozicevic. Kruno Krstić, "Marko Marulić—the Author of the Term 'Psychology'," *Acta Instituti Psychologici Universitatis Zagrabensis* 36 (1964): 7-13; Francois H. Lapointe, "Who Originated the Term 'Psychology?'" *Journal of the History of the Behavioral Sciences* 8 (1972): 328-335; Josef Brožek, "Marcus Marulus (1450-1524), Author of 'Psychologia': Early References and the Dating," *Proceedings of the 81st Annual Convention of the American Psychological Association, Montreal, Canada* 8 (1973): 935-936.
4. Dinko Stary, "Objavljeni Radovi Psihologa Jugoslavije iz Psihologije do Konca 1972 Godine," *Revija za Psihologiju* 5 (1975): 129-135.
5. David B. Klein, *A History of Scientific Psychology: Its Origins and Philosophical Backgrounds* (NY: Basic Books, 1970), p. 84.
6. Kruno Krstić, "Professor Ramiro Bujas," *Acta Instituti Psychologici Universitatis Zagrabensis* 22 (1961): 3-9; Kruno Krstić, "O Radu Prof. Dr. Ramir Bujasa," in *Imenik Psihologa Članova Društva Psihologia u Hrvatskoj*, ed. Želimir Pavlina and Mirjana Kovac'ić (Zagreb: Društvo Psihologa Hrvatske, 1973), pp. 13-22.
7. Vid Pečjak, "Kratki Prikaz Razvoja Psihologije u Jugoslaviji, 1 dio," *Primijenjena Psihologija* 1 (1980): 205-216.
8. Kruno Krstić, "O Radu Prof. Dr. Ramira Bujasa," in *Imenik Psihologa Članova Društva Psihologia u Hrvatskoj*, Ed. Želimir Pavlina and Mirjana Kovačić (Zagreb: Društvo Psihologa Hrvatske, 1973), pp. 13-22.
9. Ramiro Bujas, "Teorija Osjećanja," *Revija za Filozofiju i Psihologiju* 1 (1927): 49-59; Ramiro Bujas, "Über den Zusammenhang von Positivem und Negativem Nachbild," *Acta Instituti Psychologici Universitatis Zagrabensis* 1 (1932): 1-7; Ramiro Bujas, "Über die Funktion des Cortischen Organs," *Acta Instituti Psychologici Universitatis Zagrabensis* 1 No 4 (1933): 1-21; Ramiro Bujas, "Über den blinden Fleck," *Acta Instituti Psychologici Universitatis Zagrabensis* 1 No 5 (1933): 1-6.
10. Ramiro Bujas, "La Loi Psychogalvanique Experimentee sur un Chat," *Acta Instituti Psychologici Universitatis Zagrabensis* 1 No 2 (1932): 1-2; Ramiro Bujas, "Clarification of a Factual Question in the Psychogalvanic Field," *American Journal of Psychology* 50 (1937): 362-368.
11. Želimir Pavlina and Vladimir Kolesarić, "Značenje Psihologijskog Instituta Zagrebačkog Sveučilišta za Razvoj Psihologije u Nas," *Primijenjena Psihologija* 8 (1987): 25-35; Brnako Lazic, "Život i Rad Profesora Ramira Bujasa," *Psiholoski Bilten* 4 (1960): 1-5.
12. Vid Pečjak, "Kratki Prikaz Razvoja Psihologije u Jugoslaviji, 1 dio," *Primijenjena Psihologija* 1 (1980): 205-216; Želimir Pavlina and Vladimir Kolesarić, "Značenje Psihologijskog Instituta Zagrebackog Sveučilišta za Razvoj Psihologije u Nas," *Primijenjena Psihologija* 8 (1987): 25-35.
13. Dora Vinski, "Razvoj Profesionalne Orijentacije u Hrvatskoj (1931-1971)," *Informacije Društva Psihologia Hrvatske* (1971): 2-11.

14. Želimir Pavlina and Vladimir Kolesarić, "Znacenje Psihologijskog Instituta Zagrebačkog Sveucilista za Razvoj Psihologije u Nas," *Primijenjena Psihologija* 8 (1987): 25-35.
15. Ibid.
16. Abraham A. Roback, *History of Psychology and Psychiatry* (NY: Greenwood Press, 1961), pp. 115-116; Paul Fraisse, "French Origins of the Psychology of Behavior: The Contribution of Henri Pieron," *Journal of the History of the Behavioral Sciences* 6 (1970): 111-119.
17. Zoran Bujas, "Quelques Remarques sur le Contraste et l'Inhibition a la Suite d'Excitations Gustatives Simulatnees," *Comptes Rendus Des Seances de la Societe de Biologie et de ses Filiales (Paris)* 117 (1934): 1304-1306; Zoran Bujas, "Le Temps de Reaction aux Excitations Electriques des Resepteurs Gustatifs," *Comptes Rendus Des Seances de la Societe de Biologie et de ses Filiales (Paris)* 19 (1935): 716-718; Zoran Bujas, "La Measure de la Sensitivite Differentielle Dans le Domaine Gustatif," *Acta Instituti Psychologici Universitatis Zagrabensis* 2 (1937): 1-18.
18. Zoran Bujas, "Electrical Taste," in *Handbook of Sensory Physiology vol. 4 Taste*, Ed Lloyd M. Beidler (NY: Springer-Verlag, 1971), pp. 180-199.
19. Raymond J. Carsini, Ed., *Encyclopedia of Psychology*, vol. 1 (NY: John Wiley & Sons, 1984) p. 175; Zoran Bujas, Marion Frank, and Carl Pfaffman, "Neutral Effects of Electrical Taste Stimuli," *Sensory Processes* 3 (1979): 353-365.
20. Zoran Bujas and Boris Petz, "L'influence des Stimulants Psychiques sur le Rendement du Travail et sur la Consommations d'Oxygene su Cours du Travail Statique," *Arhiv za Higijenu Rada* 3 (1952): 282-295; Zoran Bujas and Boris Petz, "Les Modifications des Ondes Alpha au Cours du Travail Mental Prolonge," *Le Travail Humain* 17 (1954): 201-206.
21. Vid Pějak, "Kratki Prikaz Razvoja Psihologije u Jugoslaviji, 2 dio," *Primijenjena Psihologija* 2 (1981): 77-83; Nikola Rot, "Pedeset Godina Odeljenja za Psihologiju," *Psihologija* 4 (1978): 85-105.
22. Andrija Stojkovic, "Pavle-Paja Radosavljevic," in *Enciklopedija Jugoslavije vol. 7* (Zagreb: Jugoslavenski Leksikografski Zavod, 1968), p. 26.
23. Vid Pećjak, "Kratki Prikaz Razvoja Psihologije u Jugoslaviku, 2 dio," *Primijenjena Psihologija* 2 (1981): p. 78.
24. Branislav Petronijevic, *Istorija novije filosofije* (Beograd: Napredak, 1922); Spiritzam (Beograd: Napredak, 1922); *Immanuel Kant: Zivot i Filozofija* (Beograd: Stamparija Drag. Gregoric, 1939).
25. Mihajlo I. Roter, "Kako je Tekao Razvoj Naše Psihologije (3)," *Psihološke novine*, 11 (1978): 3-4; Ibid. 12 (1978): 3; Ibid. 13 (1978): 3; Ibid. 14 (1978): 3.
26. Borislav Stevanović, *An Experimental Study of the Mental Processes Involved in Judgement* (London: Cambridge University Press, 1927); Leslie S. Hearnshaw, *A Short History of British Psychology 1840-1940* (London: Butler and Tanner Ltd., 1964), p. 224.
27. George Humphrey, *Thinking: An Introduction to its Experimental Psychology* (NY: John Wiley & Sons Inc., 1951), p. 279.
28. Jovan Djordjevic, "Uloga Borislava Stevanovica u Razvoju Nase Pedagoske Teorije i Prakse," *Psihologiske Novine* 15 (1978): 3; Vera Smiljanić-Čolanović, "Zivot i Rad Profesora Stevanovića," *Psihologija* 3 (1970): 209-215; Nikola Rot, "Dr. Borislav Stevanović i Razvoj Naucne Psihologije u Srbiji," *Psihologija* 3 (1970): 173-175.
29. Mihajlo I Roter, "Kako je Tekao Razvoj Naše Psihologije (1)," *Psihološke Novine* 9 (1977): 1-2.
30. Borislav Stevanović, "Razviće Dea je Inteligencije i Beogradska Revizija Bine-Simonove Skale," *Filozofski i Filološki Spisi* 25 (1934): 1-226; Borislav Stevanović, *Merenje Inteligencije sa Upustvom za Upotrebu Beogradske Revizije Bine-Simonove Skale* (Beograd: Geca Kon, 1937), pp. 1-240.
31. Borislav Stevanović, "Socijalno-Kulturna Sredina i Umna Obdarenost kao Faktori u Odredjivanju Doba Umne Zrelosti," *Filozofsko-Filološke, Društvene i Istorijske Nauke* 92 (1940): 87-115; Borislav Stevanović, "Inteligencija i Uspeh u Radu kod Dece Istih Roditelja" *Filozofsko-Filološke, Društvene i Istorijske Nauke* 92 (1940): 119-130.
32. Vera Smiljanić-Čolanović, "Život i Rad Profesora Stevanovića," *Psihologija* 3 (1970): 209-215.
33. Josef Brožek, "Quantitative Explorations in the history of Psychology in Yugoslavia: Translations," *Psychological Reports* 31 (1972): 397-398.
34. Voprosy izucheniya i vospitaniya lichnosti [Problems of the Study and Formation of Personality] was one among several journals that were ceased in the Soviet Union in the early thirties, as reported by Josef Brožek, "Some Significant Historical Events in the Development of Soviet Psychology," in *Psychology in the USSR: An Historical Perspective*, Eds. Josef Brožek and Dan I. Slobin (White Plains, NY: International Arts and Sciences Press Inc. 1972), pp. 11-13.
35. Josef Brožek reports that the largest percentage of papers presented at Soviet Psychological Society in 1968 came from the field of child and educational psychology, followed by publications in experimental, medical, and technological fields. Josef Brožek, "Spectrum of Soviet psychology: 1968 Model," *American Psychologist* 24 (1969): 944-946.

36. Nikola Rot, "Pedeset Godina Odeljenja za Psihologiju," *Psihologija* 4 (1978): 85-105, p. 95.
37. Vera Smiljanić-Čolanović, "Život i Rad Profesora Stevanovića," *Psihologija* 3 (1970): 209-215.
38. Cominform refers to the Communist Information Bureau, a union of Communist parties from the USSR, Eastern Europe, France and Italy. Yugoslavia was expelled from the Cominform due to Tito's refusal to be dominated by Stalin. Aided by the West, Yugoslavia then developed a unique nonaligned and nondogmatic form of communism.
39. Vera Smiljanić-Čolanović, "Život i Rad Profesora Stevanovića," *Psihologija* 3 (1970): 209-215.
40. Nikola Rot, "Pedeset Godina Odeljenja za Psihologiju," *Psihologija* 4 (1978): 85-105.
41. Zoran Bujas, *Uvod u Metode Eksperimentalne Psihologije* (Zagreb: Školska Knjiga, 1974), p. 6.
42. Zoran Bujas and Boris Petz, "Etude Comparative de Certains tests de Fatigue," *Travail Humaine* 19 (1956): 193-207; Zoran Bujas, Boris Petz, Andjelko Krkovic, Boris Sorokin, "Faktorska analiza intelektualnog rada u stanju svježine i us stanju umora," *Arhiv za Higijenu Rada* 11 (1960): 203-220; Boris Petz, "Effect of the Number and Length of Rest Pauses on Work Output in Static Effort," *Arhiv za Higijenu Rada* 15 (1964): 183-188.
43. Josef Brožek and Andjelko Krović, "Industrial Psychophysiology from just East of West," *Contemporary Psychology* 6 (1961): 316-317.
44. Contents of the following books were compared to Bujas and Petz's book: Thomas W. Harrell, *Industrial Psychology* (NY: Rinehart, 1958); Joseph Tiffin and Ernest J. McCormick, *Industrial Psychology* (Englewood Cliffs, NJ: Prentice-Hall, 1958); Beverly von Haller Gilmer, *Industrial Psychology* (NY: McGraw-Hill, 1961).
45. Želimir Pavlina and Vladimir Kolesarić, "Značenje Psihologijskog Instituta Zagrebačkog Sveučilišta ra Razvoj Psihologije u Nas," *Primijenjena Psihologija* 8 (1987): 25-35.
46. Jelena Turdiu-Šimunec, "Osvrt na 20 godina Kliničke Psihologije u SR Hrvatskoj," *Neuropsihijatrija* 3-4 (1973): 301-305.
47. Jelena Turdiu-Šimunec, "Kratki Prikaz Razvoja I Rada Neuropsihologijskog Laboratorija na Neurološkoj Klinici sa Zavodom za Neuropatologiju Medicinskog fakulteta i Klinickog Bolnickog Centra u Zagrebu," *Neurologija* 25 (1977): 111-112.
48. Nicholas Kopatić, "Yugoslavia," in *International Resources in Clinical Psychology*, Henry P. David, Ed., (NY: McGraw-Hill, 1964), pp. 76-78; Jelena Turdiu-Šimunec, *Klinicka Neuropsihologija* (Zagreb: Školska Knjiga, 1990), pp. 3-8.
49. Vid Pečjak, "Yugoslavia," in *International Handbook of Psychology*, Eds. Albert R. Gilgen and Carol K. Gilgen (NY: Greenwood Press, 1987), pp. 574-586.
50. Vid Pečjak, "Kratki Prikaz Razvoja Psihologije u Jugoslaviji, 3.dio," *Primijenjena Psihologija* 2 (1981): 192-199.
51. Vid Pečjak, *Stvaranje Psihologije: Knjiga Razgovora* (Sarajevo: Svjetlost, 1984), pp. 352-386.
52. Josef Brožek, "Historical Investigations of Yugoslav Psychology," in *Psihologoske Razprave: 4. Kogres psihologov SFRJ (Ljubljana, Yugoslavia: University of Ljubljana Press, 1972)*.
53. Raymond J. Corsini, Ed., *Encyclopedia of Psychology*, vol. 1 (NY: John Wiley & Sons, 1984), p. 175.
54. Vid Pečjak, "Kratki Prikaz Razvoja Psihologije u Jugoslaviji, 3.dio," *Primijenjena Psihologija* 2 (1981): 192-199.
55. Vilhem Chmelar, "Psycholog Rostohar," *Ceskoslovenska Psychologie* 3 (1959): 3-11.
56. Vid Pečjak, *Stvaranje Psihologije: Knjiga Razgovora* (Sarajevo: Svjetlost, 1984), pp. 352-386.
57. Vilem Chmelar, "Psycholog Rostohar," *Československá Psychologie* 3 (1959): 3-11.
58. Ivan Toličić, "Dr. Mihajlo Rostohar," *Psihološke Novine* 3 (1978).
59. Zoran Bujas, *Uvod u Metode Eksperimentalne Psihologije* (Zagreb: Školska Knjiga, 1974), p. 5.
60. Mihajlo Rostohar, "Über Kinderzeichnungen: Ein Betrag zur Entwicklung der Kindervorstellungen," Bericht über den 10. Kongress für Experimentelle Psychologie in Bonn, 20-23. April 1927, pp. 154-157; Mihajlo Rostohar, "L'Evolution de la Representation Visuelle a Partir de L'Impression Initiale," *L'Annee Psychologique* 31 (1931): 130-149; Mihajlo Rostohar, "O zásadě genetické dominance celku," *Psychologie* 4 (1938): 45-47; Mihajlo Rostohar, "Stavek in Misel," *Academia Scientiarum et Artium Slovenica, Classis I, Dissertationes* 2 (1953): pp. 329-364.
61. In 1956, Soviet Communist Party leader Nikita Khrushchev disclosed the atrocities committed during the Stalin era and loosened the ideological grip of the Soviet psychology.
62. Vid Pečjak, "Yugoslavia," in *International Handbook of Psychology*, Albert R. Gilgen and Carol K. Gilgen, Eds. (NY: Greenwood Press, 1987), pp. 574-586.
63. Benjamin B. Wolman, *International Directory of Psychology: A Guide to People, Places, and Policies* (NY: Plenum Press, 1979).

64. Dinko Stary, "Objavljeni Radovi Psihologa Jugoslavije iz Psihologije do Konca 1972. Godine," *Revija za Psihologiju* 5 (1975): 129-135.
65. Zelimir Pavlina and Mirjana Kovacic (1973). "Psiholozi u Hrvatskoj," in *Imenick Psihologa Clanova Društva Psihologa u Hrvatskoj*, Eds. Zelimir Pavlina and Mirjana Kovacic (Društvo Psihologa Hrvatske: Zagreb), pp. 31-45.
66. Lidija Vučić, "School Psychology in Yugoslavia," *School Psychology International* 8 (1978): 159-165.
67. Vid Pečjak, "Yugoslavia," in *International Handbook of Psychology*, Eds. Albert R. Gilgen and Carol K. Gilgen (New York: Greenwood Press, 1987), pp. 574-586.
68. Having resisted the siege and heavy shelling for three months, this ethnically mixed city was turned to rubble, and finally conquered in November of 1991. Dozens of cities across Croatia and Bosnia-Herzegovina are undergoing bombardment as this article is being written.