

“Society as an Organism:” Metaphor as Departure Point of Andrija Štampar’s Health Ideology

Andrija Štampar (1888-1958) was one of the most charismatic figures of the 20th century public health and a typical representative of social medical ideology at the turn of 20th century. He was the founder of many health-related institutions in Croatia and world-wide. In 1927, with the help of a large grant from the Rockefeller Foundation, he opened the School of Public Health and the Institute of Hygiene in Zagreb.

Andrija Štampar was among the leading figures in Croatian medicine. His endeavors and sociomedical ideas found fertile ground and left a mark not only in the national, but also in international setting. As a young man, he started publishing programmatic and popular science articles, promulgating his beliefs about social medicine and health enlightenment.

Using the preserved corpus of Štampar’s published work, I analyzed the use of metaphor “society as an organism” as a basic instrument of expression of Štampar’s health ideology. Štampar’s language and metaphors are clearly time- and context-dependent. On the one hand, they reflect a specific manner of expression characteristic of sociomedical framework and health enlightenment, widespread in the world at the turn of the 20th century. On the other, they are heavily influenced by national zeitgeist at the time, particularly the works of the writers such as A. M. Relković, Josip and Ivan Kozarac, and T. G. Masaryk.

Organicistic approach to society and social diseases at the turn of the 20th century shaped both the unquestionable faith in the importance of disease prevention and the physicians’ approach. Thereby, the metaphor “society as an organism” became a specific cultural ethos of health protection movement, with Štampar as the leading representative at the national and international level.

Andrija Štampar (1888-1958) (Figure 1) was born in Drenovac, a small village in Slavonia, Croatia, as the son of a village teacher. He completed his elementary education in his place of birth and finished high school in Vinkovci in 1906 (1). After that, he left Slavonia to study medicine in Vienna, where he also earned his doctoral degree in 1911. Štampar began his medical career as a general practitioner in Nova Gradiška. In 1919, he joined the Min-



Figure 1. Andrija Štampar (1888-1958).

istry of Public Health in Belgrade, dedicating his time first to theoretical-organizational work and then to systematic development of health institutions in the old Yugoslavia. Due to his opposition to the dictatorship of the king Aleksandar Karađorđević, he was forced into early retirement in 1931 and returned to Zagreb, where he was elected professor at the Zagreb University School of Medicine, Department of Hygiene and Social Medicine (2). Since the authorities did not allow him to work in the country, Štampar emigrated to China, where he served as a professional advisor for the Chinese government from 1933 to 1936. Upon his return to Europe, he started developing the activities of the School of Public Health but soon received a letter from the secretary of the League of Nations offering him a job at the League of Nations Hygiene Section in Geneva. In 1938, he left for the United States, where he spent a year as a visiting professor at the Universities of Harvard, Yale, and California (3-6). When his appointment as professor at the Zagreb University School of Medicine was confirmed, he returned to Croatia. Štampar spent World War II in internment in Graz, Austria. After the War, he resumed his duties as a professor of hygiene and social medicine at the Zagreb University School of Medicine and assumed the position of the director of the School of Public Health in Zagreb. He fought to increase the proportion of practical classes for future physicians. Due to his endeavors, a College of Nursing was established under the auspices of the Zagreb University School of Medicine. From 1952 to 1957, Štampar was the Dean of the Zagreb University School of Medicine. He was a member and the president of the Yugoslavian Academy of Sciences and Arts and chaired the First World Health Conference in Geneva in 1948. In 1955, he received the international "Leon Bernard"

award for his contributions to social medicine. He died in Zagreb on June 26, 1958 (2).

Andrija Štampar was one of the leading figures in Croatian medicine, whose efforts and sociomedical ideas found fertile ground and left a mark not only in national, but also in international setting. While still a young man, he started publishing programmatic and popular science articles, promulgating his beliefs about social medicine and health enlightenment, which he continued to follow throughout his whole life.

In the present article, I analyzed the use of metaphor as a means of expressing Štampar's health ideology in the rich corpus of his preserved texts (7,8). My analysis also includes Štampar's attitude toward eugenics, which has not been studied so far. The parallel development of eugenics and public health during the second half of the 19th and early 20th century established mutual resonance and specific discourse through which these two areas construed and popularized their goals.

Bellum contra morbum: invasion of body-fortress

Ever since the ancient, pre-scientific times, the human body had been metaphorically described as a fortress resisting diseases (9). Diseases, on the other hand, were described by the metaphor of threatening danger – an enemy that invades the body-fortress. This old metaphor survived in the language of public health education, which saw disease as a social category and used the expressions such as fight, battle, or war to describe the efforts to reduce mortality rates. In the old times, the physician was the one who led *bellum contra morbum* – war against disease; in Štampar's times, the society was supposed to play that role. Thus, the transformation from fighting a war to having an opportunity to initiate a mass ideological mobilization made the notion of war a met-

aphor useful in all sorts of melioration campaigns aimed at defeating the enemy.

The metaphor of society as an organism marked the introduction of anthropomorph, organicistic approach into the interpretation and understanding of social processes. Although its roots could be traced back to the ancient times, it became almost paradigmatic at the turn of the 20th century, with the arrival of the founder of cellular pathology, Rudolf Virchow. He considered the metaphor of liberal state useful for his theory of the cell as the basic unit of life; as much as the structure of an organism is complex, it primarily consists of many cells/citizens, ie, the body is a republic (9).

If we assume the standpoint that crisis of science occurs only when its tasks and methodology become questionable (10), we can see the classical symptoms of a paradigm shift in Štampar's texts. A sharp swerve in topic – from disease toward the binomial illness/health system, with an emphasis on health, marked a radical change in the perception of medicine and treatment and made Štampar a prominent representative of that change. Štampar's texts contain typical elements of sociomedical movement in which anthropomorphic society takes a key position in the approach to and analysis of disease, health, and treatment: “by taking a position that the society should be observed as an organism, the organicistic school strongly influences the development of medical science. As an individual organism consists of cells, so does the society consist of individuals representing cells; as an individual organism can become ill, so can the society become ill. Thus, medical observation becomes tightly linked to sociological one and remains under continual influence of sociological principles. The object of medical observation is a social rather than individual organism, and the physician as a representative of medical science begins to feel the “pulse of the society” (11). In

the same text, entitled Constitutional Illness of Society, the adjective “constitutional” has a double meaning: a legal one (pertaining to the constitution, or organization, of the state and authorities) and a medical one (physiological and psychological characteristics of the human organism). There is no doubt that this term was chosen to strengthen the analogy between society and the human organism, emphasizing the characteristics that influence the appearance and course of disease. This is obvious from the quote where Štampar points out that “social illness can be called constitutional illness” and explains that each individual represents one cell in the social organism. Such an organism, according to Štampar, needs a different kind of help (by stronger means) because “an ill social organism cannot be treated individually but socially” (11).

Concept of social disease: congenital poverty, King Alcohol, and tuberculosis as a disease of poor-quality housing

Under the influence of the main representatives of social medicine at the time, whom he met during his studies in Vienna, Štampar continued to develop a concept of social disease, ie, a specific pathology harmful to social organism. Ascribing almost parasitic characteristics to social diseases, he insisted that they exhaust the entire society and thus cannot be treated on an individual basis. Štampar sees these diseases as a pathology “so deeply rooted in the society that it has become part of it: it lives with the society and it is the most widely spread and the most dangerous of all” (12). In such context, he emphasizes the predominant poverty/illness binary system, which becomes his crucial starting point and model for interpreting the origin of social diseases (Figure 2). The metaphor of vicious circle, which associates working class with poverty and social diseases, is evident not only in Štampar's



Figure 2. Zagreb school of "public" health (today's Andrija Štampar School of Public Health), founded in 1926 and opened on October 3, 1927.

texts, but also in the language of other representatives of the sociomedical movement. Francisco Murillo (1865-1944) used it as an argument for the introduction of social insurance in Spain and René Sand (1877-1953) after he moved from social biology toward social epidemiology in the early 1930s (13). While Štampar considers poverty as a congenital social disease, the source and setting of social diseases; he calls alcoholism, tuberculosis, and sexually transmitted diseases the most devastating cancer of today's society (12).

Alcoholism is a disease that Štampar talks and writes extensively about and almost obsessively works against (Figure 3). He was sensitized against alcoholism at an early age. On one occasion, while he was still a teenager, he



Figure 3. People's Textbook on Alcohol (Narodna čitanka o alkoholu), second edition by Vuk Vrhovac, Zagreb, 1931.

talked to the village miller (14), who said that more people drowned in liquor than at sea. Young Štampar remembered these words, which led him to the most radical combat he ever fought, the one in which his enemy was King Alcohol. Štampar called it an "evil spirit rooted in people, a tyrant worse than plague or war, the most ruthless liar, a hazardous player, an enemy with claws, and bitter poison" (15-20). In the context of antialcoholic movement that was spreading across Europe and America at the time and the tradition of alcohol consumption in our country, Štampar used every opportunity to advise people against alcohol. He wrote: "Alcohol takes away the paycheck from the father of a family and his children are left hungry. Because of alcohol, many lose their eyesight, the strong become weak, the rich become poor. Alcohol makes a man belligerent and quarrelsome, it makes him commit murder and robbery. In our country, it has thousands of servants, thousands that celebrate it as a king: Croatian people spend thousands of krunas on alcohol. But alcohol does not seek money – it seeks people: young and old, male and female, noble and common. Year after year, it sends entire battalions to death, thousands to jail, to sanatoriums or poorhouses... Alcohol is worse than plague or war. Nobody is safe from Alcohol the Tyrant. Alcohol is dangerous because it does not come as an enemy, but rather as the best friend. It comes over with a smile, happily offering foamy beer to the thirsty, comforting the doubtful with rosy wine, mercifully warming up those who are cold.... it promises to make you big, strong, wise. But alcohol is a liar. Those who believe it are fools!" (19). Doubtlessly, by using the metaphor of a tyrant, Štampar creates a character of a callous and powerful manipulator of human destinies, a vicious and seductive demon that can be easily recognized by the illiterate as well as the literate. Antialcoholic message in Štampar's work is intended to two types of

readership. His professional publications, extensive reviews full of statistical data are aimed at educated readers (17,20). On the other hand, his use of Biblical imagery resonates well among the common people, since these are the motives that persisted for centuries in popular culture. By using the metaphor of King Alcohol as a readily recognizable demon, Štampar ingrains visually strong and powerful messages in the minds of even the most uneducated people. The power of alcohol, Štampar says, lies not only in psychophysical destruction of an individual, but in its ability to undermine the very foundations of ethical principles. “An alcoholic is always ethically indifferent, a fillister and a reactionary, saved only by utopia and fantasy. An alcoholic is often a hazardous player, who makes and imagines a completely different world and future for himself.”

Štampar’s attitudes on alcohol may be compared to those described in *Ethics and Alcoholism* (21) by T. G. Masaryk (1850-1937). Masaryk was Austro-Hungarian and Czechoslovakian statesman, sociologist, and philosopher held in high esteem and considered a spiritual role model by many intellectuals in Croatia. Building upon these standpoints, Štampar emphasizes that “to drink and to work are two diametrically opposed notions. A modern ethicist considers love thy neighbor to be the basis of all ethical duties. But love thy neighbor also includes work toward thy neighbor. A modern person should be characterized by awareness of duty rather than sentimental philanthropy” (22). All social diseases originate from the ruthlessness of capitalism, ie, a social order that is insensitive toward working class and the poorest and ruthlessly exploits them at the same time. Štampar calls this coupling between social disease and social order alcoholic capitalism, which strives to gain as much profit as possible from its capital, whereas unorganized workers, who live in unfavorable conditions, take the bait. Therefore, the

fight against alcoholism also requires a new social order with requirements from organized working class (16).

Each social disease has its specific place where it spreads from and where it reins (Figure 4). Taverns, says Štampar, are well-known hotbeds of alcoholism, fatal places where tears of the poor form and where they dig their own graves (23).

Tuberculosis, which Štampar calls the disease of poor-quality housing, was on the other hand the disease of the weak, often young, and susceptible people. It lived in damp, stale spaces and spread by air from poor dwellings full of evaporations of infected saliva (Figure 4). The patient spat and coughed infective sputum and blood, becoming the very focus of infection. The therapy was expensive and inaccessible to the poor, so Štampar suggested implementation of sanitary measures in inadequate living spaces and establishment of outpatient service for patients with tuberculosis (24). The physician in the outpatient service, writes Štampar, “spends less time prescribing medications and more time studying family and social relations of the patient” (18).

The main reason for the spread of sexually transmitted diseases, in Štampar’s opinion, was prostitution. His view of the problem was also sociological, with a special emphasis paid



Figure 4. Štampar called tuberculosis the “disease of poor-quality housing.” Such damp, stale spaces full of evaporations of infected saliva were common in the city of Zagreb in the first decades of the 20th century. Copyright: Institute for the History of Medicine of THE Croatian Academy of Science and Arts.

to the poor background of prostitutes. In the analysis of this problem, Štampar appeals to social sensitivity and calls for global social action. He calls prostitutes white slaves, thereby implying that the responsibility to fight this problem lies on the shoulders of the entire society: “we abandon living beings to a liberal, concessional exploitation by the unaware and degenerated white slave traders, and all the while we refuse to ask ourselves why these slaves were brought to such a low point in the first place. It seems we do not want to assign any blame for fear of being implicated ourselves” (18).

The social frame used in Štampar’s understanding of the prevalence, spread, and treatment of diseases also required knowledge of cultural and historical characteristics of a particular people (25). A good example is his article on plague. Although plague was not a danger anymore, Štampar used it as an example of a socially conditioned disease by tracing its spread through China (26). According to the area where it appeared, he called it the Yellow Death and reached for the usual metaphors to describe it – a spreading evil, an aggressor, and the activities for its prevention a fight against enemy in which medicine was to provide a bulwark (26). In addition, Štampar used plague as a model to emphasize the importance of cultural development in the fight against this disease. He says “culture and cultural progress are the most powerful enemy of this disease, as proved by the example of Japan. The Japanese belong to the same race as the Chinese do and they share a similar religion. But they, a small island nation, have absorbed the European culture and taken over many European ways... And now the plague is rampant where these two cultures clash, the Asian and European one, and we already see that it is Asian culture that will draw the short straw. It is the loveliest example of how powerful the culture and modern medical science, as part of

that culture, can be in the fight against disease. Chinese government has recognized it and seeks European and Japanese physicians” (26). The recognition of interdependence between the development of society (culture) on the one hand and development of science (medicine) on the other in the fight against disease and in protection of human health is the essential characteristic of Štampar’s writing. A firm belief in this interdependence continually inspires Štampar to teach and produce texts of educational nature by using examples of social diseases and describing the relationship toward these diseases in the past and the role of physicians and their future mission (Figure 5) (27). Understanding the history and development of culture as an important determinant in understanding of prevalence of pathology in a particular area, as well as the standpoints in the choice of preventive and therapeutic measures, makes Štampar a forerunner of the concept of global health, the realization of which he would support for his whole life (28).



Figure 5. Štampar’s book “Physician. His Past and Future” (27).

Corporeality of society: body of nation over the body of an individual

The practice of using body metaphors for society began by the ancient description of a so-

ciety as a disciplined body governed by the “head.” During the 19th century, this analogy was revitalized as a basic metaphor, a leitmotif, especially due to the influence of Herbert Spencer’s scientific positivism and the emergence of Lamarckism and evolutionism (29). At that time, medicine developed under the influence of basic sciences and aspired to be a paradigmatic profession of liberal industrial society. Every provocative factor for society was seen and experienced as a disease. Both spheres of co-existence, the social and medical one, were represented in the texts of medical writers at the time, explaining social phenomena in medical terms. Due to the power of social arguments, individual rights became subordinate to the more important strategic goals and could have been used as the corrective of high risk behaviors if they became a threat to public health. The body of nation was necessarily superior to the body of an individual. Social disease became an influential rhetoric category and a persuasive way of attracting public interest.

Those were the times of unshakeable faith that scientific method can solve all problems. Initial evidence of genetic inheritance of prostitution, pauperism, idiotism, alcoholism, rebelliousness, and crime was additionally reinforced by the faith in eugenics as a scientific, quantitative, rigorous solution. All over the USA, laws were being introduced on forced sterilization and on prevention of “inferior” marriages, such as in Indiana in 1907, California and Connecticut in 1909, Nevada, Iowa (banned marriage and enforced sterilization of people with epilepsy, drug addicts, and rapists), and New Jersey in 1911, New York in 1912, and Kansas, Michigan, North Dakota, and Oregon in 1913 (29,30). In the American context, eugenics was the marriage between the fledgling field of biostatistics and Mendelian notions of genetic inheritance. Thus, this field became an arena with a clear affinity to-

ward public health thinking – the application of quantitative, statistically-based medicine to the inborn pathologies of population. Eugenics is often associated with the movement called “social Darwinism,” a phrase credited to Herbert Spencer. “To be a good animal is the first precondition for success in life, and to be a nation of good animals is the first precondition for national prosperity” was often repeated by prominent eugenicists to support their biologically-based social program (31,32). At that time, Rockefeller foundation was financing German eugenicists Poll and Grotjahn, as well as main eugenics institutes in Germany, such as Kaiser Wilhelm Institute for Psychiatry and Kaiser Wilhelm Institute for Anthropology, Eugenics, and Human Inheritance. The same foundation financially supported the construction and organization of the Zagreb School of Public Health (today’s Andrija Štampar School of Public Health), founded in 1926 and opened on October 3, 1927 (6). Štampar definitely took part in these new trends, considering eugenics an acceptable and inevitable form of social therapy, in which the reproduction/degeneration binary system determined the discourse as well as action. In Štampar’s words, “many degenerated people would disappear by themselves if their condition affected their reproductive abilities” (18). Metaphors that Štampar uses include “inferior,” “degenerated,” “mentally,” and “bodily defected.” He concludes that “the number of the less valuable constantly increases and becomes a sad mark of modern culture. This conglomerate of people, which we physicians mark as ill, as mentally and bodily defected, is excreted by itself from the people because of neglect and continual deterioration.” As a method, he recommends general asylum that would serve to cleanse human society from the procreation of improper elements (18).

While public health rhetoric was in general characterized by the activities related to quar-

antine, fumigation, and eradication, the discourse of eugenics was characterized by terms such as segregation and sterilization. Quarantining the infectious achieved the same kind of public health goal as eugenically segregating the feeble-minded from “normal” people or separating the white race from other races. Quarantine interrupted disease transmission; institutional segregation interrupted the transmission of supposedly hereditary feeble-mindedness, abnormality, and susceptibility to disease by preventing procreation (31).

Physician of the people in the mission of attentive listening to the pulse of the people

At that time, social medicine just started to develop into a complex area of various principles that stimulated a special relation toward the goals of medicine and public health, focusing on the necessity of protecting the entire population. Thus, physicians were faced with a special mission – to become a crucial factor in saving people in the name of science. Štampar supported this new trend in medicine. He was its typical representative. It was an era of intense socialization, when natural and social sciences tended to converge and even intersect. Medical practitioners were getting closer to the leading social elite, using and sharing their language. The biology/society analogy was used to describe social processes in biological frames of reference or social terminology was used to explain medical phenomena. The social concept of disease necessarily paved the way for physicians to step out of their offices toward the people. Štampar describes physicians’ practice by using the language of economic sociology. He sees the previous role of physician as that of a detrimental interdependence with the patient (the calling of physician suffers due to economic dependence on the patient) and as taking part in a market race

and competition (there is deplorable competition among physicians); and he sees the patient as an object of exploitation (12). To overcome the previous approach to the treatment of a patient as an individual, physicians should be familiar with sociology and use sociological methods in their work. “In this way, the physician’s knowledge of biological phenomena in a healthy or ill individual is completed, applied, and expanded to different social layers, to all people, and thus the physician becomes the physician of the whole society, of the people. On the basis of such observations and work, the physician will learn, not only to feel the pulse of an individual patient, but also to feel the pulse of the people, not only to study pathological phenomena on individual corpses at departments of pathology, but on the body of different social layers and the entire people (12). Besides being a very popular motif in writings of educators of the 19th century, education also became the key element in the physician’s profession. For Štampar, ignorance is the greatest disease of people (12,33) and it ought to be treated by drug of education.

Value of human life: factories as Roman arenas

In the spirit of liberalism of the late 19th century, it became obvious that proprietary rights of some people go against the dignity of others, whereas the early 20th century clearly articulates the need for a society that would ensure the basic level of protection and education. Within the debate about the “nation’s health,” expressions like human economy, value, and worth in relations with people became common. In that context, it is significant how Štampar interprets the attitude toward the value of human being from the position of capitalist relations by use of metaphors from social economy. Štampar contrasts the value

of human being, which is devaluating, to the industrialization and capitalism as the main forms of exploitation: "A large number of factories is built without the simplest regard to the human health and with a only single intention – to amortize the invested capital as quickly and efficiently as possible, but at the expense of human health. A man, has no economic value. We are shocked by what was going on in Roman arenas, but we do not see that they have not changed, because the masses of working people deteriorate in factories, which are many times worse than Roman arenas!" (34).

Štampar attached great significance to health statistics, which he used as an argument and indicator of people's health, often calling it sad statistics. Vital statistics transformed individual human bodies into quantifiable units, which allowed the state to adapt its health policy according to the statistics. In that context, vital indicators served as an index of social health, but also of interdependence of economy and medicine. "The value of human life is best reflected in health budgets. Our entire work economy is managed and developed at expense of people's health, which is the reason why there is a continual deficit in health budget. Despite this, Štampar persists in claiming that human life/health is the greatest value. As he started to see the human being as a biopolitical rather than socioeconomic being, as a qualitative rather than quantitative category, he also saw ethical revival as a process parallel to health revival. Štampar foresaw that in near future "economy of things will replace economy of people and economy of nation will replace national economy. Health budget will not be restricted only to helping the sick, but invested into the benefit of human material, which will become the main focus of public care. The impulse to this was given by world development and it will not be hindered in that direction by any reaction" (34).

Discussion

At the end of the 19th century, the development of biomedical sciences strongly influenced the public health rhetoric (35). By incorporating the abstract, the metaphor of society as an organism becomes a predominant means to ascribe organic characteristics to everything that is social. The shift in the focus of physician's interest from individual to general served as a basis for conceptualization of social disease. Proceeding from the hereditary and sanitary concept of disease, the language of public health and eugenics emphasized the concept of social disease on the one hand, especially with respect to its hereditary etiology, and the role of experts in their control for the benefit of the entire community on the other. Eugenicists as well as public health workers claimed that individual rights were subordinate to the common good, which justified the state's intervention and corrective (29-31). In that context, Štampar's program and the manner in which he presented it also implied the shift from paternalistical to biopolitical state, which would play the role of a health instrument (36,37). The use of metaphor to describe anthropologic characteristics of society was not specific only of Štampar's expression, but an elementary constituent of the language of other sociomedical movement representatives of the time (13,35). However, Štampar's language, metaphors, and ideology were not inspired only by famous sociomedical movement representatives, such as Ludwig Teleky, Julijus Tandler, or even Karl Marx and Friedrich Engels. They were additionally influenced by Slavonian literature and the expression of writers such as Antun Matija Relković (1732-1798), who spread the ideas about healthy society through his literary work, Josip Kozarac (1858-1906) who realistically described life in Slavonia and sharply criticized the decay of traditional values in his book *Dead As-*

sets (*Mrtvi kapitali*), and Ivan Kozarac (1885-1910), a writer and Štampar's friend, who died young from tuberculosis and for whom Štampar wrote a touching *in memoriam* (38).

Organicistic approach to the society and social diseases shaped the unquestionable belief in the importance of disease prevention, as well as qualified physicians in their special approach. It implied the inclusion of social and quantitative methods that require not only "listening to the pulse of the people as a whole," but also the vigilance and control to prevent social diseases and degeneration. This was paradigmatic for the rest of the popular ideas of the 20th century in Croatia, as well as within the broader context. Modern life of these ideas can be detected from Hans Selye's (1907-1982) stress concept widely used to explain the interaction of organic life with the environment in the second half of the 20th century (39). Thus, the society as an organism metaphor overcomes its primary role and becomes a global movement and specific cultural ethos of health protection till today. It was due to Štampar's endeavors and dedication that this movement found fertile ground in Croatia and helped making significant advances in the quality of life and health protection during the 20th century.

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