

A debate about nostalgia in the kingdom of Piedmont-Sardinia

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Abstract. In Switzerland from the end of the 17th century, documentation in the military-medical field and beyond had begun to detail the pathological link between nostalgia (Heimweh or homesickness) and soldiers. Throughout the following century and the early 19th century, this sickness continued to appear in various European and American armies, prompting differing opinions among the medical profession. This paper aims to examine the dialectic within Piedmont military medical officers in the 1840s, focusing on the cause, appropriate diagnosis, and treatment to prescribe to soldiers suffering from nostalgia. At the end of the debate, the opinion of who supported the moral and cerebral origin of nostalgia seems to prevail, in opposition to the physicalist hypothesis of the air by the first contender, although both are influenced by the French positivism of the first half of the 19th century. The main subsequent historical implications linked to problems of nostalgia are briefly indicated and discussed.

Key words: nostalgia, soldier, monomania, 1844, 1845, French positivism

Introduction

The Alsatian Johannes Hofer (1669-1752) was the first physician to mint the word Nostalgia (composed of two Greek terms: “nostos”-return- and “algos”-pain-) or “Heimweh” in German. He thus called the disease of the Swiss mercenaries who fought for the king of France: inappetence, consumption, insomnia, fainting, sometimes fever and an almost exclusive concentration on the idea of the homeland; moreover, not a few of them could die of pain only to hear the call of the herds (Kühe Reyhen), to the point that in France any reproduction was immediately forbidden. Hofer stated nostalgia was caused by a disturbance of the imagination, produced by the vital spirits that in their motion, followed a single path along the white ducts of the striated bodies of the brain and the channels of the oval center, and then aroused in the soul the exclusive and persistent idea of returning home.

The remedy consisted in the repatriation of nostalgic soldiers, while in case of fever, it had to be treated with an appropriate pharmacological treatment (1).

Afterwards (1705), the Swiss doctor in natural sciences Johann Jakob Scheuchzer (1672-1733), unlike Hofer, traced the etiopathogenesis of nostalgia to the heavy, thick, and dirty air that Swiss mercenaries were forced to breathe in foreign countries, especially marine; Scheuchzer contrasted the unhealthy air of foreign countries with the pure, light and thin air of Switzerland, due to its high mountains (2). In his opinion, the young Swiss mercenaries abroad experienced a sort of respiratory and circulatory intoxication that damaged the heart and brain, produced the constellation of nostalgic symptoms until death. In agreement with Hofer, Scheuchzer indicated the repatriation of the Swiss military as the real effective cure of the “Heimweh” although sending patients to the top of an appropriately high mountain or tower (if present in the nearness), could represent a temporary benefit.

During the ‘700, some important European authors (in chronological order: B. Ramazzini, 1633-1714; G. Van Swieten, 1700-1772; W. Cullen, 1710-1790; J.P. Frank, 1745-1821), studied the nostalgia of the soldiers, in the wake of the two previous arguments

and the same problems also involved the United States during the American War of Independence, with the name of “homesickness” (3). At the end of the century, this disease was inserted in the “Occasional Causes of Melancholy” by Vincenzo Chiarugi (4). Afterwards, Philippe Pinel (1801) divided nostalgia in two cases: simple and complicated. The first case could affect, regardless of age, any sensitive subject as a result of his distancing himself from all that is the dearest to him, with a very rare unfortunate outcome. The second case, much more dangerous, presented itself together with other inter-current pathologies, and was typical of young men subjected to forced military conscription.

These soldiers could reach the lethal outcome through “a stubborn silence, the refusal of drinks and food, a severe slimming and marasma”. Pinel stated the death of nostalgic soldiers could also occur following prolonged hospitalizations in military hospitals, as they easily exposed them to feverish and dysenteric diseases of various kinds. About the cure, he argued that distractions, entertainments, and pleasurable occupations could only be decisive in the case of simple nostalgia but for the second case “great care must be taken to ensure that sick soldiers retain their strength; we must give birth to the hope of seeing their country again soon. And even if they are weak, they must be brought back to their families using comfortable coaches. Some patients enter the state of convalescence from the exact moment they are allowed to return home” (5).

More generally, in the first half of the nineteenth century, the birth and socio-cultural affirmation of the French positivism of Saint Simon and Comte (in chronological order: C.H. de Rouvroy de Saint Simon, 1760-1825; A. Comte, 1798-1857), the phrenological doctrines of Gall and Spurzheim (in chronological order: F.J. Gall, 1758-1828; J.G. Spurzheim, 1776-1832), together with the Napoleonic and post-Napoleonic contributions of French and Habsburg military medicine, mentioned in the subsequent Piedmontese debate, constitute the contemporary framework of the subject of this paper.

In the 1844 January edition of the ‘Giornale delle Scienze Mediche della Società Medico-Chirurgica di Torino’ [Journal of Medical Sciences of the Medical and Surgical Society of Turin. This journal, published by the “Società medico-chirurgica di Torino”, is a dead

periodical; its hard copies, relating to the historical period (1838-1847), are kept by the Biomedical Library of the University of Florence], a paper was published by Dr Antonio Carnevale Arella on the physical causes of nostalgia. In March 1844, an article about nostalgia in soldiers by the physician-surgeon, Napoleone Alciati, appeared in the same journal, criticising the previous publication. Subsequently in December (then bound in the 1st volume of 1845, i.e. number XXII), a supplement appeared with a reply by Dr Carnevale Arella in the same journal and on the same subject, followed in February 1845, by a further (final) publication on the subject by Alciati once again. This took the form, therefore, of a sort of debate through the scientific press between Dr Antonio Carnevale Arella, ‘first class physician’ at the divisional military hospital of Cuneo, and Dr Napoleone Alciati, ‘major surgeon’. The following is a summary of the differing opinions in the four publications mentioned above, aimed at highlighting the personal views of the two authors.

Historical report

It was, therefore Dr Carnevale Arella who initiated the scientific discussion on the physical causes of nostalgia which he described as a wide-ranging illness that affected not only armies but also “exiles, prisoners of war and those afflicted by an overwhelming desire to travel” (6). His view was that attributing the cause of this condition to “a love of one’s country” was a biased interpretation whereas changes in the climate and air were the main etiopathogenetic indications. Although humans have a unique ability to adapt to living at any latitude and altitude, “they cannot, however, change climate without profound changes occurring in them, mainly due to the atmospheric air in which they must live, so the popular saying that when one goes to stay in a country, one must buy the air there, is very true. The atmosphere thus influences ideas just as powerfully as it does the waves of the sea, and consequently the sadness of the homesick soldier was an effect rather than a cause of the illness” (6). In a rather convoluted way, he goes on to set out an argument to demonstrate the universality of his theory especially in the military context: “it is not always the delights of

places, nor the comforts of life or the more civilised behaviour of one's countrymen that cause nostalgia in those who are far from their homeland" (6). To take this paradox to the extreme, the author gives a number of examples, including the one about the wild man "who when uprooted from his native forests, even if he is taken to live in an affluent, civilised world, becomes sad and gloomy and as soon as he is out of sight, tries to escape and return to his beloved forests. In the same way, the overwhelming desire of the young conscript, snatched from the comfort of his home, was to go back and breathe the free, pure air" of his native land. The underlying pathophysiology of this phenomenon is the result of the interaction between the air, lungs, and blood. In particular, the last link, the blood, in nostalgia seems to alter the normal arterio-venous balance, i.e. a decrease in oxygen in favour of "carbonic acid", thus producing "that ill-defined internal sensation of malaise and a profound sense of weakness, numbness, suffering and sadness that are typically associated with nostalgia" (6). These respiratory and circulatory difficulties would appear to be the real organic factors responsible for nostalgia and can be fatal, causing brain lesions that, for the author, therefore, are secondary. Indeed, "these disturbances have an immediate effect on the brain, to the extent that the spirit is dominated by a single thought, the homeland" (6).

In his article in March 1844, Dr Alciati first contests how "the sadness and despondency of nostalgia are the effect rather than the cause of the illness, and that the latter depends on the varying influences of the air and climate" (7). In this sense, as "universally held by psychologists, it is the faculties themselves and the primitive mindset that, if too intense, together cause physical afflictions. This then clearly shows that a healthy mind in a healthy body is essential to ensure perfect health" (7). Contrary to what Carnevale Arella believes, it is, therefore, the young soldier's soul that is "so deeply disturbed and troubled by the new lifestyle, that these feelings cause abnormal and disturbing changes in his mind and body, which negate and sometimes even make the effect of air, food and drink detrimental, even though they do not inherently contain anything harmful" (7). The truly homesick individual does not improve over time, even though he may adapt to the different air of a new environment, his entire

being remains focused on the single-minded desire to see his native country again. Alciati also claimed to have identified many cases of non-military individuals who have succumbed to nostalgia in places that were similar in terms of "temperature and warmth to their own; and a similar number of cases among military personnel" who recovered by taking a temporary leave of absence and, once cured, returned to the corps "and did not relapse again, even though they were in the same atmospheric conditions as before" (7).

As to why the civilised world with its pleasant surroundings and home comforts proved effective in overcoming nostalgia, Alciati believed and emphasised that returning home was not so much a physical need "as [...] a human instinct, which results in each individual retaining unbreakable inner bonds with the place in which he took his first breaths. Nature thus aimed at ensuring that human beings populated every corner of the world, both in climates and places favourable in terms of fertility and temperature, and in those less favourable due to adverse conditions". In this sense, he did not believe that an environment or climate that was foreign to the homesick individual in general could be the cause of his suffering. More specifically, he did not share the view that "compared to our armed forces, this illness proverbially vanishes when the bells of their homeland are left behind". He clearly states the importance and predominance of lesions of the brain observed during the autopsies of individuals who died of nostalgia with regard to their cause and type. In particular, those of the anterior and superior peripheral parts of the cerebral hemispheres followed by deeper lesions in the cerebral lobes themselves; the initial and mild lesions, and the more advanced and severe ones, accurately reflect the physiological functions of these parts". Therefore, despite recognising that the air and food are "the immediate modifiers and appropriate stimuli of the gastrointestinal-pulmonary system", inverting Arella's point of view, he concludes that "nostalgia has a damaging effect on the cerebrum at a primitive level whereas the damage found in the chest and abdomen occurs at a later stage and is secondary" (7).

The second stage of the debate sees the two colleagues/rivals focus more specifically on the military aspect. In responding to Alciati, Dr Carnevale Arella

first describes the despair of the soldier afflicted by nostalgia by quoting renowned foreign authors, such as Chamberet, [J.B.T. de Chamberet 1779-1870]: “For all armies throughout universal history, so-called ‘nostalgia’ or ‘homeland sickness’ was, and still is today, no less deadly than typhus, to the extent that it can be considered a disease endemic among the military” (8). He also refers to Dominique Jean Larrey, who in his memoirs of the Egyptian campaign, having recounted that amidst the horrors of the plague, nostalgia also beset the brave and intrepid soldiers who had fought at Acre, thus worsening its effects, discussed the characteristics of the environment (9). “Mankind depends on what surrounds him and is the true son of the land in which he was born and raised, quoting Hippocrates, “What the earth generates is like the earth itself and man is no exception to this common rule”. He also showed how the Austrian, J. P. Frank in his *A Complete System of Medical Policy* asserts that “action that the climate has on the way men think” is of great importance. Indeed, as far back as Ancient Greece, the air of the Boeotia was not as good for the brain as that of Athens, also quoting Plato, according to whom “the quality of the climate greatly influences the good or bad character of the men born there” (8).

All this leads to the fundamental consideration by Dr Arella that, “in order for the love of one’s homeland to become part of practical medicine, the longing for one’s country must be accompanied by a deeper inner malaise, a feeling of widespread discomfort, a functional impairment of some organ, a progressive daily weight loss and an inescapable sadness; one of the characteristic symptoms is progressive emaciation, which gradually turns into actual consumption”. The conclusion is that “nutrition and assimilation are impaired, haematosi is impaired, and the electrical powers of the blood are impaired due to the inadequate climate in which the individual lives” (8). He is of the opinion that the sole desire to return home or the love for one’s country is not enough to determine nostalgia. Even if the places in which the soldier fights are fascinating lands like Italy or Greece, they still exert a negative influence on the troops. To this end, he recalls how in 1831, in the 21st regiment of the light infantry of the French army, of which many Corsican soldiers were a part, many died of nostalgia in the hospital in

Navarino. Similarly, of three hundred Germans sent in 1765 to Cayenne, only three remained less than two months later.

So, it is the interaction of “air-blood” that interests Dr Carnevale Arella, who viewed nostalgia as a blood disorder. The oxygenation and electrical powers of the blood are modified by the air which mainly result from the chemical interactions of iron bound to haemoglobins and combined with oxygen and carbonic acid. He states that the following toxic compounds that form are: “peroxide [Fe+++] in the lungs and in the major arterial trunks, iron oxide [Fe++] in the innermost part of the organs and the smallest capillary vessels, and carbonate oxide in the veins. An individual who changes climate, is exposed to the influence of all the external circumstances into which he is thrust. A conflict arises and if the body cannot rebalance itself, a state of languor and sadness follows, together with an onset of weight loss, a keen need for one’s native air, in short, a morbid affliction that, given the nature of its causes, I will call ‘physical nostalgia’”. However, evidence of this interesting approach must be sought on the anatomy table, adds Carnevale Arella. To support his theory, he quotes Leopold Auenbrugger (1722-1809), the inventor of the percussion method, who,

“In the Spanish Military Hospital in Vienna, had noted that many soldiers afflicted by nostalgia, when tapped on the side of the chest, manifested a less clear sound than the one that rarely remained unchanged on the autopsy table, indicating injuries such as the adhesion of the lungs to the costal pleura, their hardening and the presence of more or less extensive suppuration. In the southernmost countries, where the climate is hotter, the injuries tend to affect the gastroenteric apparatus and the cerebrospinal axis, but are also consistently found on the anatomy table, suggesting a disease of a more physical rather than moral or psychological nature” (8).

He goes on to say, “This occurs because the physical causes, such as air and climate, have a more direct effect on the body’s organs. The respiratory and blood circulation functions, followed by the unpleasant sensations, transmitted through the nerves to the nerve centres, induce a deep sense of sadness in the soul and gradually cause the excessive arousal of the brain, leading to organic changes in the delicate brain substance”.

Since, for Dr Carnevale Arella, the changes are organic in nature, he emphasises that the soldier's nostalgia is not a mental illness: it is not a monomania. The homesick soldier is melancholy, but not delirious. His mind is not disturbed and he can think rationally. Nostalgia, therefore, seems undoubtedly to be a: "mechanical internal movement, a purely physical need for environments that are more suited to his organic sensibility and the characteristics of his body, which the homesick individual tries to resist with all his intellectual strength, almost ashamed of this internal, instinctive weakness" (8).

And in conclusion, he asks, "How can one explain the nostalgia of individuals who have voluntarily and gladly left their homeland to go to foreign shores, when it is not mainly caused by the influence of the air and climate?" (8).

The major surgeon, Napoleone Alciati responded ironically to these interpretations and reflections, stating initially that he agreed with the effect of the climate and distance from home as the cause of nostalgia. "Plants die if they are taken out of their habitat. The same can be said of panthers or lions if they are taken to places that are not suitable for their survival. Who would ever think of arguing with such facts?" (10).

With regard to the distinction between true and false nostalgia mentioned by Dr Carnevale Arella, who defines true nostalgia as a 'physical' disease that he considers to be mainly haematological, characterised by an alteration in the haematosi of the blood, the military surgeon Alciati responds by saying that this concept lacks foundation on the basis of practical observation. His colleague's theories, in fact, are but mere conjecture unsupported by empirical observations, for various reasons: "Firstly, no military physician has ever come across a simple lung injury attributable to nostalgia among soldiers. Secondly, as for false nostalgia, if an individual is faking it, why attribute illness as the cause?" (10). The most conclusive contradiction, however, comes from the renowned military physicians of the Napoleonic period, such as Larrey, who states: "The mental faculties are the first to change in homesick soldiers. In the initial stages, therefore, there is a period of heightened excitement characterised by spontaneous flushing of the face, a quickened pulse, jerky movements, reddening of the eyes, a glazed stare,

and rushed, garbled speech (10). Autopsies on the bodies of individuals who died of this disease simply confirmed and cast further doubt that:

"1) The first parts to suffer damage as a result of nostalgia are the peripheral anterior and superior parts of the anterior lobes of the cerebral hemispheres, resulting in an increase in lesions in the lobes as the intensity of the distress increases;

2) Initial and advanced lesions correlate directly with the physiological functions of these parts;

3) Although air and climates directly affect the gastro-pulmonary system, nostalgia, however, has a primary impact on the brain, and the damage to the chest and other parts follow as a secondary consequence" (10).

He then quotes Johann Nepomuk Isfordink (1776-1841), an Austrian army physician, who summed up the initial symptoms as follows: "Overall cachexia, thin wrists, silent apathy, restlessness at night, and loss of appetite. And the illness, if not treated early, will lead to monomania". Alciati thus defines nostalgia in soldiers as a mental illness, with organic neurological damage. It is important to note that he is concerned with the treatment: the illness can be prevented by "taking note of these early warning signs". The reason why the Decree of Joseph II of 12 July 1788 claims that the State benefits when a farm worker can be retained by preventive measures, such as temporary leave, is that the loss of a potential soldier is thus avoided. Moreover, there is always the hope that, once recovered, the farm worker can return to the army and contribute many years of service" (10).

Alciati, therefore, corroborates the theory of the Habsburg physician, asking the rhetorical question: "And if there is secondary damage to the chest and abdomen, is it not the pneumogastric nerve that connects the ventricle, heart and lungs? Are the homesick soldier's sad face, eyes and expression not controlled by the fifth cranial nerve?"

Does it make him smile perhaps that Dr Carnevale Arella wants to combat the illness by treating inflammation of the membranes or parenchyma? Lastly, in a quick conclusion, Alciati, the military surgeon, bluntly states: “1) An adverse climate does not cause the illness; 2) The illness does not come back if the soldier returns to the place where he contracted nostalgia; 3) Without changing the environment, moral consolations offer refuge to those who would otherwise be the inevitable victims of nostalgia” (10).

Discussion

The two doctors, therefore, seem to be truly products of their time, the 19th century scientist and the positivist in search of ‘physical’ causes for this syndrome. The physicalist of the air, Dr Carnevale Arella, is in fact countered by another physicalist, this time of the cerebral nervous system. For Alciati, the causes are not physical but moral; the consequences are, however, visible on the autopsy table in the anterior lobes of the encephalon. Moreover, in all this, the direct French but also Austro-Hungarian influence on the views held by the two ‘contenders’ also appears quite clear. While Carnevale Arella’s approach can be indirectly ascribed to the views of the Swiss physician, Scheuchzer, Alciati’s appears, in some ways, to be more in line with those of Hofer. Afterwards the microbe hunters of the second half of the 19th century, shed light on most of the hitherto unknown or misunderstood causes of the ‘febrile and/or physical’ symptoms that often accompanied and/or complicated the ‘nostalgic illness’ – an illness that some, like Dr Arella, believed to be the true cause of nostalgia. In the second half of the 19th century, French and Italian positivist medicine had other important exponents in Claude Bernard and Cesare Lombroso (in chronological order: C. Bernard, 1813-1878; C. Lombroso, 1835-1909); however, it does not appear that this medical strand had addressed the issue of nostalgia. It would take another century or so for Dr Alciati’s approach to be revolutionised from the point of view of psychosomatic medicine. This transformation stemmed from the psychological aspects of health education (11) that began to emerge at the turn of the 19th and 20th centuries.

The evolution of the world war industry between the end of the 19th century and the beginning of the 20th century represented an element of further novelty and complication in the field of military and other psychopathological diseases. Particularly, since the Russian-Japanese War (1904-1905) to nowadays, the abnormal psychic sufferings and serious psychiatric pathologies of soldiers (and of the wars victims generally) have been increased and complicated by the so-called “bombing shocks” due to the use of increasingly powerful and devastating devices (12). Therefore, outside psychosomatic medicine (of psychodynamic derivation) and more recently, the most serious psychiatric manifestations of nostalgia are mainly included in Acute Stress Disorder and Post Traumatic Stress Disorder, as well as Major Depressive Disorder (13).

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