

Iron and Speech Processes with Special Reference to Anemia*

Bernhard Woehrmann and Barbara Denjean-von Stryk

Physicians and therapists frequently see patients with iron deficiency anemia who are difficult to treat medically. Even with differentiated iron therapy including various methods of stimulating iron assimilation these patients are not completely or permanently cured. They appear constitutionally unable to cope with the iron process. Evidently the higher principles are failing to come to grips properly with the bodily organization; in other words, the individual is incompletely incarnated. In considering wider possibilities of treatment for these patients, speech therapy as an aid to incarnation is an obvious choice, and working with the processes of iron and speech has led to the discovery of a remarkable correlation between the two. This hidden affinity and the similarities in the way the two processes function will be discussed in the following.

"Why does the blood need iron?"

Rudolf Steiner asked this question in the third lecture of his first medical course, calling it a "key question for medical science as a whole." He immediately went on to provide an answer by explaining that blood "is sick by nature and constantly needs to be healed by iron." By reaching an understanding of this process in the blood, which is normal rather than pathological, the physician can "pass nature's examination."¹

Is it possible to stimulate the beneficial iron process in the blood by means of speech, which is a process involving spirit and soul?

In the Michael Imagination Steiner found words that can help us think about this subject. He described how human blood: "...not at all in the materialistic manner envisaged by scientists today, is shot through and filled with processes brought into it by iron through the stimulus received from the world of soul and spirit. The processes that take place in every single blood corpuscle when the iron compound comes in are the same, on a minute human scale, as the processes set in motion by a meteor as it flashes glowing through the air."²

* Based on a lecture given on Oct.16, 1992 at the conference for speech therapists and in a shortened version on Jan.15, 1993 at the conference for doctors and art therapists, both organized by the Medical Section at the Goetheanum. Original title: "Eisen- und Sprachprozess, besonders im Hinblick auf die Eisenmangelanaemie" from *Merkurstab* 1994, 47:146-53. English by Johanna Collis, MIL. English versions of speech exercises by Sophia Walsh.

Mars-iron and Sun-iron

To reach a proper understanding of the nature of iron we have to know that it has a dual character owing to the fact that "Mars" iron and meteoric iron come from different sources. By "Mars iron" we mean the substance that has contributed to the formation of the Earth since the time when Mars passed through the Earth (middle period of Lemuria).³ The Earth's crust, for example, contains 4.7% of iron, which amounts to about 47 kg per ton of Earth matter. It is striking that there are large iron deposits in the temperate zone of the northern hemisphere. Typical of this middle region of the Earth are the ever-changing seasons and weather, which resemble a breathing function. The other kind of iron falls to Earth throughout the year in the form of the "iron rain" of meteors thrown off by the Sun.⁴ Recent estimates put the daily amount of meteoric substance arriving in this way at 10,000 tons.⁵ This must mean that the air we breathe is permanently filled with very fine meteoric dust. There is thus a clear distinction between the sources of the two kinds of iron and their differing qualities. This division into Mars and Sun iron is very important and will concern us again later.

Iron in evolution

By coming into the Earth, iron has enabled two important evolutionary steps to come about. Firstly, it contributed to the transition from the green pigment in leaves to the red pigment in blood, thereby making possible a development from the sleeping, unconscious nature of the plant to the human consciousness of self. Secondly, iron formed out the lungs and so made possible the step from gill breathing to lung breathing.³

Because of its special capacity to absorb and give off oxygen – Wilhelm Pelikan called it the "breather" among planetary metals⁶ – iron is capable of combining with the heavy metals, some of which are very toxic, as well as with other poisonous substances, thus taking on an important detoxifying function in nature and in the human being.

Iron in the human being

The human body contains 5 g of iron. It is the only metal present in an amount that can be crudely weighed in this way. Current physiological opinion has it that all of this is absorbed from food via the digestive tract. In the appendix to Anton Degenaar's reports of his conversations with Rudolf Steiner he quotes Steiner as saying that humans absorb the "iron they essentially need" from the air by breathing and also through the senses via the eyes and ears and especially the skin.⁷ We mustn't lose sight of this important fact. Obviously the reference is to the iron ever-present in the air in the form of fine meteoric dust. So now we can distinguish between nutritional iron (Earthly or Mars iron), and respiratory iron (cosmic, meteoric, or

Sun iron). Two vitally important substances – meteoric iron and oxygen – are absorbed via the lungs through breathing. The manner in which they are absorbed into the body demonstrates the difference between the two forms of iron. In connection with iron metabolism in humans we shall here merely remind readers of the important role played by hemoglobin in absorbing oxygen via the lungs and distributing it throughout the body. In addition, the blood corpuscles containing iron provide a “buoyancy”⁸ which enables human beings to overcome the heaviness of the body. It is not very far-fetched to link this with depressive conditions in which heaviness wins the upper hand over lightness and in which there is often an underlying disorder of the iron process in the general direction of anemia.

Iron as the original healing principle

Our starting point was Rudolf Steiner’s question: “Why does blood need iron?” followed by his answer: “Because it is sick by nature.”¹ What is this inherent sickness? Iron and protein, the two constituents of hemoglobin, represent a polarity in a minute space, an archetype in miniature of an overall process in the body. If you take the iron out of hemoglobin, the protein cannot survive on its own and so disintegrates.¹ Left to itself in the human body, protein has a pathogenic effect, particularly in two areas. Firstly, this applies in the metabolism where the four protein-forming organs initiate the protein processes.⁹ This is the autonomic, sleeping, unconscious area where there is not much form. Secondly, Steiner indicated the nerve processes as an area where protein disintegrates and brings sickness if these processes are left to themselves.¹⁰

In both areas, that of metabolism and that of nerve processes, blood offers an effective healing process with its iron, balancing out the pathological powers of protein bent on bringing about decay. Steiner described this by calling it a “continuous battle” that is being fought between these two polar tendencies, a battle in which the beam of the scales must be kept horizontal. In the 12th lecture of the *Course for Doctors*, Steiner mentioned this beam which leads to anemia if it is not kept level. In the same lecture he also talked about “the radiant iron action” coming from the upper part of the body that is everywhere opposed by protein working “as a hindrance.”⁹ In the 20th lecture he went on to say that: “normally the human organism constantly tends to make itself ill through sleep. This tendency, however, is countered by the iron in the blood. Iron is the most important metal for human beings, working to create a balance inside their body.”¹¹

An imagination depicting the reality of this process going on continuously in our body is the figure of Michael with his iron spear or sword with which he overcomes the power of the dragon beneath him.

Regarding the close connection between iron and the respiratory organs

we can point to a number of important indications by Rudolf Steiner. For example, he spoke about the relationship between "lungs and larynx on the one hand, and iron on the other;"¹¹ or, similarly, in *Occult Physiology*: "Something, for example, that opens out from the lung towards the larynx, thus becoming an organ of the higher human organization, something that otherwise has a downward trend as the dull life of the gall-bladder; this element, when it is in the larynx that contains the upper parts of the lungs, expresses itself as a Mars or iron system."¹²

By mentioning the larynx we have arrived at the spot where speech is formed, and a further passage from the previous lecture is appropriate here:

"The degree to which a child achieves free will relates to the absorption of iron. This shows that iron is necessary for freedom of will. If you want to find out what is the matter with a person who is hoarse, who has a weak voice, you must try to discover whether he or she has sufficient iron. If someone has too little iron, this shows above all in the will, in the free will that is revealed through speech. With people who are good at bellowing there is no need to worry about the amount of iron they have. But with people who can hardly utter their words you must ask in what way they lack iron."

A little later in the same lecture: "When we speak, when we utter words, we do this through the power of Mars together with the comets and meteors. This is human speech."¹³

To summarize: iron forms out the lungs and the larynx and makes possible intermediary respiration by means of oxygen absorption and transport; it gives buoyancy to the red blood corpuscles and is the prerequisite for the independent initiative to stand upright¹⁴ as well as for the free will that comes to expression in speech. It detoxifies and thus overcomes the sickness of the blood by sending healing, health-giving principles down from the rhythmic system into the pathological actions of the metabolism.

The close relationship between iron process and speech process

In view of the great affinity between speech and iron, is it possible to talk of speech having an effect on iron processes? This question challenges us to examine the therapeutic qualities of consciously-formed speech. Speech formation has a harmonizing and deepening effect on respiration, which leads to increased oxygen intake. We only have to observe how by hearing speech little children are stimulated to bring themselves into an upright position and how good articulation helps them mold their internal organs.^{15, 16} Another sign of the link between blood and breathing processes on the one hand and iron processes on the other is the increase in iron content that occurs at age 9 and again at age 14. The way is smoothed for the child's readiness for life on Earth by the descending respiratory curve and the ascending pulse curve in the 9th year, a process that leads to dominance of

the blood pole in the 14th year. The curriculum of the Waldorf school uses speech, in particular alliteration and hexameter, to help the children "breathe themselves down" into Earthly maturity.

It is, therefore, reasonable to assume that therapeutic speech formation can be used to activate and bring in the ego, and this means that speech formation has a clear inner kinship with iron, the incarnation metal. It works and radiates in the same direction as iron – from above downwards. In strongly-formed speech, spirit and soul give expression to the power of iron, and each presupposes the other. Powerful speech requires a healthy iron process; and, conversely, by helping spirit and soul to radiate right down into bodily iron processes, speech formation can provide an impetus for healing by uniting the power of Mars iron with the substance of cosmic iron.

Looking up to Mars we can say that it is Mars who creates in us the influences which enable us to utilize iron. Mars must exist so that we shall have the power to make use of iron. Iron must exist so that we can apply this power to the free will. Mars provides us with the power of iron, substance of iron.¹³

This important differentiation should also be taken into account far more thoroughly by doctors giving medical treatment:

Mars is the body in the cosmos that helps us make appropriate use of the iron that meteors and comets send down to us.¹³

In the power of Michaelic speech we rediscover the iron of the sword, melted down and transformed. This is the other iron process, the one belonging to spirit and soul that arises out of the union of Mars iron with Sun iron.

Iron deficiency anemia

Basic iron deficiency anemia (i.e. disregarding anemia resulting from hemorrhage) is almost exclusive to women. With the onset of puberty the hemoglobin level of women is about 1.5 g below that for men, and this cannot be explained solely on the basis of menstruation. These facts constitute one of the many differences between the male and female constitution. Iron helps men incarnate more deeply and become more Earthbound whereas women retain more of their original cosmic nature. They find it more difficult to master iron and absorb it. Some women feel very well when they lack a certain amount of iron because this suits their nature. Iron brings about a better connection between higher principles and bodily nature, which is why it is termed the incarnation metal.

All the symptoms and signs of iron deficiency anemia indicate that the body has not been properly taken hold of. They include exceptional tiredness and an increased desire for sleep; general dullness; lack of energy and initiative; lack of concentration; increased need for warmth; noticeable

hoarse; a depressed mood accompanied by lack of drive or initiative and weakness of will. Clinical symptoms that point in the same direction are pallor and metabolic weakness.

A particular cause of chlorosis in young girls, but also of other iron deficiency symptoms, lies in the difficulty of "bringing together" Mars and Mercury in the right way in the stomach, as Rudolf Steiner put it.¹³ The chlorine in the hydrochloric acid of the stomach must be prepared to "accept," i.e. absorb, the iron. The Sun stands between Mars and Mercury, and the Sun powers have to be strengthened so that Mercury and Mars may unite and iron can be absorbed.

A case history

One case history will serve to illustrate the above.

The patient was a woman aged 33, married with 3 children, American. Since puberty she had repeatedly suffered from iron deficiency disorders which were treated with massive doses of iron in America without any lasting effect. She took her degree in psychology at the very young age of 20. During this phase she was depressed for several years. Her face is somewhat undefined with rather coarse peasant features. Her figure is also formless and rounded and her gait clumsy, with her feet noticeably positioned to form an O. She has absolutely no affinity with the German language. Laboratory tests showed marked iron deficiency, and she was treated with various iron preparations and medicines designed to stimulate iron uptake. In the space of six months, she was given the following, some concurrently, some consecutively: Ferro-Folsan (dried ferrous sulfate, folic acid); Ferrum ustum comp. (Weleda; Siderite 3x; mineral-rich Levico water undiluted; Ferrum font. 4x (a "spring water iron"); Ferrum chlorate oxide 3x; Ferrum sid. 20x, Ferrum prep. 30x, Garnet 15x equal parts as a mixed injection; Gentian Anaemodoron; Aurum chlorate. 5x; Cuprum sulfuricum 6x.

There were temporary improvements, but her iron count remained too low. After 6 months of treatment with speech therapy beginning in Oct. 11, 1991 the iron counts were as follows:

	5/7/91	10/11/91	2/14/92	8/18/92	3/4/93	3/29/93	Norms
Hb (g/dL)	11.2	11.2	12.9	13.4	11.1	12.2	12-16
Serum Fe (µg/dL)	40	55	120	121	55	194	60-140
ferritin (ng/mL)	4	3	32	19	5	12	25-180

After 6 months of speech therapy the patient felt and looked different: her features were more formed, her gaze clearer, her gait more erect; she had more energy and was hardly tired any longer. As a result of a sprained ankle with torn ligaments that had to be sutured under anesthetic she wore a plaster cast for several weeks during which speech therapy was interrupted. The iron levels immediately went down (see figures for March 4, 1993). The figures for March 29, 1993 finally show further clear improvement following resumption of speech therapy and medical treatment. The whole evolution makes it clear that specific therapeutic speech formation influenced the ability to cope with iron so that iron absorption could be considerably improved. (Measurable changes in Hb were also noted at the *Medizinisch-Kuenstlerisches Therapeutikum* in Bern.)

Speech therapy for iron deficiency

We have seen that the important iron and speech processes have the same physical basis, namely respiration and blood circulation. Rudolf Steiner described the speech process as originating in the "astral body modified by the ego."¹⁷ As mentioned above, iron is stimulated by spirit and soul powers to radiate into human blood.² The stimulus for both processes comes from the higher principles of the human being, and each presupposes the other. They help the capacity to stand upright and form out the body and make a person capable of strongly expressing free will. To demonstrate how a disturbed iron process can be countered by increased speech activity we shall explain how voice, breathing and articulation work together in human speech.

Stimulated by the will to speak, the voice – bearer of our individual soul mood – rises up and takes hold of the formative powers of the speech sounds. In the breath the two combine to shape speech that moves and lives freely in the air. If the direction from below upwards predominates – from metabolism via the pulse to respiration – then the resulting speech will be a musical recitation. Conversely, if the respiration affects the blood – if a declamatory molding works from above downwards to give form to the speech process – then we follow the direction of the iron processes in our speaking:

*Declamation is tied to the process that links up with the will element in the life of the soul. The breath impinges on the whole of the metabolic process which in the blood circulation in turn impinges on the pulse. In this procedure going from above downwards there is a pressing down into our will element that is predominantly bound up with exhalation...*¹⁸

These processes can be consciously applied in speech therapy. Before beginning to work with speech from above downwards we have to learn to experience, even when we breathe in, how speech takes hold of us and lifts us

up. This can be made clear by an initial exercise in which gravity is overcome by raising and lowering first the heels and later on also the arms. The direction of the will from above downwards is emphasized by the sequence: raise the heels, raise the arms, speak – let the arms fall, let the heels go down, speak. Even a simple exercise: "High and low/high and low/rolls the wave/splash and splash" practiced in this way causes the first changes in our breathing.¹⁹ When we walk to a text there is an even stronger experience of extricating ourselves from gravity and finding ourselves on a new level. Speaking is never a matter of marking time, let alone of stepping backwards. Having learnt to rise up to the level of speech we can then begin to use the articulation exercises to shape the exhaled breath from above downwards. Step by step the words, monosyllabic at first, are articulated, whereby every sound must be given its inherent shape: "Dust aids dim/docks do darken this lobby." The vowel sequence Ah Eh I(ee) O U unfolding in the front part of the mouth stimulates a lively and relaxing force in the breath stream. The consonants N and M in the second articulation exercise "No knock knees on nimbly moving mules." free the voice of a nasal sound or a head resonance that can indicate misdirected metabolic processes in the head in an anemic person. The vowels I(ee) and U strengthen the outward direction. With this exercise the step-by-step articulation of the previous one is transformed into flowing forms. In the next two exercises ("Rarely are merries, riddles move ready" and "richly relish/rumored ruses/reason wrestles/reckless rolling/royally rousing.") the R encourages the breathing processes to be as agile as a gymnast. In the very clearly formed final articulation exercise "Proudly propping/battle boldly/pampered puppet/bobbin bounces/puffing powder/briskly banter" the consonants P and B strengthen the lips and thus bring in the ego more strongly.²⁰ With all these exercises the speech must be prevented either from sinking back into the body or getting stuck in the head.

Psychological experiences, too, can support these processes. A tentative question rises up, a firm answer points downwards. For example: What? That!/Where? There! The Wh and Th sounds give clarity to the speech gesture.

Steiner divided the vowels into two groups, the blood and the nerve vowels. In the exercise dialogue: "I grant you, I did offend him" the blood aspect comes to life in the Ah, O and U. Then the nerve aspect counters with the I(ee) and Eh in: "Learn to make the best of life the way it is." This is a very helpful exercise for the anemic patient who lacks a force with which to counter the toxicity that rises up from below in the organism. It is important not to let the "light" of the nerve vowels be used up in the nervous system but to take it far enough to enable it to give form to the "darkness" of the blood. This can only be done if speech is fully formed on the expiration. These processes can be intensified by the swing of throwing. The ball is

thrown up (breathing in and lifting up), and as it falls we accompany its fall (breathing out and going down) by speaking "Golden ball, flee..." (*Goldkugel, fliege, dass ich dich kriege*). This is a good preparation for the declamatory breathing exercise "Fulfillment grows/through hoping/grows through longing/through willing/willing weaves/in wavering/weaves in quavering/weaves quavers/weaving binding/in finding/finding winding/kindling," which is an exercise that is very good for strengthening the constitution of the anemic patient. In this exercise the downward breath stream is formed. Steiner said of this exercise: "Become aware of your expiration." In order to become conscious of expiration in the etheric realm means, however, that the higher and the lower principles of the human being have to come together, and this in itself is a process of incarnation. When exhalation is strengthened inhalation is deepened. There are various exercises and texts that can underpin working in this way from above downwards.

One of the few exercises Rudolf Steiner gave to an individual patient called for the speaker to pause for a moment after breathing out. This draws down the upper principles as though into a vacuum and has a profoundly incarnating effect visible even in a reddening of the face. The patient breathes out completely while speaking the sentence: "I breathe the power of life" (*Ich atme Kraft des Lebens*). Then comes the pause when breathing out is complete before the speaking continues: "In air the breath dissolves" (*In Luft verhaucht der Hauch*). Steiner said this exercise was to be repeated seven times.

Throughout all the exercises patients must have a sense of giving themselves shape and form by working on their breathing processes. Some poems have an important part to play in this therapy. The healing process is given warmth and life by the image of the hammer blow coming down from above (e.g. in the Iron Rune of the Kalevala or the Song of Thrym in the Edda).

Speech formation can thus be applied specifically to strengthen uprightness, overcome gravity, deepen breathing and stimulate the circulation. This amounts to a strengthening of the iron processes by the activity of spirit and soul. Rudolf Steiner spoke of an unparalleled healing process taking place naturally in the iron process in human blood. This can be consciously imitated and strengthened through speech, but only by including the mediating, healing power of the breath "through which we take into ourselves the substance of the cosmos"²¹

Bernhard Woehrmann, M.D.
Fraasstr. 1
D-70184 Stuttgart
Germany

Barbara Denjean-von Stryk
Speech Therapist
Einkornstr. 23
D-70188 Stuttgart
Germany

References

- 1 Steiner R. *Spiritual Science and Medicine* (GA 312), lecture of Mar 23, 1920. Tr. not known. London: Rudolf Steiner Press 1975.
- 2 Steiner R. *The Four Seasons and the Archangels* (GA 229) lecture of Oct 5, 1923. Tr. C. Davy and D. S. Osmond. London: Rudolf Steiner Press 1968.
- 3 Steiner R. *Theosophy of the Rosicrucian* (GA 99) lecture of Jun 4, 1907. Tr. M. Cotterell and D. S. Osmond. London: Rudolf Steiner Press 1981.
- 4 Steiner R. *Supersensible Man* (GA 231) lecture of Nov 17, 1923. Tr. M. Adams. London: Anthroposophical Publishing Co. 1961.
- 5 Elsner E. *Raumfahrt in Stichworten* S.57. Kiel 1973.
- 6 Pelikan W. *The Secrets of Metals*. Tr. C. Lebensart. London: Rudolf Steiner Press.
- 7 Degenaar AG. *Krankheitsfaelle und andere medizinische Fragen besprochen mit Rudolf Steiner*, manuscript print, discussion on "Iron" dated Feb 6, 1924.
- 8 Steiner R. *Fundamentals of Anthroposophical Medicine* (in GA 314) lecture of Oct 28, 1922. Tr. A. Wulsin. Spring Valley NY: Mercury 1986.
- 9 Steiner R. *Spiritual Science and Medicine*, op. cit., lecture of Apr 1, 1920.
- 10 Steiner R, Wegman I. *Fundamentals of Therapy* (GA 27) chapter 7. Tr. G. Adams. London: Rudolf Steiner Press 1983.
- 11 Steiner R. *Spiritual Science and Medicine*, op.cit., lecture of Apr 9, 1920.
- 12 Steiner R. *An Occult Physiology* (GA 128) lecture of Mar 28, 1911. Tr. E. Frommer. London: Rudolf Steiner Press 1983.
- 13 Steiner R. *Cosmic Workings in Earth and Man* (in GA 351). Lecture of Oct 27, 1923. Tr. V.E. Evans. London: Rudolf Steiner Publishing Co. 1952.
- 14 Steiner R. *The Spiritual-Scientific Aspect of Therapy* (GA 313) lecture of Apr 14, 1921. Tr. R. Mansell. Long Beach CA: Rudolf Steiner Research Foundation 1990.
- 15 Steiner R. *The Human Being in Body, Soul and Spirit; Our Relationship to the Earth* (GA 347) Tr. J. Reuter and S. Seiler. New York: Anthroposophic Press & London: Rudolf Steiner Press 1989.
- 16 Steiner R. *Speech and Drama* (GA 282) lecture of Sep 22, 1924. Tr. M. Adams. New York: Anthroposophic Press 1986.
- 17 *Ibid.*, lecture of Sep 5, 1924.
- 18 Steiner R, Steiner-von Sivers M. *Poetry and the Art of Speech* (GA 281) lecture of Oct 13, 1920. Tr. J. Wedgwood and A. Welburn. London: London School of Speech Formation 1981.
- 19 Slezak-Schindler, C. *Vom Leben mit dem Wort. Fuenf heilende Wirksamkeiten der Sprache und des Sprechens*. Dornach 1992.
- 20 Steiner R, Steiner-von Sivers M. *Creative Speech. The Nature of Speech Formation* (GA 280). Tr. W. Budgett, N. Hummel & M. Jones. London: Rudolf Steiner Press 1978.
- 21 Steiner R, Steiner-von Sivers M. *Poetry and the Art of Speech*, op. cit., lecture of Mar 29, 1923.