



Insights of the Sensation in Homeopathic Mineral Kingdom

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Abstract: Two decades ago, Scholten gave a significant contribution to the development of homeopathy with the understanding of the Homeopathic profile of the elements of the periodic table. According to Scholten, all elements in each horizontal row (series) of the periodic table are characterized by a single common theme. Each series is divided into a maximum of 18 stages, each of it characterized according to their homeopathic profile. Each element of the periodic table is located at the intersection of a row (series) and a column (stage); these two coordinates define the homeopathic characteristics of the correspondent element. Scholten's element theory has transformed the way homeopaths can access the simillimum for patients. He has created the framework to take homeopaths from a rubric-centred system to a person-centred approach and has opened up a great number of previously inaccessible remedies. Scholten introduced the concept of periodic table themes, and Rajan Sankaran (another prominent homeopath) has deepened the understanding of it; enabling the application of Scholten's theory to the Sensation method. The current article resumes Scholten theory and Sankaran's adaptation of it. In addition, two of our cases are presented as examples of how applying the themes of the periodic table, and the sensation method we can with some security reach the patient remedy.

Keywords: Homeopathic Minerals, Sensation Method, Sankaran Method, Periodic Table, Rajan Shankaran method

1. Introduction

Homeopathy is a medical approach with more than 200 years; it has been called the third most commonly used system of healing worldwide, and for that reason it deserves serious attention from the modern scientific community.

Minerals have been used as Homeopathic remedies since the beginning (e.g. sulphur), however until recently, the major source of homeopathic medicaments has been the plant kingdom. This scenario has change with the contribution of Jan Scholten, an eminent Homeopath, to the understanding of the Homeopathic profile of the elements of the periodic table and the salts resulting from their combination.

In his earlier work, Scholten developed the concept of the salts as the sum of their anions and cations components, having identified key concepts or "themes" of known medicines. He predicted the likely homeopathic remedies pictures of hitherto unknown salts, illustrating his theory with successfully treated cases [1]. The idea of combining two independent remedy pictures to produce a third and individual picture is currently a common practice among

many homeopaths, and we owe this to Jan Scholten; with great clarity and coherence he has brought to light the inner relationships of groups of mineral remedies and later expanded this to a working hypothesis applicable to the whole of the periodic table [2].

Since Mendeleev, the periodic table has proven to be a reliable system to describe and predict the chemical and physical properties of elements, but the homeopathic interpretation of this was only reached in the nineties when Scholten recognized in the chemical order of the elements within the periodic table, certain phases and sequences of the Human development. Each element of the periodic table is located at the intersection of a row (series) and a column (stage); these two coordinates define not just the position of the element but also its characteristics. To understand any element, we need to know its series and stage, from which we can derive its characteristics. According to Scholten, all elements in each horizontal row (series) of the periodic table are characterized by a single common theme. The rows of the periodic table can be seen as a replica of the development of a person, starting from the conception and ending in the old age and death [2,10]. Since we perceive the person as

mineral, we can reach the stage of development in which he is stuck in, and further identify the row. The main themes in each row are: Row 1 - being, experiencing; Row 2 - ego, individuation, body, child; Row 3 - relations, house, puberty; Row 4 - work, duty, adult; Row 5 - art, science, city; Row 6 - leader, responsibility, world; Row 7 - magic, transformation, universe, old [2].

Separately we have the Lanthanides. The Lanthanides are an addition to and an extension of the other series in the system. In 2003 *Remedia*, the Austrian homeopathic pharmacy, started to potentiate these compounds motivating Scholten to work further on it [3]. The Lanthanides persons possess a high level of responsibility, they feel responsible for the world and that is why they become humanistic and live by their own rules. They need to be free and act with self-control and self-determination so they dislike being controlled and manipulated. They have a strong intellectual capacity, and they have desire of wisdom, spirituality, truth and anarchy[3].

In the periodic table, each series is divided into a maximum of 18 stages. The stages correspond to the electron configuration in the outer shell of the atom, and so to the chemical behaviour of the specific element. Homeopathically speaking, these stages therefore enables to prospect the qualities of each element and use it in homeopathic practice. Scholten has classified each stage according to their central theme. The main themes of each column are: stage 1 – beginning; stage 2 – finding a space; stage 3 – comparing; stage 4 – establishing; stage 5 – preparing; stage 6 – proving; stage 7 – practicing; stage 8 – perseverance; stage 9 – success in sight; stage 10 – success; stage 11 – preserve; stage 12 – defending; stage 13 – retiring; stage 14 – formal; stage 15 – loss; stage 16 – remembering; stage 17 – letting go and stage 18 – rest [2].

Scholten's element theory has transformed the way homeopaths can access the simillimum for patients requiring remedies from the mineral kingdom. He has created the framework to take homeopaths from a rubric-centred system to a person-centred approach and has opened up a great number of previously inaccessible remedies [2].

Scholten introduced the concept of periodic table themes, and other prominent homeopaths have deepened the understanding of it. A noticeable improvement of Scholten approach was brought by another illustrious homeopath of the present, Rajan Sankaran, from Mumbai [4,9].

2. Minerals Sensation

Sankaran, not only deepened the understanding of the evolution of themes along the rows and columns of the periodic table, but also have adapted Scholten's theory to his case taking approach the "sensation method". Homeopathic prescribing often has variable results; by applying the principles behind the "sensation method" the uncertainty in homeopathic prescribing can be highly reduced.

One of the most radical concepts developed by Sankaran is about the kingdoms. Patients who required a remedy from

the plant, animal and mineral kingdoms, describe themselves and their symptoms in a quite different way [5].

According to Sankaran, the basic quality of a plant is sensitivity. Plants grow, but do not move under their own power from place to place. They stay in one place and must be sensitive to the environment in order to adapt to the changes around them. People who need plant remedies are often soft, sensitive, attempting to adjust to the people and environment around them. They are passive, emotional, easily hurt and changeable [5].

One the other hand, the main theme of animals is competition. Animals demonstrate the attitude of survival of the strongest, they need to draw attention to themselves, try to be attractive, beautiful, sexy and better than those around them. Animals have issues of attractiveness, and even the complaints that bring them to the homeopath often have to do with their beauty, the attractiveness of their skin or hair, their sexual functioning, weight and other issues which affect their competition with others. People who need animal remedies usually dress attractively, with clothes that are distinctive in their color or design [5].

Minerals are inanimate substances, which are markedly different from plants and animals, as reflected by the symptoms and issues in their remedy pictures. Minerals are far more structured than animals and plants; the issues of minerals are usually structure, organization, safety and security, specific relationships, finances, or performance. Minerals are slower than plants and animals, more measured and organized. People who need mineral remedies wear plain clothes, or stripes, checks and symmetric or geometric designs. Color is not as important to them. Dress has to be functional rather than attractive. The person needing a remedy from the periodic table longs to feel complete, and their sense of incompleteness may be described in various ways. The two keywords of the mineral kingdom are structure and function; without function and structure they are incomplete [5].

Another vital point of Sankaran's method is the concept of levels. The idea of levels is to give structure to the symptoms that are found in a patient. Level 1 is the name of the condition; level 2 are the symptoms the patient experiences; level 3 is the emotional experience triggered by the symptoms; level 4 is the level of delusions it relates to fears, dreams or the event of life that carries more energy and reflects the person individuality and complexity. Level 5 is the level of Vital Sensation, that most reflects the deeper disturbance of the vital force. The majority of physicians from Allopathic medicine deals only with level 1 and 2, most homeopaths work on level 3 prescribing based on information from this level such as 'ailments from vexation', which are non-specific symptoms that give little insight into the vital disturbance. We may need to go deeper if we want to be more specific in our homeopathic prescription; as we go to deeper levels, we get closer to the vital disturbance [5].

Sankaran has deepened the concepts of Scholten adapting it to the sensation method. According to Sankaran, the main themes in each row are: row 1 - conception and existence;

row 2 - fetal life and the birth process; row 3 - identity and nourishment; row 4 - security and task; row 5, - creativity and performance; row 6 – responsibility and row 7 - letting go (disintegration) [4].

In the first row the main issue is the existence; the energy is turned into matter and the conception happens (they were not there before but now they exist). The elements of this series are the hydrogen and the helium. Hydrogen has no connection, no support, no structure the isolation is so great that they connect to the whole. Hydrogen is not even sure of his existence, at one pole he feels one with existence, but that also makes him feel like nothing at the other pole. Helium, a noble gas feels happy in the womb and does not want to exist in the world outside [4].

The second series follow the events after conception, which concerns to foetal life and separation. This entire row follows the process of labour and birth process, which leads to the separation from the mother. The elements of this row are lithium, beryllium, boron, carbon, nitrogen, oxygen, fluorine and neon. From beryllium to oxygen progressively happens the process of separation. Beryllium remains strongly connected and he does not even have the perception of separation. Boron doubts whether he is or he is not connected to his mother. Carbon fears not being able to be by his own. Nitrogen feels claustrophobic and wants to be separated, leave the mother's womb and be independent. Oxygen is already in the outside world and he breaths for the first time. Fluorine is the cut of the umbilical cord; he is completely independent. Neon is separated and he is happy with that [4].

The third row follows the separation and birth, thus the main issue of this series is the development of one's identity and the expressions of it as image, choice and ego. The central question in this row is "I am separate, but who am I?". The elements of this row are sodium, magnesium, aluminium, silica, phosphorous, sulphur, chloride and argon. From sodium to aluminium there is an absence of individual identity. Sodium feels that he has an independent existence, but he does not have a distinct identity or capacity to find one. There is no sense of identity and there is confusion about him. Magnesium is starting to build his own ideas but he is afraid of expressing them. He is scared of being forsaken if he expresses himself, so he adapts the identity that the others want. Aluminium is confused about his identity; he is not certain whether he has an independent personality or if he has what the others want. Silica is sure about his identity and he has a well-defined image of his own. Phosphorous has an identity apart from what was given. Sulphur is proud of his identity and he knows that he is better than the others. Chloride has an identity that is the opposite of what was given. Argon has his own identity and he is happy with that [4].

The main issue of the fourth row is security, which may be related to money/finances, relationships, house, job and/or health. The main issue of the fifth row concerns creativity and performance; they want to be creative, to perform new things and be appreciated. The sixth row issue is of

responsibility, of leadership. Here they passed all the stages, they are complete in the way that they passed through all the issues in the previous rows, so they will be the leaders because it's their responsibility. The seventh series is the row of destruction and disintegration. There is an enormous pressure due to the responsibility. They are overloaded, so they desire to break free and let go. The characteristics of each element from the fourth to seventh row depend on the theme of the column in which they are located. Individuals in the first column are totally dependent on others for everything. Their structure has not started to form. They need support to avoid collapsing. Patients that need a remedy from the second column begin to feel the presence of structure, but they cannot do anything without help. They are more independent than individuals from the first column but they still demand support, physical help and orientation to make decisions. They often need a father figure. Persons from column three want their own structure, but doubt their capacity and are uncertain regarding the type of structure. In the fourth column doubts about structure are resolved. They can't go back. They have to do things on one's own. They question themselves: "Will I be able to?". In the fifth column the structure is complete but foundation is not strong. They ask: "Should I go ahead or not?". In the sixth column the structure is not complete and tested, but the individuals feel compelled to face challenge. They need to prove themselves. Their work is criticized for the lack of precision. In the seventh column the structure is Ok in normal situations but need support when times are tough. They feel they must be perfect but they are far from perfection and they finish very tired and overwhelmed. In the eighth column the structure is proven and is no longer a challenge. Thus the structure has to resist to high pressure. The individuals feel the pressure and the force, the effort must be tremendous to achieve the targets and exhaustion takes place after. The individuals from the ninth column have no longer any resistance or opposition. The structure is nearly perfect but a little short of perfection. In the tenth column the structure is complete. Individuals are confident about themselves and they are sure about their choices. They know for certain they have achieved success. In column eleven the structure stands by itself, but the question is if it will maintain itself in adverse circumstances. Individuals have to maintain and defend their position. Individuals from column twelve are in constant vigilance, alertness and are protecting themselves. They start to have enemies. Patients from column thirteen feel that their structure is under severe attack, and loss is imminent. They need a superhuman effort to maintain it. Individuals from column fourteen begin to accept that their loss is evident. They understand that have failed and nothing can be done. They give up and accept changes. The structure in column fifteenth is being eroded, it is falling apart and cannot be preserved. They are carefully to see how long it can continue. Patients requiring a remedy from column sixteenth feel that their structure has lost its utility completely. They are too incapacitated to do anything more. They cannot make any more effort. In the seventeenth column the instability of the

individual is at its maximum, people have the feeling that their structure is dissolving and crumbling. They feel starved, betrayed and let down. They end up feeling tied down and want to escape. In column eighteen the structure is completely dissolved and is not an issue any longer. Individuals live in their own world, detached and separated from the others [4].

Once you have identified that the patient needs a mineral remedy, one has to work out which mineral is needed. The following cases are examples of patients requiring remedies from different rows of the periodic table.

3. Case Analysis

To ascertain the kingdom we first have to realise the anchor of the case. Patients from the mineral kingdom long to feel complete, and their sense of incompleteness may be described in various ways. These Patients present a desire for certainty and stability; structure comes naturally for them, thus they find the value of their life through the structure of their living.

Once we have identified that the patient belongs to the mineral kingdom, we have to go deeper within the sensation and identify the row and the column which adequately with the sensations of the patient.

Every row and column present typical expressions; getting into the sensations of the patients, we are able to extract from them the expression of “the other song” that is hidden deep but is present in every moment of their lives.

3.1. Case 1

This is a case of a 23 year-old lady who came with headache, lumbago and cervical pain. The headache was frontal and sensed as localized pressure; normally aggravated in the morning and evening.

Dr. – Please tell me a little about yourself; who you are.

P – That is a difficult question, can you start with something easier?

Dr. – Let's try something easier than, what kind of things do you like to do?

P – I like to walk around, travel, and visit new places. Basically, I like to be in contact with everything that surrounds me.

Dr. – And what kind of things you do not like?

P – I do not like stringy and paltry people that talk on my back.

(Comment: We should not think on Lachesis or any animal at this stage. When patient is on fact level and/or emotional level it is still too soon to decide the Kingdom. One should know exactly the level where patient is on consultation, and continue to asking the right questions to guide patient to the next levels.)

Dr. – And how that makes you feel?

P – I feel just sad.

Dr. – What was the most difficult moment of your life?

After a moment of silent, patient started to cry, and ask me for a moment to take a deep breath.

(Comment: Do not try to be the leader of the consultation. Give space to the patient. Create this space. Just be there. Give them time. Patient will appreciate it and go from there wherever we want him to. Respect the patient's pace and he will respect you as a Doctor.)

P – The most difficult moments in my life were when I have to leave my mother's house and went living with my grandparent.

(Comment: This is a situation - very important. When patient is in silent and report a situation in his/her life. Stay into it. Do not ask anything else. Just stay there with the patient. This is the KEY for his/her Lock!!!)

Dr. – Tell me more about that.

P – I always had a complicated relation with my mother. Maybe because of her career she was always absent. I have grown mainly with my stepfather. I do not agree with many things that she does. At that time, I used to be afraid of her, instead of having love for her. I did not have courage to face her and tell her what I was feeling, so I have decided to leave home. Now things are better, it is easier for me to face her and tell her my opinion.

(Comment: See?? She talks about mother, relationship. Left home!!)

Dr. – What was the feeling at home when you were living with your mother?

(Comment: Stay into that situation. Get whatever you can. And the lock of the door will open.)

P – I used to avoid being at home; and when I was there I used to feel anguish, distress, trapped and short breath.

(Comment: Short of breath is sensation!! we got there!!!)

Dr. – Tell me more about short breathe?

P – I never felt that I could not breathe, but I used to desire to come out, deep breath and think that everything was over; everything was OK.

(Comment: We got it!! now we will just confirm the remedy.)

Dr. – How it would be to turn back living with your mother again?

P – I believe that it would be easier than before, because now I feel more secure of myself and it is easier for me to face her and tell her about my feelings. But even though it would not be easy.

Dr. – Why do you think that?

P – Because I need to be free.

(Comment: I need to be free!! This is sensation!! some could tell: I need protection. Others could say: I need to be surrounded with people.) Let's confirm the remedy and get into energy level if possible.

Dr. – Describe free?

P – Follow my life according to my own needs and wishes. At this moment I already knew the remedy I just wanted to be sure. So I made a last question.

Dr. – So now, can you tell me who are you?

P – Again, that is a difficult question.

Dr. – Why?

P – I know that this sounds insane, but I feel that I am still growing. I am still building my identity, so I am not sure who

I am yet.

(Comment: We are sure now! Row 2 - Separation, Right side of periodical Table - column 16 - She is separated and takes her breath!)

I gave her Oxygen 10M - single dose - because patient was on sensation level

3.2. Case 2

A man with 60 year-old came with a neurodegenerative disease similar to Parkinson. Without any question he started to talk about his live. He told me that he worked for 36 years as commercial in one of the main national newspapers. He has always been the company's bestseller and he shown to be very proud of his professional performance. When the company was sold, it was offered to senior professionals the opportunity to go into early retirement. He got really happy with that, however his request for early retirement was not accepted. He got stressed and frustrated and start taking anxiolytics until he got finally retired. After retirement he got stressed because he was used to live under pressure, and suddenly there was nothing to do, no objectives, no pressure. He got prostate cancer. When he found that he had prostate cancer he got completely destroyed; he could not even say the word cancer. He refused surgery, preferring to spend a significant amount of money in a natural therapy, with which he was able to heal the cancer without the use of chemical drugs or surgery. Shortly after overcome cancer, it was diagnosed Parkinson disease. He was for three years taking medication for Parkinson's with no major improvements. Recently, with new medical exams, physicians found that it is not Parkinson's disease; it is a neurodegenerative disorder similar to Parkinson's. Currently the patient owns a very successful clinic where he offers different medical specialities such as Chinese medicine, homeopathy, and other natural therapies. He came to me recommended by one of his costumers that is my patient. During our conversation he showed to be very pleased with his live and all his achievements. He was also very proud of his two sons, grandson and granddaughter. After a long conversation I asked him to describe the moment he discovered that he had cancer.

P – I panicked. I suddenly got cold. I was desperate. I shout and demanded the presence of a physician. I could not believe that it was happening to me.

(Comment: At this moment, when we ask to describe what happened in a critical situation, patient will tell keynotes of remedy! He said - I demanded a presence of a Physician.he did not said I asked for.or begged for.He said I DEMANDED!! this must be a heavy remedy!!)

Dr. – Why?

P – It was not fair. I love my body. I really care with my health. I am always very careful with what I eat and drink. I only eat healthy food.

(Comment: See his Miasm?? Cancer Miasm. Also very anxious about his health.)

Dr. – What do you mean with healthy food?

P – I love to have very good food and wine. Although I

rarely drink wine, when I do it, it must be a high quality wine. However, usually I drink only water. I like to eat fish and vegetables, but it has to be fresh and good quality. I am always very careful with my health; that was the reason for felling unfair to have a cancer. I could not believe that it was happening to me, I did not deserve it. Now I know that the cancer came to me as a way to get me into the natural therapies, open my clinic and this way help other people. It is very gratifying seeing people getting better and cured.

(Comment: Only drink high quality wine.this cannot be Sulphur.)

Dr. – What was the feeling when you found that you had cancer?

P – I got scared. I am afraid of disease and death. I love my body and my live and I am really afraid of death. I do not accept death; even with my parents I could never accept that sooner or later they would die.

(Comment: Remedy confirmed!! I am afraid of disease and dead.)

Dr. – And how do you feel about this putative Parkinson's disease?

P – I feel anxious. I am afraid of loosing autonomy. I do not trust on doctors. I do not like to take drugs.

Dr. – Why you do not like to take medication and not trust on doctors?

P – Doctors are testing drugs on me. I feel like a guinea pig, they are constantly changing medications. Every time that I take a drug, I feel I am drinking poison.

Dr. – Tell me more about that?

P – I feel that I am poisoning myself. Medications only mask my disease. I am not being cured and these drugs are spoiling the rest of the body.

(Comment: His body is the most important thing.not trust on doctors. but always demanding one!! - please do not trust on what they say.words are not sensation or energy.most of the time they say one thing.but in fact they feel very differently.keep faith on you and don't get lost with words.)

Note: At the beginning of the consultation patient ask for some water. Throughout the rest of the talk he kept drinking small sips of water.

I gave him Ars alb LM5 every day, after disease as gone, I gave him one single dose of Ars alb 200C)

4. Discussion and Conclusions

The last two cases are examples of how doing the right questions we can reach the patient sensation and find the key sensations of minerals.

In case 1, the main issue of the patient was her relation with her mother. She needed to break free, get released from her. "Separation, motherly attention and warmth", these are themes of row 2. She desires separation, thus she is located after column 10 (carbon). She feels that she is still growing and she needs to deep breath. This is the birth process, the first breathing of the baby that remains attached to his mother by the umbilical cord. But he is already on the outer word and he desires to cut the connection and break free.

These are the key sensations of Oxygen (row 2, column 16).

On the second case, the main issue of this patient in every moment of his life was career, job, family and specially health. This is row four, security and task; security in terms of money, relationship, house, job and health. The patient is afraid of not being able to protect himself. He is so preoccupied about his health and so anxious that he is constantly trying new treatments and doctors. He changed his neurologist at least two times, and I was surprised he owns a clinic, where he has a homeopath working and he came to me. This desperate fear of losing control is typical from the elements localized in the right side of the periodic table. He needs doctors, but he cannot trust on them; (“depended of other people, but cannot trust them”) this is Arsenicum [6]. “Often thirst for small quantities of water”; the patient spent the most of the query drinking small sips of water. This is Arsenicum. Afraid of death and diseases (hypochondriac) these are keynotes of Arsenicum taken from the *Materia Medica*. Thus, in this case, by the sensations of the patient, we were able to get the kingdom, raw and column and using the keynotes from *Materia Medica* we have confirmed the remedy [6, 7].

Scholten introduced the concept of periodic table themes [8]; Sankaran deepened it adapting this new approach to the sensation method [4,9]. This are two successful cases which clearly show, how applying the themes of the periodic table, and the sensation method we can with some security reach the patient remedy. And if is a well-described remedy like Arsenicum album, we can even confirm the remedy with the keynotes from *Materia Medica*.

References

- [1] Scholten, J., *Homeopathy and Minerals*. 2013: Alonnisos Verlag.
- [2] Scholten, J., *Homoeopathy and the elements*. 2007: Alonnisos Verlag.
- [3] Scholten, J., *The discovery of autonomy*. Spectrum of Homeopathy, 2012. 3: p. 4-9.
- [4] Sankaran, R., *Structure, experience with the Mineral Kingdom*. 2009, Mumbai, India: Homoeopathic Medical Publishers.
- [5] Sankaran, R., *Sankaran's schema*. 2011, India: Homoeopathic Medical Publishers.
- [6] Vermeulen, F., *Concordant Reference*. First Edition ed. 2011, Belgium: B. Jain Archibel.
- [7] Sankaran, R., *The Soul of Remedies*. 1997, Mumbai, India: Homoeopathic Medical Publishers.
- [8] Scholten, J., *Element Theory - Periodic System of the Elements*. 2008, Netherlands: Stichting Alonnisos.
- [9] Sankaran, R., *Sensation in Homeopathy*. 2004: Homoeopathic Medical Publishers; 2nd Edition
- [10] Scholten, J., *Secret Lanthanides*. 2005: Stichting Alonnisos Publishers.

Biography



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