Original Article

Decision making and semiotics: A view in homeopathy.

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ABSTRACT

This paper discusses medical action, homeopathic medical action in particular, from a semiotic perspective. Any doctor – patient relation and communication aims at an action. Action in medicine follows a decision which is determined by the meaning of signs and operations with signs. In their turn, signs are conditioned in their perception and interpretation by the meaning they have to their receivers, both intra- and intersubjectively. The meaning of signs in the medical context relates to reference values established by normative signs, around which semiotic fields are organized. Signs never appear isolated but in configurations, meaningful only from the perspective of some specific coherence. While decision-making is a consequence of meaning, meaning is conditioned by codes predetermined in both the sender and receiver of signs. Each and every medical action has an outcome which might give rise to a new series signs – decision – action. The outcome of medical action functions as a sign subsequent to previous ones, and a new configuration might appear, which allows for new action. Homeopathic signs have as their ultimate referent an individual; these signs are configured in a coherent way using the specific codes. Specific configurations allow for specific decisions and effective prescriptions of remedies when they point out to the individual.

Keywords: Medical action; Medical semiotics; Decision-making; Homeopathy

Introduction:

One of the main issues in homeopathy, as well as in medicine as a whole, concerns the grounds for the choice of therapeutic actions. Any type of medicine, past, present and future, is grounded on the possibility of effecting an intervention on the state of health. This subject may be approached from the perspective of problem-solving.

As it is known, the notion of "health" – together with its related semantic field: "disease", "illness", "well-being", "quality of life", etc. – is not univocal and is peculiar to different historical and cultural settings. Notwithstanding, suffering is somehow represented as a deviation regarding a state both individually and culturally qualified as "normal".

Let us describe the problem in the simplest terms as possible. It all begins when a person "does not feel well", "does not feel no longer able to", "has this or that", "feels that something is wrong". To his or her own eyes, or to the eyes of people around, he or she has a health problem. And it may be transferred to another individual held as skilled to effect interventions aiming to solve it, viz. a doctor.

What a doctor needs to make a proper decision? It may be said: knowledge or clinical intuition; ability to perform a thorough clinical history; competence to ask appropriate complementary tests; clinical experience… This list may continue indefinitely and in the end we would probably have a "portrait of the ideal doctor", i.e. the addition of all qualifications required to solve health problems. Nevertheless, such a list does not seem to point out to the basis for a doctor to define the patient's problem in order to effect an intervention.

Eventually, the problem may be formulated as a problem of decision-making. Decision involves two aspects: its goal – to heal, to relief, to care – and the means to achieve it. However, before attempting to answer the ultimate therapeutic question, "what to do?", we must stop to reflect on how this problem first comes to the doctor.

The short answer: **through signs**. Patients communicate their problems through signs. It is through signs that it is perceptible that something is different in them. It is through signs that a person realizes that something is wrong with him or her. It is through signs that people around realize

that something is happening to him or her. Signs, breaks in space, in time, in the experience of continuity that, more or less conventionally, is held as "normal".

I- Medical action: What is processed between patient and doctor?

Schematically, exchanges between patients and doctors follow a general model:

1. Presence of the patient to the doctor

From the very moment a patient presents him or herself to a doctor, it is established an interpersonal relationship that is neither neutral nor generic but predetermined by the fact that one is a "patient" and the other a "doctor", encompassing all corresponding cultural conditionings and the expectations involved in the act itself of entering into this kind of relationship. In other words, the doctor – patient relationship, from the very moment of its institution carries a certain meaning and for this reason can create meanings.

In semiotic terms, the sign /patient/ represents to the doctor a concrete individual within a given framework of expectations regarding possible meanings and actions. Conversely, the sign /doctor/ does not represent to the patient a generic human being, but an individual already carrying meaning, together with the corresponding expectations. This is the reason why their relationship is not neutral but is oriented to a definite goal. That is to say, because it evolves within a specific setting, this relationship carries meaning from the very moment of its institution. Each of the participants appears under a definite sign to the other and, consequently, as a sender of signs.

According to Roman Jakobson's model, any process of communication involves a message, a sender and a receiver, channels of transmission, codes and a context [1]. What are the particularities of communication in medicine?

In the first place, the **context** within which it evolves is particular, according to well defined coordinates. Communication is processed within the framework of so-called "medical consultation" whose goal is to make a decision regarding the health of a patient. Equally orientation-giving notions are e.g. "diagnosis", or in homeopathy "choice of a remedy", which exert an influence on the full semantic process evolving in this particular setting. In other words, the meaning of signs is pragmatically ***conditioned*** by their usage. A sign, like e.g. /vomits water immediately after it is warmed in the stomach/ has no meaning to conventional medicine's diagnostic perspective, but it may be highly significant when therapeutic decision is grounded on the search of a remedy that elicits this same symptom on a healthy individual, as it is the case of homeopathy.

Then, communication in a medical context involves specific **codes**. Codes relate to 1) the way how each of the participants assumes and signifies his or her own condition; and 2) the way how each sign is ***interpreted*** by each one of them.

As the patient – doctor is an already codified type of relationship, it presupposes expectations in both participants and a play of social roles. Some *symbols*, as e.g. the white-coat or the stethoscope, are perceived by the patient as signs of the doctor's identity. Locutions as "where does it hurt?" or actions like stethoscope auscultation, following implicit codes, become social *rituals* which together with the specific goal of a medical consultation make this mode of relationship singular. For instance, due to these codes a patient "knows" that he or she must answer some questions, needs to undress and be examined or that he or she will be subjected to certain instrumental procedures.

In fact, from the very moment a patient enters in a doctor's office he or she perceives signs functioning as symbols – the presence of a person wearing a white coat, medical instruments, examination table, etc. – which confirm him or her in his or her role of "patient". Therefore, entering into this context means to the patient the onset of the operation of codes related to his or her own condition.

On the other hand, this entering into context activates also in the doctor, in a mirror mode, a set of roles, formally codified through the rulings of medical ethics and informally, according to what he or she "knows" that must and can be done.

Communication in this particularly codified context does not deal with objective instances but with *attempts of objectivity* by both participants. The patient tries to speak of what he or she feels, what is the matter with him or her, in a way already presupposing some degree of objectivity, i.e. he or she speaks of him or herself as of something he or she is "seeing", observing, an "object" of perception and knowledge.

This objectivation is processed as a function of what he or she wants or can say or believes it is needed. What a patient tells is more or less ***intentional***: up to a certain point, he or she can choose what to say and will tell what he or she wants or can.

However, the symptoms a patient tells have multiple mediations, involving several levels of translation, first intra- and then intersubjectively: 1) translation of a sensorial stimulus into a perception, "**what** he or she feels"; 2) interpretation of this perception (signification), e.g. "headache"; 3)

translation of this intrasubjective sign into speech and intersubjective communication.

That is to say, the narrative of the patient involves the passage from a purely subjective feeling to its signification to its linguistic expression in a more or less intentional way; thus, it is conditioned by codes modulating communication, both intra- and intersubjectively. We are, therefore, facing a **succession of signs**: what a patient feels is a sign; when it is signified it creates another sign; when the latter is verbally expressed, generates another one, whereas what the doctor perceives is still another different sign.

In all instances of signs above there is a Sign or *representamen* , an Object or *referent* and an *Interpretant*, according to C.S. Peirce's conceptualization. Although the intention of both patient and doctor is to *preserve the referent*, the latter changes continually, as a function of the interpretant, i.e. the way someone interprets a sign.

The process relating a sign to an object through an interpretant is a process of semiosis, involving: 1) a given object or state of things; 2) represented by a *representamen*; 3) the meaning of which may be translated into an interpretant, i.e. another representamen.

From this arises the possibility of continual and polyvalent semiosis: each step in the semiotic process brings a new set of signs and meanings, as in each step a new interpretation opens the way to a new set of signs. The limits of interpretation were a concern to U. Eco [3].

Moreover, in all these levels *code modulators* are involved: elements modifying the meaning of the original feeling, its perception, awareness and transmission within a given context and within a relationship with another individual whose role is already signified by the patient according to his or her own codes. They are responsible for a certain fragility and inconsistency in the patient's narration of his or her symptoms. This is especially evident in the case of children: many youngsters express anxiety or anguish through physical symptoms – "my belly aches". There is something that actually "aches" and according to the child's own system of signification, "it must be somewhere", thence in the "belly" or the "head" or any other part of the body where what aches can be defined.

On the one hand, there is a need to express an actual suffering and, on the other, an interpretation and communication of suffering in a given context, according to pre-established implicit and explicit codes.

The doctor will try to "see" what is happening to the patient, to understand what is with him or her. However, his or her own process of understanding is not neutral, but guided by categories he or she already posses and code modulators that are conditioning his or her perception. On the one hand, he or she needs to integrate the narrative of the patient with his or her own observations while making judgments aiming to answer questions related to the possibility of intervening on the patient's state of health, formulated as a diagnosis.

2. Clinical investigation

The goal of a medical consultation is to collect data fit to ground the performance of an action. For this reason, it is necessary to discuss what such data are and how they are sought for. As mentioned earlier, these data are signs. Signs through which it is interpreted that there is something irregular in the patient, what is irregular and how irregular it is. To the doctor, the patient represents two different epistemological values: 1) as an "*object*" of study to be known under some aspects; 2) as a *subject* to communicate with. The aim of this particular communication is to investigate some meanings of signs leading to representations fit to ground a decision.

Thence, in a first stage the aim is to discover certain signs related to the state of health to be later confronted to some models in order to arrive to what is known as **diagnosis**. Values are assigned to signs according to certain mental images that allow to give meaning to the actual signs offered by the patient. However, "diagnosis" is nothing but another **sign** to the doctor. In fact, it results from an interpretation of a configuration of signs and it functions as a sign for both decision and action.

Shortly, the doctor's action involves cognition, communication and decision: patients are "known" as objects of study; a communicative relationship is established, involving the exchange of signs and messages; and a judgment is made regarding the state of the patient in order to perform an action.

The possibility to give meaning to the signs of the patient demands a previous education and learning, specific to the medical culture the doctor belongs to which precisely supplies him or her the models of perception, representation, interpretation and decision-making.

For all these reasons, clinical investigation is neither naïve nor purely objective as it may be thought, but it is conditioned by the factors that define the doctor – patient relationship: 1) intersubjectivity, a mode of relation where each individual participates with all his or her conditionings or "prejudices"; 2) a specific goal, i.e. the possibility to intervene on the state of health of patients; 3) a framework of more or less systematized rules and values.

II- Decision in medicine: a theory of action

1. Foundations

As all a patient offers a doctor are signs, as all a doctor perceives in a patient are signs, sound decision-making requires to take into account some features that function as true foundations of decision-making.

1.1 Consistency, reliability, verifiability

The signs considered in a given situation must correspond to the reality of the patient, no matter if subjective or objective. That is to say, the signs must be *reliable*, i.e. must be as they are and in no other way, and *consistent*, i.e. they must represent a given reality.

The requirement of *consistency* is essential as, in logical terms, it establishes the value of truth of the premises whose articulation will lead to decision-making. Decisions in medicine are the result of arguments which can be logically valid but whose value of truth depend on the truth of its premises.

Consistency is easier to establish in the case of so-called (medical) *objective* signs than in so-called *subjective* signs (namely symptoms), as in the latter a direct confrontation to intrasubjective reality is impossible. For this reason, such signs are inherently imprecise and vaguely consistent.

Nevertheless, it may be established their *reliability* within the framework of intrasubjective reality: does the patient always refer this particular feeling as a "burning", or once he or she says it "burns", then "it is like stitches", and then "throbs", etc.? Did this happen only once or several times? Is this a continual, intermittent, sporadic condition, or does it appear only under some specific circumstances? and so on.

Consistency and reliability implicitly need a grounding in *verifiability*: external in the case of objective signs, where there is an external reference of validation; internal in the case of subjective signs, where there is the possibility of asserting whether there is a constant relation between what the patient says and what he or she feels.

It is worthy to insist on this notion: in the case of subjective signs, adequateness to "objective" reality is irrelevant. When a patient describes a feeling such as e.g. "It seems to me that things around me have become smaller", what it matters is whether it is a *reliable* narrative, i.e. whether he or she really perceives things around as smaller.

In order to ascertain this, it must be sought its constancy as a sign indicating internal reality. For instance, through reiteration, "Every time I walk between buildings I feel they are going to fall on me". In such cases, *situational modulators* have to be sought for, e.g. "It is only when I am exceedingly tired that I feel that the buildings will fall on me".

Therefore, consistency and reliability cannot be considered absolute but relative; their degree depends on modulating factors that must be taken into account. Such modulating factors depend on particular idiosyncrasies which at times, from a semiotic point of view, could become more significant than the primary sign they are related to.

In other words, sign modulators may also become signs. If a modulator, e.g. "always worsens in cold weather" becomes sufficiently constant and verifiably consistent and reliable, it may become an autonomous sign, even if its referent corresponds to a particular specific situation

1.2 Normativity

Any sign, e.g. "yellow color of the skin" may be highly consistent as it is immediately perceptible. However, it is not significant in a medical context in the case of a Chinese person. For a sign to be significant in a medical context [4], it must represent a discontinuity regarding a certain *norm*.

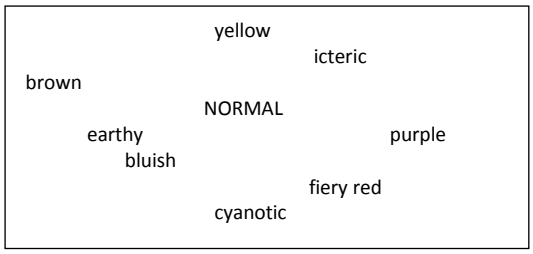
Here we have to deal with *normative signs*, established by convention or habit, according to which correlative signs are judged as more or less "normal". Signs in the medical context are signs which express a discontinuity in the norm and at the same time distribute as possible deviations from it. In other words, for something to become a sign in the medical context it must be "different", "unusual" regarding a reference criterion which operates as normative sign for the receiver of the sign.

Around a normative sign, e.g. /normal color of the skin/ other signs in the medical context appear which are related to it. They might be distributed in a gradual mode along increasing-decreasing gradients, as e.g.: /pale/…/normal/…/congestive/. In this case, it is a polar distribution, whereupon discrete signs operate as poles regarding a normative sign. According to M. Nadin, this may be expressed:

$$X: A \rightarrow [0,1]$$

which means that the elements of the set $A=\{a_1, a_2 \ldots a_n\}$ belong (fuzzily: a qualitative and quantitative mix) to the set, with membership values ranging between 0 and 1 [5].

Signs in the medical context may also be disposed as constellations around a normative sign; here each of the observed signs represents a deviation from the norm:



Therefore, although it seems that in medical practice we perceive a certain sign, we deal, in fact, with *semiotic fields* where a normative sign is the central element, either implicitly – e.g. /normal color of the skin/-, or explicitly, e.g. /normal values of blood cholesterol/, /normal shape of the QRS complex in the EKG/. That is to say, semiotic fields are *dynamic* because inside them signs interrelate, and from these interrelations arise their specific values.

Thence, it follows the *axiological function* of the normative sign: it represents the central value of a semiotic field around which all other signs are appraised. This is not an abstract function and it intervenes, indeed, any time a sign whatsoever is perceived as having medical "value". This value is established precisely as a function in correlations with both the normative sign and its entire corresponding semiotic field. Thus, due to their axiological function, normative signs operate as reference criteria in the assessment of the signs perceived in a patient.

It must be remarked that normative signs are not given but are culturally conditioned as a function of different medical rationalities. That is to say, a certain sign might be rated as normal or not according to a given perspective. Moreover, its qualification as a sign in the medical context itself may apply in one medical rationality and do not apply in another, as e.g. "sensitiveness to drafts of air". The cultural conditioning of signs may be explicit within the frameworks of several medical rationalities but it may also be implicit and exert a diffuse and imprecise influence on the notion of "normality" employed by a certain society. On the other hand, some cultural and scientific acquisitions may change the ideas on normality current in a given society, as well as some signs may become signs in the medical context, as it happened to ethnicity in the light of epidemiology, and other signs may lose its "medical context" qualification, as e.g. homosexuality.

Criteria of normality may be individual, as a function of the variation of time, as e.g. "I *always* was cold-blooded, but *now* I became hot-blooded"; may be cultural, "all children like sweets, but my son *only* eats salty food" or conventional, "the normal value of total blood cholesterol is below 180mg% but mine is 250mg%". These criteria are established in relation with some axes and relations:

- Time-axis: "*Before* I was this, but *now* it is that"; "I have fever *only in the night*".
- Space-axis: "It aches *here* and extends *there*".
- Relation of the part to the whole: "warm ears, *but* the face is cold".
- Relation to the normative sign: "cyanotic lips" (non /normal color of lips/).

Probably, the more significant mode of relation is the one between an actual sign and its normative sign, i.e. something is rated as "normal" or not. Indeed, all other modes of relation depend on it. It must be remarked that the elimination of certain signs from the field of signification for being rated as "non pathological" is restrictive and does not correspond to concrete medical reality. Not every sign in the medical context is necessarily "pathological". Generic signs such as /weakness/, /somnolence/ do not indicate pathology but a state of the individual. Another type of signs known as "constitutional", including the inherited ones, in some contexts, e.g. genetic diseases may become signs in the medical context as predispositions or elements of significant configurations.

1.3 Configurations

Signs do not present themselves isolated but in groups that represent the problems of the patient. Isolated signs represent merely parts; the problems of the patient as a whole are expressed as *configurations* of signs, whose identification allows to define the situation to be solved. Signs in the medical context never appear isolated, although methodologically we separate them from the continuum of the patient.

Each sign is associated to other signs in different ways: through *simultaneity*, e.g. "nausea and vomiting"; through *contiguity*, e.g. "vesicles on an erythematous background"; through *concomitancy*, "nausea during fever"; causality, "photophobia caused by migraine"; *succession*, "nausea after fever", and so on. Therefore, a sign such as /facial paralysis/ may appear "*after* exposure to cold, *associated* to lachrymation, together *with* salivation in the corner of the lips". That is to say, it appears as a configuration of signs which we isolate methodologically to reintegrate them later in order to obtain an unitary sign.

It may be objected that /facial paresia/ is not a sign but a diagnosis, which is true. However, from a semiotic perspective diagnostic names are signs, i.e. "something which stands to somebody for something

in some respect or capacity" [6] Moreover, they are configurational signs, with an univocal signification or a range of significations.

On the other hand, when we speak of "one" isolated sign, in most cases it is a complex sign as a function of the axes and relations mentioned above. Through the latter, a "simple" sign becomes qualified and represents by itself a configuration whose totality constitutes a sign. For instance, /headache/ will have a time qualification, "in the morning", a space qualification, "on the left side of the forehead", a sensorial qualification, "burning", a modal qualification, "better when resting", a causal qualification, "after eating peanuts", etc.

The more qualified a sign is, the higher its indexical value, i.e. the more motivated it becomes, the more determined by its referent it is and the more significant it becomes. On the other hand, meaning may appear precisely as a consequence of configuration of signs, i.e. when appearing *together*, signs may point out to a signification different to the one they point separately.

Therefore, *there is a relation between the qualification of each singular sign and the configurational group*. Configuration makes a sign to be perceived as more significant in a given condition, with more *"Prägnanz"* in Gestalt psychology terms. [7] On the other hand, a given sign, through its qualifications, may bring a new perspective on the totality of the configuration. For instance, in the sign /sadness when the weather changes/, the main mark of the sign, "sadness" is vaguely determined, whereas the secondary and qualifying mark, "when the weather changes" may open the path for a new configuration, centered on the idea of "possible modifications when the weather changes". If we found other main signs in the patient, e.g. /migraine/, /pain in the joints/, /epistaxis/ presenting the same secondary qualifying mark "change of weather", this qualification – in homeopathic terms, "modality", may become an autonomous sign by itself, and the centre of a new configuration.

The aim in this dynamics of arrangements and permutations of signs within configurations is to achieve **coherence**.

1.4 Coherence

The more coherent a group of signs, i.e. the more signs that seem disparate on the first sight are interpreted as belonging to a same totality, the higher our possibility to perform an unitary action. Coherence is not immediately given but it is the result of the reconstruction by the doctor of the signs available to his or her perception and accomplished through a principle of integration which I have called *principle of coherence*. In homeopathy, it has been known from its inception as "totality of symptoms".

In fact, the principle of coherence operates in any medical perspective: at a given moment, a certain configuration of signs is chosen in order to establish a diagnosis or as the foundation of medical action. The doctor must reconstruct a presupposed irregular reality from signs and do something "for the good of the patient". In other words, any medical action is the consequence of a semiotic process of signification, where signs and meanings are taken into account. As, on the other hand, they are never isolated signs but always configurations of signs, in last instance, what will be signified is the configuration the doctor perceives.

Whereas consistence, reliability and verifiability are susceptible to analysis, coherence is a mental operation of *synthesis*: coherence is not given but must be constructed. It reconstitutes the analyzed signs belonging to a totality. For this reason it is essential to establish the levels of reference which lead to the choice of a certain configuration of signs instead of others, i.e. what signs are taken into consideration by the doctor. If coherence is established among certain pathological signs, we must apply the normative sign of a disease. But we may rather select signs considered the most significant of an individual, therefore the principle in operation is individuality instead of disease normativeness.

In more simple words: the doctor only finds the coherence he or she is looking for, by selecting some signs and excluding others. In no case all the signs of a patient are taken into consideration but only those that prefigure a certain coherence. For instance, in order to establish the coherence of a diagnosis of rheumatoid arthritis, there are selected /articular pain/, /articular deformity/, some radiological signs and eventually /rheumatoid factor/ in laboratory testing whereas the coexisting /headache on the left side in the morning/ is excluded. However, the latter may be integrated in a coherent configuration when the aim is to select a homeopathic remedy.

2. Decision-making

From a given configuration of signs, the doctor will formulate a hypothesis that later will be confirmed or rejected. This requires a move to action: once the problem of the patient was formulated in the terms of consistency, reliability, verifiability, normativeness, configurationality and coherence we are able to ***decide*** what are the most appropriate means to solve it. Nevertheless, it must be reminded that decision is not limited to a single moment, but it involves a *series* of decision moments which begins

the very moment a patient comes into medical consultation.

Due to the importance of the final decision, the partial, ongoing ones are frequently forgotten. Yet, the final decision is the consequence of the series of partial ones, which are made regarding each sign. That is to say, from the universe of signs exchanged in doctor – patient communication, some are selected and some are excluded, which is a first level of decision. In the selected ones, a decision is made concerning the way they will be considered as a function of configurations.

Decision-making is not a static and definitive action but a *dynamic* process including all moments of decision along the attempt to solve a problem. [8] Moments of decision, therefore, are distributed sequentially: each one is inserted in a certain context, valued in a particular way which, by its turn, determines a new set of signs to be taken into account. The partial decision to minimize or exclude a given sign, thus, will have an effect on the full process and its result, the final decision.

On the other hand, as it deals with configurations instead of isolated signs, the totality of the problems exerts a pressure on the process of decision-making, leading to actions that eventually may prove themselves inadequate. Thus, in the evaluation of the therapeutic process it may happen that results were not as anticipated or that the original problem was not fully solved. If so, the problem must be reappraised.

This reappraisal may lead to another configuration, as it is also possible that signs initially excluded reveal themselves as having, in fact, high significance either in the same context, or in another one. This is an instance of feed-back between decision and outcome.

III- The specificity of semiotic processes in homeopathy

Homeopathy, as medical rationality has well defined and well known features. From a semiotic point of view what matters is: 1) the **type of signs** implicated in homeopathy and their possible differences from the signs employed in conventional medicine; 2) what the **signification** of such signs is and what the codes leading to specific meanings are; and 3) how meanings lead to specific **decisions and actions**. From a pragmatic point of view, we still need to address **how** to effect an intervention on the state of health of the patient. Regarding this latter issue, there is an immediate answer: "through dilutions of a given substance prescribed according the principle of therapeutic similarity". Studies suggest that semiotic processes may also be at the root of this action, but this still requires further research and analysis [9, 10].

1. The specificity of signs in homeopathy

The ground of the specificity in the approach to signs in homeopathy is its general view: from the general to the individual [11]. To homeopathy what matters, and thus influences the perspective on signs, is the individual. This has two immediate consequences: 1) the signs are considered beyond their direct relation to eventual diseases; 2) signs are considered as long as they point out to the individual.

In homeopathy, signs are qualified through modulators so that they do not indicate so much disease as the *individual-in-disease*. For this reason, what matters in a "homeopathic sign" are its *concrete, particular qualifications* in their own context.

The relation of a homeopathic to a normative sign is doubly determined. On the one hand, the "sign of disease" represents a variation regarding the normative sign of "normality". This is a path in common with conventional medicine, which, however stops here. On the other hand, the individual "homeopathic" sign is a further deviation regarding the sign typical of the disease, establishing, thus, a **new** level of reference related to a **new** normative sign. For instance, /yellow color of the skin/ is a deviation from the normative sign /normal color of the skin/ indicating possible pathology (jaundice). /Yellow color of the skin in palms and soles alternating with paleness/ associated to /deep linear cracks/ is a qualification and particularization of the generic sign /yellow color of the skin/ which now is rated as normative sign and, thus, susceptible to variation. In this example, variation is established via localization and concomitancy with another sign. This situation may be represented:

$$/s/N \rightarrow /s/P$$
$$/s/P(N) \rightarrow /s/H$$

where /s/=sign; N=normative; P=pathological; H=homeopathic

That is to say, there is a "migration" in normativeness, which in homeopathy is doubly determined: on the one hand, normativeness regarding pathology and, on the other a specific normativeness regarding the "typical" pathological sign, arising from the general categories of disease and that may be called the "concept" of disease, in opposition to the "atypicality" of concrete individual

signs and configurations. For the same reason, there is also an implicit migration of the referent: from a general, abstract category, abstracted from the actual case to an individual category significant precisely **due** to the concreteness of signs. Whereas a pathological sign indicates a possible disease (/jaundice/), a homeopathic sign, even when associated to pathology, indicates the individual who in his or her concrete experience "twists" and particularizes the pathological sign.

As the final referent is no longer "disease" but the individual, homeopathy takes into account **non** pathological signs as well, which, nonetheless, are significant as they signify the final referent. They are signs that indicate "the individual as he or she is" and in homeopathy they find the possibility to be signified, precisely because it has a fitting interpretative framework and codes able to signify them.

For instance, character signs such as /haughty/, /avaricious/, /fastidious/ are not pathological signs but they open semiotic fields when the individual is made the final referent. So-called homeopathic "general signs" as /desire for sweets/ or /sensitiveness to noises/ may also indicate this referent, as well as physical signs perceived through the external senses, such as /yellow color of the soles/ or /perspiration smelling of cheese/. In fact, such symptoms may become the most important as they indicate a "mode of being", a "reactive pattern" of the individual at the expense of the set of "pathological" signs which are unspecific and merely point to diseases.

2. The meaning of homeopathic signs

I believe that from the very beginning it is fitting to establish a distinction between the meaning of a *single* sign and the meaning of a *configuration* of signs in medicine as a whole. In medicine, within the range of possibilities related to the reference, as signs are considered together and configure, their meaning becomes ***restricted***. It may be even suggested that the full aim of the medical demarche is to effect such restriction in order to achieve a meaning coherent with decision and action. A single sign, no matter if pathologic or homeopathic, opens a range of possible significations: the task of the doctor is to restrict this range into "something making sense".

Restriction is achieved via three paths:

1) *Qualification of the sign*: modulation of the sign according the axis and relations mentioned above.

A generic sign as, e.g. /urticaria/ may thus become /urticaria due to peanuts/ which leads to a reduction in the semiotic field. This process is modal and may be represented as:

$$A(a_1, a_2 \ldots a_n) \rightarrow A(a_1); A(a_2); .. A(a_n)$$

2) *Inclusion of other signs*: this means the definition of possible configurations of signs.

For instance, to /urticaria/ may be included /rhinitis/, /eosinophilia/ and /aggravation in the open air/. Most conventional medical diagnoses are made through the addition of signs:

$$A, B, C = X_n$$

where X_n are the ***possible*** diagnoses

If, moreover, each sign is individually qualified,

$$A(a_1), B(b_3), C(c_{15}) = X_p$$

where X_p are the ***probable*** diagnoses, a more restricted set than X_n

As the common place states, the job of the doctor is similar to the detective's, and one of his or her tasks is to make a kind of "police portrait" including the factors that affect the patient's health. Indifferent from the medical rationality or therapeutic practice pursued, the doctor needs to identify this one idea around which everything happening to the patient acquires **meaning**.

In homeopathy, e.g., the ultimate aim of the whole semiotic process is to reach the image of a certain remedy; this remedy is the axis around which the full process of coherence is constructed, meaning develops in relation to that image. What a homeopathic doctor seeks through signs is to "identify", i.e. to "recognize" the most appropriate medicine for the individual patient, according to the codes available.

Ideally, the demarche of medical thought ought to go from possibility to probability to certainty:

$$Xn \rightarrow Xp \rightarrow Xc$$

where Xc is certainty, to be followed by "thus, action must be such".

3) *Intra-sign signification*: a process mediated by meanings originated in collateral sources, other disciplines, such as e.g. genetics, molecular biology, biochemistry, biophysics, psychology, sociology, etc.

As a function of them, signs in the medical context may change in the course of time as their connotative fields widen and their meanings become more complex or more exact.

This process of extension and deepening of meanings is not only the result of exclusively cultural influences, but also personal factors. In a given moment the patient may speak about or exhibit some sensations or lesions, he or she considers as signs, but omits or hides other sensations, that might be more relevant from the doctor's perspective. Equally the doctor may signify and perceive signs that he or she signified and perceived in a different way in the past after a change in his or her own conceptual framework. Signs in the medical context are never semantically neutral neither to the doctor nor to the patient. When the patient speaks, his or her narrative is already conditioned and what the doctor hears or observes is equally conditioned by the meaning he or she is able to attribute. Moreover, the meaning of a sign is never purely "objective", but it is the almost geometrical resultant of the whole assembly of perception, cognition, signification and valorization of both participants in the communication, patient and doctor as well.

The restriction of the semantic field through the three operations above has sense if it opens possibilities to decide on interventions. The meaning of a medical semiotic process is not only related to some information on about "how the patient status is" but is also related to the possibility to intervene (or not) on it. A configuration leading e.g. to the diagnosis (generic sign) of "persistent arterial duct" must take into account the possibility or not of a surgical intervention. Equally generic signs such as /biliary lithiasis/ or /oligophrenia/ require a definite attitude and thence a decision and an intervention.

In homeopathy, a sign, no matter if pathological or individual, always has a range of possible meanings due to its presence in pathogenetic trials, toxicological data or clinical verification. These three sources of data compiled in the homeopathic materia medica and repertories prefigure and give rise to a field were signs might be found, i.e. they supply codes for deciphering signs. Theses code are neither complete nor definitive as every new experience with a substance proves. On the other hand, the signs included in the homeopathic materia medica and repertories are ***referential signs***, i.e. normative signs *within the specific field of possible signs resulting from the interaction of human beings and substances*.

Therefore, there is a third determination of the homeopathic signs besides the two mentioned above: ***relation to previous human experience***. The homeopathic materia medica and repertories, despite their different forms and structure, are descriptions of signs resulting from the experience of individuals in contact with substances. Thence their quality of ***references***: a sign as, e.g. /frontal headache on exposure to dry wind/ has already been experienced by someone and the indication of a remedy depends of this signifier being associated with certainty to a signified, i.e. the corresponding remedy.

In this way, each and every homeopathic sign has a double meaning: 1) a meaning related to totality, to individuality ("the sign leads to the individual"); and 2) a meaning related to the possibility of pragmatic signification, i.e. regarding a remedy with a similar semiotic field , or a set of signs already experimented and related in medical history ("the sign leads to the remedy").

3. Relation of homeopathic signs to decision-making and action

As it was shown, homeopathic signs are linked to certain meanings unrelated to the underlying disease and, on the on the other hand, related to substances able to awaken or heal them. Decision-making in homeopathy – after all semantic considerations regarding individuality and singularity – is directly connected to ***homeopathic prescription***, i.e. the prescription of a remedy whose "image" (another normative sign) suits best the "image" supplied by the signs of the patient. In other words, homeopathic decision-making is expressed in a prescription and this is **action** to a homeopathic doctor.

From a theoretical point of view, here we have to confront two images: the image of the "totality of signs" of the patient and the image of the "totality of signs" of a remedy. Although the expression "totality of symptoms" traverses as a leitmotiv homeopathic literature, it may be asked if it is something actually accomplishable.

And the answer can only be an unqualified **No!** No patient will ever present ***all*** the repertory symptoms of, e.g. Sulphur (ca. 14,000 in repertory Synthesis 9) and neither ***all*** the symptoms of a patient will ever match exactly the symptoms of any remedy (possible framework of reference) in the materia medica.

Then, what is all about? It is about a set of approximations and reductions which may be called "semantic nuclei". From a pragmatic point of view, some "well individualized" signs of the patient are selected and confronted with signs included in the homeopathic materia medica and repertories as characteristic of remedies. A configuration of signs (the patient's) is confronted to another configuration of signs (the remedy's): decision is the result of this comparison.

However, each homeopathic practitioner has his or her personal way of making this selection, evaluation and signification of signs. One and the

same sign may be given different value by different doctors [11]. Here the epistemological and pragmatic beauty and fragility of homeopathy are fully revealed: decision-making and action depend on the way a doctor sees his or her patient. Whereas in one and the same patient a homeopath may exclusively take into account mental and general signs, another may focus on mental and skin signs and, nevertheless, both will write successful prescriptions. In last instance, what matters is what the doctor perceives in the patient and what he or she perceives is conditioned by his or her personal view on homeopathy.

Does this mean that decision-making is arbitrary or aleatory in homeopathy?

Yes, whenever the signs of the patient are pasted together without any unifying criterion or when a prescription is grounded on the criteria of conventional medicine.

No, when decision-making is grounded on the principle of coherence: on the coherence of signs that appear **together** in the patient and that **together** signify a remedy.

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