GIOVANNI STANGHELLINI

BODY, LANGUAGE AND SCHIZOPHRENIA

I: INTRODUCTION

Cenesthesia (in German: *Gemeingehfuel*) is a quite neglected subject in current psychiatric literature, but it has represented a fundamental topic in French and German XIX and early XX century Psychiatry. The historian Starobinski (1990) has even spoken of a "imperialism of cenesthesia" in the last century: since Johann Christian Reil in 1794, who used such term for the first time indicating «the means by which the soul is informed of the state of its body», till Blondel's *La Conscience Morbide* (1914), a cornerstone in the history of bodily sensations.

In more recent days, and precisely during the Fifties, some paradigmatic theories involving bodily disesthesias appeared, such as the one contained in Guiraud's *Psychiatrie Générale* (1950a) and Huber's monograph *Die coenesthetische Schizophrenie* (1957). In 1973, H. Ey's comprehensive *Traité des hallucinations* (1973) was published having a paramount importance in the conceptualization of bodily hallucinations. Focusing on these classic contributions, but especially on Huber's pathogenetic thesis connecting psychotic end-phenomena (such as bodily delusions) to bodily disperceptions, in the first section of this paper I shall try to outline some basic semantic distinctions in the field of abnormal bodily sensations. In later sections, I shall focus on the clinical and phenomenological characteristics of "schizophrenic" bodily disperception, and especially on the relationship between language and bodily experiences as the key to understanding the evolution from simple bodily disperception, to bodily hallucinations and finally bodily delusions. The final paragraphs will be devoted to re-interpreting the problem of bodily sensations within the frame of Husserl's' concept of "esthesiological bodyness" as developed in *Ideen II*.

II. CENESTHESIA AND INTROCEPTIVITY

Guiraud's *Psychiatrie Générale* (1950a) contains an important differentiation between the concepts of "cenesthesia" and "introceptivity": while me first is defined as a *global* experience in which all the single vegetative sensations are synthesized (*koinos aisthesis*), on the other side "introceptivity" refers to *single* bodily sensations. «A patient who declares that his brain is empty or his esophagus split, experiences an introceptive disturbance or hallucination». On the contrary – Guiraud writes about manic-depressive illness – «a patient who finds himself gay, full of energies or who declares to feel hopeless or even dead is affected by cenesthopathic troubles» (Guiraud, 1950a).

In Guiraud's theory, introceptive troubles may be involved in the pathogenesis of psychotic symptoms, such as delusion-like hypondriac interpretations; but only a *global disturbance* of the synthetical role played by cenesthesia can be supposed to be the core dysfunction in psychotic syndromes. Psychic activity is for Guiraud a "functional symphony"; two basic concepts resume his theory, which can be considered as a "biocentered vitalism" (Blanc, 1993): (i) the concept of

psychisme primordial including aspects of the "thymic" (affective), "hormic" (vital energy) and "ossitic" (pulsional) spheres; (ii) the concept of *eprouvé psychique global* the "carrefour" of all sensibility, which fundates personal identity including the feeling of existing, of being a "self", of being separate from the external world. Affections of these functions are at the origin of psychoses; at this regard, it must be kept in mind that this view was firstly enounced by Dide and Guiraud in the Twenties in the context of a pathogenetical enquiry on hebephrenia: «We think that the illness is characterized by the specific impairment of those cellular nervous systems presiding to the cenesthetic and kynesthetic synthesis and to instinctive vital activity (...) Athymonia, which we seemed it was the capital symptom of hebephrenia, is for us the consequence of this impairment» (Dide and Guiraud, 1929).

Consequently, psychoses are conceived as troubles of the synthetic function played by cenesthesia, which in Guiraud's theory is a synonym to consciousness. This view – which is inherited by Guiraud from Monakow and Morgue (Morselli, 1966) and to a certain extent is developed by H. Ey (1963, 1973) indicates that the "spring of delusions" is a global perturbation (Guiraud, 1950), situated in the instinctual sphere (*hormé*). «Delusional ideas as such – as Morselli (1966) pointed out commenting Guiraud – are secondary to something which has got nothing to do with ideas». Delusions express a derangement of instincts and drives, reflecting global and basic disorders of the hormothymic sphere: «disorders of the primordial psychic activity, complicated and masked by the intellectual and affective superstructures of human thinking» (Guiraud, 1950b).

Some differences between Guiraud's and Huber's approach must be underlined at this point.

- It must remembered that Guiraud's globalistic view is absent in Huber's *Die coenaesthetische Schizophrenie*, the latter dealing strictly with the relationship between abnormal bodily sensations and bodily delusions.
- The distinction made by Guiraud between cenesthetic and introceptive troubles is also very important to avoid misunderstanding in reading Huber's enquiry about *coenesthetische schizophrenie*, since what Huber calls "cenesthopathies" are in French literature after Guiraud *introceptive false sensations*, defined as: "not ordinary pains", mysterious, made up. Which quickly lead to delusional interpretations» (Guiraud, 1956).
- A difference is also present between Guiraud's and Huber's end-phenomena. Speaking of
 "delusions", Guiraud fundamentally alludes to the whole field of the Wahnsinn, of psychotic
 alienation, while Huber taking into account the relationship between abnormal bodily
 sensations and delusions refers to bodily delusions, such as hypochondriac ones or delusions of
 somatic influence.

However, what legitimates a parallelism between Guiraud's and Huber's perspectives in this context is their not reductionistic approach to the pathogenesis of delusions, taking into account basic disorders neither in a mechanistic-materialistic nor in a spiritualistic-vitalistic sense, but in phenomenological and dynamic perspective.

III. CENESTHOPATHIES AS BASIC-SYMPTOMS

In short, Huber renounces to a globalistic perspective on cenesthesia and aims to define a *semio-pathogenesis* connecting abnormal bodily sensations to bodily delusions. The conclusions Huber (1957) arrives at in his essay on *Die cenesthetische Schizophrenie* can be summed up as follows:

- 1. There comes to be defined as the fourth subtype of schizophrenia next to paranoid, catatonic and simplex-hebephrenic forms a clinical syndrome whose psychopathological organizer is represented by abnormal phenomena on the ground of bodily sensations, «phenomenologically distinguishable from those bodily disesthesias which are present in non-psychotic life».
- 2. Such a syndrome belongs to the group of schizophrenias though not synchronically characterized by the "usual" schizophrenic symptoms, and particularly by schneiderian first-rank symptoms (Schneider, 1987), which may lack even for a long period and become evident only after a

- prolonged observation. For this reason, many schizophrenics belonging to the cenesthetic group are misdiagnosed and this fact Huber writes acquires a «particular meaning in the delimitation of the schizophrenia concept».
- 3. The clinical picture so defined as cenesthetic schizophrenia is not just conceivable as "a clinical psychopathological syndrome", but according to Huber it shows a characterizing and nosographically unifying somatological impairment, so that the hypothesis may be raised that this illness constitutes the "organic pole" within the schizophrenic spectrum.

In the preceding paragraph, Guiraud's conceptualization of "cenesthesia" – which shades into the notion of "consciousness" – was distinguished from Huber's use of "cenesthopathies", strictly meaning bodily disesthesias. Indeed, the concept of "cenesthesia" is rather obscure and even more obscure is the way the global disorder of cenesthesia clinically (phenomenically) develops into delusional end-phenomena. Huber's approach is empirically engaged in seizing bodily sensations as they emerge in field of consciousness and in following their metamorphosis into bodily delusions. In such a way, certainly the concept of "cenesthesia" is impoverished, since a great part of its structural and also clinical aspects are ruled out, but what remains is a rigorous semiotics of those phenomena which lay *as close as possible to the body*, both in the sense of the organic (biological) body and the experiential body.

At the cost of this simplification, Huber's study on bodily misperceptions revealed itself to be an effective tool to start filling the gap between the body and the mind in understanding and explaining psychotic syndromes. Huber's proposal from an epistemological point of view – may be synthesized as putting the body in an intermediate position between biological reductionism and the reductionism of subjective phenomenology. *Die coenaesthetische schizophrenie* shows that a reflection on bodily sensations becomes meaningful within an etio-pathogenetical theory of schizophrenia *only* if the body is conceived, *at the same time*, as a biological object (the seat of epiphenomena of biological events) and as the field of subjective experience.

In fact, we might consider cenesthesia as the most biological *Erlebnis*. From this point of view, Huber's monograph may be viewed as the historical precursor of the basic-symptom theory. Basic-symptoms are defined as substrate-dose disturbing subjective experiences, laying intermediately between transphenomenal cognitive disorders and their organic correlates, at the one side, and psychotic (delusional and hallucinatory) end-phenomena, at the other side. The disorders of cenesthesia represented in this perspective the historical forerunner of the basic-symptom theory (Huber, 1983): the mediation between biological (objective) bodily dysfunctions and subjective bodily pathological experiences, as well as the intermediate phenomenon between neurological dysfunctions and psychotic end-phenomena. In this sense, Huber's cenesthopathies are basic-symptoms *ante litteram* and cenesthetic schizophrenia is an *ante litteram* pre-psychotic basic-stage.

IV. PSYCHOPATHOLOGICAL SPECIFICITY OF "SCHIZOPHRENIC" CENESTHOPATHIES

Of all the topics discussed in Huber's monograph, the one regarding the specific characteristics of "schizophrenic" cenesthopathies will be developed in this paragraph. A premise is necessary to specify what is in this context meant by the adjective "schizophrenic". Huber's concept of "schizophrenia" is oriented by Schneider's doctrine of first-rank symptoms. The notion of unitary psychosis (*Einheitpsychose*), characterized by the delusional and hallucinatory outputs of the psychotic mind, is also present in Huber's conceptualization, whose aim – at the light of successive developments of his researches – is not enquiring on the specificity of psychotic end-phenomena, but deepening the clinical features of those symptoms which may be pathogenetically situated between an organic pre-phenomenal disorder and psychotic end-phenomena themselves (*semio-pathogenesis*).

- Feeling of transformation. In terms of subjective phenomenology, what labels schizophrenic cenesthopathies is their aspect of transformation. Bodily organs, and especially visceral ones, emerge from the silent background in which they are usually laying unperceived. An excellent description – which must not be interpreted from a nosographical point of view, but rigorously from a phenomenological (eidetic) standpoint – is contained in Calvi's phenomenological essay on La consistance corporelle chez l'hypocondriaque (1980): «Let's now imagine that the own body is "penetrated" from the inside. It's like seeing an object through a veil: if the consistency increases, the object becomes more visible, till the veil seems to be disappeared. The same happens to the Hypochondriac: the object which becomes more and more opaque is his digestive tube; the veil which attenuates till it disappears is the own body; the self who assists to such transformation is the patient himself, living tragically and trying to express his metamorphosis». Moreover, bodily organs are experienced as changing in dimensions, consistency and migrating in abnormal places. A specific characteristic, in terms of subjective phenomenology, of schizophrenic bodily disperceptions is consequently the feeling of "new", "different", "incomprehensible" and "uncanny" which challenge the ordinary capacity of linguistic representation. «In our language, the expressive possibilities and adequate categories concerning these peculiar bodily sensations – according to Huber (1957) – are completely lacking».
- *Ineffability*. The relationship between bodily disperceptions and the shortage of linguistic categories to express them is central and fundamental. Indeed, an authorative tradition put forward the axiom of the *ineffability* of cenesthopathies. As Spitzer (1988) writes: «When patients have to talk about their immediate experience there seems to be a shortage or even a lack of descriptive language». In fact, a general interpretative schema of cenesthopathic phenomena may be grounded on the concept of disproportion between the quality of the cenesthetic experience (strange, enigmatic, uncanny) and the linguistic capacity of the person who is in charge to express it and cope with it, codifying it according to culturally pre-defined norms. The concept of anthropological disproportion is the cornerstone of Binswanger's (1956) theory of psychotic existence, expressing an unbalance between «the mental structure which alone enables man to grasp and understand what he encounters (including himself) » (Blankenburg, 1982) and the range of his actual experience. According to Blankenburg (1971) and in a phenomenological perspective, our «categorial capacities allow us to adequate (transcendentally) our actual thoughts, feelings and will to what we encounter». In a psychotic situation, this proportion between categorial personal capacity and actual experience is lost. Such a dialectical view does not place the "primary" morbid factor either in the subject or in the object encountered – either in the mind's semantic capacity or in bodily experience – but in the disproportion between the two.
- Peripheric etiology. Blondel (1914) is a forerunner of the tradition postulating an insufficiency of the mental capacity of categorisation: the sick mind is not able to dominate the cenesthetic factor by expressing it through «the impersonal system of socialized discourse» (Starobinski, 1990). But Blondel uniquely sited the primary (basic) "morbid" factor «in the insufficiency of the verbal response to the bodily perceptions» (Starobinski, 1990); Huber's opinion on schizophrenic cenesthopathies may be seen as opposite to this. In fact, he postulates that real schizophrenic phenomena are primarily disesthetic in nature, "peripheric", and – he adds – probably of thalamic etiology. Where Blondel postulates a language failure, Huber sees a body failure. There derives in Huber's theory clear-cut distinction between schizophrenic and nonschizophrenic cenesthopathies. In non-psychotic forms (which he names "hypocondriacpsychopathic-reactive" ones), the primary element is "an erroneous psychic attitude" towards one's own body. As Callieri reports (1980), hypochondriac ideas sometimes arise from «more or less normal bodily sensations, but amplified and distorted by the particular state of the receptive apparatus», but more often they are «representations which are delivered at the mental level and are projected to the visceral and somatic periphery with specific and dear contents of sensitiveness, as in hallucinatory mechanisms». On the contrary, according to Huber, in

- schizophrenias the "essential and primary role" is played by the "modification of somatic experience".
- Passivity atmosphere. The subjective feeling of transformation, the insufficiency of ordinary linguistic categories and the peripheric (thalamic) etiology of schizophrenic cenesthopathies are the characteristics analyzed until now. Furthermore, it can be assumed that the psychopathological specificity of such bodily disesthesias can be fully understood only connecting it with elements belonging to the affective-emotional sphere. Only in a condition characterized by enormous affective tension and emotional resonance, as to reach the deepest levels of vital anxiety, evolutive cenesthopathies emerge. An explicit reference to Bleuler's (1911) Benommenheit is not present in Huber's monograph, but the essential mood from which schizophrenic cenesthopathies arise is well described by such concept (whose English literal translations is numbness, torpor or clouding which can be translated, according to its etymology (Be=passive + Nehmen=to seize): the passivity atmosphere. Authors such as H. Ey have supported that bodily hallucinations like «every hallucinatory experience are inscribed inside this syndrome of general extraneousness» (1973), and even more in detail he affirmed that "depersonalization" appears as the background, the Hintergrund of bodily hallucinatory activity".

Depersonalization (Ey) or passivity atmosphere (Bleuler) are the hallmark which makes of a bodily disperception a "schizophrenic" cenesthopathy. In terms of diagnostic specificity, bodily disesthesias are to be defined "schizophrenic" when they have an evolutive nature. They are schizophrenic *in itinere*, because they contain *in nuce* the evolution towards more specific outputs of the schizophrenic mind, such as schneiderian first-rank symptoms. This evolution is determined by the affective-dynamic atmosphere in which the cenesthopathic primary phenomena arise, which potentiates the intensity of such phenomena and contributes to orient the relationship between them and the experiencing person who is subjected to them.

V. BODY AND METAPHOR

«For the Subject, the perception of his body constantly needs a metaphor» (Ey, 1973). In his *Traité des Hallucinations*, Ey investigates the relationship between language categories and bodily perceptions. Metaphors are needed to conceive of the experience of one's own body; they are not simply in juxtaposition to bodily experiences, but they *mediate* the very act of perception. In the normal metaphorical exercise, the perception of one's own body is not modified by metaphors themselves, but when a dissociation between experience and expression arise then bodily hallucinations appear. When the subject is no more aware that he is using a metaphor, then he becomes hallucinates. When metaphor fades away, hallucination arises. «In fact, hallucinating, in the field of this peculiar sense, is *perceiving one's own body completely or partially as an object or a living entity outside oneself*, i.e. as an object transformed by the very impossibility of metaphorical expression» (Ey, 1973).

In becoming unaware of my using a metaphor in expressing my bodily experience, I loose my distance from the experience itself: in a certain way, I loose my mastership over such experience, becoming *passive* in front of it. Loosing its metaphorical fluidity, bodily experience is no more the experience of *my* body: a pare of my body falls in the outside world and at the same time, becoming uncontrolled and uncontrollable, becomes pervasive and intruding. Indeed, the crisis of the *awareness of Ego activity* (Jaspers) in creating through metaphors one's own reality, the crisis of *Meinhaftigkeit* (Schneider) and of the *intimacy of the Ego* (Minkowski) are different facets of the same phenomenic reality. A further aspect is the fading of the *koinos kosmos* through the crisis of the "socialized" metaphorical discourse on one's own body. In fact, using a metaphor to express my bodily experience I also try to fill the gap between my bodily experience and my neighbour's. But

when the metaphor looses its analogical and communicative intention, it becomes idiosyncratic, loosing its roots in the "socialized discourse".

Ey distinguishes three levels of falsification of bodily experience.

- l. In the first level «the metaphor expresses the body as lived as an object, that is in its purely spatial dimensions». It is the level of so called *hallucinosic eidolias*. From the etiological point of view, they are "neurologic" and "peripheric" phenomena derived from a disintegration of the "perceptive infrastructure".
- 2. The process of externalization and objectification of the body is deeper in the second level in which *delusional hallucinations* arise along with a disorganization of the field of experience (*Bewusstsein*). Depersonalization is the basic phenomenon at this stage, which corresponds in syndromical perspective to manic-depressive states, *bouffées délirantes*, oneiroid and crepuscular states, etc. In this stage metaphors become *unconscious*.
- 3. In the third level, metaphors are *denied* and bodily hallucinations are organized in a delusional system arising together with a disorder of the consciousness of the Self (*Besinnung*). The clinical syndromes which correspond to this level schizophrenias and chronic delusional psychoses are characterized by an increase of the difference between the "raw experience and its enunciation". Gentili *et al.* (1965) had already pointed out that in acute psychoses, and more precisely in schizophrenic onsets, the body is *structure* of the pathological experience, while in chronic delusional syndromes it becomes the *content* (or one of them) of the delusional world.

Ey sharply affirms that "hallucinosic eidolias" must be dearly distinguished from delusional hallucinations and from somatic delusions. The first category of symptoms are simple bodily disesthesias, close to Juber's first-level cenesthopathic basic-symptoms. In delusional hallucinations the process of spatialization is accomplished and the *Meinhaftigkeit* is lost, so that a part of one's body becomes a hallucinatory object. Somatic delusions are end-phenomena in which the "raw" hallucinatory experience fades away leaving place to a pathological linguistic construct. Not a shortage of linguistic capacity characterize bodily hallucinations, but basically a falsification of bodily experience due to the *catacresis oi metaphorical expression*. Only at the level of chronic psychoses, the bodily metarnorphosis may imply a *metamorphosis in language*, a semantic distortion leading to neologism and delusional constructs. Schnell, in 1852, already pointed out that «another cause of the formation of new expressions and words seems to be found in sensations and emotions, often strange and peculiar, to which the patient is submitted». According to Schnell, perceptive and bodily transformations and the psychotic "subjectivism" may lead to the formation of neologisms.

Two pathways to the formation of bodily hallucinations and delusions in relationship with linguistic dynamics may be outlined:

- The first is based on a mechanism of *denial*. Since the normal expression of bodily experience requires metaphors, a *denial* of the metaphorical nature of one's own style of expression and communication implies bodily hallucinations.
- The second is base on a mechanism of *induction*. An *unheimlich* transformation of bodily experience may *induce* neologisms, a *concretization* of which is a pathway to somatic delusions. In fact, a third modality of the body-language relationship may be pointed out:
- The third modality might be called a mechanism of *implication*. If language is *embodied*, i.e. if linguistic categories arise from bodily experience, then a transformation of one's own bodily experience may *imply* a transformation of linguistic categories. This pathway from body to delusion will be analyzed in more details in the last paragraph of this paper.

VI. CATEGORIES METABOLIZING PERCEPTIONS

I shall now turn to another trend of studies concerning me relationship between language and bodily sensations, and more generally between mental categories and perceptive inputs. These

studies focus on the relationship between primary "schizophrenic" disorders, such as the disorganization of the perceptive field, and the cognitive competence of the patient.

The paranoid and the schizophrenic process. Among these studies, Meissner's (1978, 1981) psychodynamic theory envisions the schizophrenic and the paranoid processes as two different factors involved in the morphogenesis of disorganized ("schizophrenic") or hyperorganized ("paranoid") forms of psychoses. The term "process" is used by Meissner in an etiopathogenetical sense, resembling its traditional psychopathological meaning (Jaspers, 1959).

The *paranoid process* – which is «not isolated to some pathological segment of the population, but inherent part of the personality organization of every human being» (Meissner, 1981) – operates in the direction of the organization of the perceptive field: each element of the outside world has to find its precise place inside a pre-defined mental grid when the paranoid process prevails. On the other side, the *schizophrenic process* is characterized by disorganizing and disruptive effects at various levels of psychic organization. When the schizophrenic process prevails, a sensory flooding annihilates the patient: while the schizophrenic process overemphasizes the dependence on *perceptive* elements (as in a hyper-realistic painting), specific to the prevalence of the paranoid process is the dependence on *conceptual* ones.

While Meissner emphasizes the processual nature of the emergence of the paranoid or schizophrenic frames of mind, for Magaro (1980, 1981) – in a cognitivistic perspective – the paranoid and the schizophrenic prototypes embody two distinct "cognitive styles" in a more structural (and therefore personological) permanent sense, the latter exhibiting an "underorganized" and the former an "over-organized" intellectual system (Magaro, 1981), with "stronger tendency to organize ambiguous stimuli in a meaningful way" (Mc Reynolds, Collins and Acker, 1964). According to Magaro, disorganized schizophrenias, at one hand, and paranoid schizophrenia, at the other, represent the overpower of the schizophrenic over the paranoid frame of mind, and vice versa. Magaro indicates two nosographical dimensions: the schizophrenic dimension has its less severe pathological level in schizophrenic personality, and its severeness increases to schizoid personality disorder, schizophrenia, till disorganized schizophrenia. The paranoid dimension spans from paranoid personality traits, to paranoid personality disorder, till paranoid schizophrenia. We actually might object that the highest level of conceptual over-organization is better clinically represented by a paranoiac delusional system, than by paranoid schizophrenia, but the core of the theory still holds: in paranoids, conceptual capacity is better preserved than in non paranoids and they generally show a better intellectual functioning.

- Nodily sensations and alexithymia. Semrad (1969) had already observed that the schizophrenic disorganization arises from a failure in "metabolizing" unpleasant emotional arousal. Johnson and Quinland (1980, 1985) found that non paranoid schizophrenic patients have «more fluid boundaries in their representation of human characters» than paranoids. Linville (1985) have shown that individuals endowed with grater cognitive competence in their descriptions of themselves are «less likely to experience extreme perturbations in their emotional equilibrium». These contributions were recently reviewed by Lane and Schwartz (1987) in the context of a cognitive-developmental theory of emotional awareness, whose basic statement is that language the organon of cognitive processing leading from primary experiences consisting only of bodily sensations to a psychic state of great conceptual differentiation and integration of such experiences is a means not only for "representing" experience, but also for "transforming" it. In this sense, also the concept of "alexithymia" the lack of words for expressing affections may become a tool for interpreting the positive-negative psychopathological dimensions in schizophrenias and their clinical and prognostic correlates.
- Negative-symptoms and language disorders. Recently Crow (1989) has proposed to restrict the category of negative-symptoms to language disorders (reduction of speech performances) and affective blunting. Morice and Ingram (1983) demonstrated a relationship between low complexity of speech and early onset of illness, and we know that early-onset schizophrenias are frequently *poor* schizophrenias and have more severe outcomes.

Berner et al. (1985) showed – applying Bleulerian views on formal thought disorders – that «formal thought disorders are predictors of an evolution towards deficiency states and thus may be related to negative symptoms»; on the contrary, «if psychotic symptoms appear without formal thought disorders the illness usually takes an episodic course with a restitutio ad integrum». Andreasen and Grove (1986) found that negative thought disorders were highly associated with poor prognosis and Simhandl et al. (1986) underlined the correlation between formal thought disorders and negative symptomatology. Wilcox (1990) – using Andreasen's criteria in detecting formal thought disorders - carne to the conclusion that «initial formal thought disorders was a strong predictor of relapse». Thomas et al. (1987) found a correlation between syntactically less complex speech and first-onset negative-symptom schizophrenias. The same Author – using a method of discourse analysis – later hypothesized the relationship between low complexity of speech, negative symptoms and poor outcome (Thomas. et al., 1990). Mundt et al. (1989) found it remarkable that alogia – measured with the Scale for the Assessment of Negative Symptoms (SANS) (InSka) – do best in separating schizophrenics from other diagnostic groups. Johnson and Shean (1993) suggested that two different patterns of language disorders are to be associated with positive and negative symptomatology: the pattern of language disturbance associated with negative symptoms is characterized by a «tendency to give idiosyncratic associations and the inability to place the associations in a related context». As we already mentioned, in our study on the relationship between basic-symptoms and negative-symptoms (Stanghellini et al., 1991), we found a significant correlation between negative-symptoms and disturbances of language capacity.

In that paper, we defined the notion of *language capacity* to designate the individual's possibility of access to the appropriate linguistic codes in order to understand, express and communicate one's own experiences. The meaning of language capacity may be seized as someone's capacity to *conceptually embrace his own experiential world and make of it a shared subjectivity*. Such concept seems suitable to designate a specific cognitive impairment, a hint of categorial failure. We thought that such disturbance of language capacity could play a key role in the interface between basic-symptoms (which are "symptoms of experience" in Jaspers' sense and therefore are ready to be expressed and communicated by the patient) and negative-symptoms (which are "behavioural symptoms" and clinically may be seen as expressing the *dumb side* of schizophrenia) and could also make sense of their correlation. The linguistic capacity belongs to the personological matrix of a patient, that is to the structures which give a meaning to the events of his life. In the basic-symptom hypothesis such matrix is considered as a joint between basic-symptoms and psychotic endphenomena.

VI. HUSSERL'S "ESTHESIOLOGICAL BODYNESS"

I have already tried to characterize Huber's essay on Die *coenesthetische schizophrenie* as the forerunner of the basic-symptom theory. In a historical perspective, the analysis of the phenomenic area of cenesthetic disturbances seems to announce a conceptualization of schizophrenic bodyness which later involved kinesthetic and psycho-motor troubles, elementary sense-organ disorders, vital impulse inhibition and all the other categories of basic-symptoms.

In a preceding study, I proposed (Stanghellini, 1992) to re-interpret all such bodily impairments – firstly studied on the ground of cenesthesia and later by Huber considered on a wider ground – in the frame of Husserl's (1952) doctrine of *esthesiological bodyness*, i.e. of the somatic conditions influencing the perception and constitution of the external world.

In the *Second Book* of his *Ideen*, concerned with the constitution of the material world, Husserl shows that a modification in one's body implies a modification in the perception of the external world. «The shape of material things as *aistheta*, just as they stand in from of me in an intuitive way, depends on my configuration, on the configuration of the experiencing subject, refers to my own body» (Husserl, 1952).

The main category of factors subjectively conditioning the perception of the external world which Husserl takes into account is *kinesthesia* – the sense of the position and movement of voluntary muscles. By means of the integrity of kinesthesia, our own body is the constant reference of our orientation in the perceptive field.

An impairment of the correct perception of one's movements (as it happens for the basic-symptom area "loss of motor control") can imply the trouble of the "orientative relation" between one's own body and the visually perceived object. Since the perceived object gives itself through the integration of a series of prospective appearances (*Abschattungen*), such impairment can give rise to a perceptive dissociation whose implications on delusional perception were pointed out by Matussek (1952).

If one's own body is the constant guarantor of perceptive orientation, then its modification can originate anomalous phenomena in the perceptive world.

This corresponds to the first degree of world transformation, in which the experiencing subject remains aware of the abnormality of his perceptions. The following step is represented by the crisis of the co-experience of one's own body's active role in the shaping of perceptions.

The disintegration of kinesthesia can also result in the loss of motor automatism, that is the vanishing of the pre-thematic background of motor performances which usually grants continuity and familiarity to every action and experience. This belongs to what phenomenologists call *Vertrauen*; Binswanger pointed out the relationship between a crisis of *Vertrauen* and psychotic mainly productive experience (1960, 1965), while Blankenburg analyzed the crisis of *Selbstverstaendlichkeit* (natural evidence) in "negative" (hebephrenic) forms of schizophrenias (Blankenburg, 1971). Both express a failure of the function of the transcendental Ego in constituting spontaneously, naturally and evidently objects and situations in the world.

Such considerations on the role of kinesthesia in constituting reality might represent the bodily correlation of the anthropological concept of "positionality", whose importance in XX century philosophical anthropology and therefore anthropological psychiatry I tried to point out in a preceding paper (Stanghellini, 1992b).

VII. FROM BODILY PERCEPTION TRANSFORMATIONS TO WORLD TRANSFORMATIONS?

Recent developments of phenomenological research have followed Husserl – more or less explicitly – underlining the role of kinesthesia in the constitution of external world, and psychopathological research should regard to such studies with much interest.

The basic assumption of the studies I am going to examine is that the mental categories through which we constitute in a meaningful *Weltanschauung* our perceptions are *embodied*, i.e. they arise from bodily perceptions organized in bodily schemas.

The question to which such studies can be addressed on the psychopathological ground is: *how biological bodily transformations can entail world transformations*, "sense" transformations?

According to the anthropologist Durand (1984), the basic categories organizing our world representation are *metaphorical*. Rational thinking and its semantics are the later development of a primary semantic of imagination whose basic metaphors are to be understood as "vital categories" arising from primordial dominant reflexes (*gestes dominants*), such as *kinesthetic-positional* reflexological schemas (positional, nutritional and copulative dominants). Durand sends back to Betcherev and Piaget and supports his hypothesis with an impressive folklorist and mythological documentation.

The most advanced researches on this topic are Lakoff and Johnson's (Lakoff and Johnson 1982, Lakoff 1987, Johnson 1987), based on the analysis of language categories within the frame of a "pragmatic approach to phenomenology". Their account of cognitive models claims that our «conceptual structure is meaningful since it is *embodied*, that is, it arises from and is tied to, our

pre-conceptual body experiences» such as *kinesthetic image schemas* (Lakoff, 1987). Examples of kinesthetic image schemas are (I) the container schema (we experience our body both as containers and things contained); (II) the part-whole schema; (III) the link schema; (IV) the center-periphery schema; (V) the source-path-goal schema; (VI) the balance schema, etc.

Our coherent, meaningful, comprehensible perception of the world is a *metaphorical projection* of such primary bodily experiences.

Disorganizations of bodily perceptions might lead to specular disorganizations of the apperception of the world, whose constitution is based on the metaphorical projection of bodily image schemas. In this perspective, we might admit that the peculiar transformations in cenesthesia and kinesthesia described above might entail *sense* transformations through a disorganization of basic cognitive-semantic schemas, without taking into account the hypothesis of the *existence* of a transcendental Ego mediating between body and world.

Bodily discerception – which clinically are the *origin* of any "dissociative experience" (Gentili *et al.*, 1965) – in this perspective are to be considered as the *source* and not the effect of the crisis of intentionality. Intentionality is embedded in the body. Ontologically, the *existence* of a transcendental ego is not strictly necessary. *Transcendental Ego* is. In this perspective, the way we call this function of metaphorical projection on the world of kinesthetic and cenesthetic image schemas, constituting the world according to familiar patterns of meaningfulness. Such function – as it is shown by clinical psychopathology – is deranged especially at the onsets of psychotic episodes. In acute and especially first-episode psychoses, the body is involved as the structure of psychotic experience, while in later phases and especially in chronicity the body may be the theme or the content of psychotic secondary delusions (Gentili *et al.*, 1965). In initial schizophrenias, «the psychotic experience de-structuralizes its own Ego in its most primitive and fundamental attribute: its own body» (Agresti and Ballerini, 1965). In such case, a "necessary relationship" between the schizophrenic patient's body and his psychosis exists.

Such close relationship between a derangement of bodily experience and psychosis might suggest that the crisis of intentionality – the crisis of the *Sinngebung* activity – is primarily a crisis of the experienced body: of one's own embodied schemes of meaningfulness and of one's own orientative (kinesthetic) relationship with the external world. *A semantic failure is a body failure*.

Sometimes, it is possible to follow such psychopathological pathways in our patients. What seems very difficult is to verify such hypothesis with empirical studies on the clinical ground. Anyhow, the intention of the present paper is only to suggest the possibility of an interpretation of the basic-symptom theory not aimed at the detection of the biological causes of schizophrenia, but at shedding some light on the shadow-line between our bodily perceptions and the way we make sense of the world.

Of course, this extended interpretation of the basic-symptom theory – and especially of its chapter concerning cenesthopaties – is not in competition with its more orthodox development, i.e. with Klosterkoetter's (1988) "serial connection" doctrine, where a (reversible) evolution from elementary experiences of auto-, somato- and allo-psychic depersonalization to psychotic symptoms is brightly demonstrated. The issue of my interpretation, complementary to such clinical developments, is conceptually bridging "cenesthopaties" and "cenesthesia", resuming an empirical view concerned with bodily perceptions within a theory of consciousness centered on intentionality.

BIBLIOGRAPHY

Agresti E., Ballerini A. (1965) Aspetti psicopatologici del vissuto corporeo nella schizofrenia "Rassegna di studi psichiatrici", 54,6: 679-83.

Andreasen N. C. (1989) *The Scale for the Assessment of Negative Symptoms (SANS): Conceptual and theoretical foundation* "Br. J. Psychiatry", 155:49-52 (suppl. 7).

Andreasen N. C., Grove W. (1986) *Thought, language and communication in schizophrenia: diagnosis and prognosis* "Schizophr. Bull", 12: 348-59.

- Berner P., Kufferle B., Schanda H. (1985) *Are the plus and minus symptoms "specific" for schizophrenia?* in: Pichot, Berner, Wolf, Than (Eds.) *Psychiatry: The State of the Art*, Plenum Press, New York.
- Binswanger L. (1956) Drei Formen missgluecten Daseins Niemeyer, Tuebingen.
- Binswanger L. (1960) Melancholie und Manie: Phaenomenologische Studien Neske, Pfullingen.
- Binswanger L. (1965) Wahn Neske, Pfullingen.
- Blanc CJ. (1993) Psychiatrie biologique et pensée philosophique dans l'oeuvre de Paul Guiraud "L'Evolution psychiatrique", 58, 4: 659-68.
- Blankenburg W. (1971) Der Verlrust der natuerlichen Selbstverstaendlichkeit. Ein Beitrag zur Psychopathologie Symptomarmer Schizophrenien Enke, Stuttgart.
- Blankenburg W. (1982) *Anthropological Proportions* in De Koening, A. J. J. and Jenner, F. A. (eds.) *Phenomenology and Psychiatry* (Academic Press, London 1982).
- Bleuler E. (1911) Dementia praecox oder Gruppe der Schizophrenie Deutike, Leipzig und Wien.
- Biondel C (1914) La Conscience morbide A1can, Paris.
- Callieri B. (1980) Ipocondria in: "Enciclopedia Medica Italiana", Vol. VIII, USES Firenze.
- Calvi L. (1980) La consistence corporelle chez l'hypochondriaque in Regard, accueil et présence Privat, Paris.
- Durand G. (1984) Les Structures Anthropologiques de l'Imaginaire. Introduction à l'archétypologie générale 10^e édition, Bordas, Paris.
- Ey H. (1963) La Conscience PUF, Paris.
- Ey H. (1973) Traité des Hallucinations Masson, Paris.
- Gentili C. et al. (1965) Psicopatologia del vissuto corporeo nella schizofrenia: studio clinico e fenomenologico dei deliri a tema somatico "Riv. Sper. Freniat.", 89, 5: 1077-1139.
- Guiraud P. (1950a) Psychiatrie Générale Le Francois, Paris.
- Guiraud P. (1950b) Psychopathologie des délires "Rapp. 1er Congès Mondial de Psychiatrie", Paris.
- Guiraud P. (1956) Psychiatrie Clinique 3^{ème} Ed., Le François, Paris.
- Huber G. (1957) *Die coneaesthetische Schizophrenie* "Fortschritte der Neurologie und Psychiatrie", 25, 491-520.
- Huber G. (1983) Das Konzept substratnaber Basissymptome und seine Bedeutung fuer Theorie und Therapie schizophrener Erkrankungen "Nervenartz", 54, 23–32.
- Husserl E. (1952) *Idem zu einer reinen Phaenomenologie und phaenomenologischen Philosophie: II. Phaenomenologische Untersuchungen zur Konstitution* Nijhoff, Den Haag.
- Johnson M (1987) *The Body in the Mind. The Bodily Basis of Meaning, Imagination, and Reason* The University of Chicago Press, Chicago and London.
- Johnson D., Quinland D. (1980) Fluid and rigid boundaries of paranoid and non-paranoid schizophrenics on a role-playing task "J. Pers. Assess.", 44: 523-531.
- Johnson D., Quinland D. (1985) Representational boundaries in role portrayal among paranoid and nonparanoid schizophrenic patients "J. Abnorm. psychol., 94: 498-506.
- Johnson D. E., Shean G. D. (1993) Word association and schizophrenic symptoms "J. psychiat. Res.", 27, 1: 69-77
- Klosterkoetter J. (1988) Basissymptome und Endphaenomener der Schizophrenie Springer, Berlin.
- Lakoff G. and Johnson M. (1982) *Metaphors We Live By* The University of Chicago Press, Chicago and London.
- Lakoff G. (1987) *Women, Five and Dangerous Things. What Categories Reveal about the Mind.* The University of Chicago Press, Chicago and London.
- Lane R. D., Schwartz G. E. (1987) Levels of Emotional Awareness: A Cognitive-developmental Theory and Its Application to Psychopathology "Am. J. Psychiatry", 144-133-143.
- Linville P. (1985) Self-complexity and affective extremity: don't pull all your eggs in one cognitive basket "Social Cognition", 3: 94-120.
- Magaro P. A. (1980) Cognition in Schizophrenia and Paranoia: The Integration of Cognitive Processes Erlbaum Ass., Hillsdale.
- Magaro P. A. (1981) *The Paranoid and the Schizophrenic: The Case for Distinct Cognitive Style* "Schizophr. Bull", 7: 632-661.
- Matussek P. (1952) *Untersuchungen ueber die Wahnwahremung* pt. I, Mineilung, "Arch. Psychiat. Nervenk.", 189, 279-319.
- Mc Reynolds P., Collins B., Acker M. (1964) *Delusional Thinking and Cognitive Organization in Schizophrenia* "J. Abnorm. Soc. Psychol.", 69: 210-212.

- Meissner W. W. (1978) The Paranoid Process Aronson, New York.
- Meissner W. W. (1981) The Schizophrenic and the Paranoid Process "Schizophr. Bull.", 7: 611-631.
- Morice R. D., Ingram J. C. L. (1983) *Language complexity and age of onset of schizophrenia* "Psychiatry Research", 9: 233-242.
- Morselli G. E. (1966) Paul Guiraud et le problème des délires "L'Evolution Psychiatrique", 2: 395-401.
- Mundt C., Kasper S., Huerkamp M. (1989) *The diagnostic specificity of negative symptoms and their psychopathological context* "Br. J. Psychiat.", 155 (suppl. 5): 32-36.
- Reil J. C. (1794) Coenesthesis, dissertatio (...) quam praeside J. C. Reil, Halle.
- Schneider K. (1987) Klinische Psychopathologe 13. Auflage, Thieme, Stuttgart.
- Schnell (1852) *Ueber die veraenderte Sprechweise und die Bildung neuer Worte und Ausdruecke im Wahnsinn* "Allg. Zeitsch. f. Ps.", 9,11.
- Semrad E. (1969) Teaching Psychotherapy of Psychotic Patients Grune & Stratton, New York.
- Simhandl C. et al. (1986) Cognitive disturbances in chronic schizophrenia: formal thought disorder and basic symptoms "Psychopathology", 19: 206-12.
- Spitzer M. (1988) *Karl Jaspers, mental states and delusional beliefs: a redefinition and its implications* in: Spitzer M., Uehlein F. A., Oepen G. *Psychopathology and philosophy* Springer, Berlin.
- Stanghellini G. (1992) Schizofrenia e cenestopatia in: Stanghellini G. (1992) Verso la Schizofrenia cit.
- Stanghellini G. (1992b) *La "posizione" di Jacob Wyrsch ed il progetto di una psichiatria antropologica* "Comprendre", 6, 135-150, Supplem. Fasc. 2, "Riv. Sper. Fren.".
- Stanghellini G., Quercioli L., Ricca V., Strik W. K., Cabras P. L. (1991) *Basic Symptoms and Negative Symptoms in the Light of Language Impairment* "Comp. Psych.", 32: 141-146.
- Starobinski J. (1990) A short history of bodily sensations "Psychological Medicine", 20, 23-33.
- Stoering G. E. (1953) Besinning und Bewusstsein Thieme, Stuttgart.
- Thomas P. F., King K., Fraser W. I. (1987) *Positive and negative symptoms of schizophrenia and linguistic performance* "Acta Psychiatrica Scandinavica", 76: 144-151.
- Thomas P. F., King K., Fraser W. I., Kenddl R. E. (1990) *Linguistic Performance in Schizophrenia: a Comparison of Acute and Chronic Patients* "Br. J. Psychiat.", 156: 204-210.
- Wilcox J. A. (1990) Thought Disorder and Relapse in Schizophrenia "Psychopathology", 23: 153-156.

Dott. Giovanni Stanghellini Via degli Avelli, 6 I-50123 Firenze