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Occasional review

Tactile hallucinations: conceptual and historical aspects

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SUMMARY A brief historical analysis of the general concept of hallucination is presented and the suggestion is made that it emerged as the unwarranted generalisation of a perceptual model that was meant to apply only to vision and the "distance senses". Against this background the evolution of tactile hallucinations is considered and its interaction with 19th century psychological theory explored. It is concluded that tactile hallucinations are *sui generis* phenomena which do not fit the conventional model and whose clinical identification rests on criteria so far unclear. A brief review of their taxonomy and diagnostic usefulness is presented. Some wider implications are drawn which should be relevant to the general concept of hallucination.

The psychopathology of touch, although rich and complex, has become subordinated, in current psychiatry, to other symptoms and no longer commands descriptive or diagnostic interest. This may reflect both its relative clinical infrequency and a secular uneasiness concerning its conceptual status.

Touch has been, since Greek times, a reluctant "fifth sense". Aristotle[1] considered it as a primitive perceptual system (423.b.12) and remarked upon the fundamental characteristic that sets touch apart from the "distance" senses: "But there is a difference between the object of touch and those of sight and hearing, since we perceive them because the medium acts upon us while we perceive objects of touch not through the agency of the medium but simultaneously with the medium, like a man who is struck through his shield". (423.b.12)

This view remained unchanged until the 17th century when British empiricism developed an interest in the epistemology of touch. For example Locke[2] rejected the Cartesian view according to which extension constitutes the essence of material substance. In addition to extension he maintained all bodies possess the fundamental quality of "solidity". He acknowledged therefore "solidity" as "the idea most intimately connected with and essential to body, so as nowhere else to be found or imagined but only in matter". (II, IV, 1) This idea "we receive by our touch: and it arises from the resistance which we find in body to the entrance of any other body into the place it possesses, till it has left it". (II, IV, 1)

The epistemological inquiry into what are the bodily components that suggest the idea of solidity led to the identification of "feelings of resistance" and "motor sensations" which conveyed superior information to "mere feelings". Armstrong[3] has expressed this thus: "For all forms of sense perception besides seeing, hearing, tasting and smelling we employ the word feeling . . . nevertheless it will be convenient to distinguish between at least two sorts of sense perception covered by the word "feel": perception by touch and perception of our own bodily state".[3] This distinction was introduced in psychology by Weber[4] as "Tastsinn" (touch) and "Gemeingefühl" (common sensibility). These two categories provided late 19th century psychiatrists with a conceptual framework to describe and classify clinical phenomena as widely apart as tactile hallucinations, neurasthenia, coenesthopathy and depersonalisation.

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THE GENERAL PROBLEM

The current conceptual model of hallucination developed during the early 19th century out of the analysis of vision.[5] Of the original cases reported by Esquirol,[5] five had visual hallucinations. He commenced his paper by claiming: "If a man has the intimate conviction of actually perceiving a sensation for which there is no external object, he is in a hallucinated state: he is a visionary ("visionnaire")"; and concluded "The hallucinations of vision . . . have been called visions but this term is appropriate only for one perceptual mode. Who dares to talk about auditory visions, taste visions, olfactory visions? . . . But the functional alterations, brain mechanisms and the clinical context involved in these three senses *is the same* as in visions (my italics). A generic term is needed. I have proposed the word hallucination. . ." (From now on the author's translation unless otherwise stated.) This homogeneous treatment of all sense modalities assumed they behaved conceptually in a symmetrical manner, for example that they obeyed the "causalist" paradigm (that is required for an "external object" to impinge upon the sensors). This view Esquirol received from Condillac.[6] Therefore in generalising the definition of hallucination as a "perception without object" he embodied as a logical requirement the absence of an external and public object.

This symmetrical epistemology has remained enshrined in the phenomenological psychopathology that we have inherited from the 19th century. It does not distinguish between, on the one hand, vision, audition and olfaction which have an "object" in public space (whose existential status may be consensually determined), and, on the other, the rest of bodily sensations, to some of which the classical model does not seem to apply.

Warmth, pressure, and vibration seem in ordinary circumstances to be related to external agencies and therefore are open to consensual appraisal; they can be said to fit the "causal" model. But sensations such as aches, pains, itches, twitches, tickles etc depend essentially upon being "felt" and their reality therefore is not logically connected to external agencies; hence the subject's report is in normal circumstances accepted unchallenged.

The actual criteria for ascertaining the presence of hallucinations in clinical practice are complex and have not yet been fully worked out in the literature. Features such as bizarreness of content and context, concomitant cognitive state, behavioural signs, absence of external object may all be important. Theoretically the latter would seem crucial as it follows logically from the very definition of hallucination as a "perception without object". If that were the case, how does it apply to tactile hallucination? How is a real itch to be distinguished from a hallucinated one if in neither case the presence of an object in public space is required? Are perhaps hallucinations of touch different in a fundamental way from those occurring in the "distance senses"?

This abstract distinction may or may not be clinically relevant. For example it can be said that the "external object" criterion is unimportant for the diagnosis of tactile hallucinations. Indeed it can be said it is unimportant for the diagnosis of visual or auditory hallucinations in general. This would be based on the observation that normally psychiatrists do not search for the hallucinated object in public space. It is on the bases of concomitant symptoms, context, past history, and quality of reported hallucinatory experiences that the diagnosis is usually made. If this is the case, then it follows that the "perceptual" aspects of hallucinations may not be, after all, that important.

Since the 19th century perception-related concepts have been used at two levels in relation to hallucinations: (1) descriptively as when patients' reports about "seeing" or "hearing" things are taken at face value and recorded as "perceptual data without necessarily having a basis in reality", (2) aetiologically as when it is concluded that because of the type of experiences, the patients concerned are actually suffering from a "disorder of perception". The first level is theory-neutral in that patients' reports can be taken as simply meaning that they "believe" that their perception is involved not committing the observer to assume that perception is "really" disordered (Esquirol took this line). The second level, however, commits the psychiatrist to analysing the patient's perceptual apparatus as it assumes that perceptual hardware is actually disrupted.

HISTORICAL BACKGROUND

The view that all manner of hallucinations are fundamentally disorders of perception has been predominant since early last century. The distinction between "organic" and "functional" hallucinations started in the 1850's and created as many problems as it solved. It originated from the confluence of the two reigning psychologies during this period: whilst Associationism supported the analysis of mental experiences into discreet units, Faculty Psychology guaranteed the autonomy of perception.

For example the notion of "pseudohallucination" was used from Hagen to Kandinsky[7] to cope with the clinical anomalies that fitted neither the organic nor functional categories. It is unfortunate that Jaspers'[8] idiosyncratic interpretation of Kandinsky led to the official view that pseudohallucinations constitute a "third" class. This anachronistic

conclusion neglects the fact that Kandinsky wrote in the context of an ongoing debate on hallucinations and that his intention was to provide a rag-bag for unclassifiable hallucinatory experiences. Be that as it may, the so-called defining criteria for pseudohallucinations do not apply to the tactile sense where the questions of insight and external space do not arise. The view of hallucination as a symmetrical and homogenous disorder in all five senses breaks down in relation to the impossibility of "pseudohallucination" occurring in some sense modalities (that is, touch).

Since the 19th century national psychiatries have responded to these difficulties according to local philosophies and etymologies. For example French and German psychiatry have drawn a less vigorous line between hallucinations and delusions than the British. "Délire" and "Wahn" (the French and German terms for "delusion" respectively) have a less "intellectualistic" orientation than the English term "delusion".[9] Furthermore they assume a disturbance of personality and a fracture in the "relationship" between the subject and his world that is lacking in the English "delusion" ordinarily defined as wrong or pathological "belief", that is, as a disorder of thinking.

Hallucinations therefore tend to be considered in continental psychiatry as a subset of delusions (that is, "sensory delusions") and hence less emphasis is put upon their "perceptual" than upon the "cognitive" or "apperceptual" aspects.[10 11] In opposition to this, the "intellectualistic" view of madness that Locke sponsored is still recognisable in British views on both delusion and hallucination.

TACTILE HALLUCINATIONS

Books on descriptive psychopathology are singularly reticent about tactile hallucination;[12–16] and Ey's "Traité" dedicates to them only 16 pages (out of 1543). This may reflect their clinical and statistical unimportance but also their confused conceptual status. Descriptions of "imaginary itches" are found in earlier literature. Darwin[17] reported a case with imaginary diabetes who experienced "a hallucinated idea (an itch) so powerfully excited that it was not to be changed suddenly by ocular sensation or reason". During the 19th century clinical descriptions of tactile hallucinations are found associated with four clinical areas: insanity; complex, non-psychotic somatic abnormal experiences (for example coenesthopathies); organic and toxic syndromes; and the developing concept of "delusional parasitosis".

TACTILE HALLUCINATIONS AND THE INSANITIES

Esquirol[5] in a Lockean vein wrote "touch, often appealed to by reason to correct the other senses may also deceive the insane . . . he may hallucinate rough surfaces or sharp ends hurting his skin, he may feel torn apart by cutting instruments". Sigmond[18] observed that "hallucinations of touch vary exceedingly; it is singular enough to find an individual who believes that he has rats crawling over him, that spiders infest him. . ." Griesinger[19] made the fundamental observation that in touch "hallucinations and illusions cannot be distinguished from each other; or rather the phenomena which constitutes them, so far as they do not depend on anaesthesia, are in every case to be considered as illusions because the specific anomaly consists in the *false interpretation of certain sensations*" (my italics).

Brierre de Boismont[20] stated "it is said that hallucinations of touch are difficult to investigate because they are apt to be confounded with neurological affections . . . there can be no question that there are some hallucinated persons quite capable of judging correctly of their sensations". Brierre therefore believed that on physical examination there was nothing neurologically wrong with patients experiencing tactile hallucinations. Tuke[21] did not separate tactile from internal or corporal hallucinations and included under "tactile hallucinatory experiences" experiences such as "electrical shock", "delusion of being changed or Lycantropy" and "sexual hallucinations". Störring[22] included all these under "hallucinations of the cutaneous sense": "In delirium tremens patients often have hallucinatory sensations of spiders creeping over their skin, of ants running over them or of being covered by a fur." He also included more complex experiences "they frequently complain of electrical currents traversing their bodies. Others feel as if they were being kissed, or as if someone were lying by their side".

When writing on "morbid tactile sensations" Kraepelin[23] included formication, bizarre sexual experiences and complex movement experiences involving the body of the patient. He stated that "not frequently these imaginations, connected apparently with organic sensations, receive a very strange interpretation . . . " and "as the result of these hallucinations the conviction is often developed in the patients that they have become the sport of all sorts of influence". Bleuler[24] carefully separated bodily from tactile hallucinations, dedicated a long section to the former and of the latter wrote: "tactile hallucinations are rare (in schizophrenia) . . . occasionally patients complain of small animals, particularly snakes, crawling over their bodies".

TACTILE HALLUCINATIONS AND COENESTHOPATHY

This French syndrome[25] reflects well the earlier

German conceptual distinction between skin senses (Tastsinn) and common feeling (Gemeingefühl).[4] "Gemeingefühl" refers to the remaining corporal sensations once those associated with the skin (that is, touch, temperature, pressure and location) are separated off. They constitute a heterogenous array such as pain and "objectless" sensations such as well-being, pleasure, fatigue, shudder, hunger, nausea, organic muscular feelings etc. . . This group was also called coenesthesia[26] and some workers speculated that they provided the experiencing subject with his "sense of existence".[27]

To explain the origin of this unified bodily feeling two theories were put forward. Associationism stated that coenesthesia resulted from the summation of propioceptive and interoceptive sensations;[28] Faculty psychology on the other hand postulated the existence of a hypothetic brain centre or function on which all sensations converged; the resulting somatognostic pattern consisted in a dynamic "Gestalt" type of account of the position of the body in time. It provided the basis for 20th century notion of "body schema".

Soon after its inception, however, the psychological territory of coenesthesia underwent gradual erosion as sensations such as hunger, thirst, sexual pleasure etc were separated off. In the end all that was left were sensations, common to various organs, such as deep pressure, pain or unanalysable sensations such as "tickling" or "stuffiness".[29]

It is at this stage that the concept of "coenesthopathy" developed in French psychiatry.[25] It was defined as "local alteration of the common sensibility in the sphere of general sensation, corresponding to hallucinosis in the sphere of sensorium".[25] A "painful" and "paraesthetic" type of coenesthopathy were recognised and each classified as having a cephalic, thoraxic or abdominal localisation. Patients in the former group might feel their organs being "stretched, torn, twisted" etc or they might in the latter group experience itching, hyperaesthesiae, paraesthesiae etc.

This syndrome was never accepted in Anglo-Saxon psychiatry and the symptoms it referred to were recatalogued as hypochondriasis, neurasthenia, or dysmorphophobia.[30] In France itself some coenesthopathies, for example "topalgie" (or cephalic cenestopathy) were later on included in alternative diagnostic categories such as "neurovegetative dystonias",[31] "subjective disorders of sensibility" associated with "psychoneuroses"[32] or simply psychosomatic syndromes.[33] Some French psychiatrists continue studying these phenomena under the general rubric of "disorders of corporal scheme".[31]

TACTILE HALLUCINATIONS AND ORGANIC AND TOXIC SYNDROMES

After the development of "Haptics" by Dessoir in 1892[34] touch was considered less and less as a monolithic fifth sense. Dessoir had divided haptics (which was to touch what "optics" was to vision) into "contact sense" and "pselaphesia", corresponding roughly to passive and active touch respectively. Movement and "motor sensations" were identified as characterising active touch and provided the crucial conceptual distinction in Dessoir's classification.[35 36] This was well expressed by Merleau Ponty[37] "movement of one's body is to touch what lighting is to vision. . . There are tactile phenomena, alleged tactile qualities, like roughness and smoothness which disappear completely if the exploratory movement is eliminated". Active touch continues being treated as a separate category.[38]

Hallucinatory experiences pertaining to active touch are clinically very rare but occasionally sensorial transformations from active touch to vision have been reported as the case of a blind patient who hallucinated visually in Braille code.[39] Tactile hallucinations and indeed tactile distortions of all kinds (that is, pins and needles) are therefore more common in passive touch. This was recognised by Régis[40] "hallucinations in active touch are rare . . . this is not so in passive touch where they manifest themselves as skin sensations such as formication, pinching, rubbing, crawling etc".

Paraesthesiae and itches may be reported directly or obliquely. Direct reporting by subjects otherwise normal tends to be considered as unobjectionable and not resulting from psychopathology. Oblique reporting, on the other hand, making use of analogical "as if" descriptions, can be met with in dermatological practice. For reasons which are so far unclear, the "as if" qualification may occasionally be abandoned by the patient and replaced by a delusional interpretation. In these cases the psychiatrist is more likely to intervene. The natural history, incidence and mechanisms for these transitions is unknown although its clinical existence has been known for a long time. Griesinger[19] in a superb description writes: "the commencement of these delusions consists in certain painful sensations *being merely phantastically compared* (my italics) by the patient to analogous phenomena. Therefore hypochondriacs at first say only that it seems to them as if serpents crawled over their skin . . . but the prolongation of the sensations, the influence of unfavourable external circumstances, an increasing internal disharmony. . . the patients soon begin to consider the matter more earnestly, the comparison, at first imaginary, becomes a fully developed delusion. . ."

But this is not always the case. In some cases the "as if" qualification is never dropped and chronic hospital attendance and complicating affective disorder redefine the problem as psychiatric. In others, the "as if" qualification is actually never present; instead the delusional account appears from the start with the hallucinatory or sensory component playing a minor role. Once the transition from the "as if" to the delusion has taken place it becomes difficult to separate the delusional elaboration from the raw sensory experience. It is possible that the cognitive distortion resulting from the delusion may act as a new source of experience; as it occurs, for example in the so-called "sympathy phenomenon" in which itching (or other sensations) may be experienced by the observer in the same area of skin where he has just witnessed someone else hurting himself. Hence it is possible that the persistent belief of having insects under the skin (for example, delusional parasitosis) may generate skin sensations (or changes) that in turn confirm and perpetuate the delusional belief.

The model for tactile hallucinations has been provided for over a hundred years by the tactile experiences characterising delirium tremens and cocaine intoxication. The problem with the former is that it tends to occur in the context of clouded consciousness and is compounded by visual hallucinations and discreet delusional interpretations. Cocaine "haptic" hallucinations, on the other hand, may occur in clear consciousness and this makes them particularly suitable for phenomenological analysis. Classical writers also described "chloral" and atropinic tactile hallucinations in detail.

Up to 15% of those using cocaine for "recreational purposes" may report tactile hallucinations.[41] However, individuals in Siegel's sample consumed at least 1 gram of cocaine a month for 12 months. The early literature states that cocaine by injection is more likely to produce tactile hallucinations.[42] More recently it has been reported that it may also cause a reduction in tactile sensibility.[43] Tactile hallucinations may appear after six months of persistent use and in the wake of visual hallucinations. Prodromal feelings are itching of hands, legs and back; "moving itches" follow accompanied by "as if" interpretations (for example "insects" or "people brushing past"). According to Siegel[41] none of his patients "*believed* that insects or objects were actually present, although they would often scratch or rub the skin" (my italics). He concludes therefore that these experiences were "pseudo-hallucinations".

Classical writers, however, considered these to be true hallucinations. Magnan and Saury[44] describe how their patients tried to remove bugs from under their skin. Clerambault[45] elegantly described these as hypodermic, distal and punctiform hallucinations, and believed they were often accompanied by "sensations of movement" and by involvement of consciousness. Chloral tactile hallucinations produce feelings of "humidity" over the skin but are not accompanied by "kinetic" sensations. In general chloral hallucinations are more superficial, accompanied by pain and experienced in the interdigital folds.[11] Tactile hallucinations following intoxication by Atropa Belladona were described by Moreau de Tours[46] who reported a case who felt "that millions of insects were devouring his head".

These states have been classically likened to feeling ants crawling under the skin. The generic terms coined to describe these sensations were Psora Imaginaria, "Imaginary itch"[17] and formication. The last mentioned term had been used in general medicine at least since the 16th century when Ambrosio Paré took advantage of its metaphorical value and described "pouls formicant" (formicant pulse) as "a weak, frequent pulse that gives the sensation of 'crawling like an ant' ".[47] The earliest reported usage in dermatology occurred in 1707;[48] by the 19th century it was well established not only in relation to cocaine intoxication but to any condition where "there was a disagreeable creeping sensation in the skin".

Tactile hallucinations associated with organic states other than drug-induced have also been described in the literature such as brain injury;[49] dementia;[50–52] hypophyseal tumour;[53] diabetes.[54] In her sample of 46 cases with delusions of infestation Skott[55] found that about 50% exhibited clinical signs of an "organic brain syndrome"; 61% had pathological EEGs; and 12% had malignant disease (for example, carcinoma of cervix, breast, colon, lung etc). Berrios (unpublished observation) has recorded one case of facial tactile hallucinations associated with hypophyseal tumour and another of delusional parasitosis associated with mediastinal lymphoma.

TACTILE HALLUCINATIONS AND "DELUSIONAL PARASITOSES"

Females of middle age (or older) without history of drug intoxication occasionally complain of parasites on or under the skin to health inspectors or dermatologists and less often psychiatrists. Insects, maggots, bugs or other non-descript little animals live, breed and burn holes in their skin. Patients sometimes may date the onset of this to having moved into a new house and very rarely other family members share their belief. Patients may sometimes also "see" the bugs and produce as evidence for their existence bottles containing skin

detritus, fluff etc.

The clinical and therapeutic aspects of this syndrome have been well dealt with in recent literature and are beyond the scope of this paper (for a complete review see Skott[55]). Conceptual hesitations however punctuate the history of the syndrome and illustrate well difficulties involved in the notion of tactile hallucination itself.

The early description of the syndrome as "itchy dermatoses";[56] "acarophobia"[57] and "parasitophobia"[58] suggested amongst later writers the anachronistic impression that the syndrome in the late 19th century was actually considered as "phobia" or "neurosis". The concept of "phobia" at the time however was not yet related to the neuroses; indeed it was just undergoing a semantic transformation to separate itself from the cognate notions of obsession and delusion. These three notions were contained in the common parent concept of "fixed idea" which had been used by earlier writers to refer to the central symptom of insanity. For example Perrin[58] considers his "parasitophobia" to be generalised, hallucinatory, continuous and unaccompanied by anxiety or other affective disturbance. This writer remained undecided as to what the primary disorder was in these cases, thus starting the confusion that to this day characterises the interpretation of this syndrome. On the one hand he mentioned "profound alteration of intellectual faculties" expressing itself in a "fixed idea" (that is, having a delusional origin). On the other, he considered "hallucinations" (that is, sensory changes) as crucial to the syndrome.

Subsequent writers developed either of these options and the many names they coined show their theoretical preferences. Some believed the primary disorder to be a tactile hallucination or illusion (or even a real sensation) with the delusional interpretation following on (that is the mechanism that Griesinger had suggested). MacNamara[59] wrote "hallucinations . . . constitute its most outstanding characteristic". Mallet and Male[60] in an oft quoted but rather unimpressive paper considered "haptic hallucinations" as the primary feature. Others felt that the perceptual component was indeed primary but not necessarily "hallucinatory" in nature. For example Gamper[61] suggested an organic basis for the primary itch. Schwarz[62] pointed out that the syndrome may follow abnormal skin sensations occurring early in depressive illness. Ekbom[49] believed that presenile paraesthesiae were at the basis of his "Preseniler Dermatozoenwahn". Harbauer,[50] Fleck,[63] Liebaldt and Klages[53] also supported the view that primary organic, sensory pathology was at the basis of the disorder. A similar interpretation has been followed in relation to visual hallucinations in the elderly, with some writers claiming that they are always associated with organic or functional psychoses or visual cataract and others sustaining that they can be the only symptom present.[64]

As opposed to the "sensorialist view" others defended a cognitive approach according to which the syndrome was primarily delusional. Dupré[65] described a "délire de zoopathie interne" and his disciple Levy sub-divided it into "internal" and "external" types. The primary feature in these syndromes being the delusional belief (délire) of harbouring animals in or on the body. The 29 cases he described involved rats, birds, worms, snakes etc but no insects are mentioned. Faure *et al*[66] in turn described two cases where "le délire zoopathique" concerned insects and iterated the view that the fundamental problem was "delusional" in nature. Wilson and Miller[67] suggested the term "delusion of parasitosis" and favoured their delusional origin; their phenomenological analysis however is unsatisfactory. A few years later Wilson[68] went on to state that these "delusions" could even occur in "psycho-neurosis".

Bers and Conrad[69] in a classical paper put forward the notion of "chronic tactile hallucinoses" but took an intermediate position as they found it difficult to decide what was "primary" and what was "secondary". This hesitation, however, must be understood against the context of Professor Conrad's "Gestaltic" view of delusions[70] and of the history of the concept of "Hallucinoses" in German psychiatry. Bers and Conrad suggest that a sensorial disorder is sometimes relevant, but feel that in general, "chronic tactile hallucinosis" must be based upon a delusional state, this being, like any other chronic hallucinosis, accompanied by hallucinations which are analogous[71 72] to those that can emerge in schizophrenia-prone personalities.[73] Evidence that the incidence of schizophrenia may be higher in families of patients with delusional parasitosis is however not available. Nonetheless Skott[55] has found that siblings of patients with delusions of infestation have significantly more psychiatric morbidity than controls ($p < 0{\cdot}01$). Whether or not this was related to schizophrenia is not specified.

The British position has been to consider these states as fundamentally delusional in nature.[30 74–78] This has recently been given some support by Skott[55] who concludes that the "psychiatric symptomatology (in delusional parasitosis) is extremely varied . . . patients may suffer from illusions, misconceptions and delusions and in rare instances hallucination". The syndrome has therefore become independent of the presence of primary tactile hallucinations.

CLASSIFICATION OF TACTILE HALLUCINATIONS

Tactile hallucinations may be classified according to phenomenological or clinical criteria. The former is theoretically important in that it may suggest a descriptive basis to separate hallucinations from delusions, for example by distinguishing "pure" from "interpreted" hallucination. Descriptions of "pure" hallucinations concentrate on the raw sensation, for example itches or aches reported without delusional interpretation. The clinical existence of these "pure" states, however, is called into question by the view that since all hallucinations are by definition disorders of perception (and not of sensation), they *a fortiori* include a cognitive, interpretative component.[10] In practical terms, therefore, it could be said that "pure" hallucinatory experiences do not exist and that those described as such are hallucinations with a "reduced" or "concealed" delusional interpretation.

Tactile hallucinations, whether associated with functional psychoses, drug intoxication, other organic states and delusional parasitosis tend to be found in clinical practice accompanied by evident and often vivid delusional interpretation (for example itches are reported as the crawling of ants). Difficulties in separating on purely phenomenological basis "real" from "illusory" or "hallucinated" itches have led writers to resorting to a rough assessment of the quality and extent of the accompanying delusion (and resulting behaviour) as a means for differential diagnosis.

Clinical classifications, on the other hand, are more factual but their diagnostic value is equally doubtful. Classical writers (for example Magnan, Saury, Clerambault) provided detailed descriptions of the tactile hallucinations accompanying the various toxic states and believed that they could be used for diagnostic purposes. No statistical evidence exists to support these early beliefs. Ey[11] classified "haptic hallucinations" into "thematic" and "athematic". Amongst the former he included hallucinations of "external" objects (for example animals on the skin, erotic contacts etc) and "internal" objects, the best example of which is the "internal zoopathy" (for example complaints of animals living under the skin or inside the body). "Athematic" tactile hallucinations have no specific object and report primary touch sensations such as pruritus, aches, cramps, tearing of the skin, feeling of wet, cold and hot. He also distinguished two "structural modalities" in these experiences: "Eidolie hallucinosiques" and "hallucinations délirantes tactiles". The former referring to a group that includes pseudohallucinations, localised organic hallucinations (accompanied by insight) and non-delusional hallucinatory experiences. The latter referred to hallucinations proper in which the delusional (délire) component constitutes the morbid core thus reflecting a severe dislocation in the relationship between the subject and his world.

Conclusions

During the early 19th century all manner of "perceptions without object" were brought together by Esquirol under the common denomination of hallucination. This term had, until then, been mainly related to vision, that is to a "distance sense". The conceptual model it generated, therefore was only applicable to vision, audition and, to a lesser extent, to smell and taste.

A number of tactile hallucinatory experiences have always remained outside the epistemological boundaries of the conventional model. They seem to be *sui generis* psychopathological phenomena that only superficially resemble hallucinations in the distance senses.

The problem therefore is how they are recognised in clinical practice. It is suggested that criteria such as consensual agreement on absence of public stimulus, quality of actual morbid percept, and relationship of this percept to contextual field of normal perception are not relevant to the diagnosis of tactile hallucinations. Indeed this analysis suggests that these three criteria (derived from the causalist model of perception) are not relevant to the recognition of any form of hallucination.

Empirical analyses of the decisional tree adhered to by clinicians in the diagnosis of hallucinations are unavailable. Concerning tactile hallucinations it is concluded that in most situations the delusional component seems to be an important diagnostic factor; namely rough assessment of delusional intensity, quality and influence upon behaviour.

Thence the possibility that the concepts of hallucination and delusion may, in general, be far closer to each other than it has hitherto been considered in British psychiatry, must be taken seriously. This indeed seems to be the position taken by a number of French, German and Spanish psychiatrists.

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