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Odoratus Sexualis





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ODORATUS SEXUALIS

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ODORATUS SEXUALIS

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A SCIENTIFIC AND LITERARY STUDY OF SEXUAL SCENTS AND EROTIC PERFUMES

DR.

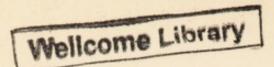
ODORATUS

SEXUALIS

BLOCH

AUTHOR OF THE SEXUAL LIFE OF OUR TIME THE MARQUIS DE SADE

1933
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Odoratus Sexualis

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INTRODUCTION



Odoratus Sexualis

Introduction

Almost a century and a half ago Immanuel Kant expressed the opinion that the sense of smell was the most ungrateful and least necessary part of man's sensory equipment. There was, he asserted, no point in cultivating it or refining it for the purposes of mere exquisite enjoyment inasmuch as there were more objects unpleasant to that sense than agreeable. Furthermore, whatever pleasure could be afforded by that sense was, in the very nature of the case, ex-

ceedingly transitory. Nevertheless, this sense does have a not unimportant function as a negative condition of health.

I, too, shall endeavor to show, in the course of my investigation, that for civilized man an over-refined cultivation of the sense of smell is to be regarded as a sort of atavism. For there are many facts to prove that the olfactory sense of civilized man has undergone a considerable weakening in comparison with that of many animals and wild tribes, and that this inferiority is bound to increase. But, in spite of all, this sense still has a definite importance; and since Hippolyte Cloquet wrote his famous Osphréseologie (shortly after the Königsberg philosopher expressed the opinion just quoted), which was the first modern monograph on the olfactory sense and the diseases of the nose, scientists and physicians have not ceased to investigate these subjects methodically.

Even if the eye and ear have become man's chief sensory organs, the sense of smell is still important for the physiology of man, as Zwaardemaker correctly observes, since here the perception stands in closer relation to the substance which elicits the reaction than is the case with any other organ. In the act of olfaction it seems that a real contact of the psyche with the material world has taken place, a penetration into the sensed matter and an immediate per-

ception of its essence. For this reason, this sense has been assigned metaphysical significance inasmuch as it enables us to judge of the innermost substance of many bodies and living things; whereas the visual and tactual senses permit us to become acquainted with the outside of these objects only. One intelligent investigator has called smell the sublimated thing-in-itself, and from various observations has explained the spiritual significance of smells as the revelation and apocalypse of the very heart of the phenomenon.

"Just as nature, after an electric storm, appears fresh and reborn to the eyes, so also does the ozone odor transmit the same message to another sense. Again, the fainting sultriness of a hot midsummer afternoon is brought to us by its voluptuous heavy odor. When the nocturnal flowers open at the sound of the nightingale the air is drenched with sweet smells. And whenever we call up a memory of youth long past, how frequently we smell again the odor of jasmine in which we dallied with our love, or of the fragrant letter paper in which she confided to us her passion and her pain."

This metaphysical conception of the olfactory sense, this belief that the olfactory sensations lead us to the heart of things and tie us up with another world is based, according to my opinion, on the fact that these sensations evoke strong, sudden emotions

and only nebulous ideas. Like taste, to which it is closely allied, smell is an affective sense, which means that, necessarily, it is imbued with an obscurity of ideas. For logical thought to rely exclusively upon the presentation of smell or taste would be impossible. This émotivité olfactive brands the olfactory smell as a "sense with dark, nebulous imaginings," as Burdach said almost a century ago. This sense goes contrary to every clear conception, every logic; and the strong emotions released by it, uncontrolled by clear ideas of equal strength, arouse mystical sensations in the human being. Accompanied by a mysterious shudder, the olfactory sensations, evoking now joy, now pain, lead into the depths of mysticism. The land of odors is, in the words of a French writer, a blue, distant land, inhabited by fairies, which we can only enter at certain intervals. The mysterious property of smell has, as we shall see later, been employed most successfully in the religious ceremonies of many peoples as a means for the production of reverential and ecstatic feelings.

This direct effect of odors explains why no sense influences human moods and conditions of the soul as much as that of smell. Montaigne was of the opinion that physicians might make much greater use of scents than they did, for he had frequently observed their effect upon himself in influencing his

own reactions. The first feeling accompanying an olfactory sensation is of the pleasant or unpleasant, of pleasure or repugnance. Accordingly, Albrecht von Haller divides odors into three classes, according to their psychological effect: odores suavolentes, odores mediæ, and the fætores. This classification has been shown by Cloquet to have only a relative value, for in many cases the conception of what is pleasant or unpleasant in odors varies among different individuals and peoples. But whether the reactions to the olfactory stimulus be pleasurable or otherwise, they conjure up numerous associations and memories, as do many other strong emotions. Darwin held that for animals with a highly developed sense of smell, like the horse or dog, the recollection of places and people is decisively connected with their smells. This may help us understand Dr. Mandsley's observation that in man the olfactory sense can arouse, in a most remarkable way, ideas and images of forgotten scenes. Marlett, in his novel Das Eulenhaus - The House of Owls, remarks: "Nothing in the world can so revitalize the past as smell." A truly fine and scientifically accurate observation. Similarly, Max Kalbech, in the tale Musk contained in his Humoresques and Phantasies, relates how the odor of musk dispelled by the dress of an elderly lady whom he happens to meet suddenly, conjures up before his inner eye a

whole series of pictures out of his youth, especially of lovely girls he had once loved.

If we should attempt to set forth the practical importance of this sense we can do no better than dwell on Zwaardemaker's excellent designation of it as the sense for near adjustments. Smell is a quality not to be separated from matter. Hence its great importance for a knowledge of food, clues, prey, pursuers and the finding of sex. Wherever a characteristic odor is in evidence we shall certainly find something of its source. What the eye is to distance, the nose is to proximity.

For animals, to whom nutriment and the sex urge are more important than the impressions conveyed by eye and ear and the mental excitations produced by the latter, the olfactory smell is thus of tremendous importance. No matter how extremely plastic our composite visual impressions are as a result of our binocular vision, or our complex auditory sensations through which the power of speech becomes evident, yet animals who lack these senses almost entirely have instead a wonderful world of olfactory impressions which is richer and more multifarious than any we can construct.

In the final chapter more will be said about the prevalence of the olfactory sense in the animal economy. Here it will suffice to recall that William Tur-

ner divides mammals into macrosmatic, microsmatic and anosmatic; and that man belongs to the middle of these groups, thus showing that from the osphresiological viewpoint he is not in the lowest realm of mammals.

The practical importance of this sense for the animal world relates especially to the important functions of nutrition and sex. The relationships to nutrition, with which we shall not be concerned, may be summarized in the classical expression of Albrecht von Haller: Mihi quidem est quam persuasissimum, nullum cibum salutorem esse, qui fœteat. The subject of Odoratus Sexualis is, as its name implies, the relationship of olfaction and odors to the sexuality of the higher forms of life, relationships which are primeval in the evolution of plants, animals, and man. Bidder went so far as to believe that he could establish a deep internal agreement between pleasant sensations of smell and feelings of ecstasy, and thus to explain the loving of voluptuous people according to their scents. But even if this ontologic identity between the smell and the feeling of ecstasy is questionable, it remains true that for many animals that sense is the chief factor in sexuality, and that there is a distinct class of sexual scents. In the first place, the most decided odor of animals is produced in the vicinity of the genitals and the anus, just as in

the plant world the odor is found in the flowers, i.e., in the organs of reproduction; and furthermore, the scents streaming out of the rest of the body, and erotic perfumes as well, are able greatly to excite and advance the sexual impulse. When Giessler classifies those odors which excite certain vegetative complexes of organs into those which excite the respiratory, vascular, and digestive system on the one hand (gastral odors), and those influencing the reproductive system (erotic odors) on the other hand, this division is not artificial but is based on the very nature of these scents. For, as we shall see, sexual scents belong, almost entirely, to one group of odors, and nearly all smells exuded from the surface of the human body (including the genitals) belong to this group. The science of sexual osphresiology is therefore based on very real facts and phenomena which I shall endeavor to represent in systematic form and with critical interpretation.

PHYSIOLOGY



Odoratus Sexualis

Physiology

General

The exact investigations of many scientists as set forth in the great work of Zwaardemaker, himself one of the most important of recent osphresiologists, have demonstrated that smell is dependent on the material presence of molecules given off by the surface of the odorous body. These olfactory materials given off from the surface of solid bodies or fluids by vaporization or chemical process are most com-

monly transmitted by diffusion — or by the wind, under which conditions such a cloud of odor can be smelt miles off. The specific gravity of the aromatic gas is scarcely worth considering as a motive force. Man himself receives olfactory impression in three ways. First, through food. Practically all foods and drinks possess a stronger or weaker odor which we occasionally interchange with taste. Secondly, by atmospheric currents, which explains why we can smell flowers and other objects apparently from a distance. In stationary air we perceive odors through diffusion as the odorous gas particles slowly mix with the atmosphere. Diffusion is the most general of the locomotors of smell because it is everywhere effective.

Now if odors come to man in different ways, the manner of their reception is none the less everywhere the same. It is always by inhalation through the nose via which they finally reach the essential sense organs. Smells are perceived only after they have been breathed in through the nose. Zwaardemaker holds that we must distinguish two kinds of smelling, sniffing and quiet breathing. The former denotes the direct impulsive introduction of odoriferous air into the nares, formed like a sort of funnel or cupola; thence the cloud of smell is diffused upwards and inwards until finally the contact is effected of the odorous particles in gas form with the microscopic

hairs of the olfactory cells. These cells are found in the regio olfactoria (upper nasal passages or muscles, medial surface of intermediate muscles) and are regarded as the percipient organs of the olfactory mucosa. During quiet breathing the air streams in to the lower stratum of the middle muscle whence the odorous particles ascend through diffusion and in vaporized form come into contact with the microscopic hairs of the olfactory cells. In quiet breathing the odorous particles can approach the olfactory cells through diffusion alone, but in sniffing the former are brought to the latter directly in great numbers through the strong air current.

The sense of smell is an exceptionally strong perceptive instrument in man, surpassing even chemical reagents in keenness. Fischer and Penzoldt found that 1/460,000,000thmg.ofmercaptan and 1/460,000,000thmg. phenol chloride per 50 cu. cm. was the outer limit of our olfactory sensation. The osmatic mammals are very likely able to perceive smells in even smaller concentration. One can therefore think of the current of air inhaled through the nostrils as a thick cloud of atoms.

Very important for the understanding of certain facts in sexual osphresology is the chemistry of smells. Aronsohn has discovered the significant law that all elements are odorless. Among them he found only

four which, according to the chemists, have a distinctive odor, viz., chlorine, bromine, iodine and phosphorus. The odor of the last element, however, is the product of ozone and phosphorus, and is formed by contact with the atmosphere. Phosphorus vapor is really odorless; and the halogens, chlorine, bromine and iodine have such a great affinity to hydrogen, that it is certain they form hydrogen compounds directly in the nostrils.

The smells of nature are therefore complex chemical combinations which, in gaseous form, possess a high specific gravity. For this reason Zwaardemaker has maintained that natural selection has made use of certain internal properties of atomic structure movements in order to equip the animal organism with sense organs whereby it obtains more information than other forms of life concerning the quality of foodstuffs and the trail of the opposite sex.

He has adduced the interesting proof that all animal scents which influence sexuality belong to one definite group of chemical relationships, namely, the fatty acids, especially the capryl group. This constitutes the seventh class in Zwaardemaker's classification of smells, which he designates as the class of capryl odors, or *odores hircini*, and to which he attributes the disintegrative odors.

Capryl odors (odores hircini L.)

- a. Capron acids and Homologues. Cheese, Perspiration, Rotting Bones, Myrtillus, Round Fat Bacillus.
- b. Feline urine. Geranium, Robertianum; Ribes nigra,
 Thalictrum fœtidum. Vaginal secretion, Sperma,
 (odor aphrodisiacus); Castania, Berberis, Cadaverin.

Thus, the specific erotic odors of the secretion of the female passage, of the male seed, and of perspiration, belong to this category of goat smells, for the capryl acids have borrowed their name from this animal. The odor of the secretion from the vaginal passage is related to that of the stinking goose's foot (chenopodium vulvaria L.) as well as to that of cheese which also belongs to the capryl group. The odor of semen is designated by Haller as odor aphrodisiacus, and is also found in chestnuts and some thorns.

Zwaardemaker further draws our attention to the fact that capryl odors, whose rate of diffusion is between 0.0533 and 0.0442, show a very strong differentiation which corresponds to the multiple purposes of procreation and the sexual impulse. It is certainly not without purpose that the ventral surface of animals is so richly equipped with perspiration glands and that the latter activities are so greatly controlled by the nervous system, which circum-

stance is probably of some importance for discovering the opposite sex during rutting periods. For non-sexual odors this need of differentiation does not exist so they appear to us to be more or less similar.

Following this exposition of the chemical peculiarities of sexual smells, I wish briefly to speak of the macroscopic relations of the nose to the sex organs. There is a very ancient and widespread belief that a large nose indicates a corresponding magnitude of the penis, and in general betokens a passionate nature. Many writers have spoken of a harmony between the nose and genitals, e.g., J. B. Sinibald. As far back as classical antiquity men who were bene nasati, were automatically regarded as bene vasati seu mutoniati. Thus the Emperor Heliogobalus, this omnis generis lasciviæ studiosus, gathered about him a whole tribe of large-nosed men in order secum in turpi certamine arma aphrodisiaca pertracterent strenue. Women are reputed to prefer, as a general rule, men with long noses, as for example, Johanna, queen of Naples, notorious for her lasciviousness, who usually chose her paramours from the nose ranks. But alas! she and many other lecherous women who have lusted after copious noses (as indices of lower riches) have been unpleasantly disappointed; and many a woman who has failed to find the ardently desired analogy between the immediately

visible organ and the other must have cried out, "O, Nose, how you have deceived me!" For Paullinus, who wrote his *Medical Observations* in 1706, already knew that there were many large-nosed men who were not very capable sexually, and indeed, he knew some who were even impotent. Similarly, in women too, a large long nose has been regarded as a sign of salacity. For them there is another index of the latter character, namely a flat nose like a swine's

(nasus porcinus).

Very likely this popular belief that a large nose was distinctive of passionate folks is based on the notion that such a nose has greater smelling capacity, and that the bearer of such an organ is sexually more excitable than other people. Now it is remarkable that actually there is a direct anatomical and physiological analogy or similarity between certain portions of the nose and of the privates. These portions have been correctly dubbed "the genital points of the nose." There are engorgeable bodies of a cavernous construction quite similar to what is found in the clitoris and penis. To be sure, in this case the capillaries do not, as is customary, communicate directly with the veins, but there is a convolution of exiguous tissues which anastomose with each other. When the veins contract those areas fill with blood and the volume of the tumescent bodies increases. It is well

known that this process takes place under the influence of the ganglion spheno-palatinum which, through the nerve petrosus profundus, receives sympathetic fibres from the carotid plexus. In this way we come to understand the connection with the sympathetic nervous system which controls the sexual sphere too. Fliess does not undertake to explain the purpose of the nasal genital points, and he appears to be ignorant of Zwaardemaker's hypothesis that the swelling of the nasal corpora cavernosa during sexual excitation in human beings is quite in keeping with the relations obtaining between smell and sex in the whole animal world. According to Zwaardemaker, it is not impossible that a contraction of the nasal corpora cavernosa precedes their tumescence, which conditions a highly desirable temporary hypersomia during sexual excitation.

This is the more likely since the capryl odors which play so large a role in the sex life of mammals are localized above the tumescent bodies. When these tissues recede, there is made possible a strong influx of air into this region of mucosa and consequently there is engendered a hypersomia for certain capryl odors. When the tela cavernosa swell up, the region is almost completely shut off and there arises a relative anosmia for the same odors so that the capryl acids are found to be even pleasant.

Now we are able to understand why the nasal genital points are brought into a sort of sympathetic passion during periods of sexual excitement. Thus, according to Dr. Joal, the chief reason for epistaxis (nasal hemorrhage) in puberty is the physiological excitement of the sexual organs. In this connection Fliess has treated fully the swelling of the nasal passages during menstruation. Mackenzie has asserted an inner physiological connection between the nose and the female genital apparatus on the basis of the regularly recurring drainage of the cavernous portion of the nose during menstruations. Joal has maintained that in women the majority of cases of nose-bleed are to be regarded as genital nose-bleeds. Here belong those remarkable cases of vicarious menstruation through the nose. Thus Korsakow has described a very interesting case of periodic epistaxis, where a young girl-child of twenty-three months suffered periodic attacks of nose-bleed. Her breasts were greatly developed and her mons veneris strongly hirsute.

During coitus almost everybody experiences a strong engorgement of the nasal genital points, which in some cases leads to nasal obstruction and thus may cause an attack of asthma. On the other hand, Fliess knows of cases where coitus has cured such obstruction which otherwise would have lasted for many hours. Cases of nose-bleed during and after sexual

connection have been recorded by Endres, Morell, Mackenzie and Ich Wall. Wall knew two young men who, to the end of their sexual vitality, would suffer a nose-bleed after every copulation; and these men experienced disturbances of nasal respiration during the sex act. Hence it is no wonder that sexual excesses find reverberations in the nose with particular frequency. Onanism frequently calls forth epistaxis not through anemia but by a direct reflex action on the nasal *genital points*. Joal, Gorord, and Alexander Peyer have noted cases of nose-bleed following masturbation. Here then is a direct anatomical and physiological connection between the nose and genital organs which will confront us when we turn to the pathological relationships in sexual osphresiology.

Psychology of Sexual Scents

The psychology of sexual odors was very cleverly treated by Carl Max Giessler in his Wegweiser zu einer Physiologie des Geruches. This author classified odors not according to their intrinsic nature, but according to the external phenomena accompanying them, and the psychological processes they evoked. Such odors which result in tactual sensations and strong organic irritations like sneezing, crying, coughing, choking, urinating and voiding excrement, constitute a primary group which can best be

designated as that of momentary physical reactions. In these cases the response of the organism to the felt irritability is immediate. The psychic accompaniments are confined to a transitory disturbance of co-anesthesia.

The second major group comprises all such odors where the psychic accompaniments are stronger and where correspondingly the physical reaction passes into the background. Here belong all the olfactory sensations which have an incitive effect upon the most important functions of life, viz., upon those which guarantee the perdurance and perfection of the organism and the species. The first subdivision of this class comprises the odors which arouse definite complexes of organs, particularly the nervous and muscular system. These are the classes of the identifying and socializing odors. The former bear their picturesque name because the olfactory sensation is simply referred back to the bearer of the odor, who in turn is regarded as the one who proceeds, or has once proceeded, from the olfactory perception. Psychic activity is limited to an identification. The socializing odors are those which have a unifying influence upon the symbiotic individuals of one family or animal state. Here belong the odor of the body, of objects of use, of inhabited shelters. Many of these socializing odors are to be counted among the sexual, and

also influence the vegetative system quite definitely. The second main subdivision of the second major class contains those odors by which the vegetative organ complexes are aroused. Herein belong the idealizing, dis-idealizing, gastral and erotic odors.

The first of this last mentioned group (idealizing and dis-idealizing) affects the digestive and vascular system. With the help of the respiratory organs every odor is tested, for its life-advancing or life-destroying qualities. If it is determined to be the odor of the first kind, then it has a vitalizing effect upon consciousness and there arise idealizing tendencies in the soul of the percipient, tendencies which are esthetic (feeling), ethical (willing) or logical (conception) and which help to effect a realization of the ideal condition. In contrast to that, those odors felt to be destructive of life call forth dis-idealizing tendencies of an unesthetic, unsocial, immoral nature. Giessler includes among the idealizing odors the perfumes of certain flowers — ethers, oils, balsams; and he attributes a special logical quality to the aroma of tobacco and coffee and the odor of ozone-charged atmosphere. The digestive system is influenced by gastral odors which excite the nerves of taste and arouse the stomach to intensive activity. They have some relation with the idealizing odors though also with the erotic ones.

These erotic odors exercise a tremendous influence upon the reproductive system. In this connection Giessler mentions only the odor of sexual stuffs and the secretions in the neighborhood of the reproductive parts. I shall show that other odors besides these must be counted in the sexual group and that, as has already been mentioned, one portion of the socializing odors belongs here too. Giessler asserts, with a good deal of justice, that sexual odors play a great role in the animal world, whereas they are regarded rather as repulsive than attractive by the cultivated man who is normal psychologically. He emphasizes the difficulty of determining what physical or psychic processes are connected with the perception of erotic smells. It is important to remember that the animal perceives erotic odors in a manner analogous to his perception of food odors. Thus many dogs following an erotic scent give vent to a peculiar growling like that heard after the ingestion of a succulent morsel. What is more, the conduct of human voluptuaries as well as certain animal acts lead Giessler to declare that erotic odors have some relation to the stomach. He should rather have said to taste, as I shall demonstrate later in the examples of Cunnilingi.

These gastral (or according to my view gustative) nuances of sexual smells are far less important than the direct influence of the reproductive system. Gies-

sler explains the latter as a preparatory one, and elucidates his contention with illustrations from the canine realm. By means of erotic scents the fantasy of the dog is greatly stirred, but in view of the continuing stimulation of the olfactory nerves only erotic fancies are engendered, particularly those relating to the sexual act itself. So vividly are these scenes envisaged that the individual wrapped in these voluptuous imaginings is ready to break all laws. Very probably the pleasantness of erotic scents for the dog consists in the liberation of a host of images and nervous sensations relative to the sexual act. In man the specifically sexual odors do not exercise as great an excitative influence upon the sexual system as the socializing and idealizing odors; and the effect is reached by the direction of the fantasy to inflammatory images and the arousal of emotions which come to the fore in coitus itself. There are men who become sexually aroused when they smell linen or underclothes or the odors of certain parts of the body. Here the excitation proceeds from the socializing odors. By dint of numerous repetitions these individuals, perhaps with some hereditary bases, have developed a capacity whereby the odor of underclothes which cover the body directly or indirectly, or the odor of parts of the body, can direct their fantasy to the genitals themselves and can create nervous sensa-

tions which clamor for the corresponding but actual physical contacts. Effectively, this kind of socializing odor is not different from the specific sexual odors emanating from the genitals. The majority of body scents which Giessler includes in the category of the socializing odors belong, together with genital odors, to the capryl scents. This explains their unvarying effect. The same holds true of many artificial odors. There are perfumes which are not members of the capryl or musk family and can still exercise aphrodisiac influence because they evoke images relevant to the erotic act. The physical basis is the same in both cases. It consists in the silencing and submerging of all particular sensations and emotions by the rise of an intensive co-anesthetic feeling of great pleasure.

In the psychic realm the effect of erotic perfumes is correspondingly the feeling of shuffling of the core of the body and the momentary illusion of a higher communion during the sexual act, the surrender of the whole personality and the momentary illusion of the extension of the content of life.

Sexual Scents in the Plant World

Now we approach the problem of investigating the material bases of sexual osphresiology in the world of living things. Already in plants there is a highly

remarkable connection between scents, perfumes and the reproductive act. When we designate the spring and the blossoming time as the time of love, as is celebrated in the poetry of all peoples and ages, this is more than a mere rhetorical trope. As a matter of cold fact, blossoming time in the plant world is the time of the most intensive sexual life. The flower is the painting and poetry of sexual activity in the realm of vegetation.

In general, we can speak of the indirect influence of sexual odors in plants. Among men and animals erotic scents afford the means of sexual approach of men to men, or animals to animals directly. But plants on the other hand employ insects for the most part to carry out the same sexual intention. These insects are attracted by the odors and carry the pollen to the female plants, thus completing the cycle of fertilization.

It is probable that even among the higher fungi, odors play a sexual role since they attract insects who carry the spores further. One frequently sees numerous insects and larvæ on such fungi, e.g., upon truffles growing beneath the surface of the earth, the plant elaphomyces cervinus, whose odors ascend from the earth and attract insects. Again, the phallic fungus, phallus impudicus, spreads a penetrating odor of foul decay which also attracts insects. However,

these facts concerning the mycotic family are not altogether certain.

Much more interesting and complex are the relations existing among the flowering plants. Sprengel (1793) and Darwin (1862) showed that in the case of bisexual plants, self-fertilization was much rarer than fertilization of a plant through the pollen of another plant of the same family. Now this method of fertilization needs an external agent which is either the wind or an insect. Thus there are distinguished two classes of plants: anemophile, dependent on wind fertilization, and entomophile, where the reproductive cycle is carried out by insects. It is characteristic that plants of the former category, e.g., the graminæ, have odorless flowers; while the other group, whose number is far larger than the anemophiles, are distinguished by many devices in their flower which serve to attract insects, such as color, nectar and odor. It is important to insist, in contradiction to Gustav Jäger and others who seek to make odor the chief and indeed the only excitant of the sexual impulse, that optical and gustatory impressions also play a considerable role. Indeed, where the olfactory sense alone predominates, we are dealing with an exceptional and usually a pathological case. For men, as for animals and insects, smell is one but not the only factor in arousing the sexual impulse.

Very interesting observations may be made concerning the importance of smell for the sexuality of plants. When the almost odorless viola tricolor grows in the vicinity of the strongly aromatic viola odorata, then it is the latter which, despite its comparatively duller flowers, is sought out by insects. When related flowers contain nectar but differ in color and smell, those are more patronized which are more colorfully decorated and possess the stronger odor. When convolvulus arvensis and convolvulus sepium grow together the latter, which is odorous, is visited by insects much more frequently. It is very remarkable that the flowers of certain plants only emit an odor after night has fallen (silene nutans) or at any rate smell more strongly during the night than by day (lonicera caprifolium, platanthera bifolia) and thus attract nocturnal insects, particularly night moths. Hesperis tristis, which because of its dull coloration cannot be seen by night, attracts moths solely by its odor. The Lady of the Night orchid, a fragile white flower, is scentless during the daytime but exudes heavy perfume after dark to attract a certain nocturnal moth, the only insect capable of pollinating it.

Many evil-smelling plants are also patronized by insects. We have seen that the odor of the vaginal secretion is identical with that of the stinking goosefoot (chenopodium vulvaria), and that the odor of

semen resembles that of chestnuts and sour weeds. The trimethylamine of the female passage is found in the flowers of cratægus oxyacantha. Insects are also attracted by the nasty odor of aristolochiacæ, balanophoraceæ, stapelicæ, araceæ, and rafflesiaceæ. Nor is the fecal odor lacking among plants: witness the Greek anagyris fætida and the East Indian stercularia fœtida. The foulest of all odors are emitted by the flowers of the dracoutium, but the giant flowers of pseudophallus titanum of the family aroidæ, discovered fairly recently at Celebes, are even worse. Bees and wasps seem to prefer plants with sharp odors. The long-stemmed flowers adapted to the visits of butterflies usually have a spicy, lily, clove or vanilla odor. Then too, many fruits have a sharp odor which attracts animals and thus contributes to the dissemination of their seeds.

It is questionable whether there is a direct influence of odors between plants, i.e., between male and female flowers. Rivière cites the case of conophallus whose female flowers emit a foul odor up to the moment when the male flowers impregnate them with the products of their filaments. It is well known to botanists that many flowers lose their odor at the moment when they are impregnated, just as many animals no longer exude a sharp odor when rutting ceases. According to Minin a half hour after

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an orchid has become fertilized it ceases to give off

any odor.

Popular belief has it that various plants can smell each other. So the Swedish writer Emal, in his novel The Odor of Flowers, asserts that lilies love beans because their odors harmonize, and that roses love onions; and he reminds us that Shakespeare asserted that strawberries like to grow among nettles. The same author believes that plants can smell even man: thus the cocoanut palm withers when it is close enough to human habitation to feel the odor of a human being. This the Singhalese know well and therefore never build their bamboo huts near such a tree.

Sexual Scents in the Animal World

Whereas the role of sexual osphresiology among plants has been the subject of investigation only during the last half century, the importance of erotic odors in the animal world was known as far back as antiquity; among other ancients, Aristotle referred to this matter. While the erotic exhalations are especially noticeable among vertebrates, especially mammals, these phenomena are by no means absent among invertebrates. It is true that among the latter, the odors are generally too weak to be perceptible to men. But the greater development of olfactory organs

among the males of many insects points to the sexual importance of the odor exuding from the female of their species. Among many of those forms the females are wingless and in certain cases do not at all emerge from the earth or their hiding-places beyond permitting a small portion of their bodies to show forth; nevertheless, the males know how to find them.

A south-European bumble bee (bombus fragrons) always smells of roses. Some penetrating observations on the odors of butterflies have been made by Dr. Fritz Müller, and reported in the first volume of the journal Kosmos. If one goes to a lighted beech-forest in May and stands near a tree where a female of the beech bombyx is to be observed, one will soon notice one or more males hastening to that spot in fluttering flight. If a male passes by at a distance of twenty of its paces (in a wind even a distance of forty will enable it to detect the odors), it will suddenly alter its direction and make directly for the trunk, encircling it and fluttering about until the female has been found; whereupon the male descends to the latter. This attraction must be explained by the sense of smell and the possession of a special odor perceptible even at some distance.

Another proof of this may be had by the butterfly collector. If one places a newly captured female

butterfly in a box, one can frequently observe a male of the same species setting pertinaciously on the lid of the box beneath which he has scented the female.

If one should capture the female and hang it up by a thread, even in cities away from vegetation, one can capture a horde of the same species. The males storm into the room, the influx beginning after midnight. Jäger assumes that only the olfactory sense must direct these males since their eyes are so constructed that they can see only a few yards ahead.

Among many species of butterflies this odor makes its appearance as early as the pupal stage. Female chrysalides of the silkworm family, for example, lie in wait for the males even before they have crawled forth. Among many butterflies the males possess upon their wings special smell-producing organs, brush-like accumulations of hair and scurflike tissue which ordinarily are contained in a cuff of the brim of the inner wing, or in a small wrinkle or pocket of the middle of the upper surface of the wing. But they may leave these receptacles and bristle up, in which case they become the best possible disseminators of such odors. Thus staphilinus olens possesses two such contractile pockets from which emanates a citrous-like odor. Others have a musk-like odor; still others smell of vanilla; while that of the male of papilio grap is pleasantly piquant.

Here too unpleasant smells are not absent. Thus hemerobius perla exudes an excremental odor; and a similar smell is given off by reduvius acanthiæ.

The greatest importance of sexual osphresiology is reached among the vertebrates. Inasmuch as these facts have not yet been investigated for amphibians, birds and fish, we shall have to confine our remarks to the relevant facts known concerning mammals. The great role assigned to bodily exhalations in the life economy of the latter appears from the characteristic abundance of glands in the skin of mammals. Under the influence of sexual activity these glands achieve a most energetic activity. In many animals they form a considerable packet or pouch of glands, perfume glands in the service of sexual activity. Here belong the viol glands in the tail of many carnivores, the claw glands of ruminants, the rutting fig on the head of the chamois, the musk glands and beaver glands on the prepuce of musk and beaver. These glands excrete discharges of an extraordinarily penetrating and obstinate odor, some of which, such as in the cases of musk and civet (in strong rarefaction), are agreeable even to man.

It was Darwin who made some very interesting observations about the functioning of these glands during the rutting season. In the reptile family the rump glands of snakes are very active during the

mating season. This is also true of the same glands in lizards, and of the subgnathic glands of crocodiles. Since among most animals, it is the males who go in search of the females, the function of the odors excreted by these glands is probably to charm or excite the female.

As far as mammals are concerned, Darwin himself referred to the work of Pallas on this subject, and also to Owen's description of these glands together with those of elephants and shrew mice. From my own observation, I am able to state that the abdominal glands of the shrew mouse (sorex) undergo an enlargement during the mating season. Among many other quadrupeds both sexes have such glands of equal size but their use is unknown. In other species only the males have specific scent glands, e.g., the castoreum of the beaver; or at any rate their glands are more developed than those of the female and, nearly always, more active during the rutting season. In this period, these glands upon the sides of the elephant become enlarged and yield a discharge which has a strong odor of musk. The male and even the female of certain species of bats have, in various parts of their bodies, follicles and pockets which are believed to give off scents.

The sharp smell of the billy-goat is well known, and the odor of certain stags is also known to be very

strong and persistent. On the banks of the La Plata, Darwin found the air to be full of the odor of the male cervus campestris as far as a half mile away from the herd, to the leeward. Furthermore, a silk handkerchief in which he had carried a bit of skin home with him, despite constant usage and many washings, still maintained traces of the odor a year and seven months later. This animal does not exude his odor until he is more than a year old, and if he is castrated very young he never gives off that odor. Burdach reports that the stag always approaches the female against the wind so that it may smell the female odor; and if the latter should flee him, he will remain standing with outstretched throat and open mouth, obviously relishing with great gusto the odor of the fleeing females.

Aside from the generalized odor by which the whole body of certain ruminants seems to be permeated during the mating season (e.g., bos moschatus) many deer, antelopes, sheep and goats possess olefiant glands in various places, particularly in their faces. The so-called tear pouches or suborbital fossæ fall into this category. These glands excrete a half liquid, stinking substance, which discharge is occasionally so profuse as to drench the whole face, as Darwin has reported in the case of an antelope. Generally these glands are larger in the male than the

female, and their growth is curbed by castration. They are completely lacking in the female of antilope subgutturosa. There can be no doubt, therefore, that these glands are definitely related to the sexual function. In related forms they are sometimes absent. In the adult male musk (moschus moschiferus) there is a naked area near the tail, moistened by an odorous secretion; but in the male younger than two years, and in the female, this space is covered with hair and is not at all odorous. The real musk pouch is, by virtue of its situation, necessarily confined to the male and constitutes an additional scent organ. It is a peculiar fact, as Pallas has observed, that the substance excreted by this organ does not change in consistency or increase in quantity during the mating season. None the less, this investigator assumes that its presence is in some way connected with the act of reproduction.

When the male gives off a strong odor during the mating season, in most cases it serves the purpose of attracting or exciting the female. In this connection, Darwin reminds us, we must not follow our own prejudices. For it is well known that rats become intoxicated by certain ether oils and cats by valerian, substances which are far from being attractive to us; and that dogs, while they do not actually eat offal,

sniff at and wallow in it.

The odors referred to above must be of considerable importance to the male, to judge by the complexity of the glandular structures involved which, in some cases, are equipped with musculature for the opening and closing of these apertures. The evolution of these organs is quite comprehensible from the viewpoint of sexual selection, for the male with the stronger odor would probably be the more successful in his amorous quest; and his descendants would ultimately tend to develop larger glands and stronger odors.

Another index of the large role played by the olfactory sense in the animal world is afforded by the remarkable circumstance that odors are the cause of sexual perversities among animals, especially, of homosexuality. In the proceedings of the French Société de Biologie of May 1898, Charles Féré reported some remarkable experiments designed to prove this assumption. "An appreciable number of cases has been accumulated to establish the existence of homosexuality among animals; but these homosexual relations are incomplete, and besides, they only occur among males when no females are available. But insects have been caught in homosexual intercourse under conditions where sexual isolation could not be made responsible. Particularly, the cockchafers or beetles have been accused of voluntary pederasty, and

the copulations of male beetles figure in the annals of animal criminality. I had long doubted this interpretation, believing rather that the odor of the female with which the male had in some way become impregnated, was responsible for the error. This guess was the more likely inasmuch as the experiments of Raphæl Dubois had clearly demonstrated the degree to which the olfactive sense can cause errors of the sexual impulse in certain animals.

"I arranged the following experiment. First, I assembled a large number of beetles separated according to sex. On the next day a definite number of males and females were set into a glass aquarium filled with leaves. Then the beetles which had practised coitus were segregated, and as soon as they had become disengaged, the males of these pairs were set down amidst new males. On the other hand, another group of males who had been isolated for twenty-four hours were impregnated with the odors of females. They had absorbed this odor by having their genitals pass over female cloaca into which the glands excreted a certain odoriferous substance whose aphrodisiac properties have long been known. These males were then set near an equal number of fresh males for observation.

"There were then three groups:

- 1. Entirely fresh males (208 pairs)
- Fresh males together with males artificially impregnated with female odors
- Fresh males with those who had just practised sexual intercourse

For purposes of identification the second group had a wing cut off.

"The result of these observations was as follows: In the first group, out of 300 pairs observed, there were no homosexual copulations; in the second group, out of 208 pairs observed, there were two homosexual copulations; in the third group, out of 210 pairs observed, there were seventeen homosexual copulations.

"In these nineteen homo-erotic unions all the passive partners had a wing missing, i.e., all those who had been odorized with female smells were chosen by the fresh males. In two cases (one in group 2 and one in group 3) the active as well as the passive partners were of the same class, i.e., impregnated with female smells. These exceptions merely go to show that the excision of a wing does not hinder sexual excitation; and the copulations of the third group show that sexual ardor in the male can be repeated within twenty-four hours.

"The large number of homosexual unions in the third group seems to indicate that the fatigue of the insects which had just been active in coitus predisposed them for a passive role. But the actual predisposing condition for this is the retraction of the penis. For, as Laboulbène already had seen, and as I have demonstrated, during homosexual coitus the member does not penetrate the anus but merely enters the penis groove. The pictures of Boas enable us to understand that the latter form of intromission can only take place in the condition of rest. But this condition, so perfectly realized in males who have just undergone sexual congress, is not the only favorable condition. In addition, the attention of the fresh or rested arrival must be excited by means of the female odor. The males not so permeated will not be chosen for homosexual union.

"Homosexual beetles are then not inverted or criminal specimens, but rather such as have entered into one given relationship through the definitely explainable, predisposing circumstances here traced. As long as one has not eliminated the preconditions for such errors, the observations of single cases cannot demonstrate the existence of voluntary or instinctive perversion of which the beetles have been accused."

It is possible and, indeed, according to my notions quite likely, that many peculiar relationships between

human beings and animals rest on similar errors, especially when animals evince a peculiar predilection for the human being. Moll has remarked that in zoological gardens one can frequently observe a peculiar friendship between beasts and women. He had learnt from an experienced observer that it was generally the male birds and male apes upon whom women conferred the gift of their friendship. This authoritative observer felt that animals were well able to distinguish between the male and female sex of our kind; and it is this which induces the predilection of male animals for women (and, conversely, the favorable reaction of the latter to the former). Darwin, that keen and indefatigable observer, who has noted a remarkable similarity of the reproductive apparatus and process among mammals, has recorded in his Descent of Man that many apes become sexually excited by the odor of human females, and relates interesting data to corroborate his notion. It is quite likely that certain women give off an odor sufficiently like that of female apes to cause male apes to draw false conclusions.

From such actual relationships between men and beasts of different sex, Gustav Jäger draws very farreaching conclusions. He believes that man will tame a female animal sooner than a male, and also that a woman will be more successful in taming a male

animal. "My two tame she-wolves doted on me and my children but had only growls for my wife and the maid. A bitch will become more easily and firmly attached to a man than will a male dog, and the reverse is true for women. Many dog fanciers would rather own a bitch but since the wife does not get along with the beast they have to content themselves with a male. That bulls are more easily handled by the maid than by the stable hand is an equally wellknown fact. My experiences cover martens, foxes, bears, antelopes, deer, cats and parrots, and in all the cases the cross sympathies are quite marked." Jäger deems it an impossibility that these facts should be attributed to the visual perception of the morphological differences between the sexes and attributes everything to smell. This appears very clearly in the fact that the male dog is always more friendly to his mistress during her menstrual period — the result, obviously, of the changed smell. From all these facts Jäger concludes that the specific sexual odor of the most diverse animal species have something in common. The morphological similarity between the females of different species is correlated with a similarity in odor.

It is needless here to examine in any detail whether, in the case of all the animals mentioned by Jäger,

odoratus sexualis plays a part in their relations to humans. In many cases it is unquestionably so.

Sexual Scents Among Human Beings

The study of odoratus sexualis among human beings began in France, and the most important contributions to this chapter of human physiology have issued from that land. In 1821 Cadet-Devaux published an article in the ninth volume of the Revue Encyclopédie under the title, De l'atmosphère de la femme et de sa puissance. This essay aroused great interest and was soon translated into German by the physician Anton Theobald Brück, in which form it was read by Goethe. Cadet-Devaux states in his introduction that he was led to this theme by a conversation with Count R. concerning the musician Grétry. The latter had said that the primary impression which a pretty woman makes upon us is not evoked by her countenance, her melodious voice, or her gracious movements, but through the exhalations from her body, her atmosphere.

For the sixty years following there was no special treatment of this subject. It was not until 1886 that Augustin Galopin published his study, Le Parfum de la Femme, et le sens olfactif dans l'amour, which treats the subject rather superficially, in the feuilleton style, but none the less brings together a number of

interesting facts, mostly derived from the Gallic scene and Gallic sources. For this author, love rests in smell. "La femme respirée est aimée." This parfum de la femme, or odor di femina, as the Italians term it, expresses the essence of the beloved woman most deeply and intensively. "When one smells an odor one becomes impregnated with the very matter of the odorous body; when one smells a woman, one becomes impregnated and sated with the living perfume of this woman." No amorous assimilation is as prompt or as radical as that proceeding via the nose.

The concept of the *odor di femina*, notably of the erotic odors of the human body, is a composite one and includes the odors of the skin, the hair, the genital odors with all the relevant zones, and to a lesser

degree, that of the mouth.

Only the subjective sensation of any given observer can judge the ensemble of these odors; the scientific investigation can but analyze the nature of the erotic odors of individual parts of the body. I might mention first, Galopin's interesting, but by no means established, classification of women in respect to their odors. According to him, it is not at all strange that certain women have a natural aroma of musk, so that in less than an hour they can permeate a bathtub of water with this odor. Much less frequent, and more sought after, are those women

who naturally exude the odor of amber. Men love longer the latter type of woman, which seems to indicate that they prefer the odor of amber to that of musk. Blondes with ash-blonde hair are wont to exude a very delicate amber odor. Sometimes women with chestnut brown hair have this odor, but more often they have a sort of violety odor which appears to be connected with the excretions of the sebacious glands. Brunettes not infrequently have an odor of ebony wood which, during their periods, combines with a light but not unpleasant musk odor. Galopin goes so far as to think that he can divide even the lovers of these women according to these different categories. Men who love the violet and amber odor are more tender and more faithful. Yet blonde women are able to hold their lovers longer than their swarthier sisters who, though they are loved more passionately and despotically, are loved less deeply and permanently.

Almost half a century before Galopin, Albrecht von Haller had asserted that the odor of the female genitals exercised an inflammatory influence upon men. It cannot be doubted that the genital odors play a definite role in the sexual osphresiology of human beings. Indeed Monin reduced the specific odor di femina to vaginal exhalations. I have already referred to the chemistry of these smells and pointed

out that they belong to the class of capryl odors which can be designated as the erotic odors, and which, as we have seen, are not limited to the genital odors alone. According to Monin, the vaginal mucosa always have a faint characteristic odor which becomes stronger during catamenia. The natural odor of the vagina is not very penetrating; upon this point Berthold agrees with Monin. The female genital secretions have less of a distinctive odor than the male, except during the menstrual period, which is the human analogue to the animal rutting season. To be sure, the odor of the female parts can become aggravated through lack of care and cleanliness. But even the smegma of the vulvarian sebacious glands do not have the unpleasant, sharp odor of preputial smegma. The comparison of this odor with that of rancid fat or decaying cheese, according to the famous Scotch physician, Dr. Cullen, is only correct for unclean women. It is the opinion of Dr. Rullier that it is this smegma vulvæ which exercises a special erotic effect upon easily excitable men.

The Hindus appear to attribute the differences in the *odor di femina* to exhalations from the female genitalia. Accordingly, Ploss-Bartels makes the following comment. "In Hindu writings women are divided into four distinct classes: the *padmini*, who smell like lotus flowers; the *chitrini*, who are merry;

the *shankini*, who resemble snails; and the *hastini*, who are like the elephants. Concerning these four classes of women the *Kokkogam* states the following:

"The lotus-smelling: Their two breasts are like the bilva fruit (acyle marmelos). They are distinguished by the fact that the suradaner, the love-secretion (the discharge flowing out during cohabitation) flows without cessation and can be compared with the odor of the Tâmarei, which has lovely blossoms. Their sexual organ is like the flower of the red water-rose, and is compared to a holy mystery.

"The merry: Their breasts are thick, and their thighs have the color of gold. Their love-secretion has an odor like that of tên (honey, or the sap of the palm tree). Their sexual part is beautiful because it possesses a copious foliage of hair. Their love-secretion is mild and flows abundantly for their sexual organ is drawn apart as with a pulley.

"The snail-like: They are very thin and meagre. They have very black hair on their sexual organ which is compressed; hence their love-secretion tastes and smells salty.

"The elephant-like: Their body is large and rich. Their vulva is exceedingly broad because the dry and protruding Mani (clitoris, the middle pearl of the rose-wreath) stands therein. Their love-secretion has

the penetrating odor of the fluid which is discharged from the ear of the rutting elephant."

Ploss-Bartels concludes, and this is substantiated by other authorities, that these descriptions are based on actual facts and that the ancient Hindus knew well the different forms of female genitalia.

A second factor in sexual scents is the general smell of the skin dependent primarily on the secretions of the sebaceous and sudorific glands. The odorous substances of both these discharges also belong to the erogenous class of capryl odors. We have already observed that the ventral surface of many animals is richly equipped with sweat glands whose discharges play an important role during heat. The capryl odor of perspiration may pass over into that of musk, so that Galopin's observation of women who reek of musk is borne out by the facts. Haller too had previously observed that human perspiration occasionally spreads a musk odor. Valentin believed that there was a chemical affinity which accounted for the similarity in the odors of a great number of materials of plant or animal nature. Cloquet enumerated musk odors from the world of animals, plants and even minerals.

There certainly does appear ample justification for Zwaardemaker's statement that the musk odors seem to fulfill a sexual role among many animals. All of

them, it will be remembered, belong to the capryl group.

The general exhalation of the skin has been localized in various portions of the body according to its intensity, and has been brought into special relation with *odoratus sexualis*.

The first place in our consideration shall be given to the axillary odors. According to Hyrtl's Handbuch, the thin and fine skin of the axillæ, more strongly pigmented but less hairy in females than in males, is extremely susceptible to tickling (hence the chatouilloir and titillie of the older French anatomists), and is characterized by an abundance of sebaceous glands. The latter discharge a secretion which mixes copiously with that manufactured by the sweat glands, which in this vicinity of the body are distinguished for their size. The fatty acids and the ammoniacal constituents (according to Robin, alkali salts) are the cause of a specific odor, which among unclean people appears as a billy-goat odor. The latter was known as far back as Aristophanes who called it tragomaschalos; and it is also the subject of Catullus' epigram: Valle sub alarum trux habitare caper. It is the capryl odor in its highest potency. Ambrose Paré, in his famous text on surgery, attributed the intensity of the axillary odor to the concave form of the armpit and the consequent faulty or incomplete

perspiration in that area. Cleanliness can greatly reduce the odors of the axillæ. Indeed, Galopin believed that in many women there was nothing unpleasant about the odor, but rather that the shoulders of some women smelled somewhat of violets and amber when the axillæ were exposed to the free air. Among other women, on the contrary, the goat odor of the axillæ is so pronounced, that cats have torn to bits the underwear and dresses of their mistresses which were suffused with it.

Much has been said about specific odors of the shoulders, bosom and neck. Particularly has an erotic effect been attributed to the scent arising from the nape of the neck. It is that spot which has been celebrated by numerous French authors, including Guy de Maupassant, as being particularly inviting for kissing. It is at this point that Jäger has localized his cerebral affects; and it has the authority of the German idiom "Du hast's hinter den Ohren." This means that in order to judge a person we must go behind his pose, and even smell him behind the ears to know what manner of man he is. It is interesting to recall in this connection that beasts of prey prefer to bite the neck of their victims because they can smell most keenly that odor of terror which brings so much pleasure to their victorious nostrils. The same fact is to be observed during the love ecstasy among

birds, among fowls, and among mammals in the equine family. Before the stallion besprinkles the mare he sniffs her neck with open nostrils, and during copulation he bites her neck. Jäger has observed similar phenomena among asses; and, of course, cats enact the same scene, the tom biting his partner's neck viciously during the orgasm. Moreover, man is no exception to this practise, and in his ecstasy often presses his head against the throat of his mate, kisses it, and under certain circumstances actually bites into it.

Some people have a penetrating perspiration odor given off by their feet. This is without significance for normal sexual osphresiology, but is quite important in forensic and pathological relations.

Of great importance is the odor of the hair, the erotic effects of which have long been recognized. Jäger holds that just as feathers are the specific scent organs of birds, so is hair for mammals and men. Fritz Müller found that the scent organs of the male butterfly are specially formed hairlike grains which frequently form a sort of brush that opens up when the male is wooing the female. When the brush is opened the cloud of scent thus emitted becomes perceptible even to the human nose.

Jäger made a similar observation with regard to birds. When the peacock or turkey-cock opens up his

tail and flutters or shakes his feathers, a cloud of scent issues from them which a person, standing nearby and possessed of a sensitive olfactory apparatus, is able to smell. Among many birds, strutting and the shaking of feathers is a usual gesture when the male is courting; as, for example, among birds of paradise, pheasants, the domestic cock, doves, and sparrows.

This is the true explanation of the long and well-developed decorative feathers which, since Darwin, we have grown accustomed to regard as existing for the sole purpose of catching the eye of the female. But this is a secondary consideration, the primary object being that of highly developed scent organs. Jäger admits, however, this is much less clear in the case of the mammals. The dog spreads his rear hair when he courts the female, also the male of the chamois. The hair on the neck and abdomen of the stag also serves the same purpose.

As far as human beings are concerned, these facts have long been known and have become imbedded in the popular consciousness. Consider, for example, the German proverb: "Where there is hair there is joy" (Wo Haar steht, ist Freude). This is an expression of the fact that people with hairy bodies emit a stronger scent than the hairless, and that these scents are piquant. One of my correspondents writes me on this subject: "Dry, bushy hair in females always used

to stir me sexually, while smooth, flatly plastered hair always repelled me." In line with this is the other well-known fact that men with long or curly hair always exercise more fascination upon the feminine sex than smoothly combed or, at least, closely shorn or baldish men. Actually, it is a very simple matter to see that the hair odors of the former must be stronger since there is so much more hair to emit odors. Lovers delight to finger and scratch softly each other's hair, and the same actions are observed in the relations of parents and children. The long hair of the human female are elongated scent organs; and long rich hair can definitely be regarded as valuable marks of beauty in women.

The diverse kinds of hair odor are, in the opinion of Monin, difficult to define, and they vary in different people. Galopin believes that the general parfum de la femme pervades the hair in a concentrated area. This is the bouquet of the body which renders superfluous any other perfume. Many hair experts distinguish, for the sake of accuracy, the odors of living and fallen hairs which have lost their scent. During the orgasm of love, the hair frequently takes on the distinct odor of ozone.

The odors of the mouth do not belong to the narrower circle of sexual scents, yet many (poets, principally) have thought of it as a powerful factor of

sexual attraction or repulsion. "La fraîcheur de l'haleine est la première condition de la séduction féminine," wrote a sophisticated woman of the world in her handbook of toilette; and, in truth, a pleasant, sweet mouth odor has always been justly regarded as a sign of human beauty. It is not quite certain whether the kiss, which Günther believes to be a peculiarity of the Aryan race, was originally connected with the smelling of the mouth, or, as appears more likely, whether it was more closely related to sensations of touch and taste. Yet people do speak of the aroma of a kiss, and of sweet and intoxicating kisses.

A modern French symbolist, Edmond Haraucourt, has composed a poem, Symphony, celebrating the local differences of the odor di femina for which the French seem to have a particularly keen perception. -

Ton corps est une symphonie De parfums qui chantent en chœur Et dont la troublante harmonie M'emplit d'extase et de langueur.

Ils s'envolent comme des trilles Perlant la gamme des plaisirs Et rhythmant du front aux chevilles Une sonate des désirs.

Quand ta bouche s'ouvre et se mouille On dirait que tu bois du cièl; Et pour mes lèvres qu'elle fouille Ta langue a le gout blond du miel.

Ta salive sent la dragée Lorsque dans nos baisers mordants J'aspire par longues gorgées Ton âme qui vient sur tes dents.

Ta nuque a des senteurs fragrantes Et tes lourds cheveux sous ma main, Ont les souplesses odorantes Due chèvre feuille et du jasmin.

Ta peau fleure l'iris et l'ambre Dont elle imprègne les coussins, Et la mystère de ta chambre S'embaume aux chaleurs de tes seins

Sous tes bras de Junon antique Tu couves des ferments salins Dont la tiédeur aromatique Flotte autour des duvets câlins.

We now have to consider the particular influences and special relationships which are able to alter the

odor di femina, or which give it a specific form.

not begin until maturity, most students agree that the specific sexual scent is not to be found before this time. Before puberty, the odor is, to employ Jäger's language, indifferent, vacant and dull. During this premature period, the olfactory sense, too, is much less developed in both sexes, a fact whose relation to sex development was recognized in both sexes by Rousseau and Dr. Cabanis. The typical sexual scent does not arise until sexual maturity, and in the woman differs according to the three natural phases of puberty, marriage and menopause.

The odor of the intact, nubile virgin has been described by many observers as very pleasant. Galopin makes the following charming comment. "La jeune fille dont les sens n'ont pas encore parlé, est sensibilement aromatique; elle sent le vent et le soleil du printemps, l'eau fraîche framboisée. Celle qui est amoureuse a un parfum plus prononcée." Jäger holds that the scent of the pure virgin, in contrast to that of the woman, is of uncommon purity and of a refinement bordering on scentlessness. It is this very absence of strong odor that lends such a sanctity to the home of a virgin, which finds its expression in the cult of the immaculate, holy Virgin. Indeed, the common folk

think of the Virgin as so odorless that even her flati are without smell.

As soon as the young girl falls in love her scent changes, according to Jäger, at least quantitatively. It becomes stronger. However, the sexual odor of the woman is qualitatively very different from that of the virgo intacta. Jäger terms the later odor the aroma of the female (Frauenduft), and correlates it with the physiological function of the reproductive organs that supervenes upon marriage, so that the characteristic genital odors can only arise in the married woman.

After the menopause and the cessation of physiological activity of the female sex organs, there gradually becomes perceptible the senescent odor of the female which has also been described as pleasant. Thus, Bertrand de Saint-Germain avers that the skin of aging women exhales a scent of withered leaves; and Galopin compares the natural perfume of old women with the odor of dry rose leaves or decayed linden blossoms. However, in the interests of accuracy, we should refer to Jäger's dissenting opinion: he compares the senescent odor to that of rotting wood.

2. Time of day and weather. Women are like flowers and smell their sweetest at dawn and twilight, in the first rays of the rising and the last rays of the setting sun. Still, there are women whose exhalation

is strongest at night. Furthermore, weather conditions exercise some influence. The parfum de la femme is especially intense in the sultry oppressive atmosphere before a storm, and it decreases markedly at the first drops of rain. The hygrometric relations of the atmosphere influence not only the keenness of our olfactory sense but also the relative strength of our scents.

- 3. Constitution. In general, spare women have a diminished scent, for with meagerness of body is correlated a certain dryness of the skin. In fat women the perspiration pores and the sebaceous glands are larger, which results in copious transpiration and increased excretion of fatty acids by the sebaceous glands. This is responsible for the intense odor difemina, and that is why Musselmans prefer capacious women.
- 4. Hair color. It is certain that brunettes have a stronger odor di femina than blondes, but both are eclipsed in this regard by red-heads. Galopin has constructed the following scale of smells (applicable only to the French) which thus arranges sexual scents in the order of diminishing strength. 1. Negress and mulatto. 2. Dark brunette with strongly pigmented skin. 3. Dark brunettes with white skin, except for the neck, forearm, hips and knees. 4. Dark brunettes with entirely white skin through which veins are everywhere transparent (also with lustrous hair). 5.

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Light brunettes. 6. Dark blondes. 7. Light blondes.

For Galopin the carrot-haired females occupy a special place; he designates their scent as a very peculiar one. He believes that brunettes have an odor as of ebony wood (Monin suggests bitter almonds instead), and blondes, very frequently, of amber. That red-haired women have an unusually strong scent has been observed also by a naturalistic writer, E. D., certainly very competent in these matters, to whose work, *Odor di Femina Amours Naturalistes*, we shall return later.

5. Climate. The inhabitants of hot lands have a stronger body odor than those dwelling in cooler climes; just as flowers of the hottest zones are the most fragrant, so also does the human flower, to employ an expression of Goethe, yield a greater fragrance in these climes. For further information on this subject the reader is referred to the later chapter on Ethnology.

6. Food and Medicine. It is not to be doubted that the food a person eats has a considerable influence upon the odor he emits. Jäger has observed this fact in animals. When dogs are fed horse-meat, their odor is not only more penetrating but actually different than when they are treated as omnivorous and are fed kitchen leavings. Jäger reports that when Holmgren

developed a scent like that of birds of prey. In general, vegetarians have a weaker scent than carnivores. Galopin believes that truffles impart their odor to the perspiration of him who has eaten them. He also draws our attention to the influence of certain medicaments upon the human scent. Thus cod liver oil imparts to the perspiration the odor of tinned sardines. Arsenical medication frequently induces fetid axillary sweat. Sulphur salts give to perspiration the odor of hydrogen sulphide, while oxide and zinc phosphate make perspiration smell of garlic.

7. Alcohol. Individuals who indulge their love for alcohol to an immoderate degree, permit us to recognize their indulgence by their skin which has an unmistakable alcohol smell. In delirium tremens the

perspiration reeks of aldehyde.

8. Clothing. The odor of the human skin is increased by dark clothing, for more odorous materials are absorbed in the latter than in light-colored clothing. Black absorbs most, then blue, then red, then green, yellow very little, and white scarcely anything. Jäger was an apostle of wool and he quite forgot that wool, like silk, apart from its obvious irritating effect, absorbs odors more readily than cotton or linen, and hence intensifies the human odor. For most people woolen clothing is too warm and calls forth excessive perspiration, a condition which does

not improve matters. Light, airy clothes are an essential condition of preventing the *odor di femina* from becoming offensive.

- 9. Emotions. Joy, pain, calm, rage, every excitement and depression alter the parfum de la femme. The melancholy temperament can never be combined with as pleasant an odor corporis as the sanguine. If the lachrymal glands have been active for sometime, their secretion adds a somewhat mousey flavor to the odor di femina. Tears, too, alter the human scent. Jäger has gone so far as to set up a special odor of emotion (Affektgeruch).
- nence will, according to Galopin, increase the intensity of the natural scent in man as well as in woman. Many a person who has gone to confessional has had his head turned by the *odeur de confessional et du presbytère*. In man, this characteristic odor of abstinence is to be attributed to the resorption of the seminal fluid, which, received by the blood and lymph, is partially evaporated through the skin. Widows condemned to sudden abstinence also suffer a specific alteration of their sex scent.
- odor di femina during menstruation is of an unpleasant nature. Jäger describes it thus: "It is known to all that during her menses woman gives off an idio-

syncratic repulsive odor reminding one of old herrings." This may be the explanation of many popular beliefs connected with this period. For example, during this time women should not churn butter, nor water plants, nor tend to their gardens lest the plants die; this is obviously due to their catamenial smell. Many physicians can infallibly detect the presence of a woman's period merely by sniffing. Various causes have been assigned for this smell. Jäger believes that it is caused by the absorption into the woman's bedclothes and clothing of the herring-like smell of her menstrual blood (Jäger's so-called female poison) which, by the way, has a strong influence on the vocal apparatus, a fact known to all female singers. Others have emphasized besides, this penetrating trimethylamine odor of the genitals, the curdling of the perspiration during menstruation which gives rise to a rather sour parfum de la femme. Lastly, the odor of the mouth is not without significance. Monin believes that at the time of their periods, women generally exhale a strong, intolerable odor which reminds one of onions. It is most advisable for women to observe a rigorous regimen of oral hygiene during their periods.

12. Coitus. It is easily understandable why the natural odor of the body should become more intense immediately before, during, and directly after sexual

intercourse, since this act is correlated with increased activity, not only of the heart, but of the glands of the skin as well. During the act itself this odor issues particularly from the axillæ, and immediately afterwards the whole body gives it off. The philosopher Democritus was well acquainted with this odor voluptatis. When Hippocrates visited him once, the physician was much surprised that the sage greeted a female who was accompanying the father of Greek medicine, one day as a virgin, and the next as a woman. La Motte le Vayer regards it as highly probable that in these judgments Democritus was following not his eye, as Diogenes Lærtius supposes, but his nose. Ever so often we hear the story of the blind man who, upon his return home, recognized that in his absence his daughter had suffered herself to be seduced. Jäger sets up a real love intoxication induced by the continued inhalation of the partner's scent, which may have a variety of effects, making one foolish, another garrulous, and a third ferocious. The poetry of all nations abounds in parallels of women with wine (even as woman and flowers have been juxtaposed) which is not due solely to the fact that they both afford pleasure, but rather to the physiological similarities in the effects of these pleasures.

13. Special Conditions. Certain observers, obviously under the influence of the fragrant freshness

of the countryside, have maintained that peasant girls have a special odor di femina which has something vitalizing and intoxicating about it. According to the naturalistic writer E. D., alluded to above, one can find the true odor di femina nowhere else than in the country. The popular belief in the bewitching effect of a peasant girl's scent has been depicted in perhaps too realistic pictures by this author, who has traced the adventures of an olfactory fetishist among French peasant girls. He constantly contrasts their natural, fresh scents with the artificial perfume of sophisticated Parisian women and the demi-monde. It is clear that this assumption is true only in so far as peasant girls generally enjoy better health, and hence, more perfectly normal conditions of perspiration than their urban sisters. What is more, the uncleanness so rampant in the country will tend to produce the opposite condition. Cadet-Devaux is only one of those who have noted that very frequently the smell of peasant women is extremely unpleasant.

Ever since antiquity there has been recognized the specific odor of prostitutes, what Juvenal in his sixth satire terms the *odor lupanaris*. Inordinate sexual intercourse appears to result in a remarkable deterioration of the odor of the given person, and in all periods, competent observers have emphasized the evil scent of sexual delinquents. Perhaps the cause of

the fætor puellarum publicarum, which Monin has described as unpleasantly rancid, is to be sought in the carrying over of the scents of the numerous men to whom she has given herself in the course of her work. Partly, too, the odor lupanaris is due to the artificial perfumes so excessively used in the brothels. Add to this that vix unum reperias libidini inauctoratum, qui oris præ se ferat suavitatem. However, in this matter also, Jäger maintains a dissenting opinion, for he holds that public women have no odor. Indeed, he contends that women who have been in the trade for a long period lose all body scent, due to the degeneration of their ovaries.

One group of observers who speak of a special odor lupanaris may perhaps have been influenced by the circumstance that wherever a large number of females congregate, the atmosphere de la femme becomes much more intense. This can be observed frequently at balls where the normal odors are increased and aggravated by the movements of the body. This is alluded to by Freiherr von Nordkirch in his Memoirs. The same is, of course, true about harems where there must also be considered the fulsome use of perfumes so common among Orientals. Dr. Brück tells of an eight-year-old boy who, upon entering a room in which many women were congregated, exclaimed to his mother, "Phew! how it smells here of women."

Much of what has been said concerning the parfum de la femme applies as well to the sexual exhalation or scent of men. In strong, vigorous men this odeur de l'homme is considerably sharper than among effeminate and weak ones. Both of the specific sexual secretions, that of the preputial glands and the semen, belong to the group of capryl odors, the specifically sexual scents.

Among the males of the musk family, and certain antelopes and rodents, the colossal development of the preputial glands points to the great sexual importance of the secretions of the latter. In man these glands are much less developed and are virtually unimportant, the odor of the *smegma præputiale* having, if anything, an unpleasant and anaphrodisiac effect.

Some authorities have spoken of the aura seminalis of the man, which first appears at puberty and is really a rarified form of the so-called ram- or billy-goat odor which animals emit during the rutting season. This odor is one of the most important symptoms of the seminal fever of Bordeu, and is most frequently found among continent men. "Illos hirquitallire qui non cœunt," said the ancients. According to Mattei, this specific odor is caused by the resorption of the seminal fluid into the circulatory system and its consequent exhalation through the skin. At any rate,

this odor disappears with the decline of the sex function. What is beyond dispute, however, is that the male seed has a peculiar and penetrating odor; Jäger even attributes to it a power so pungent that it acts at a distance upon the female ovum.

A special role is played by the hairs of the masculine beard and mustache whose scent exercises an obvious erotic influence upon many women. The classical writer Philostratus has this to say concerning Protesilaos, the first Greek to fall at Troy. "He is scarcely twenty years old and a soft downy beard has bloomed upon his chin which smells more fragrant than the myrtle." Montaigne's remarks in reference to the mustache as an apprehender of smells are most interesting. "Celuy qui se plainet de nature, de quoy elle a laissé l'homme sans instrument à porter les senteur au nez, a tort; car elles se portent elles mesmes; mais à moy particulierement, les moustaches que j'ay pleines men servent; si j'en approche mes gants ou mon mouchoir, l'odeur y tiendra tout un jour: elles a accusent le lieu d'ou je viens. Les estroicts baisers de la jeunesse, savoureux, gloutons et gluants, s'y colloient aultrefois, et s'y tenoient plusiers heures aprez." (Book 1, Chap. 55.)

The thoroughly captivating and exquisite fragrance of certain famous women, such as Diana of Poitiers and Ninon de l'Enclos, has become famous;

and similarly, certain distinguished men have left behind them reputations for pleasant scents. Plutarch, who was well aware of the strange connection between smell and the psyche of an individual, relates in his life of Alexander the Great that whatever clothes the latter wore, and whatever room he happened to be in, became permeated by an unusually fragrant odor which resembled violets, but was nothing more than the exhalation of his skin. This was doubtless due to his magnificent temperament which was so full of fire that it boiled his vital fluids and engendered such attractive scents, not unlike, perhaps, the action of the sun upon certain Arabic and Persian bushes. It is also recorded that Malherbe, Cujas, and Haller emitted a pleasant musk odor.

A question of obvious importance is that concerning sexual scents among eunuchs and castrates. According to Jäger this must be different from those of whole men. Both lack the spermatic smell; and the former also lacks the penis odor, i.e., that of the smegma. Among animals it is very easy to notice that the castrated animal has a different smell than the normal one, the ox differing from the bull and the gelding from the stallion. Jäger appears to have overlooked the interesting remark to be found in a rather out-of-the-way place, namely, Roubaud's *Traité de l'Impuissance*, which is to the effect that the skin of

castrates is soft, smooth, pale, and characterized by a sour odor. Roubaud expressly differentiates this smell from that of normal men. To what extent this is accurate we shall not discuss further. However, as far back as 1738 old Venette said that "the castrates, who have been left their rods, love women fervently and they are even more capable of loving than before their subtraction, owing to the fact that their minds have become somewhat weakened. When once their imagination has been inflamed and a sort of watery seed, found in their prostate or seminal ducts, drives their male organs, one cannot say how far they will go in their mad, inordinate and abnormal love ardor." Therefore, since the sexual impulse in castrates has not suffered or abated, it is rather questionable whether a special sexual odor can be attributed to them.

People have also spoken of a special odor characteristic of saints, and Gowes has treated this theme in great detail in the second volume of his study of *Christian Mysticism*. According to Hammond, this saintly odor is no mere phrase but an actual fact, the expression of a neurosis in which the skin exudes more or less pleasant scents at the moment of religious ecstasy. However, the presence of this aroma in exhumed corpses of saints is rather to be attributed to the fact that the fatty deposits of fat people become

transformed in the moist ground into adipocere, a substance with an amber-like smell.

A healthy constitution, proper diet, abstinence from alcohol, good digestion, good teeth, oral hygiene, care of the face, cleanliness of the whole body, and last, not least, light clothes—these are the causes of a pleasant odor di femina. A certain woman who captivated men by her freshness, despite the fact that she was not particularly handsome, was asked the explanation of her charm. Her reply was: "Une propreté recherchée et des vêtements légers!" (Utter cleanliness and light clothes.) Similarly, the abbess of Fontevrault, who had only pretty and attractive girls in her cloister, explained to the astounded Cadet-Devaux that she had long observed that bodily freshness, regularity of feature, youth and joyousness were the outcome of carefully tended and healthy bodies. This theory was adopted by Stratz as the basis of his researches into the beauty of the female body. Thus, cleanliness is the chief reason for a pleasant, unobtrusive parfum de la femme; or as Voltaire said, "la simple propreté composait sa parure." (Her ornaments consist of simple cleanliness.) In addition, light clothes are to be preferred because, under thick and heavy materials, the exhalations of the body lose their own character and easily become unpleasant. Quoth

Cadet-Devaux: "Venus in heavy clothes would no longer be Venus."

Not infrequently a bad odor is the cause of sexual antipathy between man and woman or husband and wife, an antipathy which is otherwise utterly groundless. Moll has recorded a case where olfactory aversion rendered a man completely impotent. Mantegazza believed that olfactory antipathies between man and woman could be so pronounced as to cause hatred, revenge, infidelity, and even murder. Of course, Galopin laid it on a bit too thick when he asserted that the bad odor of many women was an index to their character. This is nonsense, since the fœtor is due to corporeal reasons alone. The somatic basis of fetid odors is especially obvious in halitosis, which, as Mantegazza reminds us, has been adjudged a valid ground for divorce in many legal codes. "Not everyone knows why the daughter of Vincenzo Monti cannot live in the same room with her husband, the Count Perticari. Not everyone knows the reason for the icy coldness of that marriage bed. I learnt the reason from a contemporary. The poor Count has such a fetid breath that he contaminates the entire room in which he lives."

The forensic importance of olfactory antipathies has long been recognized. Thus, at the close of the seventeenth century the following question was pro-

posed, in all seriousness, to the medical faculty at Leipzig: an fætor alarum sufficiens causa divortii. The foul odor of the axillæ, here for the first time adduced as ground for divorce, was believed by Dio Chrysostom to have been imposed upon the Lemnian women by Venus in order that their husbands might become estranged from them. After the plagues of halitosis and axillary foctor, the next most objectionable body odor is that of sweating feet, called bromidrosis pedum, with which Louis xiv and Henry iv of France were afflicted. The repugnance felt toward the latter by his second wife, Queen Margaret, is entirely the fault of her spouse's pedal scent. It is quite certain that even today many marriages are ruined by olfactory antipathies. Galopin is quite right when he remarks that a woman may love a one-armed man, a hunchback, or a man who has had both legs or arms amputated; but she cannot for long love a man who smells bad, whether it be his mouth, nose, feet, or skin in general which are at fault. The converse is also true.

The unpleasant odor which arouses antipathy does not have to be localized, according to Jäger; it is enough if the odor is felt to be something unusual or queer, as appears from this communication of a friend of his. "I can relate thousands of events from earliest childhood till the present time, in social contacts, in

friendship, and in love, where the olfactory sense was the dominant factor in determining the sympathy or antipathy which I felt towards people. What is more, the feeling was frequently quite unconscious. Like every one else, I met people who were kind to me as well as those who did me harm. Sometimes I could foretell the conduct of these persons but on other occasions their conduct was quite sudden and unpredictable. I have an unusual sense for natural beauty and artists of the first rank who consorted with me have been known to value my judgment. But very frequently these esthetic valuations of mine, and the consciousness of a person's evil or good conduct towards me, have had nothing to do with my estimate of a person. In such cases it was just the atmosphere in which a body was enveloped or the scent which he disseminated, that determined my reaction to him, whether favorable or the reverse. But it must not be supposed that I smelled anything that was physically obvious, like scent or stench; this was not the case at all."

I doubt whether among normal people the olfactive sense plays such a great role. I must confess that in my own case, I am only affected by particularly unpleasant odors which have some local, corporeal foundation. I also believe that the majority of people in their dealings with other human beings depend

much more upon their eyes and ears than upon their noses. I regard as equally problematic the assertion of Jäger that sexual scents affect the body of their producers as nerve excitants, and engender the characteristic nervous excitement connected with the sex impulse. Since human clothing absorbs odors, it can itself, under certain circumstances, call forth sexual excitement. This is the simple explanation of that type of olfactive fetishism which is confined to such articles of human use. This whole subject will be considered in the following sections.

PATHOLOGY



Odoratus Sexualis

Pathology

Sexual Disturbances

In the first portion of this book, I have demonstrated the close relationship subsisting between the physiological functions of the nose and the sexual organs. The same close connection holds true in the domain of pathology. Not only does the nose suffer sympathetically when the sex organs become diseased, but the converse is true as well. Many observers have commented on the dependence of the urogenital

apparatus upon the affections of the nose; and John Mackenzie has even gone so far as to suggest that retarded sexual development may be conditioned by certain rhinological disturbances.

To be sure, the vast majority of cases of hyperosmia and anosmia are caused by changes within the nose itself, especially asymmetry of the nasal skeleton. In mild form this condition is fairly frequent and is caused either by deviation of the septum or by growths. Zwaardemaker has shown us very clearly how these asymmetries may cause a heightening or a dulling of the sense of smell. Then too, poisons may cause olfactory disturbances. Thus, cocaine poisoning will at first sharpen the sense of smell, but later will cause a high degree of anosmia.

Of much greater interest is the influence exercised upon the olfactory sense by sexual processes and disturbances. Take, for example, that remarkable case described by Heschl, of a man who lacked both olfactory bulbs and whose genital apparatus was atrophied as well. He was forty-five years of age, otherwise well built, but his testicles were as big as beans and lacked seminal canals; and his larynx was of female dimensions. Every trace of olfactory nerves was lacking, including the trigonia olfactoria and the furrow in the ventral aspect of the anterior lobe. Furthermore, the apertures were scanty and instead of nerves there

issued through the former only nerveless extensions of the dura; and the mucous membranes of the nose were just as poorly provided with nerves. The noted physician S. Gottschalk has reported an analogous case indicative of the close relationship subsisting between the olfactory and reproductive systems. This case concerned a woman who developed complete anosmia after her ovaries had been extirpated. In Gottschalk's opinion, the anosmia was a reflex neurosis induced by the artificially produced climacteric.

Such abnormal functioning of the olfactory nerves has frequently been observed in correlation with certain sexual disturbances. The nature of the olfactive malfunctionings is varied, comprising pure hyperosmia, pure anosmia, or abnormal olfactory hyperesthesia which makes the sufferer abnormally sensitive to odors which to the normal nostril are either pleasant or at the worst, indifferent. In addition, there may be parosmia, olfactory hallucinations of nonexistent odors or peculiar delusive misconstructions of odors actually smelled. For example, in a certain sexual neurasthenic, Dr. Peyer saw an alteration of the olfactory nerve in the form of an extraordinary sensitivity and irritability. This patient could never remain for any length of time in a room with a company of people because his organ of smell was so sensitive to the slightest vitiation of the atmosphere

through body odors, perfumes, etc., that he began to feel very sick after he had breathed this atmosphere for a very little while. The same investigator has also listed many other interesting cases illustrative of the etiological connection between nervous snuffing and salivation with diseases of the sexual apparatus.

It is not at all unusual to observe hyperosmia in the gravid female especially during the earlier months of her pregnancy.

Another illustration of the connection between the nose and the genitalia is the remarkable fact that the olfactory sense is considerably sharpened and refined by onanism. Finally, it should be noted that in numerous psychoses there is a noteworthy correlation between these two sets of organs. This is particularly observable, in both sexes, in cases of masturbatory psychoses; and in females alone, in psychoses due to diseases of the genitalia. Both of these psychoses are very frequently accompanied by olfactory hallucinations.

Olfactory Fetishism

It is the opinion of such outstanding investigators of sexual psychopathology as Krafft-Ebing and Moll, that today sexual smells play quite an unimportant role in the life of normal people. In the course of

advancing civilization they have been displaced by sense impressions of a more spiritual nature. Later on, we shall recur to this relation of olfactory impressions to other influences which possess a sexual import and effectiveness. In this connection it is interesting to observe that even such a fanatic of this subject as Gustave Jäger, who assigns to the sense of smell a predominant role in the animal economy and understands the whole world by and through smells alone, naively believes that most people who are in love are entirely unaware that a beloved object is fragrant. He explains this failure to notice the fact of smell in a beloved person in the following way: For a sense impression to come to full consciousness, it is necessary that the spiritual attention be concentrated upon it; now in the case of lovers or married folk, this direction of attention is usually absent since they have so much else to talk and think about that they have no room in their consciousness for this matter. Then, too, among persons of culture, there has up to now been completely lacking the feeling for the effectiveness of smells.

Thus Jäger is persuaded that, for the normal civilized person, the olfactory impressions based on the scents of the body are of very slight significance as compared to the other influences which assail his senses. Indeed, the normal man experiences a greater

or less repugnance for the majority of these smells, for they belong to the capryl family, i.e., the odors of decomposition, which are commonly held to be unpleasant. There are not many normal people who will find pleasurable the sharp odor of perspiration or of the genital discharges. How much justice there is in the observation of J. Hyrtl, the distinguished anatomist, which we now quote!

"All the excretory functions have something ugly and even disgusting about them. Aside from invalids and physicians, no one speaks of these things, despite their indispensability. The edifying impression aroused in us by the contemplation of a beautiful human form is very quickly lost when we bring it into relation with excretion. All illusions fall away at once. Think of Zeus Olympius not on the cloudy throne but on the stool, with a spitoon instead of a thunderbolt, or of Juno snotting through her fingers; think of Ganymede belching, or of Vulcan sweating, or of Adonis enveloped in clouds of flatus, or of Hercules busy in the urinal, or of Endymion asleep, cum profluvio seminis nocturno; think of Pallas Athene in labor, with a prolapsed abdomen, or of the virginal queen of the night in childbed, with bleeding lochia, or of Venus Anadyomene with genitals dripping menstrual blood, etc. It had been much

more æsthetic could the image of God have been without these functions."

In the normal civilized person, then, the sense of smell is much duller than among uncivilized savages, (or the diseased among the civilized); and the nose is thus all the more dulled to sexual odors. The employment of artificial perfumes is to a certain extent proof of our aversion towards natural smells. When, therefore, we come upon a heightening of the olfactory sense and an employment of it for sexual purposes, we may regard this as the sign of an incipient abnormality. We have already seen that neurasthenics almost always show a hyperosmia and a heightened reaction to olfactory impressions. Without bringing in the question of morbid heredity we can still, in certain cases, speak of a predominance of the olfactory sense above the others. Binet, the brilliant French psychologist who has become best known for his work on intelligence testing, has designated the class of individuals displaying such an exaggeration of olfaction as the type olfactif, and regards this condition as a degree of olfactory fetishism. Such a person will set great store by the odors of objects in all the relationships of his life; thus, if he is a physician, he will be especially influenced in his judgments by the odors emitted in different diseases. The olfactif will also assign a special odor

to every woman, and be she ever so pretty, she will find no favor in his eyes if she has the odor which, to him, is objectionable; and conversely, he will permit himself to be seduced by even a very ugly woman, provided she smells right. This, according to Binet, is the logical consequence of the dominance of the olfactory sense above the others. Hence, when a rich, distinguished, and intelligent man marries a rather old, ugly, and stupid woman who lacks all charm, it is perhaps owing to the fact that there exists between them a perfect communion of smell. This is a typical case of *petit fetichisme*. Binet is decidedly of the opinion that such marriages are usually the consequence of olfactory impressions.

Now this olfactive type is the preliminary stage to what is really pathological olfactory fetishism. When the olfactive man gets to the point where the only thing he seeks in a woman is her smell, then we have arrived at the genuine stage of fetishism. It matters but little if the woman be old, decayed, stupid, or common. As long as she emits the desired odor, she is perfectly satifactory. In these cases, as Binet says, the *detail cutane* has become paramount. All the sexual wishes are concentrated about it and all consideration of age, fortune, desirability and social propriety are sacrificed to the pleasure of odor. Furthermore, an irresistible urge compels the olfac-

tory fetishist to pursue every woman in whom he has detected *his* odor. He can no more resist this impulse than the toper can resist the sight of a glass of wine. For the olfactory fetishist, the smell of a woman is not merely a sexual attraction, but the highest sexual pleasure.

This grand fetichisme of olfaction is met with only in morbid degenerates, young voluptuaries who have exhausted all pleasures and need a preparatory means for the winning of relative temporary potency (Krafft-Ebing), or in such abnormals who find sexual satisfaction in smells alone. This condition is quite common in senility, but it has also been observed in young persons.

Baudelaire was an olfactory fetishist and he has left us a characteristic statement concerning the origin of this abnormality as a consequence of sexual degeneration. In his small prose poems, he has a connoisseur discourse on the stages of love. "The first stage of love was the time when in the absence of dryads men embraced oak trunks. In the second stage they began to choose, and a conscious effort was made to find the beautiful. But this selection is already a sort of decadence. As far as I am concerned, I can boast that for a long time already I have achieved the climacteric third stage where beauty alone is no

longer sufficient unless it is rendered piquant by odor or ornament."

Here is very clearly expressed the notion that the development of the olfactory sense to a dominant role in love is a consequence of satiety, that it is something artificial, morbid, and unrelated to normal love. The olfactory sense only achieves such importance among degenerates, not only of high standing, but also among low ones, such as idiots.

In line with this is the frequent appearance of olfactory fetishism in old age, which produces a large contingent of individuals of the sort to be discussed below. Galopin relates a typical incident of such senile fetishism in a coarse, sensual octogenarian. He had a young servant girl at his disposal but all that he did to her was to smell her; that sufficed him. However, there was one condition he imposed upon her — she must wash herself no more than once a week. It happened that she became enamored of a servant boy and to please the latter whose taste was not as primitive as his master's, she washed out of turn. The doddering voluptuary noted at once that her bouquet was less pungent than usual and dismissed her forthwith.

While the real reason of olfactory fetishism is a gradually advancing sexual degeneration, it cannot be denied that custom and accidental external in-

fluences play a large part in the actual rise of this aberration. Aside from heredity, viz., the inheritance of an uncommonly irritable olfactory apparatus, it is possible that the influence of certain styles has been responsible for the deflection of this sense in a sexual direction. A perverse direction of it can be aroused or at least abetted not only by the copious use of artificial perfumes so common in the sophisticated and distinguished world, but also by the predilection cultivated by these folk for the haut-goût of certain articles of food possessing unpleasant odors, such as rotten game and snipes' entrails. "C'est la contume qui pétrit nos gouts, la contume, c'est-à-dire les associations d'idiées qui se repétent fréquemment," says Binet. That an accidental external influence can influence a man in a powerful and lasting fashion, was already demonstrated by Descartes who chose smell as an illustration. In his psychological treatise he investigates how for certain people the passions can take on such peculiar forms; and he explains the latter by reducing them to constantly reappearing association of ideas. "It is quite possible," he goes on to point out, "that the peculiar aversion felt by many against the odor of roses or cats or what-not is due to the fact that at some earlier point in their lives, they were injured by that or a similar object. Thus, when the child was still in its cradle, it may have gotten a headache

from the odor of roses. The memory of that occasion will be lost, but, there will remain forever after, an aversion to roses."

Olfactory fetishism is found almost exclusively among men. This results from the fact that the olfactive sense is less developed in women. Yet, by their employment of artificial perfumes they contribute not a little to the creation of olfactory fetishism among men.

A classical description of such a male fetishist who was avid for female scents and revelled in them has been left us by the Parisian Chief of Police, G. Macé. "Let us follow that fellow with the polka-dotted tie who slouches along so carelessly. He is alone. What is he looking for in this large Magasin de Nouveautés where everything reeks of women? He is ecstatically happy in this undulating movement, in this multitudinous exhalation of odors arising from the large congregation of females. It is this which inflames his senses; he is mad, deranged by his passion which becomes wildly intoxicated by the natural and artificial odors of the female sex. With marked pleasure he permits himself to be jostled by the crowd which presses him, surrounds him, and pushes him forward three paces only then to hurl him back five paces. These fellows are as numerous as pickpockets and their gestures are similar, too. Even detectives who

are experienced at this game sometimes fail to distinguish cutpurses from plain fetishists. Only after they have spent some time following and observing the latter, does it become plain to them that they are simply wasting their time. Their error is the easier since both groups choose the same places for their activity."

This is the picture of the olfactory fetishist who finds satisfaction in merely inhaling the atmosphere redolent of the human female; and to a certain extent it is the type of the generalized olfactory fetishism out of which develop the special classes of this aberration which we are now going to consider in detail.

Handkerchief and Clothing Fetishists

There are men who become sexually excited by the possession of single pieces of the female wardrobe, such as chemises, lace trimmings, aprons, bathrobes, panties, pajamas, stockings, shoes, and handkerchiefs. Indeed, these things exercise a greater sexual influence upon such men than the woman herself. Clothing fetishism is, however, not always connected with smell; this is the opinion of Eulenberg. Moll, too, calls our attention to the fact that handkerchief fetishism may be employed in various ways to give sexual satisfaction. "These fellows feel constrained to steal handkerchiefs from women and to make a

collection of such articles. They make no further use of them; the mere possession and sight of them is sufficient to bring great joy. Others bite such articles to pieces in a fury of passion and in this way attain sexual satisfaction. Dietz mentions a man who used to get ejaculations only when he tore to pieces feminine underwear." Thus it appears that in these cases it is not always olfactory impressions that play the leading role. All the other senses, as well as purely mental influences, may be factors in arousing sexual excitement; though sometimes one sense is employed for whipping the organism into ecstasy, and sometimes, another.

Quite naturally, in many cases of handkerchief and clothing fetishism, it is olfactory impressions that are decisive. Since these articles are suffused with the scents of their female owners, they serve the fetishist as a sexual stimulant and, in fact, act as substitutes for the normal sex pleasure. For him, these articles contain the true odor di femina. That these perceptions of the fetishist are not altogether delusions, is established by the fact that such articles do have a sexual effect even when there is no question of fetishism. Professor Most of Rostock has written: "I have learnt from a passionate young peasant of the procedure he employed to arouse many a modest girl and to make her an easy and willing victim of his

purposes. During the dance, he would hold his hand-kerchief for a while in his armpit, and later he would wipe the perspiring face of his partner with this strongly reeking handkerchief." Then there is the very well-known story told of the French monarch, Henry III. At the wedding ceremony of the King of Navarre and Margaret of Valois, Henry accidentally wiped his face with the perspired shirt of Maria of Cleves. Immediately he was overcome by a fierce desire for the latter, despite the fact that she was already the bride of the Prince of Conde.

Thus it is quite clear that among clothing and handkerchief thieves, there are many olfactory fetishists; and medical literature knows of such unfortunates who have amassed incredible numbers of handkerchiefs, which afford them their only pleasure. The fetishists bring these articles close to their lips with inordinate passion, suck in the aroma and sway as though intoxicated. An extremely interesting case of handkerchief fetishism closely allied to olfactory perceptions was that of the Viennese baker, Caspar Eiles, reported in Krafft-Ebing and in Jäger's Monatsblatt. This man had masturbated excessively in his youth and began to exhibit the not unusual sequelæ of fatigue, enervation, adynamia, tremors, lumbar pain, and aversion to work. Sexual intercourse with women was terra incognita to him, but once

while in a dense crowd, he became sexually excited by a young girl and pressed up against her. He experienced violent excitement, palpitation, erection, and impetus cœundi. However, all that he did was to steal her handkerchief. From that time on, that became his usual method of sex satisfaction, faute de mieux, and in his home there were found many hundreds of handkerchiefs. When he was arrested, he explained that the attainment of the handkerchief of a sympathetic woman who attracted him, meant as much to him as though he had possessed her sexually; and after a trial he was acquitted because of the extenuating circumstances of weak heredity and the disintegrative effect of onanism. Nature had given him a perverse sexual impulse in which there was exemplified the peculiar and interesting connection between sex and smell.

As in these cases of handkerchief fetishism, many other instances of the same aberration involving articles of clothing are also related to olfactory perceptions. The *intimate character* of women's underthings which Krafft-Ebing regards as peculiarly seductive, consists for the most part of the odors emanating from these articles of apparel. It is these odors that are particularly effective in *panty fetishism*, a condition to which Gley first called attention, where

men became violently inflamed by the sight and proximity of the dessous of a woman.

Of course the transition from normal to abnormal in these matters is very labile. Here is an instance of a not abnormal usage current in medieval times. In his World of Clothes and Styles, Jacob Falke relates: "The medieval world discovered numerous sensual refinements in their ideal love pleasure. For example, people exchanged shirts that had been worn; the knights put on the shirts of the women before a combat and exposed them to damage during the fray. In this mutilated condition the shirts were returned to their female owners who wore them anew." Jäger remarks, apropos of this passage which he adduces, that this pleasure was not an ideal but a very real one; for the shirts were suffused with the odors of the knightly wearers, and the scent of such a shirt after a strenuous combat was certainly a very appreciable quantity.

The Togales are reputed to have a particularly keen scent for the odors of clothes, and even in a large company are able to recognize people by the odor of their handkerchiefs. There are servants taken from their ranks who can immediately discover the property of their masters in the midst of a dozen strange and freshly laundered shirts. Finally, let us mention the fact that lovers frequently exchange

articles of clothing in order to have the pleasure of smelling them; and when the odor of the beloved has been displaced by one's own, a new exchange takes place.

Hair and Braid Fetishism

Among hair and braid-fetishists, too, olfactory sensations play a more important part than any other sort of sense impressions. This point requires no particular emphasis; for even in normal people the hair odor of the beloved exercises a special attraction. Krafft-Ebing justly emphasizes the fact that the transition from mere admiration of the female hair to pathological fetishism is a very fluid one. The practise of lovers to exchange locks or tufts of hair which are frequently smelt in order to conjure up the image of the beloved is, at any rate, quite a normal phenomenon of sexual osphresiology.

Those cases only become pathologic in which the hair becomes to be regarded as a fetish apart from any connection with the body. Very close to this hirsute fetishism is that tale of Casanova which describes what he did to a lock of hair he had stolen from a woman of Corfu beloved by him. After the affair had burnt itself out, he got a whole tuft of her hair from her which he had woven into various pieces of embroidery, neckband, etc., and the re-

mainder he had mixed into sugar coated pastilles of various kinds — amber, sugar, vanilla, melon juice, etc.

In his interesting work, Un joli monde, Macé has depicted the different kinds of pilatory fetishists and their procedures in approaching women, touching their hair, sniffing and inhaling the aroma of the latter, and finally snipping off the braids. These barbers are not uncommon phenomena in great cities; but it isn't always clear whether olfactory sensations constitute the motive for their abnormal deeds. Moll tells us of an artist who used to get sexually excited by one point of the human body, viz., the nape of the neck where the thick hair growth ceased. This place has also been described by certain French writers, e.g., Guy de Maupassant, as being particularly inviting for kissing. We are reminded of Jäger's assertion that this region of the body is characterized by a particularly strong scent. It must be again emphasized that in these cases of pilatory fetishism, not only olfactive impressions are concerned, but also visual and auditory ones (rustling of the hair). This is a further proof that in man the olfactory sensations have ceased to play the dominant role in sexual matters common among animals.

Foot and Shoe Fetishism

Cases of these abnormal phenomena are quite common and here olfactory impressions are decisive, but the connection with masochism which Krafft-Ebing emphasizes so much, is secondary. The following statement of Moll seems to me to be a correct explanation of this type of fetishism. "With regard to the close relationship in which the olfactory sense and sex impulse stand under pathological conditions, it must be constantly borne in mind that perhaps shoe and foot fetishism owe their origin, or at least, development, to the strong odor characteristic of these objects." Since I shall later show that a masochistic or sadistic element is contained wherever olfactory impressions become a source of sexual excitement, this position can easily be combined with that of Krafft-Ebing. In one of his studies, the latter has given a classic demonstration of how nasal impressions can predominate as sexual fetishes, with the former closely accompanied by masochistic fantasies. This case incontrovertibly demonstrates that in cases of perversions of the sexual impulse, olfactory impressions predominate. In this case it is quite likely that these olfactory irritations and hallucinations were primary, and only later were masochistic notions added. This becomes especially clear in those instances where the individual con-

cerned is avid for the highest possible olfactory sensation, for which reason he chooses the dirtiest kind of individuals. As illustrations of the latter specialty (with or without masochism), we may mention the not uncommon toe smellers. Krafft-Ebing tells of a well-to-do major who had run the gamut of lasciviousness. In the last years of his life, he was wont, when night fell, to lurk in the shadow of factories in the slum districts and wait for the female operatives to be released. As they emerged, he would engage the filthiest looking one and induce her to follow him. When they arrived at a room, he would undress her and do nothing to her beyond sucking her dirty toes. In this way his libido would be gratified.

Closely related to pedal fetishism is shoe fetishism, which does not seldom owe its origin to olfactory sensations. Rudolf Kleinpaul was the first to call attention to the peculiar symbolic relations between the shoe and the female genital, and in his treatise, Speech without Words, he has given us numerous illustrations of this relationship. Moll, also has reminded us of a poem, The Shoe, in which the canal of a girl is compared to a shoe. Yet neither of these writers has explained why the shoe should be regarded as a symbol for the female genital. Is it not possible that here primitive olfactory impressions

have played a role which has resulted in an involuntary association of ideas between the occasionally very strong odor of leather and the fætor cunni? At any rate, even today shoe fetishism is quite often called forth by olfactory impressions. Thus a patient of Krafft-Ebing has revealed that he was very fond of the patent leather of women's shoes without being an out-and-out fetishist. Again, Moll has left us a remarkable account of such a case: "Between his thirteenth and sixteenth year, X. began to show peculiar enthusiasm for the female foot. He delighted to watch girls as they scrubbed the floors, and this sight would educe erections; and after these experiences, he would retire to a quiet corner to masturbate. He took shoes and stockings away from girls and smelt them passionately until ejaculation ensued. He licked the inner sole off, wetted a stocking and sucked the water out, pulled the girls' shoes and stockings on his own feet, and ejaculated into these articles of clothing. Occasionally when he lacked female instruments he would perform these manipulations with his own shoes and stockings. Friction against these feminine articles brought him the maximum degree of pleasure. He would strive to prolong this excitation as long as possible, and when he felt the ejaculation approaching would intermit his efforts and then begin anew after the lapse of a

few minutes. At night he would slink into the girls' quarters on tip-toe, steal their shoes and stockings, and after having masturbated with the latter, would restore them. Whenever, of an afternoon, the girls would be away from home mangling the wash, or whenever else the house would be deserted — how ardently X. yearned for such moments — he would throw off his shoes and stockings and crawl into the bed of one of the girls in order to masturbate there in the manner described above."

One of the most famous foot and shoe fetishists of all time was the celebrated French author, Rétif de la Bretonne, of whose bizarre personality Eugen Dühren (Iwan Bloch) has given a detailed account, first in a work on the Marquis de Sade, and later in a volume dedicated especially to Bretonne. That this perversity is partly connected with olfactory sensations is borne out by a passage in the latter's notorious novel, L'Antijustine, ou les Délices de l'Amour, which according to certain writers is largely autobiographical. In the forty-sixth chapter is depicted a scene where a wench is handing her shoes over to him: "Le surlendemain quand je vis Conquette, je la trouvais coiffée en battant-l'œil, ce qui, avec ses yeux a longs cils, la rendait charmante; elle avait des souliers de coutil de soie neufs qu'elle essayait. Je me jetai à genoux en lui disant: 'Conquette, ton pied est

le mieux fait possible, mais il est un peu grand, et ce soulier fort pointu, ces talons minces trop élevés, le font paraître plus petit de moitié. Qu'il est divin! et je b—, comme tu le vois. . . . Mon cher papa, comme je sais à quel point vous m'adorez, j'ai voulu consacrer cette chaussure avant de vous la prêter pour orner votre cheminée. Voici les blancs d'hier, avec lesquels j'ai tant été . . . ce que vous savez. Voyez la jolie forme que leur a donnée mon pied; ils sont plus voluptueux qu'avant d'avoir été mis.' — Je flairai avidement le dedans de ces divins souliers. 'Ah! je b—! m'ecriai-je, tes sacres b— de souliers sont embaumés!' "

Here Rétif is saying very clearly that it was particularly the odor of the shoes which threw him into a state of sexual excitement.

Axillary Fetishism

The pungent odor frequently emitted by the human axillæ is sometimes the cause of a specialized axillary fetishism. Charles Féré has observed that a certain sportsman, who enjoyed robust health and was free from any hereditary neuropathic taint, had a curious habit of vexing women both old and young in a very queer way. He would only approach women who were working in the fields with uprolled sleeves and in such a fashion that he could slip his hand into

their armpits. When he had succeeded in the maneuver, he would slink off keeping his moist hand near his nose for a long while, his countenance expressive of the highest happiness.

Many odoriferous substances are able to excite the gustatory sense at the same time; the individual experiencing simultaneously sensations of taste and smell is, of course, hardly able to separate them. Zwaardemaker asserts plausibly enough that between these two classes of sensations the same association subsists as between sound and color. As we know, there are some people who experience correlative auditory and visual sensations, which gives rise to what is known as audition colorée. This association also plays a part in sexual osphresiology, above all in the pathological division of the latter. However, that taste alone can have aphrodisiac consequences is extremely unlikely, although Roubaud, in his treatise on impotence, has reported that a friend of his would, upon eating whipped cream, immediately be beset by voluptuous thoughts. Even those remarkable forms of love-charms, in which food is mixed with genital excretions, sweat and other corporal excrements and then handed over to him who is to be bewitched, are more readily explained as a calculated olfactory effect. Günther is right in includ-

ing in his chapter on erotic odors, the popular belief that of the secretions of the human body, sweat, aural wax, and menstrual blood have an irresistible effect on the man, and semen virile upon the woman.

Thus in Mecklenburg the belief is current that the beloved must follow the wish of her lover when he gives her to eat an apple impregnated with his armpit odor. In Pfeiffer's Germania (v. 1, p. 80), we read that on a certain day the women roll naked in a heap of corn and later prepare from this corn a succulent love-charm. In the ordinances governing church confessions issued by Bishop Burchard of Worms, there are two references which clearly establish that the use of menstrual blood and other filth as means of erotic wizardry was quite common in Germany at that time. The pious prelate declares there: "Have you done that which certain women are accustomed to do? They save their menstrual blood, mix it into the food and drink which they give their husbands, in order that their husbands may love them more ardently. If you have done that you should do penance for five years on the legal holidays." And again somewhat later: "Have you done that which certain women are wont to do? They hurl themselves upon their face and with buttocks bared, put bread into their notch and grind it there. When the milling is done they drag out these

odorous crumbs and feed them to their husbands in order to fan their love into hotter passion."

Lest it be supposed that such manipulations were confined to the eighteenth century, we shall quote a scene from an erotic book written in 1832, Les Amours Secrets de M. Mayeux, which obviously depicts real circumstances and experiences. "I heard the voice of a man in the room, and so quitting the work I was doing, I peeped in through the keyhole to ascertain what was going on. I saw Sophie in a chemise seated on the lap of the grocer, holding with her one hand his membrum virile and with the other, the handle of a frying pan. . . . His hands too were playing a very good game. . . . When the omelette was finished, she let it cool a bit and then she sat on his lap again but let herself fall forward lightly until her face rested on the ground; when that was done, she raised her nates as far as possible. Thereupon the épicier raised her chemise, applied the omelette to her nates and set himself to eat it, taking care with each bite to lambere anum et cunnum." Eulenberg also, in his study of sexual pathology, has left us an account of a man who experienced sexual pleasure in eating strawberries which had previously been introduced into the female genitalia. Finally, there is the popular belief catalogued by Günther that nutmegs and ginger nuts which have passed through the di-

gestive canal are irresistible aphrodisiacs. These facts all point to the peculiar association between odor and taste; and they facilitate the comprehension of those extraordinary categories of sexual fetishists whom we now turn to consider.

Cunnilingi and Fellatores

It is undeniable that in this category of sexual fetishism, where the person concerned introduces his tongue into the vulva and licks it, or where the fellator sucks the virile member, olfactory impressions play the most decisive part. Forberg and Rosenbaum have given detailed accounts of the history of these perversities, and have gone minutely into the analyses of these themes.

In this connection, the remarks of the very experienced Moll concerning this type of olfactive fetishism are of considerable interest. "The cunnilingus activus, which in certain large cities, at least, is preferred by men of society, seems in numerous cases to be attributable to olfactory stimuli proceeding from the cunnus. Yet other factors also play a part as, for example, the wish libidinem feminæ excitare, id quod sæpe coitu non fieri potest, ac libidine feminæ se ipsum excitare. From the viewpoint of the history of culture it is noteworthy how widespread cunnilingus was in the decadent Roman Empire, if one can

judge from the allusions to it in Roman writers."

Up to this day, the chief element of many erotic books is the gamabucher and it is not without significance that it is precisely among the homosexuals that one finds an exaggerated reverence for the sexual parts. Tardif has indeed expressed the most extraordinary opinion that those people who are attracted by the odor genitalium are only following a normal urge, whereas the sexual effects of the other body odors are really to be regarded as perversions. Naturally, this is absolutely false. The normal man is, at the most, attracted by a generalized body scent when it is not out and out disagreeable, but is altogether repelled by genital odors. Such an inverted condition as is manifested in cunniling is an atavism to manipulations of a sort frequently observed among animals. Healthy and normal people experience the strongest repugnance to all odors localized in those areas.

That the cunnilingal act is only an individual variant of sexual fetishism is proved by those not infrequent cases where the act is carried out post mictionem puellæ. We find a description of such a scene in Rétif de la Bretonne. In this perversity what is sought is the keenest possible olfactory impression. At this point, we should also mention the nasty class of renifleurs, first described by Tardieu. Similar to

these creatures are the épongeurs, individuals who sneak into public urinals and wipe up the urine with sponges, then hold these dripping sponges to their noses in ecstatic joy. Finally, the actual bibere urinam (drinking of urine) occurs frequently in de Sade's Iustine et Juliette and in the Memoirs of a Singer.

Copromaniacs (Stercoraires) and the Philotani

Krafft-Ebing has applied the telling name of *Podex-fetishism* to these monstrous cases of olfactory fetishism where a sexual influence is excited upon individuals by olfactory impressions issuing from the nates and the anus.

There have long been people who have taken particular delight in wallowing in rebus scatologicis, as a glance into the curious Bibliotheca Scatologica will demonstrate. The greatest number of scatological works has appeared in France, so that scatology can really be regarded as a specialty of the French. Among the books found in the library of St. Victor by Pantagruel, according to Rabelais, was the Ars honeste farzandi in societate per M. Ortvinum; and in the eighteenth century (1776) there appeared L'Art de Péter, Essai Theorie-physique et Methodique a l'usage des personnages graves et austères, des

Dames mélancholiques, et de tous qui sont esclaves du prejugé.

However, these scatologists are relatively harmless fellows compared to the podex-fetishists par excellence, the *stercoraires*, as Leo Taxel has dubbed them in his detailed description of them contained in The Corruption of the Close of the Century. The latter class can be further divided into copromaniacs, philotani, and the toilet fetishists. These podex-fetishists can only find sexual satisfaction in acts characterized by intensely unpleasant, even nasty olfactory sensations such as smelling of flatulent odors, licking the anus, and even, horribile dictu, the ingestion of fæces. It was reported of Caligula, already, that "et quidem stercus uxoris digustavit"; and Martial, in one of his epigrams (Lib. iii, Epigram 77), refers to it: "Suspicor ut quid enim, Bactice, saprofagis." In one chapter of his medical work, Galen lashed this vice, so common in antiquity; and according to the testimony of various authors it has become quite widespread in modern times, though it is by no means confined to noble and well-born worldings. The Marquis de Sade has described many such scenes in his Justine; and in the notorious Memoirs of a Chanteuse there is recorded an episode where an old voluptuary in a Budapest brothel receives into his mouth the excrement of girls. Krafft-Ebing lists a

number of such cases. But perhaps the most revolting of all is a case described by Neri which is a stark example of how the olfactory sense can control the whole sexual life. It concerned a young laborer who experienced the acme of joy when prostitutes would defecate and urinate into his mouth. He would pour wine down the body of a prostitute and as it flowed down from the upper half of her body he would suck it at the point of her vulva. He also delighted to suck catamenial blood out of the vagina. This is just a partial account of this poor fellow's vagaries.

A special class is formed by those individuals whom Taxel calls stercoraires platoniques. These are contented merely with watching from afar the act of defecation in others. In the brothels of Paris this is arranged by the aid of the so-called tabouret de verre whose floor is of glass and is constructed so high that a man can stretch out underneath it and observe the woman squatting on the seat and doing her stint. Similar monstrosities are depicted in de Sade's Justine where Saint Florent and Rodin observe with wild amusement, Justine, while she is defecating.

To this major category belong also those toiletfetishists characterized by the queer desire to hang around privies, toilets, etc. Moll has written up a case of this sort. X, of a well-to-do family, was accused of frequenting ladies' toilets. His sexual im-

pulse was fairly normal. Women aroused him; a naked woman would cause an erection and normal coitus brought him satisfaction. He scarcely ever masturbates except when he contemplates the female genitalia uncovered in the women's privy. From the age of fourteen, he had begun to frequent these places with an eye to seeing their naked sex organs. To him the odor of the toilet is pleasant, or at any rate, not repugnant. Of course, it is not the odor of these places alone which draws him thither, but the opportunity of seeing the genitals or buttocks of the women using the place. No matter how much he has to contort himself to get a view, he enjoys it; and when it is too dark actually to see, the atmosphere of the place conveys enough of an impression to cause an erection, which then finds completion in masturbation. This sort of satisfaction brings him greater enjoyment than normal coitus. The odor stercoralis always calls forth in him a sexual excitation. Other acts usually loathsome to the normal man are not at all so to him, e.g., to lick the anus of women. But the woman upon whom he carries out this disgusting manipulation must be young and pretty; otherwise he will be unable to carry out his deeds except in the dark. These perverse impulses were revealed at a very early age. Thus at eight or nine, he loved to have a female cousin of his sit on his face;

and even at the age of five or six he remembers having crawled under the dress of a servant girl with his face pressed close to her nates.

In the introduction, I emphasized the point that no sense impression calls forth so strong and prompt emotional reactions as olfactory sensations do. If the quality of the odor is especially unpleasant, then the effect is especially strong and energetic. This is why for many masochists, the odors proceeding from their mistresses have an inflammatory effect. Their whole reaction to these odors can be regarded as a peculiar sort of humiliation to which they submit themselves. In this form, olfactory impressions appear as outright masochistic or sadistic phenomena as Krafft-Ebing has repeatedly remarked. It would appear, however, that another explanation is possible. It is well known that man does not find his own gas as unpleasant as others do. Hence, when the philotanus identifies himself with his beloved, her flatus will appear to him no more unpleasant than his own.

Krafft-Ebing calls this avidity for disgusting sensations, gustatory as well as olfactory, in the realm of masochism — coprolognia, which we can naturally divide into an active and a passive sort. Thus Sacher-Masoch tells of a Danish lady who gave no man her favors before he had submitted to being treated as her slave for some time. She forced her would-be lovers

to lick her feet and rump. She had the lovers put into chains until they would consent to lick her feet and thighs. Then the *slave* would be chained to a post of her tester bed and compelled to be the spectator of a scene of sexual intercourse, in which she gave herself to another. After this fortunate recipient of her highest favors had left his moist and recumbent lady, the latter ordered her *slave* whipped by her serving maids until he would consent to lick her anus. This is a case of active coprolognia where the mistress becomes intoxicated in sadistic fashion by the thought and circumstance that another is practising coprolognic acts upon her. Instances of passive coprolognia are numerous, and quite a number have been listed by Krafft-Ebing.

The writings of the Marquis de Sade, *Justine* and *Juliette*, abound in such sadistic and masochistic emphases upon, and valuation of, olfactory sensations; for in the orgies of the *Society of the Friends of Crime*, coprolognic acts played a tremendous role. In this book there are chronicled hideous accounts of a bishop who commanded a woman to micturate into his nostrils; of a woman who defecated upon the teats of another; of a man who for two whole hours kept on licking the mouth, eyes, ears, nostrils, toes, and anus of a girl; of an old woman who devoured the excrement of her daughter; etc.

There is a custom fairly prevalent in England which shows us even more clearly how odors are employed for the creation and augmentation of sadistic or masochistic ideas. We refer to the use of flowers during flagellation. Thus, in a story dealing with two active girl flagellants, we read the following: "She took Miss N. to the garden with her and plucked for her such a huge bouquet that the latter was almost ashamed to carry it. Yet when she saw that her friend bore one of similar size, she pinned it to her bosom. 'I see, my love,' the first girl went on to say, 'that you do not yet know the secret influence of flowers; know then, dear child, that their sweet fragrance exercises an unusual effect upon many men and women; but in order to insure that this effect will be exercised upon men, they must adorn their bosom even as you have done now.' According to the correct fashion the bouquet must be very large and worn on the left side of the breast."

Very interesting is the question of sexual osphresiology among homosexuals. Let it be stated emphatically at the outset that olfactory sensations appear to play a significant role in homosexuality. Jäger, who has identified a person's soul with his smell, goes on quite naturally to derive homosexuality from odors

alone. His theory of homosexual idiosyncrasy is something like this:

- of soul substances. In homosexuals these are of such a kind that they stand in utter harmony with the spiritual aroma of the women, in such a fashion that they become fully impotent towards women. To homosexuals, the whole woman smells bad, but particularly her breasts and lap. Hence it is impossible for them to employ woman for the satisfaction of their sexual impulse. This idiosyncratic antipathy is not equally strong among all individuals so that some of them can still manage to live with a woman, but they must frequently make such violent efforts to overcome their disgust that their health suffers as a consequence.
- 2. The soul substances of homosexuals stand in harmony with persons of the same sex, but they differ with age. Since the sexual impulse is the strongest, and cannot altogether be extinguished, no other course remains open to the homosexual for whom solitary onanism is practically impossible, than to gratify his sexual appetites among those of his own sex.

Everyone knows that it is not only smell which matters in sexual attractions and will therefore recognize the exaggeration and errors inherent in this

theory of Jäger. Yet it cannot be denied that olfactory sensations do influence homosexuality very strongly. John Addington Symonds has made noteworthy studies concerning the role of erotic odors among male homosexuals. That men of lower orders like lackeys, coachmen, drivers, grooms, jockeys, constables, soldiers, peasants, postilions, masons and carpenters are especially desired by distinguished and educated urnings, he attributes to the fact that these fellows possess what Straton has called the "naturally good odor of flesh."

"This odor," as an anonymous enthusiast in this realm has said, "is the peculiar possession of young men who live in the open and have natural occupations, and is never found in women. The perspiration of such youths is fresh, quite unlike that of young girls in a dance hall: it is more refined, more ethereal, more penetrating, finer and more difficult to differentiate. At harvest time or in winter when they bring the hay down from the barns, the young peasants bear the odor of the field with them, the fields which God has blessed. Their bodies and clothes emit an indefinable scent combining cleanliness and sexuality. Every gland of their young brawny bodies appears to have stored up the odor of grass and herbs which is slowly diffused from their cool, fresh skin. This cannot be noted indoors, but if one takes the

hands of these boys and buries one's face in them, or lies in bed with them under one coverlet, one can clearly detect this aroma. No other olfactory sensation is more permeated by spiritualized poetry, the poetry of youth, of morning hours upon the hills, of joyfully completed work and God-given harvest produced by human toil. They owe this odor to the freedom and simplicity of their life in the open, and the health resulting from such a life of robust strength developed by their labors, and an indefinable something recalling nature itself. . . . I want to mention further that a man of good family and education will feel himself irresistibly drawn to powerful mowers and harvest workers. A distinguished man has informed me that he always becomes sexually excited by stable odors, for they remind him of a groom whom he had loved passionately."

According to Symonds, soldiers hold such a great attraction for urnings because they exude a "powerful masculine effluvium" as a result of the concentration of swarms of males in the barracks. The same holds true of sailors, which fact Pierre Loti has described in his novels. When Aristophanes described the perfect Athenian youth, he emphasized the natural aroma issuing from the latter; and we recall here two short poems from a homosexual poet represented in the Greek anthology which celebrate the superiority

of the male odors over the female. Here is one of them. "After the boxing match in which Euphonon, Son of Euphades, emerged the victor, I wrapped him in handsome silks and wreathed his brow with soft and honey-sweet flowers. Then did I kiss him thrice where he was full of blood, his mouth, eyes, and all his wounds; more fragrant than pure incense, believe me, the wild fragrance of blood which flowed from him." Symonds relates a typical case of this sort which Krafft-Ebing quotes; and Moll has also reported similar cases.

Among feminine homosexuals, too, there exist peculiar sympathies derived from olfactory impulses. Thus, Krafft-Ebing has related most interesting details of this sort concerning the Countess Sarolta v, a tribade with masculine charms. The latter would in the absence of her Marie, lie down on the sofa, which was the usual scene of their embraces, and sniff it all over until she would seek out those places where Marie's head was wont to lie. Having discovered these spots she would inhale with great erotic delight the hair odor of her absent partner. Certainly, sexual odors are particularly important for tribades. An effeminate man who has studied this field has concluded that women's sensitivity to odors proceeding from those of her own sex is very keen despite the

fact that, on the whole, women's olfactory processes are much duller than men's.

Quite in agreement with these observations is the fact that for homosexuals the odor of the opposite sex is thoroughly repugnant. Thus one urning writes in his autobiography: "From the erotic point of view women are not only indifferent to me but downright repulsive. To my way of thinking it is incomprehensible and even ridiculous to assert that the female body is the prototype of human beauty; for I find the breasts disgusting, and the female hip construction ugly. Hence dancing is an abomination to me; the fierce odor alone, which the so-called fair sex disseminates after it has become heated from the exertions of the dance, is sufficient to drive me far away." Another urning has commented that the specific female odor contributed to increase his horror of woman; and still of a third, it has been recorded that the mere proximity of women would arouse nausea and vomiting in him.

In view of all these facts it will not appear remarkable that all types of olfactory fetishism should be encountered among homosexuals also. Moll has asserted that handkerchief fetishism exists among men who feel drawn to other men. Just as the fetishists who are attracted by the feminine handkerchief find

no satisfaction in intercourse with women, so also do those fetishists who are daft about men's handker-chiefs find no pleasure in intercourse with men. These fetishists are not attracted by pederasty nor yet by mutual masturbation; indeed, the male genitalia are as revolting to them as the female parts to the heterosexual fetishist. Moll has related a very typical case to establish his contention.

More frequent than this type is foot and shoe fetishism. One may often observe urnings licking and kissing each other's feet, and some are known to prefer particularly sweaty feet. Moll has written of an urning who got sexual satisfaction from riding in a boat and watching the bare feet of the skipper. In addition, Garnier and Krafft-Ebing have listed many other such cases.

Among male and female homosexuals, sexual intercourse usually takes the form of fellatio or cunnilingus so that one cannot really in these cases talk of fetishism. Yet, these acts are not seldom preferred or chosen for the one reason that certain strong olfactory sensations are connected with them. Havelock Ellis has recorded the case of an urning particularly sensitive to smell, who practised fellatio; and it is known that a considerable proportion of urnings perfume their genitals, which also speaks for the

fact that they desire to stimulate the olfactory sense. The same holds true of cunnilingus among tribades. A homosexual girl has well expressed this intimate connection of olfaction with homo-eroticism in a letter to a physician from which the following words are taken: "Can there be anything more delightful or enjoyable than when a girl having placed her face between the thighs of her *friend*, kisses with her tongue and lips the large lips of her friend's vagina, and then sticks her tongue into the vagina, pushing it as far as it will go and licks the odorous mucous of her friend's clitoris until she gets literally drunk with the odors of the vagina?"

In the same way, podex-fetishism and coprolognia are also represented among the homosexuals, male and female, as Krafft-Ebing has copiously recorded. Some of these cases again show a clear relationship between the olfactory sense and masochistic notions. Indeed, this sense has been deemed quite important in the genesis of pederasty. According to Stark, the haut-goût of the anus stimulates pædicatio; and it was Moll's opinion that among certain individuals who really prefer this sort of sex activity, it is not only due to a homosexual drive but also because there is concerned an additional perversion of the sexual impulse, one allied to coprophagy.

Famous Olfactory Cranks

In this section I desire to treat of certain celebrities who have become renowned for their uncommon emphasis upon the importance of smell in human life, especially in connection with sexual matters. These people who propagated their olfactory fanaticism almost exclusively through their writings are the French poet, Baudelaire; the novelist, Zola; and the German naturalist, Gustav Jäger.

Charles Baudelaire (1821-1867), the founder and leader of the French Parnassian school, was without doubt a sexually perverse personality who gradually disintegrated with a progressive paralysis. In his Artificial Paradises he sang ecstatic hymns to the pleasures of opium and hasheesh and in almost every respect he preferred the artificial to the natural. Baudelaire had an olfactory monomania, a fact emphasized by Nordau and before that, by Gautier, in the latter's biography of his friend.

Gautier has pointed out, regarding a certain poem bearing the title *Correspondences*, that it divides odors into various classes depending on the thoughts, sensations, and memories aroused. Some are fresh like children's skin, and green as the prairies in spring, reminding one of dawn and calling up ideas of innocence. Others like musk, amber, benzoin, nard and incense, are glorious, triumphant, worldly, call-

ing to coquetry, love, festivity, and the transport of the senses. Were one to compare them to colors, they would represent gold and purple.

Baudelaire very often recurred to this theme of the significance of odors. In reference to a dusky beauty from the Cape, or an Indian bayadere who had drifted to Paris and seemed to have the mission of lulling his spleen nostalgique, he spoke of odors mixed of musk and Havana which transported his soul to lovely fields of sun where the palm unfolds its fan-like leaves in the hot blue air, where the masts of ships come and go with the harmonic movements of the tide, and the silent slaves of a young ruler seek to rouse him from his dull melancholy. On another occasion, after asking what will remain of his works and fame, he chose to make answer by comparing himself and his activity to a certain type of smell. He compared his works to an old sealed flagon left in a cob-webbed cupboard of an abandoned house. From the open closet there stream out light odors of the past, of clothes, laces, powder boxes, etc., which call up memories of old love and past elegance; but when by chance the old sticky vial is opened, a pungent acrid odor issues forth, of English salt and antiseptic vinegar, which serves as a powerful antidote to the modern pestilence. One frequently finds this predilection for aromas which

swathes things and creatures in a light cloud. Very few poets have this capacity; in their verses they content themselves with singing of light, colors, and music, but only very rarely do they sprinkle those drops of fine essence with which the muse of Baudelaire always moistens the batiste of her handkerchief.

René Fleury has said that Baudelaire had two great passions, the love of cats, and the love of odors. As a pagan who added to his paganism the aura of an artificial mysticism, Baudelaire respected in odors, the soul of matter, and his morbid senses rendered extraordinarily keen by disease, received constant impressions of this soul which penetrated and enveloped all nooks and corners of the material world. "He celebrated odors in his song, and to the hellish liturgy of his excesses there was added the fatigue induced by the intoxicating and faint scents of the paradisiacal incense." Another distinguished historian of French literature has said of Baudelaire that he had two excited and tortured senses: touch and smell.

These judgments render it superfluous for us to emphasize that Baudelaire revelled in erotic odors and smelt them everywhere. How correct is Nordau's remark that Baudelaire loved women with his olfactive sense! The sexual scent of woman, the odor difemina sent him into an intoxicating passion, awoke old memories in him, unlocked infinite perspectives

before him and conjured up heavenly pictures. We may take as an illustration the twenty-third poem in his *Fleurs du Mal*.

PARFUM EXOTIQUE

When with eyes closed as in an opium dream
I breathe the odor of thy passionate breast,
I see in vision hell's infernal stream
And the sunset fires that have no instant's rest:
An idle island where the unnatural scheme
Of Nature is by savorous fruits oppressed,
And where men's bodies are their women's guest
And women's bodies are not what they seem.

Guided by thine odor towards the heat of veils, I see a harbor filled with masts and sails, Wearied by the sea wind that wearies me,

And in the perfume of the tamerind there clings I know not what of marvellous luxury Mixed in my soul with the song the mariner sings.

The aroma of female hair exercised a special fascination for this poet. Baudelaire discovered a *hemisphere* in the hair, as the title of one of his dreams printed in the *Prize Poems* indicates: "Let me smell

for long, for very long, the odor of your hair. Let me bury my face in it as a thirsty man sips greedily the water of a spring. Let my hand toy with it as with a fragrant handkerchief, that I may shake out memories. Could you but know what I see and feel and learn in your hair. My soul voyages upon their aroma as that of other men on the wings of music. Your hair contains a great dream, full of sails and masts and cables, with winds wafting me to lovely climes where the horizon is bluer and deeper, where the atmosphere is suffused with the odor of fruit, flowers and human skins. In the ocean of your hair, I discern dimly a harbor sounding with melancholy songs and filled with robust men of all nations, who have come on ships of all types, whose fine and complicated structures are outlined against an infinite sky in which broods an eternal heat. In the embrace of your hair, I find anew the voluptuous fatigue of long hours spent upon a divan, in the cabin of a beautiful boat gently rocking on the tranquil waves of the harbor, whose walls are adorned with flower pots and refreshing cascades. In the glowing depths of your hair, I inhale the odor of tobacco mixed with that of opium and sugar. In the night of your hair, I see the infinitude of the tropical sky's blueness shine forth. In the downy recesses of your hair, I intoxicate myself with odors mixed of musk and cocoa-

nut. Let me continue to bite your heavy, raven braids. When I bite your elastic and rebellious hair, it seems that I am eating memories."

The poem, La Chevelure, the twenty-fourth in the Flowers of Evil, is a poetic version of the above notions, but fuller and more passionate.

LA CHEVELURE

O fleece, meandering over shoulders bright!
O fragrant heavy locks! O languorous snare!
O bliss! to flood thy dusky room tonight
With all the memories drowned in their delight,
Scarf-like I'd flourish them upon the air!

There, Africa and Asia, lands of love, Yea, worlds afar, lost islands, dimly loom Within thy depths, O aromatic grove! As others' souls on soaring music rove, Mine, O belovèd! floats on thy perfume.

Waft me to shores where lustier mortals share
With trees, long swooning days 'neath skies aflame;
Bear me away upon thy streaming hair!
O ebon sea, dost hold a vision rare
Of boatmen, sails and dazzling waves of flame:

An echoing seaport, where my spirits drain
Great draughts of fragrance, sounds and colors gay;
Where vessels cleave the gold and silken main,
Their spars enormous spread to clasp again
A cloudless sky where fires eternal play.

Fain of that ecstasy, my head shall press Through thy dark ocean, full of southern seas; My tenuous dreams that all its waves caress Shall learn to find thee, fruitful idleness, Cradle unresting of ambrosial ease!

O blue-black tresses, dark mysterious tent, Ye give me back vast azure skies afar; Along their rippling marge, in ravishment, I breathe beneath thy braids an odor blent From oil of cocoanuts and musk and tar.

Now, —and for aye!— my hand shall strew, at morn, This massy fleece with pearls and rubies fine;
Never must my desire meet thy scorn!
Art not th' oasis where I dream, the horn
Where I inhale long draughts of memory's wine?

Baudelaire's writings abound in references to the sexual odor of women, and later on we shall have occasion to consider two such unusually interesting

examples of this mania. For Baudelaire, the sexual aroma of a woman was especially prone to awaken memories of the distant past which, as we have seen, is characteristic of olfactory sensations.

After Baudelaire, and perhaps influenced by him, the next most important olfactory fanatic is Emile Zola, the head of the French naturalistic school. The frequency and intensity of his allusions to smell are so obvious that already as early as 1889, a professor of philosophy at the Montpelier Lycée, Leopold Bernard, wrote a monograph on *Odors in the Novels of Zola*, in which he brought together all the materials for judging this peculiarity in the great naturalist.

It is noteworthy that Bernard attributes Zola's predilection for smell to a purely physical predisposition. Because he had been struck by the dimensions of Zola's nose in all the portraits of him, Bernard presumes that he suffered from a hypertrophy of the lobus olfactorius. He believes that when you observe Zola's visage, all other parts of the physiognomy seem to be eclipsed by the nose which is gross, fleshy, and broad, with wide nostrils which seem to quiver and sip in the air. "No one who saw that puissant nose and those dilated nostrils could help divining that here was a man of exceptional subtlety." This immediately explains the bewitching descrip-

tions of Paradou, the famous symphony of cheeses, and the other concertos of odors not less astonishing though less well known.

As far as sexual osphresiology is concerned, Zola himself has left an authentic expression of opinion concerning his views on the importance of that subject. In 1897, Dr. Tardif was writing his book on the relations of sexual activity to smells, and he wrote Zola a letter asking the following questions:

- 1. Is man as easily stimulated as the animals by olfactory sensations related to the sexual act?
- 2. Assuming that these odors have such a consequence, are all categories of men and classes of society equally affected? Do different types react in the same way to the same odors, e.g., those who are tyros in love but possess fine senses and intelligence; those who are sophisticated in matters but depraved; and finally, the simple folk like the peasant or urbanite of material or moral inferiority with respect to his body? Or is there a relation among men and women alike, between their intellectual and social levels and the perfumes which attract them?
- 3. Does the man feel more pleasure at being with a perfumed woman than does a woman who detects

the use of perfumes in the man she is with? Which prefers the use of perfumes by the other sex?

- 4. If a man uses perfumes, is that synonymous with intelligence and at the same time with effeminacy and a sort of decadence?
- 5. Is there any correlation between a woman's level of intelligence and the kind of perfume she prefers?

Zola made the following reply:

Paris, 22 January 1897

My dear Sir,

You really pose too many and too complicated questions for me to be able to answer. My few observations have all been made on the natural odor specific to the woman which is quite different in different individuals. I am convinced that occasionally it exercises a considerable effect upon the sexual impulse and explains certain great passions. It is certain that the olfactory sense is one of the snares in which nature captures man in order to guarantee the reproduction of the species. Witness animals during their rutting season; and I may add, witness man, although here exact observations are

lacking. A whole book could certainly be written on this theme.

Naturally, where an instinct is active, a perversion of that instinct may take place. The artificial perfumes are definitely an ornament assumed by the woman for the seduction of the man. This can, of course, be exaggerated by both sexes to the point of morbid abnormality. And ultimately, we arrive at perversity and monstrosity.

I believe that as a matter of fact woman does perfume herself more than man, just as she adorns herself more. It appears equally plain that as the intelligence of the mass is raised, refinement supervenes and leads to perversion. If the olfactory sense has degenerate forms, it is my belief that the latter can be found among all classes.

Yours,

Emile Zola

This letter shows what great significance Zola attributed to the olfactory sense in human sexuality and, as Bernard was the first to show in his excellent monograph, Zola's works are no less eloquent witnesses to this feeling for the importance of olfaction. Bernard believes that before Zola, the language of odors was poor, that it became wonderfully en-

riched by the latter's writings. He found names for the finest nuances of scents and transmitted all the sensations aroused by such scents in happy expressions. In these depictions he achieved the greatest and unparalleled virtuosity. Bernard correctly concludes that Zola was able to do this precisely because he really felt all these things.

Zola not only describes in his novels the odors of certain individuals, but he also permits the odor to permeate the action of the play to a certain degree and to influence certain actions of some characters. When in Rougon-Macquart he desires to portray the animal in man, it is only natural that he should assign such a great role to the two animal senses of smell and of taste. It is the other subordinate senses, of sight, hearing and touch, which, according to Zola, purvey to thought those clear and distinct ideas from which science and art arise. The nose and mouth merely report what is pleasant or unpleasant to the stomach and lungs, what is directly useful or harmful to the body. The sensations which they afford us have, in addition, the function of arousing or extinguishing our desires, to unleash or pacify the passions of Venus terrestris. Hence, those who seek at any price the satisfaction of these senses are gourmands, voluptuaries, and epicures. Zola has an excellent capacity for depicting the different types of

gastral and sexual odors (the *odeurs voluptueuses*, apbrodisiaques, erotiques) and for designating the degree of their influence upon our feelings, ideas, and actions. Above all other odors, it is the scent emanating from the human body itself that exercises the strongest effect, as Zola stated in his letter to Tardif.

In one of his novels, Zola has written: "And more than the hot suffocation of the atmosphere, than the radiant lights, the large and brilliant flowers resembling laughing or grimacing faces among the leaves, it was the odors which assailed her. An indefinable, strong, exciting, languid odor made up of a million scents — human sweat, female perfume, the smell of hair and of breath, cloyingly sweet and obnoxiously stale was combined with pestilential vapors, sharp and charged with poisons. But in this strange music of odors, the melodic phrase which constantly recurred, dominating and choking out the tenderness of vanilla and the sharpness of orchids, was that of human odor, penetrating and sensual, that odor of love which arises in the morning from the closed chamber of two young wedded folks."

In Zola's novels this sexual odor differs according to the age, sex, and health of the individuals concerned and is influenced by crime, heredity, and character. Between the external milieu and the or-

ganism, there is constantly taking place an incessant alteration of endosmosis and exosmosis, of fine olfactory atoms and smell substances. All these ideas are to be found in La Faute de l'Abbé Mouret, in L'Assommoir, Nana, Pot-Bouille, La Terre, and even in the chastest of all Zola's tales, Le Rève.

In La Faute de l'Abbé Mouret, Albine, the fairy of the ancient and mysterious Paradou, first appears to the bewildered Serge as a great wreath of enchantingly fragrant flowers. He smelt how she filled the small garden of old Jeanbernat with the effluvia of her underclothes as she shook off the harsh odor of green which she bore upon herself. Another time, when Serge saw Albine out of doors, the gentle breezes which were wafted from the fields carried a mighty smell of green, an odor of wild flowers which Albine had shaken off from her naked arms, her open bodice, and her streaming hair. Serge, that gentle mystic who had spent his youth in the depths of the sanctuary, in the devotion of sacristies or the presbyteries, feels himself robbed of his sex and his masculine odor. In the seminary he had smelt like a lily whose pleasing aroma had delighted his teachers; but now he felt like a saint and had incense in the smallest wrinkles of his organs. His sister Désirée, lovely innocence, who thinks of nothing at all and spends her days among the animals of her farm,

smells good, like health. Brother Archangias, the terror of the kitchen scullions and the maids, smells like a he-goat who can never have enough.

In L'Assommoir, Bec-Sale, who is known as Boit sans Soif, exhales an odor of alcohol like an old whisky keg whose bung-hole has been opened.

Nana exhales an odor of life, of the omnipotence of woman, which literally intoxicated the public.

In *Pot-Bouille*, Uncle Bachelard smells of base excesses, of absinthe, tobacco, and musk. Madame Campardon, the wife of the architect, was ripening towards the thirties and had a mild savor (*saveur*) and lovely fresh odor reminiscent of autumn fruits.

It is especially in the novel, Ventre de Paris, that Zola revels in the descriptions of human odors. Claire, the younger daughter of Mother Mehudin, the blonde fisherwoman emits an odor of spawn, one of those sharp odors arising from rushes and muddy sea roses. Lisa, the handsome pork-dealer from the rue Ramouhan does not possess the odor of spiced sea fish and the haut-goût odor exhaled by her rival, the handsome Normande. She smelt of fat and had the faint odor of handsome flesh. Florent, the tender Utopian humanitarian, the friendly revolutionary, carried everywhere the odor of fish, in his clothes, beard, and hair. Françoise, the honest truck-gardener of Nanterre, disseminates the odor of earth, hay,

fresh air, and bright skies. Cadine, the spoiled child of the halls, the pretty flower girl, just smelt good from head to foot. She was a living, warm, flower wreath. The description of Sarriette, the no less adorable fruit dealer, closes with a reference to her characteristic odor. "Her mouth was both painted and perfumed with cosmetics from the seraglio. An odor of plums arose from her underclothes; and her badly tied cravat reeked of strawberries."

There are many other descriptions of sexual odors in Zola's novels, e.g., the famous cheese symphony in L'Assommoir which Huysmans has imitated in the symphony of odors found in A rebours. How sexual odors cling to dirty underwear, Zola teaches us in the description of these articles, also found in L'Assommoir. In the salon of Worms, the clever tailor before whom the ladies of the second Empire knelt, the silk, lace, satin, and velvet all had a light aroma of hair and amber-smelling shoulders; and the atmosphere of the salon retained this odorous warmth, this incense of flesh and luxury, which transformed the room into a chapel dedicated to a secret religion.

Zola very frequently concerned himself with the odors of saints and priests. When the Abbé Mouret thinks back to his years in the seminary, he sees that old cloister again entirely filled with the smell of holiness. The room of the Abbé Faujas exhales a

special odor, an odor of the priest, a man who was different from the others.

When Angelica lies dying in La Rêve, the bishop Mgr. de Hautecœur enters at the moment of the last sacrament while the priest is anointing the nostrils with the holy oils and uttering the words: "Per istam sanctam unctionem, et suam piissimam, misericordiam indulgeat tibi Dominus quidquid per odoratum deliquisti." Zola thereupon unfolds before us the mystical purpose of the ceremony and says: "And thus the odor returns to the first innocence purged of all impurity, not only of the sensual shame of perfumes, of the seduction of flowers, and sweet odors scattered through the air which lull the soul to sleep, but purified as well of the blemishes of the interior odor, the bad example set for others, the contagious pestilence of scandal. Righteous and pure the soul finished its existence as a lily among lilies, a great lily whose perfume fortified the weak and cheered the strong. It was so frankly delicate that it had never been able to tolerate the ardent pinks, the perfumed lilacs, and heavy hyacinths, but had found ease only among quiet flowers, violets and primroses."

One sees that Zola perceived that impressive relationship which we shall take up again later, be-

tween the employment of odors in religious and in sexual life.

Bernard is right when he remarks at the close of his thoughtful essay, that the tremendous significance assigned to odors in Zola's works is what lends the latter their specific character; and he is just as correct when he raises the question whether Zola, who made such a point of relying upon his observations and experience of reality, did not in this case go wide of the mark by causing his characters to appear so greatly dependent on their olfactory sensations.

Like Zola, Ivan Turgeniev had a predilection for odors and smells. He possessed the rare ability to conjure up smells in imagination not as pale memories mostly visual, but as affective olfactory experiences. For him, odors meant much more than they did to other people.

In the melancholy story, The Living Relic, which portrays the tragic fate of a young girl who had become paralyzed by a fall and had been bed-ridden for seven years, Turgeniev seeks to mitigate the misfortune of the poor Lukeria by showing that her olfactory senses were keen so that she could smell the faint odor of the buckwheat growing in the

fields afar off, and the odor of the blooming lindens down in the garden.

While Baudelaire, Zola, and Turgeniev emphasized, as poets, the emotional side of odors, Germany, the land of thinkers which has always pursued its theories with a contumacious stiff-neckedness in all directions, can boast of having produced a genuine philosopher of smell in the person of Gustav Jäger of Stuttgart, the famous discoverer of the soul.

It is not my purpose at this point to present Jäger's complete teaching as set forth in the two voluminous tomes of his chief work since I have already related the most important of these doctrines relative to sexual osphresiology, and will adduce a few more of them later on. I shall mention only what is indispensable for judging this unique doctrine.

Jäger is the olfactory fanatic par excellence. One can say that he dissolves the world into smell and odor. The soul of anything is its specific exhalation. Jäger has solved the ancient and eternal question; he has torn the truth from the sphinx who oppressed men so cruelly; he has discovered the soul. The soul is a definite chemical substance and is governed by the laws of metabolism as are all the other parts of the body.

According to Schiller, the world is ruled by love and hunger. Jäger accepts this thesis but discovers

that during both these states, man's soul, i.e., his odor, appears in particularly characteristic form. In man and beast, hunger appears when the supply of circulatory fat and urea hydrates is exhausted and a considerable dissolution of protein has begun. Since the substance which Jäger designates as the soul resides in proteins, in the disintegration of the latter the soul is liberated, and appears as an independently acting factor either as bouillon odor or as excrement odor. This free specific substance acts as nerve stimulant and produces the feeling of hunger. Hungry animals have a much stronger odor than the sated animals, and their flesh is richer in odorous ingredients.

Jäger asserts that the different organs of the body possess different smells and each tissue has its distinctive soul. So the sexual substances, i.e., seed and egg, have their peculiar soul modification in the molecule of their albuminates. The acrid penetrating odor of semen has long been known by the technical designation of aura seminalis, and that of the ovary Jäger terms correspondingly aura ovulalis.

Sexual love is thus a sort of nervous excitation just like hunger except that another sphere of the nerve apparatus is here concerned. But in this case also, the stimulus is a volatile chemical substance whose transitoriness is clearly evident because it also

appears as a scent exhaled from the body. At the time of rutting, the scent emanating from all animals is not only increased but also *modified*. In man, the stimulus is the aura seminalis and in woman it is the aura ovulalis. The impulse of love, just like that of hunger, is not without direction but is fixated upon a definite object. And this choice is entirely conditioned by the olfactory sense among animals, whose physical soul apparatus has not reached the overwhelming development it has achieved among men, and partially also among birds; for the choice depends altogether upon the harmony or disharmony of the odors in question.

In addition, psychical emotions have their own soul stuffs. There are sorrow-, joy-, hate-, fear-stuffs, etc. There are also the specific exhalation substances of the brain, brain soul stuffs. In the state of fear, the scent and taste of an animal's flesh are quite different than in the state of joy.

Jäger has set forth in voluminous minutiæ the psychological details of the influence of odors upon character and the actions of men, as well as the ethnological curiosities found in this domain. The olfactory soul is everywhere found among plants as well as among inanimate objects. "All natural objects have a specific odor, even stones and sweet water, for we smell the rain before it falls." All things are con-

sidered and explained from the viewpoint of the olfactory soul and are investigated in their relation to the human nose, all things such as agriculture, linguistics, magnetism, hypnotism, massage, heredity, infection, mind reading, clairvoyance, idiosyncrasy.

"Disease is stench." This according to Jäger is the whole secret of medicine. I shall forego describing his odor of insanity, of parturition, and the numerous odors associated with certain physiological and pathological processes, and shall mention only those facts or rather those notions connected with sexual osphres-

iology.

Jäger explains very simply so-called Platonic love. If the corporeal scent of a person is to another pleasurable at a certain distance only, but repugnant when it is too near, then there must result an instinctive Platonic love, abstaining from all fleshly lusts because it forbids direct contact. This must certainly be the case where the aroma is rather mild and unobtrusive. Such a Platonist will choose to remain in the proximity of his friend but will not kiss him.

O Plato! O Socrates! Where were your noses? Was it necessary for this Jäger to come in order to sniff Platonic love for you?

Not less astounding is Jäger's remarkable apology for mutual masturbation. We read that the practise of mutual masturbation among homosexuals is much

less harmful to health than solitary manustupration. In the former, the two concerned satisfy each other mutually in a human sort of way. They love each other ardently and passionately, for the moment at least, and their act does not require fantasy images, such feverish fantasy constructions as in the solitary practise, thus avoiding to a great extent the injury to the brain and nervous system not infrequent in cases of the latter. Furthermore, the mutual masturbators maintain an open spirit to their fellowmen, and though they are lascivious creatures, they are not the enervated dismal duffers all too frequently found among solitary masturbators. In addition, they cannot ruin themselves by the excesses characteristic of the other because two people are necessary for their erotic satisfaction — which is not always possible — whereas the solitary masturbator can incessantly ply his task and indulge in unceasing excesses.

This summary excerpt from Jäger's theories is adduced to show the whole tenor of the man's writing. A kernel of an idea is swathed in an immense amount of verbiage until what little interest it possesses is obscured. There is a copiousness of cobweb speculation which is all the more ridiculous when one realizes how utterly serious the author is, indeed, almost hysterically so. One need only glance at the fantastic and puerile etymologies, or the incredible

interpretations of literature which he parades, to understand the measure of the man.

It was Max Nordau who made the following interesting observations which, I believe, were previously noted by Emil de Bois-Reymond. "German hysteria becomes manifest in anti-semitism, that most dangerous form of the persecution mania, in which he who believes himself to be persecuted becomes the wildest persecutor, capable of the most heinous crimes. The German hysteric is constantly in a fever of anxiety about his precious health just like the hypochondriac. His nightmares are concerned with the scent of his skin and the processes of his abdomen. He is constantly dreaming about Jäger's flannel shirts and the corn meal of the vegetarian, ground by himself. He goes into violent emotions in connection with shower baths and barefoot running about in the grass. In the midst of this he will develop a morbid love for animals, a zoöphilia engendered by the sufferings of frogs used for physiological experiments. But the major note of all this anti-semitic, vegetarian, anti-vivisectionist mania is an insane chauvinism against which the noble Emperor Frederick warned in vain. All these varied aberrations generally appear together." Jäger, whose fantastic work we have been discussing in such detail, is an excellent example of this unfortunate divagation

of the German mind. He, too, is a ferocious antisemite, an anti-vivisectionist, homeopath, and at least a Platonic adherent of vegetarianism.

His anti-semitism expresses itself not only in idiotic anti-Jewish utterances like those of the notorious Ahlwardt, but also in the persecution mania characteristic of so many fanatical Jew-baiters. Poor Jäger! He quite earnestly believed that the Jews were carrying out a well organized campaign against the reception of his work. And yet, ironically enough, his work achieved popularity chiefly through the efforts of Leopold Einstein, a Jew.

After all these achievements it is not at all remarkable if Jäger has been ignored by professional scientists. Zwaardemaker who has written the latest and most detailed work on the physiology of smell does not even mention him; nor does Wundt in his Physiological Psychology. Others refer to him casually but only to marvel that such things can be. Thus Moritz Carrière declared that, when he first began to read Jäger's stuff, he thought he was dealing with a hoax: some clever rascal had wished to write a devastating parody on the view which regards the soul as a tangible substance; but very soon he realized the truth. This was not a perfect parody but almost perfect moroncy.

I shall refrain from a detailed criticism of this doc-

trine. Jäger arbitrarily set up smell as the principle of the world. But he could just as well have chosen any other sense; for the world is not only smell, but also sight, hearing, touch, and finally, purely psychic conceptions. Why scent alone should constitute the soul substance is nowhere explained. It was merely dogmatically asserted by Jäger, just as he declared that the nose was the only certain guide through life. Thus his work belongs to the class of literary eccentricities; nevertheless, it cannot be denied that it contains a large number of interesting observations. Jäger might have done much had he not fallen on evil ways. We shall conclude this section by quoting the opinion of the famous biologist Weisman: "It is really the fault of Jäger's unrestrained speculative impulse which is responsible for the innocuous desuetude of his work including even the sound portion of it."



ETHNOLOGY



Odoratus Sexualis

Ethnology

Now that we have completed our survey of the facts of sexual osphresiology in relation to general anthropology, the question naturally arises as to the relation of sexual odors to various races and nations. Is there an ethnology of sexual odors?

A priori, we can assume that among primitive peoples the body scents play a much more important role than among civilized nations. This assumption can be made since the most competent observers

have united in asserting that savage peoples have a considerably keener olfactory sense than we.

Darwin has stated somewhere that among the dark colored races the olfactive sense is keener than among the lighter ones. This is quite natural. For anyone who believes in the principle of gradual evolution will not readily hold that man suddenly came by the senses which he now possesses. Rather did he inherit his capacities in a weakened and more or less rudimentary condition from his ancestors to whom they were extremely useful and by whom they were constantly being employed. It was Zwaardemaker's opinion that the greater olfactory powers of savage tribes is limited to a definite type of impressions and is only won after long training.

The first to gather data on the keenness of olfaction among the savages of South America was Alexander von Humboldt. Mühlenpfordt has confirmed the findings of that great traveller so far as Indians are concerned. The latter were able, according to his account, to distinguish at night and by means of their sense of smell alone, different races of man, calling the odor of Europeans, pezuna; of Indians, posco; and of Negroes, grajo. Similarly, Houzeau has made many experiments confirming the fact that Negroes and Indians can tell people in the dark solely by their odors.

From these few facts it is at once obvious that the attempts to classify different racial and national odors are not without foundation. Part of the explanation of the difference in odors among the different races of mankind is climate, since climatic conditions influence human odors. In hot lands where the exhalation and transpiration of the human body is greater, its odor will also be more intense. As Monin states: "Just as the flowers of the tropical zones have the strongest odor, so also, to use a poetic image, does the human flower in these regions emit a stronger odor." When Zimmerman speaks of a scent rather specific to South Europeans and lacking among their northern brethren, this odor is due to the difference in latitude.

Secondly, there seems to be a decided connection between skin color and skin scent. Swarthy peoples are distinguished from their lighter brothers by a definitely different smell. Darwin was the first to state this fact clearly. Carl Vogt has also affirmed the specificity of the odor emitted by dark colored races which is not lost in spite of even the most careful cleanliness. The specific negroid odor remains the same no matter how much the negro may wash himself, or what food he may eat. It belongs to the same category as the musk odor of certain animals, and depends on a peculiar excretion of the sebaceous

glands which appear in these races to be more numerous and larger.

Vogt has reminded us that this racial odor must not be confused with those scents which are caused by the ingestion of certain foods, which differences may be observed within the race. An Italian or Provençal who eats a lot of onions, garlic, and celery certainly has a quite different odor from a Scandinavian who subsists essentially on fish and rancid butter. In the account which J. G. Kohl left of his journeys through the interior of Russia and Poland, we find the following: "There can be no doubt that every country and every nation has its own distinctive odor. In every land one will detect this distinctive national odor most clearly in public places, in cafés, saloons, etc. This national odor is a composite of the odors of the various foodstuffs and dishes most preferred by the people, the smells of its clothing, and the scent idiosyncratic to those people. Often one can distinguish in these odors the presence of an article frequently used by the nation, e.g., herring among the Lithuanians, whiskey among the Poles, garlic among the inhabitants of Little Russia, and Russian leather among the denizens of Great Russia."

This brings us to the fourth point that we must take up in connection with the ethnological relationships of sexual odors: the relativity of the subjective

judgment. It is certain that human judgments as to odors are modified by the different modes of life found among various individuals and races; and furthermore, there are idiosyncrasies in susceptibilities to odors. "To the rustic," says Runge, "fresh steaming dung is not unpleasant, for he associates with that odor, the thought of a rich harvest. The Persians spice their food with asafætida, and other Orientals use garlic lavishly. Many thus consider unpleasant that which to other nostrils is quite agreeable."

After these preliminary remarks we approach the actual details of the ethnology of sexual osphresiology. As far as American Indians are concerned, those of South and Central America have a much stronger odor than those in the North. The Creoles have special designations for the weaker odors of Americans (catinca), as well as for the exceptionally strong and repugnant odor (soreno) of the Araucanians.

During his stay in Paraguay, Mantegazza was tended by a handsome, clean Indian woman of whom he wrote the following: "Now Petrona, like all Paraguayans, washed herself many times a day so that she glistened like a fish with cleanliness and youth, and yet she possessed such an ethnic odor that I was nauseated to the point of fainting. Before she had

entered at the door I smelled her already, her odor being a mixture of a menagerie and rotten onions."

The sexual odor of the woman appears to play a large role among South American Indians even now. The same is also true of South Sea Islanders. Hortense Baré, who accompanied her botanist lover, P. Commerson, to a South Sea Island, was immediately recognized by the natives as a woman by virtue of her odor.

The Mongolian race has been said to emit a specific odor which has been compared to that exuded by people of bilious temperament. It may be that their odor is connected somehow with their skin color. The peculiar odor of the Chinese was first noted by Adolf Erman in his travel sketches. This is what he wrote: "When I returned to Kiachta, I visited the house of the merchant Kotelnikov. As soon as I entered the house (and on many other occasions as well), I at once understood from the peculiar odor that Chinese had been in the living room. People who have suddenly been set in certain areas of the world, have in order to grasp the specific character of these places without any gradual or intermediate stages, spoken of a national odor. The experiences I have had lead me to be satisfied with this explanation. At the Chinese border even a blind man could tell that the Siberian and Russian scent had

been left behind. The odor prevalent in Maimatschen is derived partly from the smoking tapers burning before the Mongolian chapels and from the smoke of Chinese powder, but most of all from the odor of the Chinese themselves who emit an atmosphere strongly reminiscent of leeks. I scarcely believe that this is directly due to their eating of onions, as many Russians believe, for otherwise we should always detect this odor no matter where or by whom the onions were eaten. One must therefore conclude that the scents of the human body among the various nations are constant and hereditary and quite distinct from the individual peculiarities which every dog learns to recognize in his master."

The Chinese, on their part, assert that for their nostrils an absolutely foul odor issues from the strange devils, the Europeans. A Chinese savant has related that this odor is so disagreeable to him and has such a strong effect that he can immediately smell when a white man had been in a room. Furthermore, the odor even permeates his clothes so that when he has come among his friends they will say to him, "So, you've been among strangers again; one can smell it miles off." Hence, say the Chinese, the Europeans must bathe so frequently because their odor is so objectionable. A Chinese nurse has asserted that the children of white people smell like sheep.

One observer who lived in Japan for many years has written that a Japanese crowd smells sweet, and a German, sour.

A specific odor has also been observed in the Malay race. Of the Mantras in the interior of the Malayan peninsula, Peter Bourien has remarked that "like the Negroes, they emit a strong odor." He has however not specified the exact nature of this odor.

Gypsies have long beeen accused of having a bad odor. In his book on Gypsies, Liebich has written the following: "The Gypsies have a distinctive and disgusting odor which becomes especially perceptible in a closed space, but it can no more be described than the quite different but no less distinctive odor of poverty well known to criminologists and police officials." Some insight into the nature of this odor and its possible forensic importance may be gleaned from the remarks of the criminologist, Hans Gross. He has asserted that the gypsy odor, peculiar, unmistakable, and clinging, can never be forgotten by one who has once smelled it. This odor, somewhat like that of the Negro, can immediately be perceived by police officials equipped with normal olfactory apparatus; so that as soon as the latter enter the court house they can tell that a Gypsy is present as though his odor were cleaving to the walls. This fact can frequently be employed to determine whether Gypsies have been

at a certain place. If a theft has been committed, then the brief interval of the Gypsy's sojourn in the house which he was ransacking, is sufficient for his odor to have impregnated beds, chests, articles of clothing, particularly of wool, etc. These articles will retain the odor for a while and if the officials do not come too long after the crime, they will be able to detect the ethnic affiliation of the culprit with almost complete certainty. If one has to compare the gypsy odor with something familiar, one would perhaps think of the odor of fat mixed with that of mice.

About forty years ago the world was greatly a-roused by the seduction of Princess Chimay, previously the American heiress Clara Ward, at the hands of the Gypsy, Rigo. The European press devoted endless space to various conjectures concerning the origin of the love of the Princess, famed as a beauty for the none too handsome Gypsy. A certain journalist who had an opportunity to speak with her reported that this romantic case was clearly a typical olfactory love.

One evening he was dining in the restaurant where Rigo was bandmaster. When the latter left Mme. Rigo-Chimay to lead his men, the journalist took the liberty of approaching the ex-Princess who was an educated woman, and asked her the question which the newspapers were debating so furiously.

"Gracious lady, I know that love is capable of all, and I can understand how, enraptured by M. Rigo's violin playing, you became ardently enamoured of him. But to speak quite frankly, I am unable to understand how so intelligent and superior a woman can continue to live with such an ignorant man who is so obviously beneath your level."

The beautiful lady was quiet for a moment and then replied, blushing: "True. But do you know what attracted me to him originally and continues to keep me bound to him? His odor."

Günther, who substantiated this fact, also emphasized the point that the Princess Chimay was a very nervous woman on whom the strong perspiration odor of the Gypsy would exercise a particularly exciting influence which would have been lacking in a normal woman.

The race whose distinctive odor is most definitely established is, of course, the Negro, although the nature of this odor has been variously described. According to Peschel, they are strong, ammoniacal, rancid, hircine-like scents which, wafted across the waters, were able, in an older day, to herald the approach of a slave ship. Fritsch has noted that the Amakosa of South Africa must have a strong, invisible perspiration which makes itself known through a peculiar penetrating odor; the latter seems

to be related to fatty acids but it is quite independent of impurities clinging to the body since washing does not remove the odor. In fact, it aggravates it since the strong muscular movements involved in rubbing call forth more perspiration.

A musk-like scent is what another experienced observer finds in the black race. "They have a very fine skin which perspires abundantly and gives forth an indefinable odor *sui generis*, which reminds one slightly of the musky smell of the crocodile. This influence is particularly noticeable when the female is excited by sexual passions, and is annoying to beginners who are not accustomed to it, but you end by getting used to it. The Negress therefore anoints herself plentifully with all the strongest perfumes from Europe in order to conceal her native smell, and she always keeps herself very clean."

This negro odor is very penetrating. We have already quoted the point mentioned by Quatrefages concerning the cargo of the slave ship whose odor is wafted in from the seas. In his impressions of West Africa, the English Consul, Thomas Hutchinson, has described in the strongest terms the specific odor of West African Negroes. Here is his description of a crowd of Negroes assembled in the market-place of old Kalabar. "No vile compound of drugs or chemicals would rival the perspiratory stench from the as-

sembled multitude. It is not only tangible to the olfactory nerves but you feel conscious of its permeating the whole surface of your body. Even after going from the sphere of its generation it hovers about you and sticks to your clothes and galls to such an extent that with stick and umbrella in your hands, you try to beat it off, feeling as if it were an invisible fiend endeavoring to become assimilated with your very life blood."

Waitz has particularly emphasized the foul odor of the Negroes of Guinea, the Balantes and Bissagos, and the Negroes dwelling in the South of Sierra Leona, the Ibocs, Papaws, Mokos. It is his opinion that the scent of these tribes is the same as that emanating from the black feathers of the birds and the black hair of the dogs that inhabit Guinea.

So far as the Kaffirs are concerned their scent has also been reported as being strong and very disagreeable to Europeans. Some of these people have such a foul smell that when they merely pass by a house they fill it with their odor. Washing does no good since the effort exerted merely opens the pores more.

However, the Galla lack the specific negro scent which is the more interesting since the attempt has been made to regard them as the intermediate stage to true negroes.

It is this strongly unpleasant odor of the black race which is one of the chief reasons for the antipathy between negroes and whites; and the negro question in North America has not incorrectly been designated as a nose question. In this connection it is very interesting to note that the negroid odor is just as objectionable to the Indians of Guiana as to the whites. Appun has reported that Indian women and children hold their noses at the approach of a negro and spit. On the other hand, the same antipathy seems to be entertained by negroes and mixed races against white folks. Thus, it has been reported that to the Massai every stranger is hateful from the start; and this hatred goes so far that upon smelling the approaching stranger such repugnance is aroused that aromatic herbs must be held to the nose.

In general, the unpleasant scent of negroes will stand in the way of sexual relations between them and whites. The normal white man will agree with Tardif's friend who, while living in the colonies, was able to have intercourse with a black woman only if she had previously taken special pains to perfume herself, so that her naturally bad odor would be disguised. Still, among the French there has been observed a peculiar predilection for intercourse with negroes and negresses. Even in the eighteenth century there were negro brothels in Paris. In one of these

bordellos belonging to a certain Mlle. Isabeau there were negresses, mestizos, and mulattoes, who were sold to purchasers even as the slaves of a caravan. The frequent appearance of negroes in the novels of the Marquis de Sade has been commented upon by Dühren. I desire to call further attention to the notorious novel of Andrea de Nerciat, Le Diable au Corps, in which negroes appear as lovers of white women. Similarly, a pamphlet on Napoleon iii and his court emphasized the fact that Madame de Solms was especially fond of negroes. Even today the brothels of Paris and many provincial cities have a steady supply of negresses for the satisfaction of the numerous clients who demand dark meat. In Galopin's book there is a remarkable chapter, entitled Le succes des Negresses à Paris, which shows that in this peculiar taste of the French, sexual osphresiology plays the most important role. The same Galopin asserted that a European woman was insipid to a negro, but a negress piquant to a European. He had a white friend who was a physician at Haiti and who subsequently married a negress. This medical man used to say that the perfume of his woman intoxicated him; and that he was unable to understand how love could be aroused by a flat blonde sans odor. Voltaire has truly said that the toad finds nothing more beautiful in the world than his lady toad.

Galopin even went so far as to suggest means for improving and strengthening the erotic exhalations of the negress!

The predilection of the poet Baudelaire for negresses and mulattoes was caused by such an aberration of his olfactory sense as the following oft-quoted poem will show:

SED NON SATIATA

Bizarre Deity, dark as infernal nights,
Whose perfume mixes with musk Arabian,
Work of some Obi, Faustus, that learned man,
Sorceress with ebony thighs, child of midnights,
I prefer to all things, opium and the nights,
Thy mouth's elixir, strange as a Pavane;
When toward thee my desires in caravan
Pass, thine eyes assuage mine appetites.
By those black eyes, vent-holes of thy soul's shame,
O pitiless Demon, pour on me less flame;
I am not the Styx to embrace thee nine times, nay,
Alas! I cannot, Mægera of the Sorrows nine,
To break thy courage and to set thee at bay
In the hell of thy bed, become thy Proserpine!

Now, while the French seem to be particularly fond of black women, such a taste is by no means lacking in other European lands and capitals. For

example, London, where negroes and negresses are frequent performers in music halls and on vaudeville stages, is not ignorant of such relationships. There too, in the eighteenth century, an African negress achieved fame as a demi-mondaine. She was, as one old book has it, a new phenomenon, in the fullest sense of the word, and a perfect specimen of her race. She had an enormous custom and constantly raised her prices. Within a few months she had on the list of her admirers the names of forty peers and fifty members of the House of Commons so that she could very confidently take over a famous brothel at King's Place. In Berlin also, negroes play a suspicious role in vaudeville and dance halls. In a north German metropolis, I knew of a sexual union between a strikingly handsome white woman and an American negro.

We shall now spend a moment *en passant* upon one of those bits of folly that assuredly make one cynical about our human race. In the history of human stupidity there is scarcely anything more obtuse than the harrowing persecution of the Jewish race. Many libels and frauds have been excogitated to rationalize or justify the monstrosities perpetrated against them. Thus, a most illuminating insight into the criminal folly of Judeophobia and Jew-baiting and,

incidentally, into certain amazing lacks of the German mind, is afforded by the bifurcation of the Caucasian race into Aryan and Semite on the basis of difference in odors. We must remember that people will always accuse an alien race — and, therefore, such is the breadth of human sympathy — a hated one, of possessing all sorts of vile characteristics among which bad odor occupies an important place. The hatred borne by certain Aryans against Semites, particularly Jews, has led the former to accuse the latter of having a specific, repulsive odor. That nothing but hatred lies at the base of this libel can be seen from this fact: that certain groups who stood much closer to the lost nations than the Jews, and even such as avowed the Christian faith, were nevertheless hated, despised, and also accused of the same offence, i.e., possessing a foul odor. There were quite a number of shunned or pariah tribes in medieval Christendom. In his history of culture, F. V. Hellwald draws our attention to the pitiful fate of the Cagots. "Not even the direst poverty would be sufficient to compel a man to wed his daughter to a Cagot; the popular opinion looked upon them as excommunicate; no one wished to see them, much less touch them. They lived in unspeakable misery, in frightful little huts far away from the villages as tilers and carpenters. In the churches there was a little door for them, a

special corner, and a special basin. The same segregation was practised in the cemetery; and, of course, they were compelled to use their own water. They were regarded as magicians and wizards and were accused of a stinking odor and leprosy, ugliness and infinite licentiousness."

Precisely the same fables were propagated against the Jews. The most un-Christian hatred of the chosen people expressed itself in the invention of the most fantastic lies against them. Again and again they were accused of ritual murder, and of causing the Black Death by having poisoned the wells. In the same way, they were accused of offending Aryan sensibilities and the German nose by their idiosyncratic odor. That genuine anti-semite and hysterical Jäger has left behind some extremely amusing remarks on this subject. Needless to point out, he did not intend the humor. His Christian piety even goes so far as to state that Pope Pius iv was of Hebrew extraction because a friend of his had smelt a peculiar odor when kissing that Pope's toe. This Jew-smeller and others of his ilk do not seem to pause long enough to remember that the founder of the Christian religion was a Jew.

Let us be entirely serious for a moment to reply to the incredible accusations of such unworthy human beings. I have very frequently been in company

comprising both Jews and Christians and have never detected anything that might be construed as a specific odor of the former. To be sure, if a Gentile eats a lot of strong cheese, then for a while thereafter he will reek of cheese; and if a Jew eats a lot of garlic, then for a while thereafter he will reek of garlic. But garlic is by no means a Jewish national dish. All Mediterranean peoples use it as a condiment; and Italians and Provençals are really the ones who consume a great deal of it, so much, that Richard Andree has spoken of them as "reeking of leek." West European Jews have practically abandoned garlic even as a condiment.

This Jäger has, as we might have expected, also gone on to set up a method of differentiating French and Germans by their odor. But I rather think we have had enough of this race prejudice. Difficile est satiram non scribere.

A unique product of sexual osphresiology among primitive peoples is the so-called nose greeting or nose kiss about which Andree has brought back some very interesting reports. He regards it as a characteristic custom of certain races and nations, and stresses the fact that the essence of this practise is not the rubbing or mechanical contact, but rather the smelling. When one greets his male or female friend with a nose greeting, one inhales his or her scent in order to receive

into oneself a portion of the friend or love. The keen sense of smell found among primitive peoples facilitates this, of course.

According to Andree this form of greeting has a definite distribution. Beginning at the Cape it proceeds northward through both the old and new world as far as Greenland. It is also found in farther India and spreads from there beyond the South Sea Islands to Easter Island.

The nose greeting of Lapland first observed by Linnæus is still common today. Frijs reports that it consists of half an embrace, in which one places the right hand on the shoulder of the other and rubs cheek against cheek and nose-tip against nose-tip murmuring the while "darvan, darvan", — "well, well." the same form of greeting is practised by the Samoyeds and other Siberian groups.

The Ainos in Sachalin have added some further gesture to this general process which includes laying one's head upon the shoulder of the other; but the general outline of the nose greeting remains. All Eskimos employ the latter.

In the South, there is a further zone of this form of greeting beginning with lower India. Lewin has reported that the hill folk of Tschittagong have a special form of kissing. They place the mouth and nose upon the cheek of the other, and then breathe

in deeply. In their language you do not say, "Give me a kiss," but, "Give me a smell." The same is true of the Burmese.

Similarly, Crawford has reported that among all tribes on the Malayan archipelago, kissing has been supplanted by smelling. The words *smell* and *greet* are synonymous. Neck and head are the usual objects for embracing at which time a deep sniffling is heard. In Ceram, the Alfurus rub against one another with the upper portion of their bodies just like cats and then arch their backs as a sign of their satisfaction. In Celibes, too, nose rubbing is practised.

Darwin has left a description of the nose greeting among the New Zealanders. "The women crouched down holding their faces upward; my companions standing over them placed the ridges of their noses in the right corner of the women's noses and began to press down. This lasted somewhat longer than a hearty handclasp would among us. During this while they emitted pleasurable grunts." However, Andree reports that today this form of greeting is common only among old men and women, for the younger generation has grown accustomed to the European method. The male Maoris of today also shake hands in the English fashion. What is more, the nose greeting act was not merely nose pressing as Darwin reported, for our attention is directed by Andree to

the fact that the word *longi* means to smell as well as nose greeting. This then is the purpose of this form of greeting, namely, to inhale the odor of the friend or beloved.

The Maoris of the Chatham Islands have the New Zealand nose kiss. Lamont and George Foster also found it in the Marquesa and Peurhyn Islands. Missionaries have observed it in the Ellice group and in the Marian and Kingsmill Islands; hence, everywhere in the South Seas.

Whether the Blackfoot Indians of North America and the Australians of Queensland have this form of greeting, as Waitz has reported, is questionable in view of the paucity of cases involved.

These interesting views of primitive peoples which lie at the basis of the nose kiss enable us to see that even language has felt the repercussion of facts which relate to sexual osphresiology. This can best be shown in the poetic literature of many nations. Since we shall treat of poetry in the sixth section of this work, I desire at this point merely to adduce a few facts from Aryan etymology which point decisively to the predominance of olfactory perceptions in the relations of men and the sexes in primitive times.

Noë has reminded us that the German words riechen (to smell), geruch (odor) and rauch (smoke) are related to an Aryan root which signifies an ascend-

ing movement. "The primitive view regarded the human body from which an odor emanates, as being in motion to some extent. One should think of it in terms of an army's movements. First there come stray skirmishers, then a few companies, and finally the dense masses of the army itself. Now this view of separated parts which herald the approach of a body, is in agreement with the notions of science. We do receive a portion of a body into ourselves when we smell it. Through this communion, we come into closer contact with the essence of things than either the visual or auditory sense affords us. For the latter senses are affected only by the wave movements which emanate from bodies, but not from the actual parts of the bodies liberated from their matrix and wafted into our nostrils.

Now we can appreciate the justification for the fact that among the Aryans, the original meaning of the word love can be deduced from olfactory impressions, for according to their views the most intimate union between man and woman can only be effected through the sense of smell. So in Sanskrit, the root ghra denotes to kiss and to smell as well. In Persian, bujah signifies smell as well as love and yearning. Hence the Persians say: I obtain the odor of some one with my nose, that is, I get a yearning for him.

So also the French have only one word for smelling and feeling, viz., sentir.

Jäger has reported that in certain districts of Bohemia a bride and bridegroom are left alone together before marriage for a short time (generally for a night) for the purpose of abi se scuchli, that they may smell each other. That is one Bohemian way of

getting intimately acquainted.

A similar relationship between love and odor is indicated by the numerous female names recruited from flowers. Heine also called women *human* flowers. Finally, we must not overlook such significant expressions as *defloration* and *flos virginitatis*, so indicative of the intimate relation between the two realms of smell and love.

SHUNAMMITISM



Odoratus Sexualis

Shunammitism

How deeply imbedded in the popular mind are the conceptions of the powerful influence of sexual odors, is best illustrated by the very remarkable and interesting facts of Shunammitism. By this name I designate that very ancient belief in the therapeutic and macrobiotic effect of the scent of young people upon older ones, especially when different sexes are concerned. It should be made clear that no sexual intercourse is entailed.

The oldest example of Shunammitism, from which the name is derived, is found in the Bible (I Kings, Chapter I, Verses 1-4). "Now King David was old and stricken in years; and they covered him with clothes, but he could get no heat. Wherefore his servants said unto him: Let there be sought for the King a young virgin; and let her stand before the King and be a companion to him; and let her lie in thy bosom that my lord, the King, may get heat. So they sought for a fair damsel throughout all the borders of Israel and found Abishag, the Shunammite, and brought her to the King. And the damsel was very fair and she became a companion unto the King and ministered to him; but the King knew her not."

Dr. Johann Heinrich Cohausen, of whom I shall have more to say later, has elucidated these passages and has drawn certain conclusions relevant to the nature of a true Shunammite. Certain questions occurred to Cohausen in reference to this account. The first was why, when there were so many thousands of girls in Jerusalem, did they not choose one out of that number without further ado. David had a large number of wives, at least seven being known by name. Why could not these warm him so that it would not have been necessary to obtain a virgin?

Cohausen's answer to these questions is that the physicians wished to renew the King's warmth and

prolong his life by having him inhale the breath of a fresh virgin who slept by his side. For such a purpose his wives, who had borne him sons long before and whose youth now was behind them, were unfitted. Hence, they sought a young woman who would be healthier and livelier than the wives; and they chose a beautiful girl since beauty is a sign of a healthy constitution and a lively temperament. This girl not only slept in his lap but stood before him and tended him. In this way he was enabled to enjoy continuously her scent and her breath. But she does not appear to have been too small, or else she could not have tended the King nor could it have been said of her that she remained chaste. For had she not already possessed a reputation for chastity she could not have brought the King the hope of long life.

From this story of David, one can conclude what were the characteristics of the Hermippian girls. The first is perfect health. For when the teeth are decayed and the lungs diseased, when the mouth drains and the breath stinks and the whole body reeks like a stagnant pool, how can the spirits of life, which take delight in a pleasant odor, be strengthened by such a foulness. You, old one, let yourself be given a thousand kisses by Neæra or Cælla and suck in a thousand breaths from her, yet your blood will not grow one

bit livelier, nor your cold old age one bit warmer, nor will your withered body regain new strength and beauty, no matter how much you delude yourself into thinking that these exhalations smell like nard and precious spices. We hold it to be indisputable that the virgin of Shunam must have been perfectly healthy.

The other characteristic of the King's concubine which is so explicitly praised is beauty, whereby we must understand the symmetry and healthy constitution of the body. The third trait is chastity or virginal innocence. David's conduct with Abishag was innocent and she remained chaste. I believe that in choosing the Shunammite, David's physicians were interested not only in her corporeal form but also and to a much greater degree in the gift of chastity. This latter quality they detected in the physiognomy and lineaments, a research which must have been rather arduous considering the large number of Israelitish virgins.

One must not suppose that all virgins have such therapeutic scents that they can serve to prolong life, since, for one thing, they are not all provided with perfect constitutions. The Bible testifies how difficult it was to find a suitable virgin in all Israel to serve as the king's concubine. Had I been assigned the task of finding a nocturnal warmer for the sep-

tuagenarian king, I would much sooner go to the huts of the peasant than to the homes of the nobles; for in the former I should very likely find good health, white teeth, sweet breath, good digestion and a generalized pleasurable odor.

Jäger explains Shunammitism as sympathy engendered by the sweet scent of the person in question. Contact with such a one has a therapeutic effect upon the aged and sick. Thus, for Jäger, odor becomes a direct agent of therapy.

Scheffel's *Ekkehard* has it that, as living bodies approach each other, invisible energetic forces become active, stream out and pass into each other, causing peculiar relationships among men.

Perhaps the following ancient Egyptian magic formula is based on conceptions relating to Shunammitism. "To lay my . . . on the navel of . . . , to bring the . . . to N N, and that she arrange it so that whatever is in her hand is in mine, whatever in the female limbs . . . forthwith — instantaneously, instantaneously."

After all, the quintessence of Shunammitism is the attribution of a healing and life-prolonging power to the corporeal scents of young, healthy and chaste persons; and as we have seen, this belief is of great antiquity.

More than 500 years ago, Gommarus, a Bolo-

gnese antiquarian, quite accidentally discovered a marble votive tablet with the following inscription. This was included by Thomas Reinesuis in his Syntagma inscriptionum antiquarum, and later reprinted by Johann Kayser in his Parnassus Clivensis.

ÆSCULAPIO. ET. SANITATI.

L. Clodius Hermippus.

Qui. Vivit. Annos. CXV. Dies V.

Puellarum. Anhilitu.

Quod. Etiam. Post. Mortem.

Eius.

Non Parum. Mirantur. Physici.

Jam. Posteri. Sic. Vitam. Ducite.

That is: To Æsculapius and Sanitas, this table is erected by L. Clodius Hermippus, who lived 115 years and 5 days with the aid of exhalations of young girls; which circumstance cause physicians no little wonder even after his death. You, descendants, lead your life in the same way.

It was the German physician of the eighteenth century, Johann Heinrich Cohausen, who devoted to this discovery his famous, satirical book bearing the curious and enormous title: Der wiederlebende

Hermippus, oder curieuse physicalisch medizinische Abhandlung von der seltenen Art, sein Leben durch das anhauchen Junger—Mägdchen bis auf 115 Jahr zu verlängern, aus einem romischen Denkmal genommen, nun aber mit medicinischen Gründen befestigt, und durch Beweise und Exempel, wie auch mit einer wunderbaren Erfindung aus der philosophischen Scheidekunst erlaütert und bestätiget dur von Joh. Heinrich Cohausen M. D. 1783. This is the only monograph I know of on the theme of Shunammitism.

Cohausen draws special attention to the fact that Hermippus did not erect the tablet to himself but that others erected it in his memory after his death. This leads him to suspect that we are dealing here with a hoax, many of which have been perpetrated on an unsuspecting public.

Cohausen draws a highly delightful portrait of the life of this supposititious Hermippus (which strangely enough has been accepted in all seriousness by Carus Sterne) who is represented as living in the midst of girls who had not yet sacrificed their dolls and playthings to love. They were very small and, like the sister of the wise king, did not yet have breasts. Accordingly, one could still play very innocently with them and derive a chaste pleasure. "Playing and jesting with these girls will not arouse lust, in-

duce gloom, interfere with sleep; nor will those melancholy thoughts be induced which generally follow and plague the spirit of an old man who loves." One need not think that Hermippus was a mighty lord who sat in the seraglio like the sultan among beautiful and mature girls and prolonged his life by breathing their exhalation. Nothing of that sort is indicated on the tablet; and it would certainly be rather foolish to counsel posterity to follow such an example, for how many of the later readers of the lapidary inscription could lay claim to the power of a sultan.

Hermippus continued to live on, and as the little chaste virgins were not able to remain children for ever, they had to be supplanted by a new group of children. If we assume that Hermippus began to practise this means of prolonging his life when he turned sixty, then by the time he was one hundred and fifteen, he must have changed the youngsters about ten times, even if he made changes but once every five years. Thus Hermippus must really have been a very rich and distinguished person, for only such a person could afford such a large contingent. But our author holds this assumption to be unnecessary, as he believes it quite likely that Hermippus was a supervisor or teacher in a Roman orphanage for girls, or in a virgin's school. In this way he was en-

abled to spend part of his life at least in the society and breath of young girls. Moreover, Cohausen, mindful of the fact that teachers and schoolmasters have at all times enjoyed a reputation for longevity, holds it to be not impossible that Hermippus may have spent some of his time among boys.

The pièce de resistance of this precious satire is the description of the life of Hermippus among his little Shunammite women.

The orphanage, similar to a palace, had many gorgeous living and dining rooms. Here Hermippus had chosen a spot, in which he spent most of the day in the company of the girls, greedily breathing in the odor of their bodies and mouths. The time was spent in friendly and pleasant talk, in the dissemination of worthy maxims of life, with the narration of appropriate stories, and subtle injunctions to virtue.

Upon arising the girls kindle a fire in their room in order to thin out the air which during the night has grown thick. In rainy weather, they are especially diligent in fumigating their rooms several times a day with the best fumigants, for they have learnt from their venerable superior how necessary this procedure is to the preservation of health. When the old man arose, the older girls (since we do not desire to attribute Hermippus' preservation to little girls)

waited for their master in the dining-hall and greeted him with expressions of hope that he had spent the night well. Ofttimes, as they would relate their pleasant dreams, he would interpret them, endeavoring always to extract and enforce a moral lesson. Meanwhile, some of the older and more sensible girls, who were already susceptible to flattery, would be combing his snow-white hair, arranging his long, white beard, or rubbing gently his neck and shoulders with a rough cloth, which the ancients held to be very healthy. And had it been customary in those days to drink tea or coffee, they would undoubtedly also have brought him this drink.

When the school was over the rest of the time was spent with Hermippus' permission, in childish games. They jumped, played with their dolls, and frequently sang songs, for the ancients regarded singing and music as the most efficacious means of preserving health. In this way everything, including of course the inhalation of the breath of the girls, contributed to the preservation of our old man.

Now he would find pleasure in the rare figure of this girl, now in the premature modesty of another, or the piety of a third. When business would compel him to leave the room, the little girls would be seen endeavoring to restrain him; and when he had finally gotten to the door, they attempted to bring him back

with their kisses. At his return, they ran to meet him, hugged and kissed him and put their little hands around his shoulders. Some jumped upon his lap and poked him playfully, and all endeavored to embrace him. It was thus the rejuvenated Hermippus played with the little girls, since as Quintilian says, Romans show moderation and modesty not only in their serious concerns, but also in their merriment and children's games.

The orphanage had a very lovely garden wherein grew many flowers and herbs which disseminated a very pleasant odor that contributed much to the prolongation of life. Every day the children would pick flowers and decorate the room with them and on every fair day they would all congregate in the garden. Thus they lived without any worries. With the Platonists he held that without this all the other agencies for the prolongation of life would be ineffective. So he jested, played, and danced and sang with the little girls like a really young person.

Later on I shall reveal what the real views of Dr. Cohausen were on the subject of Shunammitism. The above excerpts leave no room for doubting that the learned physician to the Bishop of Münster was enjoying a good joke at the expense of those who believed in the salubrious effect of the odors of young people. This belief had remained widely held long

after the time of Hermippus. Thus Francis Bacon relates that when Frederick Barbarossa became old, he always held young boys close to his stomach and hips. Again, Martin Crusius relates in his Swabian chronicles that when the Emperor Rudolph of Hapsburg was stricken by a fever, he enjoined his nobles to bring him their wives and daughters, whom he kissed. When he was asked the reason for this practise, he replied jovially that he knew of no better means of restoring health than when he drew to himself the sweet souls of virgins and the pleasant spirits of young girls. The nobility who loved him laughed heartily at this explanation, and frequently brought their spouses to this honorable old man.

The Italian physician-philosopher of the Renaissance, Marsilius Ficinus, refers to this theme in his work, De Sanitate tuenda, where he refers extensively to the theory that odor and halitus strengthen the spirit of life. The kind of air we breathe and the odors we smell determine and form the spirit within us, for air gives the spirit its constitution (since we have not a simple but a compound spirit). He goes on to say that if the soulless exhalations of plants afford us so much pleasure, then how much more healing to the body of an old man is the odor emanating from a young girl. If the latter is in perfect health, then she is far preferable to all flowers and odorous

things; for her odor has something of the nature of living force which the other odorous substances lack. Hence, her odor is able to exercise a vitalizing influence upon an old man.

Francis Bacon shared these views of Ficinus, for he too detected in the corporeal exhalations and odors, the presence of vital spirits which pass from one individual to another. The following comment is taken from his Silva Silvarum: "The spirits of young people can, when they enter an older body, restore life to it, or at least keep it in good health for a long time thereafter. It has been observed that old men who spend much time in the company of youths live long, for their spirits emerge strengthened from such contacts. Thus the ancient rhetoricians and sophists were always to be found among youthful bearers, as witness, Gorgias, Pythagoras and Isocrates, and grammarians like Orbilius, among others, who reached the century mark." Bacon wishes to increase the Shunammite effect by having the girl anointed with myrrh and other aromatic substances, not in order to increase the pleasurability of the odor but to increase the warmth emanating from the living body.

Reports of their practical experiences in this realm have been left us by the physicians Capivaccio (d. 1589) and Forestus (1522-1597). The first has related how he prolonged the life of a scion of a noble

Italian house who had gotten marasmus, by letting him sleep between two young and vigorous girls. Forestus, again, saved the life of a Bolognese who was gravely ill, by ordering him to rest night and day by the side of a twenty year old nurse. The Dutch physician Bærhaave (1668-1738) also told his students that he had saved a German prince in a similar fashion.

Cohausen mentions the famous case of Thomas Parr (1483-1635) who lived to be one hundred and fifty years old and married many young women. He regards it as remarkable that long-lived men have so frequently been known to have many young wives. A certain Teutonic analogue to Parr by the name of Von Bevervorde took a new wife when he was a mere stripling of one hundred and ten and had two daughters by her. He reached his one hundred and thirty-fourth year in good health.

Cohausen's own attitude is of interest for he has assembled the most important facts and views relative to our problem. He is not without justice very much of a sceptic regarding the whole matter.

In the first place, this means of prolonging life is not accessible to all. Already St. Jerome desired to drive out every girl of that sort from the homes and beds of priests since the latter ought to sigh not for the corporeal faces of girls but for divine things. But

that is by no means the worst objection to the procedure. Cohausen goes on to cast doubts on the efficacy of the whole business and even suggests that certain dangers are involved. "A nubile virgin cannot serve to strengthen an old man by her nocturnal presence. She can, it is true, fan the extinguished flames of the old man, but this will more often consume than strengthen him. Gray and withered senility is not always free from the friction of passion. King David's virgin may have remained such in the royal bed, but in general, one cannot be too trustful in such matters. There do remain embers in the blood which can easily be rekindled into a strong flame. Ovid believed that the love of certain old folks was a shameful thing."

The story of Hermippus he regards as a down-right hoax which the discoverer of the tablet concocted to get a better price from the dealers. It would be as sensible, he asserts, to seek to prolong one's life by the aid of a little girl as to search for a treasure in a beggar who does not own a penny. No one can expect the late fruits of senility from the young and undeveloped branches of girls. Even their fluxes are raw and undeveloped and achieve their maturity only after a number of years. What sensible person will choose to take to his bed at night, or take upon his lap or even to have around him constantly, for the

sake of enjoying their odors and breaths, little girls who have scarcely begun to talk? Is not this a foolish and vain task? Poor old man who must draw strength from young girls! It would be much better for the aged were he to put a mustard plaster on his side or his belly than to depend for warmth upon a young concubine who needs to be warmed up herself. And what results? Will she restore the lost powers of the body, or remove the creases from the brow, or melt the snow of the hair? Will she strengthen the trembling hands or stumbling feet, and open the blinking eyes? Away with the breath of little virgins and the cohabitation of older ones! Away with Hermippus who owes his long life perhaps not to the breath of girls, nor the grace of Æsculapius and Hygixa or any of the imagined gods, but to human ignorance. If any one still doubts the satirical character of this work by Cohausen let him glance at the title page which represents Hermippus surrounded by children, one of whom he holds on his lap, while behind him stands—an ass. However, his book did redirect attention to the problem of Shunammitism, and during the eighteenth and nineteenth centuries, this belief was not only found as an element of popular belief but was even realized in practise.

Cohausen suggests that Turkish sultans used to delight in sitting among the women folk of their

seraglios in order to enjoy the female scent day and night; but we shall not discuss this matter further.

It was France of the eighteenth century described by the Goncourts and also by Dühren in his *Marquis* de Sade which, enervated by debauchery of all kinds, seemed particularly attracted by Shunammitism as a means of rejuvenation.

A famous imitator of King David was the abbè and author Claude Henri Fusée de Voisenon (1708-1775), notorious for his dissolute life. He wrote the Erotic Fairy Tales, as scintillating as it is piquant and sophisticated. He was the lover of the actress Favart and Mlle. Quinault and the famed Madame du Chatelet. In his old age, he took to his home as Shunammite, a Miss Huchon, but did not molest her. The librarian Querlon reports the incident in his introduction to the famous erotic book of the abbè, the Exercises de Devotion. The account closes with the following words: "C'était une fille d'une grande beauté; elle dormait toujours à côtè de lui, et il la laissa toujours vierge. Ah!"

This act of the renowned worldling leads us to assume that such practises were common at the time. Actually, there were panderesses in Paris during the eighteenth century, particularly at the Palais-Royal, who kept numerous girls just for this purpose. These

maidens had to be in the first bloom of youth and in perfect health.

In his famous work, Le Palais-Royal, Rétif de la Bretonne brings many highly interesting facts concerning the practises of these Shunammites. Much of this material is presented to us in the form of stories, but there can be no doubt that actual circumstances underlie his narratives. Most of the incidents he had either seen with his own eyes or derived from his friend, the physician Guilbert de Preval. The most famous dealer in Shunammites was the notorious woman called by Rétif, Madame H. Janus, who had more than forty girls hailing from the country or suburbs for the delectation of her customers. Very rarely did she employ Parisian girls. As a quondam housekeeper to a famous physician, Madame Janus understood her metier perfectly. Her charges were kept in an out-of-the-way house where they were trained for their vocation. They received the most nourishing foods and had to undergo a daily regimen of physical culture. Madame Janus took a louis d'or per night from the old gentlemen who desired restoration, of which sum the girl got six francs, and she herself twelve. At the first visit she would accompany the girl to make all the necessary preparations. She would bathe the old codger in an aromatic bath, then massage and dry him till his body was clean and

fresh. Then she would affix a tight-fitting muzzle to him and lay him down in bed between the two Shunammites so that his skin would touch theirs.

A girl could not serve more than eight nights in succession. Then the first pair of Shunammites was replaced by another; and the former would now enjoy a period of rest. For the first two days after going off duty, they had to take frequent baths and then they were permitted to loll and amuse themselves for a whole fortnight until their turn would come again. A patient needed the application of at least three pairs of Shunammites, so that the minimal cure required three weeks.

The greatest care was taken to insure the preservation of the virginity of these Shunammites, the loss of which would make the girls more harmful to the old man than useful. The *patient* would not only injure his health, according to the opinion of experts, but would also forfeit the deposit placed on the first day of cure to prevent just such a contingency.

A girl could only remain in Shunammite service for three years after the onset of puberty; and any girl who was in daily use would not last for more than one year. To increase the effectiveness of the treatment one virgin of the pair was always a blonde and the other a brunette.

Madame Janus also employed the services of a

resident physician called, strangely enough, Hermippus. Among her clients, Rétif mentions an old banker, a dyer merchant, a duke, a marshall of France, a millionaire physician, a broker and a retired capitalist. Had Madame Janus become known before, she would without any doubt have preserved Voltaire, Rousseau, Diderot, d'Alembert, and a little earlier, Montesquieu and Fontenelle.

Another item in the aforementioned work is also very interesting—the report of the Shunammite, Rose, concerning the services she and her companion Veillette rendered to an old banker. The disgust of the little girls with the grandpa to whom they had to minister and their frantic yearnings for the moment of their dismissal is very vividly expressed. Perhaps one sentence should be given in the original. "Un vieillard . . . qui tousse . . . crache . . . mouche . . . sue . . . et fait mille autres choses . . . non moins désagréables. . . . Nous asperons au moment de notre liberté comme des prisonnieres à la Bastille."

Even the century of science has not overcome the belief in the life-prolonging effects of Shunammitism. There is a story current of a very wealthy prince who in his old age slept between two nurses and sucked milk from their flowing breasts, which to be sure does not fit in strictly with the notion of Shunammitism. Then, too, it is related of a ruling prince

of the nineteenth century that he kept a young girl for that purpose. The same story is told of the old field-marshall R; and Louise Weil, in her book of autobiographical sketches, relates that an old man

desired to engage her for such a purpose.

King David and the pretty Shunammite, Abishag, figure on the title of the only Shunammite novel that has appeared. It saw the light of day in London in 1884, and bore the title: Abishag; a Luscious Tale of a Successful Physiological Search after Rejuvenescence, Fully disclosing the Secret of the only natural and true Elixir capable of effecting such a desirable necessity, By David II. Jerusalem 1851.

The elixir of rejuvenescence mentioned in the title consists in contact with a young girl. The author, taking his starting point from David and Abishag, relates that six months after his own marriage, he grew tired of his wife, and entered into an affair with his maid Jemima which intimate relation lasted for two years until the latter's marriage. As he grew older, his sexual capacity abated continually; yet when he seduced Jemima's successor, a young eighteen-year-old orphan who had never seen service before, he regained his potency and was able to satisfy mistress and maid alike. His wife congratulated him upon the return of his pristine power and desired to

learn the explanation, whereupon he revealed the mystery. She was quite amazed to hear that such consequences could issue from such girls; but since she was a good wife, she treasured the information in the hope of using it in the future. Accordingly, when Polly left to marry a young butcher, she hired another young and willing girl, and thereafter she changed her servant girls every three months, "as fresh girls are most effective".

The idea that one's own wife will bring in other girls to render Shunammite services for the purpose of strengthening her husband so that he will be able to satisfy her own needs, is rather a new one. The author declared that his book is absolutely true to life and the fortunate outcome of his own careful experiments.

The pictorial arts, too, have given some attention to Shunammitism, as for instance, the painting of David and Abishag, by the Czech painter, Douba.

Jäger asserts that what Bacon once said about the longevity of teachers as due to their perennial contact with youth is still a common belief; only he adds that teachers of girls live longer than their colleagues in the boy's department since the inhalation of the scent of girls is healthier.

There is also such a thing as animal Shunammitism. This is the import of the old belief that con-

sumptives will improve and finally get well in the atmosphere of cow stables. Bacon has reported that the physicians of his day used to apply young dogs to the bodies of old men at night. Of all animals, dogs are supposed to be the hottest and it was hoped to transfer some of this warmth and vitality to the wasted and jaded bodies of old men.

The therapeutic and macrobiotic value of Shunammitism is entirely problematical. Modern science has not yet discovered a single fact to prove that the odors or exhalations of young people can rejuvenate and extend the life of old and wasted persons. When you consider that the Shunammite must possess the good qualities of youth, health, and beauty, then it is quite likely that this combination may exercise a salutary and quickening effect upon the senile, for everything fresh and healthy affects a man favorably. At best, Shunammitism is a sort of suggestion-therapy, but it is quite unlikely that the exhalations of young persons as such exercise any positive effect.

However, there is a sound doctrine imbedded in the belief in the curative power of Shunammitism: the injunction to be as chaste as possible and to take pleasure in innocent contacts with a pure and unspotted girl. It is a fine and shining precept which in no way exceeds the powers of the normal man. It is in this sense that Cohausen interprets the words

of Hermippus engraved on the tablet discussed above: Iam posteri sic vitam ducite. Nor would he have been unjust had he directed his warning only to the lovers of Venus and the sons of Cupid who regarded the sexual smell of their nymphs as their very life and believed it impossible to live without them. With the permission of the graces, they also loved the nectar-like ructus of their girls. Indeed, when passion overcame them, they sucked up the hiccup and the ructus as though it were the most pleasant aroma of youth.

Against this pathological olfactory fetishism, assuredly Shunammitism, with its belief in the curative power of chastity, appears in a more ideal light.

EROTIC PERFUMES



Odoratus Sexualis

Erotic Perfumes

A rich and interesting chapter of sexual osphresiology is the one dealing with artificial odors or perfumes. It is the latter perhaps which best enables us to recognize the importance of odors for the sexual life of mankind and shows how these relationships between the olfactory sense and the sexual impulse were especially noteworthy in primitive times.

According to Paschkis, perfumes are among the very earliest cosmetics and almost all of them used today were already known in early antiquity. It is merely in the manner of their employment that progress has been made. Let us now review briefly the most important perfumes according to Paschkis's classification before we take up in greater detail the erotic importance of perfumes.

From the animal kingdom, there are derived the following major categories of perfumes:

- 1. Ambergris. A light gray-brownish or ash-gray tough substance melting to an oil upon subjection to heat, giving off a peculiar and not quite pleasant odor. Upon strong rarefaction, the latter grows more pleasant. Ambergris is derived from the sperm whale (physeter macrocephalus), but the exact spot from which the substance is drawn is not definitely known, some believing that it comes from the rectum, and others from the bladder of the animal.
- 2. Musk. Seeds of black-brown color and a peculiar penetrating aromatic odor. Musk is the secretion of the glands in the vicinity of the sex glands contained in a receptacle situated about 15 cm. from the navel of the male musk animal (moschus moschiferus). This musk pouch is composed of several skins, con-

cealed by hair-covered abdominal skin, and has two openings. The glands lie between the skins. The best sort is the Tonkinesian musk; less valuable is the Russian or Cabardiner musk, the Nepal and Assam musk.

- 3. Civet. A yellow-brown ointment-like disagreeable-smelling substance secreted from a pouch located between the rump and genitals of the civet cat (viverra civetta), particularly the African civet.
- 4. Castor. A caseous substance of a penetrating smell consisting of the preputial follicles of the beaver and their contents. The Siberian Castor is more precious than the Canadian.

The scented substances of these drugs are soluble in alcohol, but because of their penetrating odor they are not used independently as perfumes but only in combination with others. The latter serve as solvents which lend permanence to the fine, lovely volatile odors.

The plant world contains numerous odorous substances. Paschkis lists the following:

Labiatæ (Lavendula, Origanum, Melissa, Mentha viridis and piperita, Rosemarinus offic., Salvia offic., Thymus serpyllum, Pogostemon Patchouly)

Umbelliferæ (Anethum graveolens, Pimpinella anisum, Fæniculum vulg., Opoponax chironium)

Leguminosæ (Myroxylon perniferum and tolniferum, Acacia fornesiana, Dipterix odorata, Santalum album)

Iridæ (Iris florentina)

Orchidæ (Vanilla planifolia)

Liliaceæ (Polyanthes tuberosa)

Coniferæ (Juniperus virginiana)

Laurineæ (Cinnamomum Camphora, Laurus, Cassia, various Cinnamons)

Gramineæ (Andropogon Schænanthus, muricatus, nardus)

Lonicereæ (Sambucus nigra)

Magnoliaceæ (Illicium anisatum)

Rosaceæ (Rosa centifolia and Damascena)

Geraniaceæ (Pelargonium odoratissimum)

Convolvulaceæ (Convolvulus Scoparius [Rosenholz])

Residaceæ (Reseda odorata)

Violaceæ (Viola odorata)

Styraceæ (Styrax offic.)

Myrtaceæ (Myrtis communis and Carophyllus aromaticus)

Aurantiaceæ (Citrus Bergamia, medica, aurantium)

Aroideæ (Acorus Calamus)

Amaryllidiæ (Narcissus odor.)

Borrigineæ (Heliotropum peruvianum)

Jasmineæ (Jasminum odorat.)

Apocyneæ (Plumeria alba)

In some plants, the perfume is contained in certain parts: e.g., in flowers (acacia, heliotrope, violets, jasmin, elder, lilac, rose, etc.); in the stalk (mint, sage, patchouli, etc.); in the fruits and seeds (umbelliferæ, vanilla, etc.); in the rind (cinnamon, cascarilla, santal, etc.); and in the roots (iris, acorns, etc.). In other cases, however, all parts of the plant contain the perfume.

All these substances, in one way or another, play a role in sexual osphresiology, but the two perfumes which have always been known as sexual stimulants are amber and musk. Paschkis is wrong in assuming that the modern predilection for toilet waters redolent of these odors, such as *Eau de Cologne russe* or *Par-*

fum Peau d'Espagne, is a sign of increasing barbarization or the derangement of nerves symptomatic of modern times. Amber and musk have long been the most favored articles of toilette in spite, or rather because of their sharp odors.

In any investigation into the origin of the use of erotic perfumes, the religious factor cannot be left out of account. The mystical element inherent in olfactory perception must have made the latter as important for the religious cult as for the worship of Venus. In this realm, too, there is apparent the peculiar interpenetration of religion and passion which has been emphasized by so many investigators. It was perhaps at religious festivals that men first made the acquaintance of mysticism and passion, and it argues well for the priests' knowledge of human nature that they sought to attract men by the use of incense and other perfumes. Fleury rightly observes that of all pleasant things that enchant men and draw them to religion, that of odor is the most effective and most impressive, especially for women. How characteristic it is that St. Augustine, in that portion of his Confessions which treats of sense pleasures, regrets all of them save that of perfumes. He says: "I am not afraid of the temptation of perfumes. If they are not present I do not despise them. I am ever ready to do without them."

In one of his poems Baudelaire has clearly expressed this inward relation between the religious use of perfumes and the sex life of human beings.

LE PARFUM

Hast thou inhaled —O reader, say!—
With zest and lazy greed, the old
Incense that chapel arches hold
Or the stale musk of a sachet?

O magic spell, O ecstasy!

—To make the present yield the past!—
'Tis thus on a beloved breast
Love culls the flowers of memory.

The tresses long about her face

—A living censer, left the place

With strange wild odors all astir,

And in her velvet, muslin, lace, Candid and girlish, over her Hovered a perfume faint of fur.

This effect upon the senses which already the religions of the ancient Orient and classical antiquity sought to achieve by the use of perfumes, is exempli-

fied in modern times whenever the odor of incense and myrrh induces a mystico-ecstatic mood in the believers.

Now that we have briefly mentioned the religious origin of perfumes, we approach another point: the relationships of these perfumes to the natural odor di femina; for there is no question that women were the first to use perfume as cosmetic and sexual stimulants.

It is not impossible to derive the use of certain perfumes directly from the natural scent of woman, a relationship which Tardif also appears to recognize. Since it is certain that in primitive times sexual odors played a much greater part than today, it is obvious then, in accordance with the principle of sexual selection, that such women were preferred by men as were characterized by a strongly developed odor di femina. It is quite understandable therefore that women, who for one reason or another lacked these specific scents, would resort to artificial odors to make good their deficiency. We have already seen that all the specifically sexual odors belong to the capryl family, and for this reason are penetrating and unpleasant. Hence, from very earliest times women have used as substitutes for their deficient natural scents, such sharp aromatic substances as civet, musk, castoreum, and amber, which in fact constitute the old-

est known perfumes. That nature contains a large number of odors both vegetable and animal, which are similar to sexual scents, we have observed above. Take, for example, the smelly chenopodium vulvaria. It has been reported that some adolescent boys are wont to smell this plant with a great deal of satisfaction because it smells veritably like a vulva. So it is quite likely that at least a portion of the perfumes used today owe their origin to such analogies. Otherwise how could we explain the fact that in early times women employed almost exclusively substances bearing a strong and unpleasant odor. I believe that my theory concerning the preference of such odors in primitive times is more correct than the explanation common today: that women originally used perfumes to hide their evil odor. To my mind this reason, which has been emphasized by Zwaardemaker, Jäger, Moll, and Ellis, is of secondary importance and has become operative only in very modern times when there has developed a definite aversion to markedly noticeable body odors. It is to be assumed that perfumes still serve as stimulants; and when one wonders why so many unpleasant and even repugnant odoriferous substances are employed for this purpose, one must remember that ancient tradition and inherited custom play a large part in the perpetuation of such habits.

At any rate it was always the women who were

concerned with enlarging the store of available perfumes, as Servius said a long time ago. It has even been stated that the character of a woman can be determined by her predilection for a certain perfume. According to Zimmerman, the ancient Greeks judged the whole by a small part — e.g., a man by his odor or dress. An American writer, Harry Thurston Peck, once paraphrased an ancient maxim into: Tell me what you love to smell, and I'll tell you what you are. He divided all female lovers of perfume into five main classes.

- 1. White Rose, Celtis, Chypre, Peau D'Espagne, and Patchouli lovers. All have the same heavy, sweet, almost intoxicating odor. They are not pleasant to loving human beings; and are inclined to sentimentality, sloth of body and mind, sextravagance. They also have a tendency to obesity.
- 2. Musk lovers. These are brutal and undifferentiated persons.
- 3. Violet lovers. These are characterized by education, good taste, and admiration of the beautiful.
- 4. Eau de Cologne lovers. These possess the highest purity of character, finest taste, comprehensive education and a keen mind.
- 5. Corylopsis and Ayapana lovers. These are excep-

They love the unusual, the rococo. The evil in them does not always come into the light of day.

Rene Fleury has made similar observations. A woman of taste betrays herself by her perfume. If she is silent and reserved, a few drops of ancient oil charged with extract of violet will suffice her; if fiery, she will love the haughty zinnia; the blonde and tender, languishing and agitated, will announce herself by heliotrope; the mature and sensual one, somewhat massive, will have a great inclination for patchouli; the violently voluptuous will have as favorites, stephanotis, chypre, and the opulent opoponax; the simple, downright girl will have the odor of hay caught in her handkerchief. Each group of women inclines to a family of perfumes which indicates her character and morals. In this there can be no concealment for no matter how crafty a woman may be in other respects the choice of her odor is indicative of her true self.

The home of the perfumer's art is Egypt which in ancient times supplied all the Orient as well as Greece with its perfumes. Even in those days Egyptian women had developed the art of perfume to the highest degree and had perfumes for their hair, mouth, and private parts. Great use was made of

the white flower of the henna plant, which was also employed by the ancient Hebrews for this purpose. In the notes to his Egyptian tales, Ebers has some interesting details concerning perfumes.

The Jews learnt about perfumes from Egypt, and besides henna they used myrrh, cinnamon, cassia, and calamis. Fleury has made the striking remark that the famous seduction scenes in the Bible are all enacted in a cloud of perfume, so to speak. Ruth came perfumed to Boaz; Judith put on an intoxicating bouquet for Holofernes and Ahasuerus was bewitched by Esther in the same way. The latter took a whole year to complete her preparations for King Ahasuerus, an olfactory fetishist. For six months she was perfumed with balsam and myrrh, and for six months more with excellent spices.

From Egypt the use of erotic perfumes spread to Greece and thence to Rome. The ancient Greeks were especially fond of perfumed ointments and oils. The scented oils served the same purpose as our modern toilet waters. So great a traffic was carried on in these articles and so luxurious did they become that the Consuls Licinius Crassus and Julius Cæsar had to prohibit the sale of foreign perfumes. Violets from Athens, roses from Cyrene, nard from Assyria, henna from Egypt, these were some of the substances used as perfumes not only pure but in various mixtures.

Products of certain firms such as Cosmus, Nicero, and Aurelian were especially prized.

Unguents of delicate fragrance were made by enfleurage; while oils were prepared by maceration. The latter were warmed in water baths and then successively charged with fresh flowers numerous times. The ancients knew already that to capture delicate aromas required support by a more powerful odorous substance. So the oil of lilies got myrrh and calamus as a base, while the attar of roses was imprisoned in andropogon schönanthus. It is true that alcohol as such was still unknown but they set up wine with certain aromas for use in perfuming; of this method, Discorides has recorded many accounts in his materia medica.

According to a remark of Lacroix, perfumes in antiquity were the companions of the one and the other Venus. The ancients knew no love without perfumes. This predilection had been transplanted to Hellas and Rome from the Orient and presently Rome was as perfumed as Sybaris and Babylon. However, the more highly perfumes were valued and desired, the more disrespect was shown to the male and female makers and dealers of perfumes who were mostly courtesans, panderesses, male prostitutes, and brothel-keepers. Respectable people who needed perfume used to enter the places of these people with

masked faces. Cicero and Horace spoke of them with deepest contempt. The appellation unguentaria meant the same as whore or panderess. The shops of these dealers were reputed to be the sites of vilest lechery so that rich folks had their private perfumers. Lacroix gives an eloquent description of the immense importance of perfumes in imperial Rome, at which period the mania for perfumes was as intense as never before or after. He points out the enormous erotic importance of these innumerable olfactory stimulants. Especially as a prelude to the palæstra venerea did these perfumes play a major role. Both lovers would have their bodies anointed with fragrant ointments and oils after they had washed with perfumed water; incense arose in the love chamber as at a sacrifice. The bed was garlanded with floral wreaths and strewn with roses. The other furniture was sprinkled with nard and cinnamon; moreover, the love act was interrupted by frequent ablutions with perfumed essences. The composition and manner of using these erotic perfumes constituted a very important portion of the ars amandi, and in these departments the prostitute, especially, developed great skill.

In medieval times it was the Crusades and the Arabian physicians who gave the impetus to the dissemination and development of perfumes in the

Christian Occident. The ladies of knightly society knew well how to apply perfumes for erotic purposes. In the fireplaces, they burnt aromatic woods and the sleeping chambers were permeated by the intoxicating odor of incense. On the floor-rugs there were, as *Parsifal* has it,

In Muscheln, Büchsen, Topfchen
Und serpentinenen Näpfchen
Die kostbarsten Aromata.
Es streuten Ambra und Theriak
Ihre Düfte; auf dem Boden lag
Cardemom, Zeriffel und Muskat,
Dass man mit Füssen darauf trat,
Wodurch ihr Wohlgeruch sich mehrt.

There was no festival, no wedding in medieval France at which one did not adorn one's head with roses. The author of the romance *Perce-Forest* was careful to remark, apropos of the description of a festival, that every participant wore a cap of roses.

During the Renaissance, the rebirth of antiquity, sexual perfumes again achieved the position of importance they had occupied among the Greeks and the Romans. According to Tardif, the Renaissance scored epochal accomplishments in the realm of per-

fumery, which opinion is shared by Piesse and Burck-hardt.

Accordingly, a new art of perfume of infinite refinement proceeded from Italy and a large number of writers composed works on this subject, e.g., Saigini, Giovanni Marinello, Giovanni Baptista Porta, Isabella Cortese. The discovery of new aromatic substances in the New World, such as cocoa, vanilla, and Peru balsam aided these novel developments of the perfumer's art.

From Italy, the contemporary home of sexual sophistication, the excessive use of perfumes was transplanted to France, principally by Catherine de Medici where, indeed, it assumed even more remarkable forms. Catherine invited many famous Italian perfumers to France who, somewhat later, under the rule of Henry iii were scarcely able to satisfy the demands of a corrupt court. On this point, Brantome wrote that formerly the Italian and Spanish women had perfumed themselves more but now "our French women far surpass those others."

Another reason for the increased use of artificial perfumes at that time was the terrific spread of syphilis. This had first broken out in Naples in 1495. According to Hæser, people fairly swathed themselves with perfumes, as during previous epidemics, in order to guard themselves against the poisonous

vapors of syphilitics, or perhaps to guard themselves against the morbid effluvia of their own bodies. Jacobus Sylvius, a physician of that time, has left a vivid account of the procedures employed to ward off the plague. To quote just a point from his narrative: "Pastilles made from aromatic substances were constantly rolled between one's fingers so that the pestilential vapor could not become perceptible."

Lacroix believes that the desire for cleanliness did not arise among respectable women until the sixteenth century. Until that time women would boast publicly that they never washed their genitals and left the latter practise to courtesans and prostitutes alone, a prudery which was scored by Beroalde de Verville in very coarse words. The same author reported a true French invention singular in the history of artificial perfumes and one covering with glory the scatological propensities of the French. These were the pets parfumés of the sixteenth century of which Beroalde has again left us a graphic account.

The last golden age of perfume was set in the France of the eighteenth century, particularly during the reign of Louis xv when the excessive employment of erotic perfumes really assumed the proportions of an epidemic. Sophisticated women would use a different perfume every day, and the Marquise de Pom-

padour spent more than half a million livres annually for perfumes. Versailles was called *la cour parfumée*. In this Cytherean time, indifference to odors was virtually a crime; never before had the empire of woman been so strong and prosperous. Without the bergamot of Italy, of what use was money — and even passion. . . .

The Duc de Richelieu, one of the greatest voluptuaries of the ancien régime, lived in a perpetual atmosphere of perfumes which were sprinkled about his rooms. During the eighteenth century there was a famous club of dandies, the so-called Ordre de la frivolité, devoted to the introduction and improvement of styles and other gallantries, whose members spent four hours daily at their toilette. This organization had as identification signs, certain perfumes and flowers which every member had to carry about with him.

The perfumes most favored by the eighteenth century were peau d'Espagne, musk, civet—in general, very penetrating odors. Very famous, too, were the seraglio-pastilles of Madame du Barry of which the chief ingredient was amber. Later, shortly before the outbreak of the revolution, somewhat milder perfumes came to be preferred, e.g., violet and roses; and during the revolution, the employment of perfumes was regarded as an aristocratic luxury. Per-

fume did not come into popularity again until the time of the Directory and only after the precedent had been set by Madame Tallien and Josephine. Napoleon I was very fond of Eau de Cologne, and every morning he perfumed his neck and shoulders. Another scent that he was very fond of was rosemary.

In England, the use of perfume was very widespread during the reign of Queen Elizabeth. On his return from Italy, Edward de Vere, Count of Oxford, brought with him gloves, scented pillows, perfumed doublets, and other novelties. From that time on there was a great traffic in these luxuries. There was a tremendous vogue for sweet coffers, perfumed boxes in which every lady had her favorite perfume. People never went out without their vials of essence, scent balls, and little perfume boxes created by the finest goldsmiths.

In 1770 the English Parliament issued the following decree which is very interesting for sexual osphresiology: Any woman of whatever age, position or calling, virgin, wife, or widow, who shall hereafter ensnare into marriage any subject of the king, by the aid of perfumes, false hair, Spanish cosmetics, corsets, crinolines, high heels, or false hips, shall be liable to all punishments prescribed for witchcraft and similar practises, and the wedding shall be pro-

nounced null and void.

At the present time, the use of perfume among all classes of people is still most common in France. In northern lands the practise has abated considerably owing to the increase and wide dissemination of bathing facilities. Paris has virtually a monopoly on the manufacture of perfume. Its annual production, valued at more than 100,000,000 francs, reaches every corner of the world. Some of the more famous perfumeries are Lentheric, Guerlain, Pinaud, Violet, Houbigant, Roger et Gallet, Gille, etc.

That perfume must be considered as a means of sexual attraction is especially clear from the fact that ever since antiquity certain parts of the body have been covered with perfumes. Hieronymus Mercutialis has left a list of the various practises of this sort among divers ancient nations.

A most primitive custom and one most important for *odoratus sexualis* is that of perfuming the male and female genitals. This practise seems to have originated in Egypt. An exact student of Egyptian culture and medicine has accounted for this peculiar cosmetic fashion first found among the Egyptians, by pointing out that it was a necessity enforced by the sexual competition resulting from the system of polygamy regnant there. The famous *kyphi*, a composite of many aromatic substances, served as the

perfume for the female genitals. A papyrus some thirty-one years old, contains a recipe for this article and reads: "For women, to make as a little ball, for smoking or fumigating purposes, or as a pill for their vulva in order to make pleasant the odor of the latter." This custom of perfuming the female genitals has been preserved in Egypt throughout the millenia. The Renaissance physician Prospero Albini who spent three years in that land has left the following memorandum in his study of Egyptian medicine: "The Egyptian women anoint the vulva with amber and civet, thus increasing the pleasure of coitus. Just as the women of Italy and other nations pay great attention to the care of their face and hair so do the Egyptian women, neglecting entirely the interests of their European sisters, pay exclusive attention to the pudenda and the regions thereunto adjacent."

The cosmetics of the vulva were early introduced into the Occident, perhaps by Arabic physicians. During the eleventh century the Salernian woman physician Trotula wrote a work whose manuscript is at present available in the Laurentiana at Florence, bearing the telling title: Trotula, in utilitatem mulierum, et pro decoratione earum, scilicet de facie et de vulva earum.

During the Renaissance some additions were made to the beauty culture of the genitals. Not only were

the latter perfumed, but the pubic hairs were combed and curled. Men, too, at least those who passed for gallants devoted great care to the frizzling of their genitals. Lacroix says: "Il n'y avait que les débauchés et les femmes dissolues qui le (le poil honteux) peignaient, le frisaient et le parfumaient avec milles recherches de sensualité obscène." At the time of Francis I, it was the barbers and bathers, particularly, who purveyed this erotic beauty culture.

Nor were these arts unknown to the eighteenth century. The Espion de la Cour and the Gazetier Cuirassé ou Anecdotes scandaleuses de la Cour de France report that Madame du Barry was accustomed to perfume the interior of her genitals in order to keep her lover, Louis xv. His great attachment to her was the result of her efforts to douche her genitals daily with amber. Moreover, the perfuming of the genitals is also described in the Anti-Justine of Rétif de la Bretonne, and in the works of the Marquis de Sade. Among other objects used as genital cosmetics may be mentioned certain Chinese perfume balls filled with amber and musk.

After the genitals, the mouth has always been the next in importance as an object of care. Thus, one of the Ebers papyri (about 1500 B. C.) gives a formula for pastilles to be used in smoking or as mouth pills, in either case to give a pleasant mouth odor. A similar

formula is given by Discorides. Among the Greeks and Romans, perfumes were very important in the hygiene of the mouth. In order to conceal halitosis or confer sweet breath, they used mouth washes containing saffron, roses, etc., or they drank *chian mastix*, myrrhs or costly preparations similar to our perfumed cachous. We all remember the lines of Martial:

Esse quid hoc dicam quod olent tua basia myrrhum Hoc mihi suspectum est, quod oles bene, Postume semper Postume, non bene olet, qui bene semper olet.

Another point showing that the ancients recognized the importance of mouth odors for sexual attraction is that jealous Greeks compelled their wives to eat onions before going out.

Lacroix quotes a Renaissance formula against toute puanteur et fédeur du bouche. A detailed account of modern oral cosmetics may be found in the chapter on the mouth contained in Paschkis' Kosmetik fur Aerzte.

Unpleasant axillary odors were banished in the sixteenth century by pulverized myrtle-leaf alum solution or lead acetate.

The arsenal of the art of erotic perfuming also includes perfumed baths which were not uncommon in antiquity. Oleum, jasminum and other aromatic

substances were added to the water. In the poems of the Greek Anthology there are preserved some bathhouse inscriptions which particularly celebrate the aroma of the baths there purveyed. In the eighteenth century, perfumed baths became very popular and were used in the toilets of distinguished women as well as in certain houses of prostitution. These baths were taken in special tubs, the famous baignoires à la Dauphine Marie Antoinette. These cosmetic baths were prepared with milk or almond paste, eau de chair, de mouron, eau distillée du miel, de la rose, suc de melon, balsams, etc. Under the Directory, Madame Tallien propagandized very energetically for these baths. Even today such perfumed baths are still to be had in France. Galopin lists various prescriptions in this line and even advises local perfumed baths for the female genitals. The most recent French speciality is flower-baths. These not only impregnate the skin with their perfume but also stimulate the body as a champagne bath does. There are two types of floral ablutions. The first, the dry one, is very simple. One merely fills the heated tub with flowers and lies upon this floral bed for an hour. The second is a real bath. One soaks dozens of posies in hot water and prepares the bath from this solution. Jäger has advised floral baths to which wild thyme has been added.

In the list of Parisian fashions in *odoratus sexualis*, we must add that of the perfumed bed, first introduced by a famous and well-loved duchess in the last century. This lady, whose hospitality was proverbial, went so far as to supply her guests with beds whose lace-covered pillows concealed more than a dozen little pouches containing the favorite perfumes of each guest.

Perfumed gloves are an invention of the Renaissance which originated in Italy and later entered England and France. The Spaniards, too, manufactured these articles but gave them such a sharp odor that they were inferior to the Italian products, and often caused their female wearers unpleasant headaches. Antonio Perez was such a famous gantier parfumeur. At the time of the Fronde the perfumed gloves most popular in France came from Rome, Grenoble, Blois, Esla, and Paris. In 1649, through the painter Poussin, M. d'Chanteloup ordered a pair of gloves perfumed a la frangipane from the famous Signora Maddalena of Rome. In Paris in 1692, there were a certain number of gantiers parfumeurs who lived in the rue de l'Arbre-Sec and rue Saint-Honore. Under Catherine de Medici, Jeanne d'Albret was poisoned by a pair of perfumed gloves. Queen Elizabeth was so delighted with a pair of such gloves that she insisted on being painted wearing them. Today there

are many formulæ for perfuming gloves, the favorite means being Peau d'Espagne, amber, and violet.

An outgrowth of the perfume mania is the scenting of large rooms and open spaces. In her manuel of elegance, the Vicomtesse Nacla has left copious directions for perfuming the rooms of one's home. (Incidentally, this book also contains directions for perfuming letters and book marks.) In earlier times this practise was customary during festivals. According to Mathieu de Concy, the historian of Charles vii, there was seen at one of the parties given by the Duke Phillip the Good, of Burgundy, a child, "qui pissoit de l'eau rose". There were even fountains whose aromatic waters disseminated their fragrance all through the festive chambers. The Mercure Galante of March 1681 contains a report of a fountain of orange-blossom essence which played all through a formal dinner given at Marseilles. And on festival days, even the public fountains were temporarily scented.

In fairly recent times, perfumes have been employed on the stage. French symbolists accompanied the reading of their verse with the dissemination of odors which were adapted to the words and were calculated to increase the sexual effect of the latter.

The great German poet Schiller entertained this idea in the eighteenth century. In Kabale und Liebe

(Act I, Scene 6), his stage directions read: "Marshall von Kalb, combed à la Hérisson, in a rich but tasteful court garment, bearing with a chamberlain's key two watches, a dagger, and a *chapeau-bas*. He flies to the president with a great clatter and spreads the odor of musk over the whole pit."

During the 1840's, a farce was presented in Berlin bearing the name, Köch und Guste. In it, a gallant friseur scattered an odor offstage into the audience with interesting results. During the presentation of the hallet In Morgenlande at the Munich Court Theater on September 10, 1811, in honor of the German Kaiser, perfumed liquids were squirted out upon the stage by Frau Flora Jungmann as part of a flower-waltz. In 1897 when the new ballet of Hassreiter, The Red Shoes, was given its premiere at the Budapest opera, the local newspaper could not say enough in praise of the splendid décor and the numerous scenic wonders which contributed to the success of the performance. The first prize among these accessories went to the rose-waltzes. While these were being danced upon the stage, the theatre was gradually filled with the odor of white roses, which strengthened the illusion considerably.

In a certain sense, flowers are excellent means for exciting an erotic influence upon the other sex; and the fair sex, especially, employs these instruments

to buttress up their efforts in this field. Flowers played the chief role at the famous festival of Floralia among the ancient Romans and served as sexual stimulants. Floral wreaths were worn upon the head on all occasions where "intoxication of the senses and of wine required a corrective." The odor of flowers weakened the intoxication of wine, and at the same time heightened the sexual impulse. To this day, the bouquet of flowers is the most innocent form in which sexual osphresiology manifests its influence even though it does not always bring to the mind of the person in question the thoughts reported to Mantegazza by a certain woman. The latter confided in the scientist that occasionally she felt such intense joy in inhaling the scent of flowers that she really believed herself to be committing a sin.

The employment of perfumes is rightly regarded as the surest earmark of the effeminacy of man, so utterly is it a feminine fashion. Fleury, to be sure, says that men have contributed to the refinement of the art of perfuming, but we shall not go into that matter. At all events, it is certain that modern healthy and normal people regard a man who perfumes himself, as a womanly creature, as an effeminate. When Callias in Xenophon's Symposium wishes to bring his guests perfumes, Socrates rebukes him as being

about to do something unworthy of men. In antiquity, it was especially the homosexual man who perfumed himself. Every day the perfumer (unguentarius) had to anoint and besprinkle these Kineads a scene graphically described by Lucius Africanus. Today also, it is primarily the passive pederasts and

male prostitutes who employ such arts.

Just as there are olfactory fetishists in relation to the natural odor of woman, so also are there perfume fetishists, men who become sexually excited by a perfume which the woman uses. This may be violet, iris, heliotrope, amber, etc. Conversely, and equally naturally, sexual antipathies can be called forth by certain perfumes. Jäger opines that these antipathies are due to the fact that there are male perfumes and female perfumes. The male odors exercise an attraction upon the female sex, but are repelled by the male. Musk and similar animal perfumes which are employed to heighten sexual attraction and pleasure come from the male animal. This employment of a male odor by females accounts for the large number of spinsters, according to Jäger.

This notion is absolutely wrong. Were it true, one could not explain the persistence of musk, civet, and other penetrating animal odors ever since their dominance in antiquity. It may be true that today more men are unpleasantly impressed by these odors be-

cause advancing civilization has robbed the olfactory sensations of their former importance. As a result, sexual odors and perfumes play but a small role in the life of the normal man, but contrariwise, very frequently exercise a strong repulsive effect, especially upon the man whose sense of smell is more developed than woman's. This then, is the explanation of various antipathies and idiosyncrasies induced by perfumes.

At this point, we may remark in passing that animals, too, are susceptible to the influence of perfumes. According to Tardif, this is mainly true of domesticated ones. The elephant is well known to be a perfume loving animal and seems to prefer the fragrance of orange blossoms. Nightingales begin to sing only when some perfumes have been put into their cages. Cats love peculiar odors like valerian. Dogs seem to be dull to perfume. If one holds a handkerchief steeped in perfume to the nose of a hunting dog, he will smell it and promptly turn aside.

Galopin has reported unique experiments which have been made among animals, especially horses and cows, to entice a reluctant male to have sexual intercourse with a certain female animal which the former was avoiding. It was found that after perfumed liquids such as thyme-water or sage-water

had been injected into the vagina of the female, the male consented to copulate.

Since the influence of odors is almost exclusively confined to the sexual system, perfumes have been used as therapeutic agents in sexual maladies of all sorts, particularly impotence, anaphrodisia, and sterility. Hippocrates was the first to recommend the introduction into the vagina of myrrhs and various aromatic substances in order to increase the sexual excitement of both the man and the woman. This counsel was accepted by later physicians. Michæl Ettmüller advised the fumigation of the vagina with perfumed vapors, and Konrad Gessner sold perfumed pessaries. According to Gyur Kovechky, however, most perfumes have only a transitory and unreliable effect in cases of impotence, and are not at all effective unless the individuals are easily excited sexually.

Perfumes seem to be more effective as sedatives in cases of sexual excitement. According to an ancient maxim of the Salernian school, the odor of camphor is effective in cases of priapism: Camphora per nares, castrat odore mares.

In the monasteries they used to employ as antidotes for sinful erections, the odor of ruta graveolens, which was therefore widely cultivated in monastery gardens and used for the vinum rutæ. In hysteria and other sexual neuroses, valerian has been proven

extremely effective. Finally, perfumes are also indicated where evil odors are to be concealed, a custom suggested by the ancient physician Criton.

Descourtilz has mentioned that there are cases of relative impotence which can only be cured through the influence of the natural *odor di femina*. However, the evidence is as yet too slight for us to use this suggestion as a therapeutic device.

LITERATURE



Odoratus Sexualis

Literature

The literature of all nations and ages is rich in references to the facts of odoratus sexualis. It would require a complete book to present, with any degree of satisfactoriness, the numerous notions relevant to this theme which are to be found in prose and poetry. I shall content myself with a short review and the quotation of a few characteristic examples indicative of the great importance which poets have at all times assigned to the sexual scents of human beings. At

the outset of our excursion into this realm we are struck by the remarkable fact that it is almost exclusively the sexual odor of the woman which seems deserving of poetical exaltation. The odor di femina is among all peoples regarded as a subject worthy of literary treatment; but the masculine odor hardly appears in poetry. It is an interesting item of cultural history, and the explanation is not far to seek. Man has by nature a stronger olfactory sense than woman and is therefore more susceptible to the female odor than she is to his. Another factor in the situation is that once the female scent possessed a great sexual significance for the man. The further back one goes in literature, the more glowing and more natural are the depictions of this female scent. I say more natural because the same description which one finds in the Bible will, in a modern poet, appear highly artificial. When the Song of Songs revels in glowing and passionate fantasies about the splendid odor of the beloved, and compares, as an example, the odor of her breasts with that of the costliest perfumes, the natural feeling of those times is being echoed in that wonderful song of love. But when a modern symbolist like Edmond Haraucourt enumerates and analyzes the various odors of the human body — for his Symphonie is nothing but such an analysis - then this is merely artistic raffinement. It in no way reflects or

corresponds to our modern feeling about these matters.

How much naturalness and refinement of feeling there is in the following section of an Egyptian song: "Would that I were the washer who washes her clothes regularly, who washes the oil stains found in her head kerchief; then would I be able to smell her odor."

And how much deep symbolism there is in the fact that Kama, the Hindu God of Love, has flowers in his quiver in place of arrows.

It is a very primitive conception that woman is the embodiment of perfume. This view is specific to the Orient and from there it spread to the west. The northern peoples, as those of cooler climates generally, are less in the power of the *odor di femina*. Thus, in the Edda, it plays no role whatever. But let us return to the Orient.

A Chinese poem contains the following lines: "Of all the loveliest girls in Tientsin and Taku, I have chosen twelve; Kneifu has something poetical about her. Her cinnamon-leaf soul is radiant and mysterious, and her very shadow is full of perfume. Yue-ju is transparent and clear. Her body is of ivory and her soul of snow. Whether she laughs or cries, she is always perfect. When she opens her red lips, her breath fills all of Tientsin with perfume."

The poetry of Persia is the richest in references to odors. But here, too, it is always woman whose natural and artificial odors are celebrated. Men usually did not perfume themselves. In his Pend-nameh, Ferid-ed-din-Attar remarks that only women are made glad by odors and colored baubles. In one of his poems, Sadi represents with fine understanding the pleasant as well as repugnant aspects of corporeal odors. When Mamun was Caliph at Bagdad, he bought a girl beautiful as the moon; wit was her play; her body a joy, a rose stem; her face, a sun. In the darkness of the night she refused her hourilike body to the mighty Mamun. Enraged, the latter wished to break the head of the refractory wench. Whereupon she spake: "Strike my head off with your sharp sword but have nothing to do with me." That gave the mighty ruler pause, and somewhat chastened he asked: "What is it that has so disturbed thy rest? What have I in me that horrifies thee so?" Her reply was: "The odor of thy mouth is my pain; by sword and arrow one dies but once, but by the odor of thy mouth death is prolonged." The mighty prince felt deeply chagrined by this. He took medicines until his breath was like the aroma of roses. The pretty one he took to himself as wife, for, said he: "She told me my faults; she must love me."

In the Gulistan, Sadi praises the Jasmin countenance and fragrant tresses of his beloved and points to the spring odors that summon him to love. A neo-Persian poet, Hussein Ali Mirza, has written an Alcoran of Love which details the odors of his beloved.

From the rose garden of Persia, it is but a little way to Arabia. The Arabian Art of Love teaches us what a great role in matters of love, Mohammed and his people attributed to the olfactory sense.

The poet Motannabi says of his beloved: "Her lips are more fragrant and lovelier than summer zephyrs; her hyacinthine hair more aromatic than Scythian musk." In the *Thousand and One Nights*, a woman is described thus: "Her eyes are black, and perfumed is her mouth; her apple cheeks are like anemones."

Albanian songs compare the odor of one's beloved to mountain mint-balm, her mouth to carnations; and one actually identifies the beloved with an orange.

In the literature of classical antiquity there are also many references to sexual odors. Thus a famous hetæra is called *sisymbrion* (thyme), because after a dance she exudes an aromatic scent. In the sixth book of the Iliad, Andromache takes Astyanax to her fragrant bosom. There is also Martial's famous description of Thais' bad odor beginning: *Tam male*

Thais olet (Bk vii, no. 93). An ode of Horace (ii, 8) directed to a beautiful coquette closes with the words: "Still, mothers fear for their young sons, also niggardly old men and poor recently married women as well, lest your scent charm them away." In the twelfth epode of this poet the odor bircinus of the axillæ plays a role.

In connection with the word Cysthus (pudendum muliebre) the Latin poet Ausonius warns us against believing that "cysthum herbam lanuginosam et cysthum pudendum muliebre."

Among modern poets, Shakespeare alludes to the odor di femina in Romeo and Juliet, and in Cymbeline (ii, 2) he cries: . . . "Tis her breathing that perfumes the chamber thus."

A peculiar attitude to the sexual influence upon women of the masculine smell is found in Grimmels-hausen's *Simplius Simplicissimus*. He asserts that strong perspiration odors in men attract women folk.

The French poet Parny has described in his poem, Le revenant, how after his death he desired as a spirit to approach his beloved, but so very gently that he would only flutter the feather of her hat and her curled hair, at whose scent he was aiming. Similarly, in his Cabinet de Toilette, he says:

Ce chapeau, ces rubans, ces fleurs Qui formaient hier sa parure De sa flottante chevelure Conservent les douces odeurs.

Chateaubriand also has expressed in his Atala, the unique effects of hair-scent. "The other day, the wind blew your hair into my face while you threw yourself on to my breast. I verily believed that I felt the light touch of invisible spirits."

Friedrich von Schiller possessed a peculiar idiosyncrasy of the olfactory sense. As is well known, the most poetical mood was engendered in him when he smelt the odor of rotting apples. In his works, he frequently recurs to the subject of human odors. "And thou suckest nectar odor from a girl's lips." (An einen Moralisten). "To drink the passion of your breath." (Das Geheimnis der Reminiscenz). "Your odor is murder." (Don Carlos V, 4).

Franz Grillparzer also belonged to the company of those who become sexually aroused by odors. "It is a remarkable thing about the human heart. I never loved A... and if I ever did, it was not for more than two days. Every hour she grew more indifferent to me and love died within me like a flickering lamp. Many times she lent me her books and I lent her some of mine occasionally, and every book that

passed through her hands, bore the aroma of the perfume she was wont to use. It is now four or five months since our parting, but only today did she send back my copy of Schiller's *Don Carlos* which I lent her in those happy hours. I had no sooner smelt her perfume than my heart started to palpitate and I could think of nothing but her. Had she been present, my passion for her would have flamed up again and erupted. Perhaps my emotion would not have lasted long, but my love would have been more fiery than before. Even as I write, the phantom is already half gone, but it is most extraordinary."

In Hacklander's *Nullen*, we read: "Through that space there blew that ineffably sweet scent which our consciousness associates with a beloved person, a fragrance not entirely perfume, but one that delights and intoxicates us more than all the perfumes

of Araby."

Mörike has written two excellent lines on this theme:

Fort mit dem Geruch dem zauberhaften; er mahnt mich An die Haare, die mir einst all Sinne bestrickt.

Heinrich Heine, who said of himself that he was composed of sauerkraut and ambrosia, frequently presents human odors in a cynical fashion, as George Brandes has set forth in his *Main Currents*.

In Richard Wagner's Siegfried, the latter speaks to Brunhilde thus:

Süss erbebt mir Ihr blühender Mund: Wie mild erzitternd Mich Zagen er reizt! Ach, dieses Athems Wonnig warmes Gedüft!

A very interesting point is contained in the unique Spanish novel, El Gusano de Luz (The Glow Worm), by Salvator Rueda. A young girl meets a young rustic and immediately develops a certain olfactory sensaton of human beings. Later on, she meets her uncle. The girl recognizes the scent which has remained in her senses since her first meeting with the swain, with only this difference: that the odor of the uncle is more intense, as old wine smells stronger than new. She formed a habit of taking her uncle's hat and burying her nose in it, as in a muzzle, in order to seek out that specific odor which she could never forget. Had one given her a whole set of hats and bidden her to find her uncle's, she could have recognized it at once by its odor.

In his collection of short stories, Schattenpflanze, Konrad Telmann remarks once: "It appeared to him that there still hovered here that unique odor which

streamed out of Thessa's hair and garments, and which had already become obtrusively obvious to him when he sat in his place in her boudoir. He did not yet know the scent, but there was something intoxicating for him in it."

Edmond de Goncourt describes, in his La Faustin, how the actress permitted Lord Annandale to smell her bosom. "Smell! what do you smell?" she asked. "The carnation," he replied, and enjoyed her with his lips. "What else?" she inquired. "Your skin."

In Renée Mauperin by the same writer and his brother Jules, there occurs this vivid bit: "Finally she got so that she lived only through him and for him; through his presence, and thoughts of him, his future, his portrait, through that which she took from him when she saw him. When she left him, she ran her hands through his hair many times and then rapidly pulled her gloves on. That whole day and the next, while she was in the presence of her husband and her daughter, she inhaled deeply the odor of her flat hand which she had not washed. Thus she inhaled her beloved by sucking in the fragrance of his hair."

Huysmans has portrayed, in the duke des Esseintes of A rebours, an olfactory fetishist, who wallows in olfactory symphonies by playing with countless perfumes. After he had sprinkled the most varied

perfumes around his room, "there blew a light rain of human and almost feline smells, reminiscent of underclothes and the painted and powdered woman: elephanotis, ayapana, opopanax, cyprus, shampaka, sarcanthus. Then he introduced the slightest trace of syringea in order to give this artificial life the touch of natural, hearty, sweaty laughter and joy taken in flooding sunshine."

Senancour also expresses the opinion, in his Superman, that a series of varied perfumes contains as rich a melody as music. He hoped to be able to comprehend the hidden harmonies of existence by means of the sense of smell.

Maurice Barrès' novels evince a special interest in depictions of scatological episodes.

Tolstoi, too, recognized the relations of the olfactory sense to sex life. In War and Peace, he has the Count Pierre suddenly make up his mind to marry the princess Helene when he smells her odor at a ball; and in the story The Cossacks, he never speaks of Uncle Jeroshka without remembering the latter's odor. "With him, there entered into the room, a powerful but not unpleasant odor."

When I considered the treatise of Cadet-Devaux in the early portion of this work, I mentioned that Gothe had shown great interest in the question of the atmosphere de la femme. It was the balneologist-

physician Anthon Theobald Brück, who brought this treatise to Gœthe's attention. In 1825, the former sent a portion of it to the great poet with some notes of his own, containing some shrewd comments. "No one can suppose that this atmospherology has been drawn from the air. No keen observer can have failed to notice the atmosphère des femmes. But that one cannot escape the bewitching effect of this as well as of other attractions of the female upon our other senses, I strongly doubt. It argues for weak self-control on the part of a man who lets himself be enmeshed in such a snare. Verily, nature has presented woman with much more noble and spiritual charms. The writer of these lines is able to determine whether a man or woman has slept in a room. . . ."

All this is not new, not only in our physiologists who have spoken of an *unnoticeable exhalation*, but also in our poets. Thus in Gœthe's *Faust*, Mephistopheles says to Faust:

"Indessen könnt Ihr ganz allein In aller Hoffnung künftiger Freuden In ihrem (Gretchen's) Dunstkreis satt euch weiden."

And in Gretchen's chamber, Faust calls out in delight:

"Umgiebt mich hier ein Zauberduft?"

Brück goes on to express the hope that Goethe who has manifested so much genius in his scientific studies will not hesitate to express his opinion on these matters as well.

How did Gothe respond to this wish of the young knowledge-loving physician? Carus Sterne has left us an interesting answer to this question. It is not known whether Gothe actually answered Brück's letter but there can scarcely be any doubt about it, in view of the fact that the poet treasured up the letter so that it was found among his papers. Nor did Gothe ever write a separate dissertation on this subject. But it is Carus Sterne's opinion that Goethe must have made some answer, which proves to us that he did pursue the matter further and assembled data of his own. This reply is contained in a work of Gothe's composed after the receipt of Brück's letter, viz., the second part of Faust. If the first portion of this work had referred to the influence of the female scent upon men, which alone is referred to by Devaux and Brück, Gothe represents the captivating influence of the masculine odor upon the female:

Young Woman (delighted):

Zum Weihrauchsdampf was duftet so gemischt Das mir das Herz zum innigsten erfrischt?

Older Woman:

Fürwahr! es dringt ein Hauch tief ins Gemüte, Er kommt von ihm!

Oldest Woman:

Es ist das Wachstums Blüte, Im Jüngling als Ambrosia bereitet Und atmosphärisch rings umher verbreitet.

and in the third act

Chor:

Sage, gibt's auch Tänzer da?

Phorkyas:

Die besten! goldgelockte frische Bubenschaar; Die duften Jugend! Paris duftet einzig so, Als er der Königin zu nahe kam.

Carus Sterne shows the deep psychological insight in the first selection where the youngest spectator feels a certain influence without knowing whence it comes. She is then informed by the maturer woman that it comes from Paris, the handsomest of men. Whereupon the oldest woman, wisest and most experienced, warns them not to think that this odor comes from a perfume shop, but is the blossoming of maturity. In view of these facts, there can be no doubt that Goethe paid considerable attention to the problems of *odoratus sexualis*.

CONCLUSION



Odoratus Sexualis

Conclusion

In the preceding, I have assembled the facts of odoratus sexualis from the domains of anatomy, physiology, and pathology. In addition, I have shown the deep traces left by these facts in the mores and beliefs of the people, traces which show clear and unmistakable proofs of the prime importance of odors to human sex life.

A very natural question now arises: How great is 259

this importance today? And what will it be in the future?

Plato, in his Republic, put perfumes on the same level with spiritual pleasures, a view followed later by Thomas More in his Utopia. Opposed to this view of the greatest philosopher of antiquity, is that of the greatest philosopher of modern times, Kant, which I have quoted at the beginning of this book. Schopenhauer was the next after Kant to occupy himself with the question of cultivating the olfactory sense. He, too, came to the conclusion that this was the lowest sense of man, a purely affective one, and therefore of inferior importance. According to him, only two senses serve to achieve an objective view of the world, viz., touch and sight. They alone purvey the data, on the bases of which, reason constructs the objective world. The other three senses, hearing, smell, and taste, remain essentially subjective, for while their sensations point to an external cause, yet they do not contain any data for the determination of their spatial relationships. Hence, these senses can only apprise us of the vicinity of objects already known to us from other sources. But on the basis of their data alone, we cannot achieve any objective spatial construction of matter, and hence, there can be no objective perception. From the odor alone, we

can never construe a rose, says Schopenhauer, in The Fourfold Root.

Nordau was another who believed that in the modern world, olfaction has but little place in man's knowing process, for impressions of the external world no longer reach us through the nose but through the eye and ear primarily. Olfactory perceptions contribute only a minimal portion to the store of concepts built up from the individual constituents of sense perceptions.

The correctness of this view is confirmed by the phylogenetic weakening of the olfactory sense in man and the primates. While the mammals with a developed olfactory sense have very complicated apparatus, man and the other primates show a retrogression of the organ which exists in them in a somewhat stunted state. This is seen in a rather considerable atrophy of the olfactory lobe of the brain and that portion of the cerebrum which stands in relation to the lobus olfactorius, which together constitute the central apparatus of the organ of smell. Compared to the mammals with a developed sense of smell, man's apparatus seems definitely to have retrogressed. The relatively small development of the gyrus hippocampi results in the genesis of the fissure of sylvius, lacking in the keen-smelling mammals. The same retrogression can be seen in the peripheral forms of the human

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organ of smell. The nasal muscles are, as Jegenbaur has said, mere relics of much richer forms. Even in mammals with highly developed senses of smell, the lower muscle is without direct relation to the olfactory apparatus, and it is only the muscles rising above the ethmoid that maintain such relations; but in the primates, the relations are so much simpler that the retrogression is obvious. It is not quite certain whether human beings have a rudiment of that upper anterior muscle which in mammals is the nasoturbinal. Hyrtl has pointed out that the smaller area of the regio olfactoria in man is responsible for his diminished capacity to smell.

In man the frontal lobe has taken the place of the olfactory lobe and is the seat of the highest intellectual functions and speech.

Hence, it is understandable why the most advanced type of man shows a loss in the keenness of his olfactory sense and that, conversely, savage tribes who still remain on the most primitive level are characterized by remarkably keen olfactive powers. The higher development of the psyche and of language requires an extraordinary enlargement of the cortical surface and frontal lobes, with the result that the olfactory center must become smaller. The eye and ear become the chief senses, while that of smell diminishes in importance.

It is now clear why the eye and ear have become primary in the sexual life of man and why the olfactory sense has been pushed out of the primary place. By the same token, it is obvious that the olfactory sense plays a large role in the life of the blind.

The cultural influences which have diminished the sexual importance of the olfactory sense are not to be underestimated. Lombroso rightly draws our attention to the fact that civilization has resulted in covering the whole human body with clothes, whereby the natural odor of the woman and man, which was formerly of such great importance, is now almost withdrawn from our perception. For the first time now, the sexually excitative impressions proceeding from the sense of sight and touch can be developed, through which the lips and breasts of women become erotic organs. Moreover, the baths and ablutions that have become habitual with civilized men, contribute much to the diminution of the natural body odors. In a certain sense, too, certain artificial perfumes contribute, as we have seen, to the concealment and deflection of sexual scents.

From all these facts, Moll concludes that in the future man will gradually not only lose the capacity to perceive erotic olfactive substances, but also that the latter may themselves disappear, or at least suffer a change since they are no longer useful for sexual

selection. Organs and capacities which are not used gradually wane.

After all, we must regard any excessive attention to, or cultivation of, the olfactory sense today as a sort of atavism. This point of view was already adumbrated in antiquity. Martial and Juvenal mocked those men who lent great attention to their sense of smell and designated them as molles and effeminati. Again, St. Jerome has observed in his discourse against Jovinianus: "Odores et diversa thimi amata et amomum, et muscus et peregrini muris pellicula, quod dissolutis et amatoribus conveniant, nemo nisi dissolutus negat."

We moderns concur in these opinions and see their force even more clearly. Says Mantegazza, who is not inimical to odors: "It is difficult to remain for long in the sultry atmosphere of passion without sacrificing a goodly portion of those noble forces which should be devoted to higher duties. Hence, a passionate addiction to perfumes cannot exercise a good effect upon us. Whoever surrenders himself to the titillating waves of perfumes no longer steels his powers to a continent, strong manliness, but presses the last drops out of the fruit of his life, and contrives new pleasures in his very enervation." Geissler also emphasizes the fact that the normal cultivated man is repelled, rather than attracted, by

erotic odors. So also Brück, as we have noted.

The perfume-symphonies which Fleury has depicted so fantastically would be, if carried out in life, as in Huysmans' A rebours, the most monstrous retrogression. Excessive cultivation of the olfactory sense not only renders man effeminate, but actually brings him to the level of perception and knowledge characteristic of the lower mammals.

The normal man goes through the world without becoming sexually excited by olfactory impressions and is, indeed, scarcely aware of them. Within a measurable space of time, odoratus sexualis will play a role in human pathology only. At that time the best odor that the normal man will know will be that of aromatic fir trees or, as Noë declares, "that air which is wafted across great clean bodies of water, which are in truth the most vitalizing of all perfumes."



BIBLIOGRAPHY



Odoratus Sexualis

Bibliography

Abishag. A Luscious Tale of a Successful Physiological Search after Rejuvenescence.

Baudelaire, Charles. Les Fleurs du Mal.

Baudelaire, Charles. Petits Poëms en Prose.

Bernard, Léopold. Les odeurs dans les romans de Zola.

Bibliotheca Scatologica.

Bidder, F. Article Riechen in Handwörterbuch der Physiologie by Rudolph Wagner.

Binet, Alfred. Le Fétichisme dans l'amour.

Boas, J. E. V. Organe copulateur et accouplement du hanneton.

Bretonne, Rétif de la. L'Anti-Justine ou les Délices de l'amour.

Bretonne, Rétif de la. Le Palais Royal.

Brück, Anton Theobald. Letter to Gæthe in Gæthe's Naturwissenschaftliche Correspondenz. Edited by F. Th. Bratanek.

Cadet-Devaux. De l'atmosphère de la femme et de sa puissance in Revue Encyclopedique.

Casanova de Seingalt, Jacques. Memoirs.

Cloquet, Hippol. Osphrésiologie, ou Traité des Odeurs, du Sens et des Organes de l'Olfaction.

Coffignon, A. La Corruption à Paris.

Cohausen, J. H. Der wiederlebende Hermippus.

D., E. Odor di Femina, Amours Naturalistes.

Darwin, Charles. The Descent of Man and Sexual Selection.

Davenport, John. Aphrodisiacs and Anti-Aphrodisiacs.

Dinaux, Arthur. Les sociétés badines.

Dühren, Eugen. Der Marquis de Sade und seine Zeit.

Ellis, Havelock and Symonds, J. A. Sexual Inversion.

Ellis, Havelock. Man and Woman.

Endriss, Gustav. Die bisherigen Beobachtungen von physiologischen und pathologischen Beziehungen der oberen Luftwege zu den Sexualorganen.

Eulenburg, A. Sexuale Neuropathie.

Fleury, Réné. L'art des parfums.

Fliess, Wilhelm. Die Beziehungen zwischen Nase und weiblichen Geschlechtsorganen.

Forberg, F. C. Antonii Panormitæ. Hermaphroditus.

Galopin, Augustin. Le parfum de la femme et le sens olfactif dans l'amour.

Geissler, Carl Max. Wegweiser zu einer Psychologie des Geruches.

Gross, H. Handbuch für Untersuchungsrichter, etc.

Günther, Reinhold. Kulturgeschichte der Liebe.

Gyurkovechky, Victor G. Vecki von. Pathologie und Therapie der mannlichen Impotenz.

Hæser, H. Lehrbuch der Geschichte der Medicin.

Haller, Albrecht von. Elementa Physiologiæ.

Haller, Albrecht von. Gynäkologie.

Haraucourt, Edmond. La legende des sexes. Poëmes Hystériques et profanes.

Hellwald, Friedrich von. Culturgeschichte in ihrer natürlichen Entwickelung bis zur Gegenwart.

Hertwig, Richard. Lehrbuch der Zoologie.

Hirschfeld, Magnus. Jahrbuch für sexuelle Zwischenstufen.

Hyrtle, Joseph. Handbuch der topographischen Anatomie.

Jäger, Gustav. Entdeckung der Seele.

Jäger's Monatsblatt.

Korstakow. Menstruatio præcox.

Krafft-Ebing, R. Arbeiten aus dem Gesammtgebiete der Psychiatrie und Neuropathologie.

Krafft-Ebing, R. Psychopathia sexualis.

Kühner, A. Grundriss der öffentlichen und privaten Gesundheitspflege.

Lacroix, Paul (Pierre Dufour). History of Prostitution.

Lanson, Gustave. Histoire de la littérature française.

Les Sérails de Londres, ou les Amusements nocturnes.

Lombroso, C. La Femme criminelle.

Mantegazza, Paul. Physiology of Love.

Mayeux, M. Les Amours secrets.

Meyer, G. Article Kleidung in Eulenburg's Real-Encyklopädie der gesamten Heilkunde.

Moll, Albert. Die konträre Sexualempfindung.

Moll, Albert. Untersuchungen über die Libido sexualis.

Monin, E. Die Geruche des menschlichen Körpers in gesunden und kranken Tagen.

Montaigne, M. Essays.

Nacla, Vicomtesse. Le Boudoir, Conseils d'Elégance.

Nordau, Max. Entartung.

Paschkis, H. Kosmetik für Aerzte.

Paullini, C. F. Observationes Medica.

Peschel, Oskar. Völkerkunde.

Ploss-Bartels. Das Weib in der Natur- und Völkerkunde.

Prichard, James Cowles. The Natural History of Mankind.

Quatrefages. Rapport sur les progrès de l'Anthropologie.

Rabelais, François. Gargantua und Pantagruel.

Régla, Paul de. El Ktab des Lois secrètes de l'amour.

Rohleder, Hermann. Die Masturbation.

Rosenbaum, Julius. Geschichte der Lustseuche im Alterthum.

Roubaud, Félix. Traité de l'impuissance et de la stérilité chez l'homme et chez la femme.

Runge, W. Die Nase in ihren Beziehungen zum übringen Körper.

Sinibaldi, Jo. Benedicti. Geneanthropeiæ sive de hominis generatione Decateuchon.

Tardieu, A. Etude médico-légale sur les attentats aux mœurs.

Tardif, Etienne. Les Odeurs et les parfums. Leur influence sur le sens génésique.

Taxil, Leo. La Corruption fin-de-siecle.

Uzanne, Octave. L'omgrelle, le gant, le manchon.

Venus School Mistress or Birchen Sports.

Vogt, Carl. Vorlesungen über den Menschen.

Voisenon, Abbé de. Exercices de Dévotion de M. Henri Roch avec Madame la Duchesse de Condor.

Waitz. Anthropologie der Naturvölker.

Wiesner, Julius. Biologie der Pflanzen.

X-, Jacobus. Untrodden Fields of Anthropology.

Zwaardemaker, H. Die Physiologie des Geruches.

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