

Lecture 2. The Necessity of Philosophy.(b) Intellectual Passions.*Education of desire**education in
conviviality*

1. A newly hatched chicken shows an innate urge to peck up and swallow small objects of the size and shape of grains and after a few mistakes it learns to feed itself correctly. It also learns quickly to join the flock which follows its mother and to seek protection under her wings. The latter educational process goes on so swiftly that it normally escapes notice, but it is clearly revealed by the experiment of letting a chicken grow up in isolation. ^{the chicken brought up in solitude is} When released after a fortnight and brought together with its sisters and brothers which ^{long since} have formed a flock around their mother ^{it behaves in a most frantic manner.)} ~~It pecks at them~~ ^{at its fellow chicks} wildly and runs around terror-stricken. We may say therefore that the earliest inter-personal interaction between chickens affect their emotions towards each other. They usually result in developing a rationally balanced emotional life which is stunted and deranged by artificial isolation. // The emotional comfort which the chicken seems to enjoy when brought up in a flock is not unrelated to bodily satisfaction of shared warmth and protection, but it is ~~as~~ yet distinct from mere drive-satisfaction and seems to arise much more vividly between one animal and another, rather than between the solitary animal and impersonal sources of drive-satisfaction ^{such as food and shelter.} A hungry dog will jump about and bark when its meal is approaching and this excitement has emotional colouring, but the companionship afforded by a dog to a man // by which it may vitally participate in his existence // is rooted in richer and more disinterested passions. Indeed, a dog will attach its affection to a master who plays with it, goes for walks with it and generally shows interest in it, rather than to the person who feeds it. // The comprehensive scope of inter-personal relations has been expressed by Koehler in the aphorism that a solitary chimpanzee is not a chimpanzee. All its physical needs are

*Emotional
education*

satisfied, yet it languishes through emotional starvation. It lacks that sharing and interplay of life between fellow animals, the manifold forms of which are reflected in a whole gamut of varied emotions.

I shall not attempt to survey the emotions of animals and still less of men. It is difficult even to illustrate their range, however sketchily. A series of moods reflected by the physiognomies of chimpanzees are shown here according to Yerkes.

+ (SLIDE). How numerous are the varieties of humours which may pervade man's mind, we may gather from the vocabulary that covers any single minute class of them. Thus in Roget's Thesaurus we find this group of terms for the kind of resentment which burns inwardly: "pique, umbrage, huff, miff, soreness, dudgeon, acerbity, virulence, bitterness, acrimony, asperity, spleen, gall; heart-burning, heart-swelling, rankling." While an open and active expression or resentment is described as a "burst, explosion, paroxysm, storm, rage, fury, desperation." On another page we find the following clearly distinguishable shades of a particular kind of disapprobation: "satirical, sarcastic, sardonic, cynical, dry, sharp, cutting, biting, severe, virulent, withering, trenchant."

I have shown that emotions often spring from and are always somewhat related to desire. Desire is one of their roots in the sub-intelligent object-directed sphere of mental life; the other - closely interwoven with the first - is their connection with the sensuous nature of the animal. W.N. and L.A. Kellog have recorded a series of facial expressions in a chimpanzee and in a child of about the same age, who responded to the same tastes in their mouths. (SLIDE). These forms of object-directed tempers are - like the excitement of the hungry dog at the approach of food - on the sub-emotional level, but they resemble emotions in the overwhelming quality of the feeling which they carry. They should also remind us that all emotions have some cognitive content,

Desire:

sub-emotional
affections

+

reveal
clearly
cognitive
content

as they refer to external facts and are also guided by them. This is implied when we speak of appropriate and well balanced emotions, in contrast to exaggerated, irrational or deranged emotions. Emotional education is the process which fosters the former and tends to eliminate the latter.

also present in emotional life

2. I have derived the nature of emotions here in the first place from interpersonal exchanges. The communication between persons, their practical interaction and the mutual knowledge of persons are indeed pre-eminent in arousing a wide range of emotions. Conviviality is the principal milieu of emotional life. But object-directed mental activities on the sub-intelligent level have been shown also to arouse pervasive affections allied to emotions. It is fundamental to my present argument for the necessity of philosophy, as well as for the position which I shall try to formulate subsequently in these lectures, to establish the presence of an emotional factor in all object-directed intellectual performances including those on the highest levels of intelligence. The demonstration of this factor, ~~to~~ which I shall presently ~~turn~~ ^{undertake,} will lead to an extension of the previously surveyed range of object-directed intelligence, by bringing in the field of pictorial and musical arts. But these arts do not of course consist of emotion. In the end therefore, when account has been taken of the impassioned nature of all intellectual life, there will not appear any new separate section to which emotion could be assigned as its content. Instead we shall recognise the presence of emotional colouring throughout the whole range of intellectual activities, each of these having its own characteristic hue without excluding the possibility that it may be occasionally suffused by other shades of colour. Naturally, the depth of emotional colouring will also vary in a characteristic manner from section to section ^{region to region.}

pictorial and musical art

I shall now try to go over our map and apply the appropriate colouring to each region.

3. The study of convivial intelligence has made us aware of emotions and of pervasive affections in general, which did not strike us before in object-directed mental activities. Having envisaged now the impassioned nature of all mental life, we shall have to amplify the whole of our previous survey, before proceeding further with our original programme to describe the articulation of convivial intelligence.

sign-event Take the inarticulate region of object-directed mental acts and begin with the process by which sign-event relationships are recognised. It results from a pervasive tension of which no fully awake animal is free and is manifested in the lowest orders down to the protozoa, by exploratory movements; in the higher species it is vividly reflected also in the preparations of the sense organs, the attentive gaze, now fixed now carefully sweeping round, in the pointed ears, the sniffing snout. The alertness of the animal is usually prompted by desire or fear. Hunger and sometimes fear are used in the animal experiment to make the subject look out for signs of food or danger. The reading of signs *is animated by* ~~embodies~~ and satisfies these sub-emotional tensions. The force of attention which guides this performance is kept alive by the expectations of discoveries to which the sensuous life of the animal will naturally respond.

means - ends The alert animal is keyed up also for action. Here we have a different kind of expectancy which generates the invention of means for the achievement of desired ends. This is not properly speaking an expectancy for it does not prepare the animal to meet an event but to engage in an action: it is an intentional effort. It is most commonly manifested in an increase of the muscular tonus, as in the tenseness which the sprinter takes on at the sign of 'ready'. A more flexible and in this sense more intelligent form of it is observed in the sparring of boxers. They practise a controlled relaxation of their muscles which combines alertness with utmost freedom of decision. This is the prototype

of more delicate manipulative exertions such as picking a lock with a hairpin or, reverting to Koehler's famous experiments, to invent or seek to invent a tool, e.g. in the form of piled up packing cases in order to reach a bunch of bananas suspended on high. Koehler has described the physiognomy of alert relaxation in chimpanzees which conveyed most convincingly to his visitors the fact that the animals were wholly preoccupied at that stage by an intense inventive purpose.

puzzlement
 The third kind of inarticulate intellectual performance, which consists in grasping a situation in its various alternative aspects, is stimulated by an alertness which combines both kinds of expectancy: the waiting for something to happen and the concentration on something to do. But these are both present in an attenuated form and the prevailing tension seems to be more specifically one of puzzlement. Though this is invariably at play also in sign-event observation and means-end invention, it appears in its purest form when the intended intellectual performance consists essentially in the re-assessment of a situation in which nothing lays hidden or requires to be done by any essentially new forms of manipulation.

The fact that animals can suffer acutely from puzzlement, to the point of mental breakdown, and that they can accordingly enjoy most keenly the purely intellectual pleasure of solving a problem, has been amply demonstrated in my conviction by various observations extending over the past thirty years.

Starting from Pavlov's experimental neurosis in dogs, arising from situations which overtaxed the animal's discriminatory capacity, we have more recent studies by Maier and Klee (E.R. Hilgard, Theory of Learning, p.303) of obsessional disorders produced in rats through the repeated battling of their intelligent efforts by a craftily misleading presentation of alternative choices. The remarkable experiments of on apes have demonstrated that the propensity to become thus obsessed is localised in the pre-frontal lobes and is eliminated

by lobotomy. X Koehler has first clearly demonstrated that chimpanzees derive pleasure from the discovery of a new ingenious manipulation, quite apart from the practical benefit they derive from it. He describes how they will repeat the performance for its own sake - as a kind of play - with signs that they enjoy it. W.N. and L.A. Kellog have found that a young chimpanzee is as much inclined as a child of the same age to repeat in play a manoeuvre, involving the use of a tool, which they had first invented for some practical purpose. The animal was as keen as the child to climb into the ~~place~~^{chair} where it was usually confronted with the task of solving problems. I believe that this evidence shows both that there are situations which worry the animal far beyond what is due to its deprivation of reward, and that correspondingly, the animal can feel the intellectual triumph of solving a problem and enjoy the beauty of its solution. While these tempers and sentiments accompany all manner of intellectual performances, they should be present most purely in such problems and such problem-solving as involve merely the recognition of alternative part-relationships. However, I feel this conjecture to be justified mainly from experience on the articulate level, which offers safer grounds for observation.

4. The transition from inarticulate forms of intelligence is performed by the process of articulation which is itself inarticulate. This process presents important philosophic problems which can be dealt with only after proceeding much further in this investigation, while taking articulation which is in constant use during any spoken or written argument, largely unexamined. I shall therefore leave until that later stage my description of the emotional colouring of articulation and turn now directly to articulate intellectual performances, continuing of course at first along the remaining sphere of object-directed intelligence.

intellectual
pleasure

emotions of
articulation
set aside

5. The emotional colouring of the inarticulate regions can be applied with appropriate modifications to the corresponding articulate stages of intelligence. Observational science is animated altogether by a set of feelings, ranging in intensity from a mere liking to an obsessive passion for its pursuit and achievements. The growth of these sentiments has been of comparatively recent date and they have never spread very widely. The ancients almost lacked it. Assyrian astronomy and its Hellenic successor were blended with astrology; the anatomy of Galenus was a branch of medicine; Ptolemean geography, however admirable, hardly deserved the name of a science in the modern sense. In any case such beginnings as had developed of a taste for observational science were firmly condemned by the rising authority of the Catholic Church. St. Augustine brushed aside scientific observation as irrelevant to the true purpose of thought which is salvation. The beginnings of modern science in the 16th and 17th century are still profoundly affected by scholasticism - as in Harvey and Descartes - or by Pythagorean number mysticism - as in Copernicus and Kepler. The several founders of the Royal Society in 1660 still held a very queer collection of views as to the nature of scientific enquiry. It was not until about the time of Newton's Optic (and partly by that great work) that the methods of modern observational science became finally established. Only since then has there been established a body of men with the proper temper of science, animated by a true love for its knowledge and further advancement. The growth of these sentiments occurred within a small area of the globe, mostly in Western Europe and were shared at no time, however slightly, by more than a minority of the local population. Outside this region the appreciation of pure science has remained uncertain and scientific research at universities had to struggle against an indifferent and often contemptuous, or even hostile, atmosphere.

The revolutions of the twentieth century - though often invoking the support of science - have emphatically repudiated the love of science in itself and have compromised thereby the whole future of science over the areas under their sway. The passions which animate science have not been planted long nor widely in men's hearts and unless ~~vigorously~~ ^{carefully} ^{deliberately} cultivated, they may soon wither away and become extinct.

The force of our appetitive drives declares our creaturely subjection to pleasure and pain; the emotions which animate intelligent performances proclaim judgments of value. The most important value upheld by the cultivation of observational science is that of intellectual beauty, which prevails throughout the higher cognitive performances and is indeed even more pronounced in the deductive sciences.

Secondly, the pursuit of our drives implies the supposition that there exist objects which we have reason to desire or to fear; and similarly, all passions animating cognitive intellectual performances imply a belief in the existence of such knowledge of which these passions declare the value. The kind of value we attach to observational science is inseparably linked to the kind of understanding we seek through science. It is associated with our basic scientific beliefs which define the very nature of science as we conceive it.

The significance of the connection between passion, value and belief is amplified by observing the division between the heuristic and the contemplative approaches to science. The latter contains the appreciation of the established results of science and expresses thereby a person's general beliefs of what constitutes a scientific explanation based on scientific evidence. Science can continue to exist as a coherent activity only so long as these general beliefs are shared among a considerable group of people (the scientists) and their reading public. In contrast to science as read and taught, the heuristic approach comprises science in the making, or rather the attempt to make science. The emotions and beliefs to the guidance of which discoverers

emotion and
value

implication of
external
reality
(belief)

entrust their efforts are of a particular kind. They refer to a restricted field and are held by an individual working in it. The passionately pursued intimations of discovery which guide or delude a scientist engaged in research, are a form of intense alertness which is closely akin to an animal's mood on the look-out for signs as pointers towards the coming of some interesting event. The scientist having a hunch (or being possessed by a hunch) resembles the animal's effort to identify a sign-event relation also in the fact that the hunch is almost inarticulate. In contrast to the established knowledge of science, its germinating ideas cannot be set out explicitly.

6. From the field of Observation exemplified by empirical science we turn to the field of Invention, the emotional tone of which expresses itself in similar forms though with appropriate variations in content. Passion, once more, implies valuation and, being attached to a cognitive performance, it implies also beliefs; and once more we see the same characteristic differences between the contemplation of accomplished results and the heuristic drive towards new results. Unmistakably, the engineer shares the supreme delight of all cognitive intellectual performance, the beauty of a simple and momentous solution. But unlike science, technology sets itself practical problems. In contrast to science which cultivates the values of perceptivity and penetration, the engineer's ideal is ingenuity. True ingenuity must involve the achievement of a practical advantage; for ingenuity which achieves a disadvantage is but a caricature of itself. In setting himself his problems the inventor must therefore always have an advantage in mind with which the scientist is not concerned. hence a conflict of values arises between the scientist and the engineer which makes it difficult to mix the two occupations. J.R. Oppenheimer, the distinguished physicist who was in charge of developing atomic weapons in Los Alamos during the Second World War wrote on this subject: "The scientist is irritated by the practical preoccupations of the man concerned with development,

and the man concerned with development thinks that the scientist is lazy and of no account and is not doing a real job anyway. Therefore the laboratory very soon gets to be all one thing or all the other."¹ This conflict of values implies no contradictory beliefs, for the disparate valuations refer to the relevance and not to the validity of the cognitive performances in question.

7. Mathematics starts off with the invention of very general ^{notations} (conceptions) and symbolic operations, such as numbers and the counting of things by numbers, which are felt to be apposite to a wide range of possible instances. By applying these formal constructions we can greatly extend our intellectual control over alternative aspects of observational and manipulative situations; but mathematics goes beyond this by investigating the implications of its own constructions ^{from a variety of} ~~within their~~ alternative aspects. Moreover, mathematical inventiveness continuously amplifies this enquiry by extending the conceptual structure of mathematics beyond the field of apparent possible instances. This is the most characteristic performance of mathematics, ~~which G.H. Hardy has celebrated in his "Apeology" by declaring that the greatest pleasure of the mathematician lies in the complete uselessness of his speculations.~~

The mathematician's power to form ever new conceptions and to discover ever new implications in terms of these has been compared with the powers of poetry and music. Indeed, similarly to the masterpieces of these arts the works of mathematics are justified in themselves by purely internal evidence. They appeal to an intellectual sensibility fully shared only by a small number of minds possessing exceptional gifts, carefully matured in a tradition which fosters this particular sensibility. Nowhere is intellectual beauty so fully known and fastidiously appreciated in its various grades and qualities ^{as} ~~than~~ in mathematics.

1. Atomic Scientists Bulletin, 1947, p.173.

Penetration, profundity, but in the last resort beauty are the measure of the mathematician's achievement among mathematicians.

Mathematics can be said to exist only to the extent to which there lives a passion for its beauty in those who accredit the existence of mathematics. Observational science which seeks information about the nature of things and technology which devises new ways of manipulating them share in this beauty, but their substance is ~~not~~^{never} entirely derived from it.

8. Insofar as mathematics is an affirmation of beauty its power does not depend on its denotative significance, even though it can never be reduced to the handling of marks on paper lacking any symbolic value. But symbolic significance is largely acquired in mathematics from the interest of the context in which the symbolised concepts become involved. The conception of a multiplicity of parallels to one line through one point - which contradicted Euclid's Fifth Postulate - was suggested many times without making any impression on mathematicians. It was only when Lobetschewsky and Bolyai showed that this conception could be elaborated to a beautiful system of implications, that Non-Euclidean geometry gained power over the minds of mathematicians. It was the same with imaginary numbers until a calculus was discovered into which they entered. The denotative function is attenuated here so that it resembles that of a character in fiction. There never was a person called Sherlock Holmes, nor even a person like Sherlock Holmes. Yet this character was well defined by the description of his consistent behaviour in a series of fictitious situations. Once Conan Doyle had composed a few good stories with Sherlock Holmes as their hero, the image of the detective - however absurd in itself - was clearly fixed for the purposes of any further such stories. The main difference between a fictitious character in mathematics, like a complex number, and a phantastic character in a novel, as for example Sherlock Holmes, lies in the greater hold which the latter has on

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our imagination. It is due to the much greater measure of sensuously experienced elements which enter into the conception of Sherlock Holmes. That is why we acquire an image and not merely a conception of the detective.

This attenuation of the denotative function of articulation is inherent in its ~~present~~ application to alternative part-relationships. For the same system of relationships can exist between items that are most unlikely, like elements of geometry on the one hand and committees formed by partners in a banking firm on the other hand. ♦ The interest in relational structures coincides with the prevalence of aesthetic valuation in the deductive sciences, since the understanding of a complex and significant structure is the greatest source of contemplative intellectual pleasure. Combined with the concomitant attenuation of the denotative functions, the discovery of interesting mathematical systems attains the status of a supremely free creative act. ~~Freer than scientific discovery which depends on specific observations and freer than practical invention which must serve temporal advantages.~~

9. The parallel which I have drawn between mathematics and fiction can be extended to include other forms of art which belong more properly to the field of articulation excluding convivial relations. Painting and music are ^{satisfy} ~~are rooted in~~ an aesthetic appreciation of complex relationships. They discover or create these relationships within structures composed of utterances having little denotative content.

The simplest musical effects can be expressed in numerical relations between the frequencies of the notes sounded. Like mathematics, music articulates a range of rational relations for the sake of the pleasure of understanding them. We may class painting in a neighbouring category; like music, it neither

♦ comp. Kasner and Newman, Mathematics and Imagination. (1949) p.151.

seeks information about the nature of things, nor tries to manipulate them to some purpose; but creates instead a field of harmonious representation. Abstract painting bears indeed the same relation to geometry as music has to numbers. In contrast to mathematics articulation is not attenuated here by abstraction but by filling it with a strong sensuous content. A patch of colour or a musical note are so substantial in themselves that they become articulate without necessarily pointing beyond themselves. They are at once a thing and a thing ~~named~~ ^{pointing out} by its own striking sensual presence. (Correct in their sense lect. 1. p. 8/9)

Yet painting and music have done perhaps more than science, technology and mathematics ~~put together~~ in making human beings into what they are today, ~~by the nature of~~ ^{frustrating} ~~their~~ ^{endowing} sensibility, ~~by the~~ ^{expanding the} range of their emotional resources and ~~by their~~ ^{setting up for them new} standards of cultural obligations. It is in view of this power of the visual and musical arts to release, formulate and discipline our hidden faculties ~~for~~ ^{for} harmonious experience that I wish to add them here to the province of Interpretation, which hitherto contained alone the deductive sciences. The concept of Interpretation which represents here the articulate stage of an object-directed appreciation of alternative part-relationships will be further strengthened when we shall find an important counterpart to it in the field of convivial intelligence.

Finally, let us more fully envisage here once more that

10. There is one more characteristic feature ^{so} closely related to the rest of their distinctive qualities - ⁱⁿ by which the intellectual performances brought here under the common heading of Interpretation ^{surpass those listed under} differ from Observation and Invention; though once more the difference is one of degree. (All object-directed intelligence has to operate within the limits set by a state of affairs among objects. Observation can only discover existing sign-event relations and Invention is restricted by the potentialities of matter and value. Mathematics, painting, music are all freer and therefore more overtly creative. A symphony is

obviously something new achieved by the human mind; but if we call it a symphony we also recognise it as something valid to which we owe recognition. Thus Interpretation confronts us forcibly for the first time with the paradox that our intelligence both creates and discovers its products. It fulfils creative potentialities according to standards which it appears to set itself for the purpose of disciplining and thereby making effective its creativity. This active-passive rôle of our minds will be seen to bear on the very centre of the philosophic problem as I shall try to define it.

11. This completes the survey of emotional colouring throughout the province of object-directed intellectual performances on the inarticulate as well as on the articulate level. With this in mind we may now resume the study of interpersonal relations which had first presented us forcefully with the hitherto neglected affective qualities of mental processes.

~~The previous flash-back to object-directed intelligence was inserted at the point where I was about to proceed from the inarticulate to the articulate forms of conviviality. Let me briefly illuminate once more to the starting point on which this step will have to reply. We have distinguished three kinds of inarticulate conviviality. (1) Transmission of experience (2) Practical interaction (3) Knowledge of persons. In the examples which I have given for the first of these processes we see how the pain of mutilation suffered by one person strikes horror in another. Cruelty experienced at second hand may indeed completely overwhelm us, causing loss of consciousness and even acute mental derangement; and afterwards it may haunt us during the rest of our lives. Similarly, there is in us the capacity for sharing others' pleasures; provided that our affection for them exceeds our envy of them. 'Einfühlung', the direct response to another person's experiences by which we know~~

that experience, has been called empathy. We see that this faculty is guided by sympathy, which is the identification of our person with another by fellow feeling. Our affection for others makes us liable to be affected by what affects them. We may say that empathic reception from a person depends on emotionally tuning in on that person. Therein lies the characteristically convivial I-Thou relationship which contrasts with the object-directed I-It relationship.

Turn now to practical relations between men; the relation of master and servant, of leader and follower, of parent and child, of husband and wife, of friends, of foes, of rivals, of comrades in effort or danger, indeed all rational interactions between persons, owe their strength^{to} and derive their character from a complex interplay of emotions. A man whose convivial emotions were dead would live in complete solitude. He might still observe men and take their actions into account, but he would live alone in a behaviourist's paradise surrounded only by robots, not persons.

Our capacity to know another person as a person underlies indeed both our empathic and practical responsiveness to other persons. This is manifested distinctively, as Martin Buber and J.H. Oldham have made clear, in that we may 'encounter' a person. We may listen to a person and address him, even though he be but a newborn baby. Such inarticulate listening and addressing is purely emotional. And in it is rooted all articulate knowledge of persons, all communication and interplay between persons. Indeed, emotional perspicacity can dispel the recurrent confusions created between persons by talking to each other. For it sees the other person directly as such, by the light of love. 'But one man loved the pilgrim soul in you, and loved the sorrows on your changing face' wrote Yeats. This defines the distinctive identification of a person which underlies all life between men and women. You cannot know a person from observation, you must

listen to him; and it is little use to listen in envy, contempt or fear; only the loving listener will get to know the person whom he encounters.

12. And now at last we may turn to the articulation of conviviality; but not without including introductoryly a reference to the principles governing the articulation of the appetitive and sensual affections in which conviviality is rooted. Both hunger and the satisfaction of hunger have a bearing on food; and likewise, sexual desire and sexual satisfaction have a reference to objects. But the main interest of the appetitive and sensual approach is not to observe, nor to manipulate or to draw inferences - it is altogether not cognitive but existential. It is a way of being, not of knowing. To the extent to which emotions pervade my whole person they cause changes of my person which I can record only from a point of view that is itself affected by the change. I cannot apply any stable cognitive framework to my emotions. I must either consent to be submerged by them or struggle to liberate myself from them, and such actions are not cognitive assent or dissent, but existential acceptance or refusal.

Accordingly, the articulation of an emotion is not a denotative symbol but stands for an act or an experience. It is an utterance which supplements our emotional physiognomy by specifying our feelings in an articulate manner. In conviviality this function of articulation shows up most elementarily in the practical interactions between persons.

13. For a moment my argument must assume here a somewhat polemical edge. The essential part which I have ascribed to emotional responses in the performances of intelligence, stand in sharp conflict to the aim of critical philosophy to eliminate all emotive elements of thought which inevitably interfere with its objectivity. In this view the ideal of thought is dispass-

ionate knowledge and inference, and the ideal of language is unambiguous denotation used for strictly prescribed logical operations. Interpersonally, such language serves merely the purpose of communicating knowledge. The movement of modern logic which Boole started in 1846 has since laboured towards the ideal of an unambiguously communicative language freed from emotional bias. Though recently linguistic criticism has somewhat enlarged its conception of language and no longer seeks to eliminate altogether the emotional content of language, these concessions have not led to a clear reconsideration of its philosophic intention. Indeed, the study of linguistic usage, however open-minded, can in itself hardly ever lead to any important and certainly never to any fundamental affirmation. For a dispassionate scrutiny of our passions inevitably reduces them to a merely subjective status and thus debars us from giving ourselves to those passions which alone can carry our deepest convictions. It is with this in mind that I shall now give a brief survey of the convivial use of language with an emphasis on its emotional roots.

14. Take first the field of practical relations between persons. They are articulated by one of the most powerful uses of language which is preponderantly emotional. It is abuse and praise. To call a man a cad conveys hardly any information and is akin rather to the act of striking him. The man who is called a liar or a coward shrivels up under the impact of such abuse and must hit back or otherwise vindicate himself if he is to escape permanent loss of self-esteem. The slanging matches which are formally arranged among various primitive tribes are true battles fought by the weapon of abuse. Abuse and praise have an infinite variety of shades, all of which form only one class within a much broader range of articulate emotional impacts. Commands, complaints, appeals, jokes, sneers, endearments, threats, are a few of the innumerable forms of speech by which one person

may affect another, essentially without passing on information. And it is by this form of language that the practical inter-relations of human beings are primarily established and regulated. Even when people communicate matters of fact to each other this is done more often than not for the mere purpose of companionship. Gossip is indispensable and most conversation is gossipy; the torment of solitary confinement is not that it deprives of information but of gossip.

15. But let me now turn more directly to the process of communication (to which the logical criticism of language originally intended to reduce the interpersonal use of language). For the purposes of analysis we may describe communication as an extension of the solitary articulation of object-directed intelligence. We may recall that the latter may refer to sign-event, to means-ends or to alternative part-relationships. Solitary articulation involves two assumptions: (1) that an utterance can be identified by one person and (2) that it can be used consistently as a symbol of something or instances of the same thing by one person. Such articulation then stands for a denotation. Communication by the use of denotation is possible within a group of persons if (1) they mutually identify the same utterances and (2) mutually denote by them the same designates. All such mutual recognition and understanding of language must ultimately rely on the inarticulate transmission of experience between persons. All articulate communication relies in the last resort on the mutual identification of persons in respect to the meaning of the utterances used by them. This is the kind of identification - of which I have given numerous examples - underlying the whole class of inarticulate processes and directly transmitting an experience from one person to another. Thus the assumption that people can exchange information by talking to each other is seen to imply the anterior assumption that persons can know each other's minds and can rely on knowing it, merely by sympathetically responding to what another person does or undergoes in one's presence.

16. All articulate conviviality entails emotion, and language is convivial before it is informative. This is doubly true if the information conveys a knowledge of persons. For this presupposes links of emotional identifications, both between the persons communicating with each other on one hand and between these persons and the person (or the kind of persons) who form the subject of the information which is being exchanged on the other hand.

The last three paragraphs offer a preliminary outline of three modes of articulation which are embodied in three great departments of social lore.

17. While the subject matter of the Lecture has touched by implication on a great many philosophic problems, the necessity of paying serious attention to them and pursuing them systematically has not yet become apparent.