

THE PSYCHOLOGICAL REVIEW.

PSYCHOLOGY AND HISTORY.¹

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A few years ago, at the Philadelphia meeting of our Association, the Presidential Address sketched the wonderful progress of our modern psychology and culminated in the statement: "We are past the time for systems of psychology; now handbooks of psychology are prepared." Psychology, indeed, since its declaration of independence, is eager to find out and to collect the special facts, without allowing the traditional interference of metaphysical philosophy, and that which brings us together in our Association ought to remain our common interest in the discovery of empirical psychical facts. And yet I cannot help thinking that many of us who sincerely agree with that enthusiasm for daily use are ready to confess the wish of thoughtful hours that, while handbooks of psychology appear now in masses, the time may come again for systems of psychology. We strive, I think, from the disconnected facts towards a systematic unity, and know that such unity is never reached by even the most complete collection of facts, but only by a philosophical understanding of the fundamental principles of our work. The discussion of the basal conceptions and categories of psychology, of its presuppositions and its limitations, of its relations to other empirical sciences and to philosophy, seems thus still more important and essential than the results of any observation, and the fact that in recent years inquiries in regard to the psychological standpoint

¹ President's Address, American Psychological Association, New York Meeting, December, 1898.

have come everywhere to the foreground of epistemological research appears to point more strongly towards the real progress of psychology than any discovery between the walls of our laboratories. I welcome, therefore, the more, the honorable opportunity of this hour, as I understand that the Presidential Address should emphasize the general problems of our science.

My address deals with the limits of psychology. I know quite well that such a choice easily suggests the suspicion of heresy; whoever asks eagerly for the limits of a science appears to the first glance in a hostile attitude towards it. To emphasize its limiting boundaries means to restrain its rights and to lessen its freedom. It seems, indeed, almost an anti-psychological undertaking for any one to say to this young science, which is so full of the spirit of enterprise: Keep within the bounds of your domain. But you remember the word of Kant: "It is not augmentation, but deformation of the sciences, if we efface their limits." Kant is speaking of logic, but at present his word seems to be for no field truer than for psychology. Psychology, it seems to me, encouraged by its quick triumphs over its old-fashioned metaphysical rival, to-day moves instinctively towards an expansionistic policy. A psychological imperialism which dictates laws to the whole world of inner experience seems often to be the goal. But sciences are not like the domiciles of nations; their limits cannot be changed by mere agreement. The presuppositions with which a science starts decide for all time as to the possibilities of its outer extension. The botanists may resolve to-morrow that from now on they will study the movements of the stars also; it is their private matter to choose whether they want to be botanists only or also astronomers, but they can never decide that astronomy shall become in future a part of botany, supposing that they do not claim the Milky Way as a big vegetable. Every extension beyond the sharp limits which are determined by the logical presuppositions can thus be only the triumph of confusion, and the ultimate arbitration, which is the function of epistemology, must always decide against it. It is thus love and devotion for psychology which demands that its energies be not wasted by the hopeless task of transgressions into other fields.

Philosophers and psychologists are mostly willing to acknowledge such a discriminative attitude when the relations between psychology and the normative sciences, ethics, logic, æsthetics, are in question. They know that a mere description and causal explanation of ethical, æsthetical and logical mental facts in spite of its legitimate relative value cannot in itself be substituted for the doctrines of obligation. The line of demarcation thus separates with entire logical sharpness the duties from the facts, the duties which have to be appreciated in their validity as ideals for the will, and the facts which have to be analyzed and explained in their physical or psychical existence as objects of perception. But can we overlook the symptoms of growing opposition against the indiscriminative treatment of the world of facts in the empirical sciences? The creed of those who believe in such uniformity is simple enough: the universe is made up of physical and psychical processes, and it is the purpose of science to discover their elements and their laws; we may differentiate and classify the sciences with regard to the different objects which we analyze or with regard to the different processes the laws of which we study, but there cannot exist in the world anything which does not find a suitable place in a system in which all special sciences are departments of physics or of psychology. In a period of naturalistic thinking like that of the Darwinistic age the intellectual conscience may be fascinated and hypnotized by the triumphs of such atomizing and law-seeking thought even to the point of forgetting all doubts and contradictions. But the pendulum of civilization begins to swing in the other direction. The mere decomposition of the world has not satisfied the deep demand for an inner understanding of the world; the discovery of the causal laws has not stilled the thirst for emotional values, and there has come a chill with the feeling that all the technical improvement which surrounds us is a luxury which does not make life either better or worthier of the struggle. The idealistic impulses have come to a new life everywhere in art and science and politics and society and religion; the historical and philosophical thinking has revived and rushes to the foreground. We begin to remember again what naturalism too easily forgets, that the interests of

life have not to do with causes and effects, but with purposes and means, that in life we feel ourselves as units and as free agents, bound by culture and not only by nature, factors in a system of history and not only atoms in a mechanism.

Such a general reaction demands its expression in the world of science too, and there cannot be any surprise if psychology has to stand the first attack. The naturalistic study of the physical facts may not be less antagonistic to such idealistic demands, and yet it is the decomposition of the psychical facts which oppresses us most immediately in our instinctive strife for the rights of the personality. The antithesis becomes thus most pointed in the conflict between psychology and history, and it seems to me that only two possibilities are open. One possibility is that these sciences stay yoked together, the one forcing the other to follow its path. Then, of course, two cases may happen. Either psychology remains as hitherto the stronger one; history must then follow the paths of psychological analysis and must be satisfied with sociological laws; every effort of history which goes beyond that is then unscientific, and the works of our great historians must seek shelter under the roof of art. Or—and this second case has all odds in favor of it—the belief in the unity of personality becomes stronger than the confidence in science, which merely decomposes, and psychology becomes subordinated to the historical view of man. That is possible under a hundred forms, but the final result must be always the same, the ruin of real psychology. I think this undermining of psychology with the tools of history is to-day in eager progress. Here belong, of course, all the most modern attempts to supplement the regular analyzing psychology by a pseudo-psychology which by principle considers the mental life as a unity and asks not about its constitution but about its meaning. Whether authors, half unconsciously, alternate with these two views from chapter to chapter, or whether they demand systematically that both kinds of psychology be acknowledged, makes no essential difference. Both forms are characteristic for a period of transition; both must lead in the end to giving up fully the analyzing view, to shifting the results of such analysis over to physiology, and thus to confining psychology

entirely to the anti-causal categories, that is to denying psychology altogether. Such turnings of the scientific spirit are slow, but if history and psychology remain chained up together the symptoms of the future are too clear: there is no hope for psychology.

But there is a second alternative open. The chain which forces psychology and history to move together may be broken, the one may be acknowledged as fully independent of the other. What appears as a conflict of contradictory statements may then become the mutual supplementation of two partial truths, just as a body may appear very different from the geometrical, from the physical and from the chemical points of view while each one gives us truth. To those who have followed the recent development of epistemological discussion, especially in Germany, it is a well-known fact that this logical separation of history and psychology is, indeed, the demand of some of the best students of logic. They claim that the scientific interest in the facts can and must take two absolutely different directions: we are interested either in the single fact as such or in the laws under which it stands, and thus we have two groups of sciences which have nothing to do with each other, sciences which describe the isolated facts and sciences which seek their laws. A leading logician baptizes the first, therefore, idiographic sciences, the latter nomothetic sciences; idiographic is history; nomothetic are physics and psychology. Psychology gives general facts which are always true, but concerning which it has not to ask whether they are realized anywhere or at any time; history refers to the special single fact only, without any relation to general facts.

I consider this logical separation as a liberating deed, not only because it is the only way for psychology to escape its ruin through the interference of an historically thinking idealism, and also not only because the value and unity and freedom of the personality which history preaches can now be followed up without interference on the part of psychology, but because, independent of any practical results, it seems to me the necessary outcome of epistemological reflection. And yet the arguments which have led to this separation appear to me mistaken

and untenable in every respect. I agree heartily with the decision, but I absolutely reject the motives. No antithesis is possible between sciences which study the isolated facts and sciences which generalize; such a methodological difference does not exist. We shall see that it must be replaced by a difference of another kind, but the end must be the same: psychology and history must never come together again. To criticise the one way of attaining this end and to illuminate the other new way which I propose is the purpose of the following considerations.

We must proceed at first critically; what is the truth of the view which contrasts idiographic and nomothetic sciences? At the first glance the importance of the discrimination seems so evident that it appears hard to understand how it could ever have been overlooked. It seems a matter of course that the empirical sciences can ask either about the general facts of reality, the laws which are true always and everywhere and which do not say what happened on a special place and in a special time, and on the other hand about the single facts which are characterized just by their uniqueness. We may be interested in the physical and chemical laws of fire, but our interest in the one great fire which destroyed Moscow has an absolutely different logical source, and if we extend our historical interest from the physical to the psychical side, and investigate the stream of associations which passed during the days of that fire through the mind of Napoleon, we have again an absolutely different kind of interest from that of the psychologist who studies the laws of association and inhibition, which are true for every mortal. How small from a logical standpoint appears the difference between the search for physical laws and the search for psychological laws compared with the unbridgable chasm between the search for laws and the inquiry for special facts which happened once! And this difference grows if we consider that all our feelings and emotions refer to the special single object, not to any laws, that, above all, the personalities with which we come in contact come in question for us just in their singleness, and that we ourselves feel the value of our life and the meaning of our responsibility in the uniqueness of the acts by which we

mark our individual rôle in the history of mankind. These arguments of recent epistemological discussions will easily find the ear of the multitude. Common sense, which demands for itself the prerogative of being inconsistent, will probably hesitate only at the unavoidable postulate of this standpoint, that also the development of our solar system, of our earth, of our flora and fauna, belongs then to history and not to natural science, as they describe a process which happened once, and not a law.

I may begin my criticism at the periphery of the subject, moving slowly to the center. I claim first that all natural sciences, of which psychology is one, do not seek laws only but set forth also judgments about the existence of objects. Of course, we can make the arbitrary decision that we acknowledge the natural sciences as such only so far as they give eternal laws without reference to their realization in a special place or in a special time, while any judgment about the existence here or there, now or then, has to be housed under the roof of history. The sciences as they practically are would then be mixtures of historical and naturalistic statements, the historical factor diminishing the more, the more abstract the science, reaching its minimum in pure mechanics. Such decision has only recently found able defense, but do we not destroy, by its acceptance, the whole meaning of natural science? Are the laws for themselves alone still of any scientific interest at all? Why do we care at all for such general laws, as the law of causality, the most general of them, which embraces all the others, is included already in the presuppositions of science, and thus anticipated beforehand? When formal logic or mathematics deals with A and B and C, they state valid relations without asking whether A, B or C is given anywhere or at any time, even without excluding the possibility that their real existence may be impossible. The scientific judgments of physics and psychology, on the other hand, have lost all their meaning if we deprive them of the presupposition that objects which prove the validity of such laws have real existence in the world of experience.

We can construct well-founded physiological laws also for the organism of the centaur and psychological laws for the mind of nixes and water fairies, but both attempts do not be-

long within the system of science. The claim of existentiality is not explicitly expressed in the formulation of scientific knowledge, not because it is unessential, but because it is a matter of course. The larger the circle for which the law is valid the more we find these included judgments of reality deprived of their reference to special local and temporal data, but even in the most general propositions of mechanics such judgments are tacitly included. The question is not whether the objects with which the laws of mechanics deal have real existence from a philosophical point of view; certainly they have not. The important point is that mechanics by its laws tries at the same time to make us believe that even the atoms have existence. On the other hand, the existential judgment must become the more detailed the more special the law is, that is, the more complicated the conditions of its realization. If the psychologist states the laws of the feelings, he claims that it is not true that only men without feelings exist; he claims that men with feelings have reality too. If he gives us the more special laws of ethical feelings, he claims that experience knows men with ethical emotion. If he goes on with his specialization of the psychical laws, claiming that under special conditions the ethical emotion of obedience to the state comes to inhibit the desire for life, he tells us that this really happened. His psychological law becomes finally only still more detailed if he lays it down that under such and such conditions obedience to the state discharges itself in the drinking of a hemlock potion in spite of antagonistic suggestions of escape from philosophical friends. It is a psychological law and yet it claims at the same time that all this once at least really happened, while the complication of conditions practically excludes the possibility of its happening more than once in the world of our experience.

Of course, it remains a law of general character with regard to the absolute space and the absolute time; when all conditions including our solar system and all the events on the earth are given once more in infinity, then Socrates necessarily must drink once more the poisoned cup. But in the limited space and time of our experience the conditions for the realization of such a psychological law can have been given only once, and that

they really once were given is decidedly claimed and thus silently reported by the law. If our opponents maintain that the naturalistic sciences need as supplement a historical description of one special stage of the world to give a foothold for the working of the eternal laws, we can thus reject this external help for the explanation of the world, as the laws themselves furnish all that we need. The system of the laws is at the same time a full and graduated system of existential propositions with regard to the limited space and time of our experience. If ever and anywhere in the empirical universe a molecule had moved otherwise or another thought had passed through a consciousness, then the system of laws, thought in ideal perfection, would have demanded a change. Our physics and psychology presuppose and assert the real existence of exactly our world. They do not seek the laws with the intention of neglecting and ignoring the special facts.

The separation of the single facts from the general facts is thus untenable, because the explanatory law includes the description; but we can also emphasize the other side of this mutual relation: every description includes explanation, every assertion of a special fact demands reference to the general facts. A description has a logical value only if it points towards a law. We describe a process by the help of conceptions which are worked up from the general facts, common to a group of objects, and these general conceptions are the more valuable for the purposes of description the more their content is a condensed representation of real objective connections. The descriptions in popular language make use of conceptions which are deduced from superficial similarity, but every new insight into the physical and psychological laws gives to the general conceptions a more and more valuable shape. The history of science is the steady development of the means of description; there is no description which by its use of conceptions does not aim at working out the laws. Thus, far from the trivial belief that the law is merely a description of facts, we ought not to forget that the description of facts involves the laws and is only another form of their expression. To describe a physical thing as a group of atoms or an idea as a group of sensations demands the whole knowledge

of the psychological and mechanical laws and condenses in its conceptions the progress of science. To separate the descriptive report from the explaining apperception is thus again impossible.

It could appear that this does not hold for all kinds of description; we communicate with one another in practical life without relying on general conceptions. But our communication then is no description. Any mode of personal expression, gestures or tears, may tell us what is going on in the mind of another without reference to psychological laws. But the fact is that they give no description either; they give a suggestion. The words of practical life, the words of the poet and, as we may add at once, the words of the historian, work like such movements of expression; they make every mental vibration resound in us, because they force us unintentionally or with conscious art to follow the suggestion and to imitate the mental experience. The rhythm and the shade of the words may then be substituted for logical exactitude, and interjections may have deeper influence than complete judgments, but all that is decidedly no description, as a description demands a communication of the elements. Such a suggestion allows us an understanding of the meaning, but gives us no knowledge of the constitution. Where a single object really has to be described, there conceptions and laws are inevitable, and the historian cannot make an exception.

But just this fact, that description and explanation cannot be separated and that the conception includes the law, has opened in recent philosophical discussions a new way of thought which also seems to lead to those claims which we rejected. Granted, it is said, that every description presupposes generalizing abstractions, but such abstraction must then lead us away from the endless manifoldness of the reality. Every scientific description deals with physical or psychological abstractions; does that not mean that we need still another kind of treatment which does justice to the existing richness and fullness of the real single fact? If we give this mission to history we acknowledge that its communications would not be ordinary descriptions, but we should in any case again have the separated camps with the

antithesis: Manifoldness and abstraction, single fact and general fact. But the presupposition is wrong; the manifoldness of the reality is not endless and the abstracting conceptions are not at all unfit to do justice to the richness of the single fact. The single conception abstracts, but the connection of conceptions in the sentence reconstructs again. On the other hand, whatever is the possible object of perception and discrimination must be the possible object of descriptive determination. Whether the task of a complete conceptual description is difficult or not is no question of principle; impossible it is not. The ability to perceive differences is even inferior compared with the power to separate the differences conceptually, and the abstracting description of science must, therefore, frequently increase and not decrease the manifoldness of the object. We know about the objects more than we perceive; above all, the description can never leave behind it a perceivable remainder which from its too great manifoldness excludes description. The full variety of the single facts thus belongs just as much as the most general law to the physical and psychological sciences; the antithesis psychology and history as coinciding with the antithesis abstraction and manifoldness of reality is then impossible. That history stands, indeed, nearer to reality than any psychology we shall later fully acknowledge, but, as we shall see, for very different reasons; history abstracts, we shall see, not less than psychology, and psychology is interested in the variety of the facts just as much as is history. ✓

This brings us to our central arguments: Every science considers the single facts in their relations to other facts, works towards connection, towards generalities. Science means connection and nothing else, and history also aims at general facts, or it cannot hope for a place in the system of science. Does that mean that it is valueless to consider the single fact as it stands for itself, isolated and separated from everything else? Certainly not; the isolation is not less valuable than the connection, but it never forms a science; it is the task of art. The single fact belongs to art and not to history; history has to do with the general facts. That is the thesis which I must interpret and defend. One point, of course, is clear before the dis-

cussion. If we maintain that history has also to work up its material with respect to the general facts and not with regard to the single facts, then it is evident that there is in the deepest principle of the inquiry no methodological difference between physics and psychology on the one side and history on the other. But we insisted that an important difference does exist. The difference must then be not in the kind of treatment, but in the material itself. To be sure, there cannot be a physical or psychical object in the universe which would not be possible material for psychology or physics; if history deals with a material which is different from the possible objects of those empirical sciences, then it must deal with facts which differ from the physical and psychical objects in their kind of existence; in short, the difference between psychology and history is not a methodological but an ontological one.

We must then ask what kind of existence belongs to the material with which physics and psychology deal and how it is related to reality; above all, how far reality offers still another kind of facts which could be the substance of other sciences. Reality means to us here the immediate experience which we live through. This immediate truth of life may be transformed and remoulded in theories and sciences, and these remodelings of reality may be highly valuable for special purposes of life; we may even reach finally a point of reconstruction from which the subjective experience appears as an illusion and the supplementation stands as the only truth. Yet the importance of such constructions must not make us forget that we have then left reality behind us. Our doubting and remoulding itself belongs to the reality for which its products can never be substituted. And this primary reality can, of course, never be reached when we start from the finished theories of the physical or psychological sciences. Whether we pretend that the world is a content of our consciousness, a system of psychological ideas, or whether we start from the mechanical universe and consider experience as effect of the outer world on the consciousness, or whether we confuse the two and call the world a product of the brain, it is all equally misleading if we seek the reality, as each view presupposes equally the psy-

chological or physical constructions. It is then, of course, for us also impossible to reach the less remoulded primary experience by going backward through the genetic development of the individual or of the race to an earlier simpler stage of experience. Just this genetic tracing backward fully presupposes the categories of the psychological view; we must have already considered our own inner life as a complex combination of elements before it has a meaning to call the mental life of the child or of the animal less complex; the starting point of the genetic development is thus itself an artificial construction which lies further away from the primary experience.

If we thus escape all theories and stand firm against the suggestions which psychology and physics plentifully bring to us, then we find in the reality nothing of ideas or of mechanical substances, neither consciousness nor a connected universe. The reality we experience does not know the antithesis of psychical and physical objects, but in the primary stage merely the antithesis subject and object. We feel our personal reality in our subjective attitudes, in our will acts which we do not perceive but which we live through, and with the same immediacy we acknowledge other personalities as subjects of will. They too are not objects which we merely perceive, but we acknowledge them, by our feeling, as subjects with whom we agree or disagree and whose reality is thus not less certain than our own. Our acts as subjects are directed towards objects which in reality exist only as such objects of will, that is, as values. They are our ends and means, our tools and purposes, and nothing is to us real that is not called to be selected or rejected, to be favored or dismissed. Subjective acts of will and objects of will form the reality, the whole reality, nothing lies outside and nothing is valid beyond this world of will relations, and even if we form judgments about objects which we think as independent of the will, this judgment and this thought itself is an act of will working towards a purpose.

As soon as we begin to bring order into the manifoldness of this real world the subjective acts as well as the objects divide themselves into two groups, those of individual character and those which are common to all, over-individual. This division

means not a result of counting whether several subjects or by chance only one subject have made the decision or appreciated the object: it is a question of intention merely. My act is over-individual if it is willed with the meaning that it belongs to every subject which I acknowledge, and my object is over-individual in so far as I consider it as a possible object of attitude for every subject. My overindividual will-act is that factor of reality which we call duty; every duty lies in us as subjects, as our own deepest will, and yet as more than our individual decision. The overindividual objects are those which we call physical; the individual objects are the psychical ones; we must only not forget that these physical and psychical objects are in reality not in question as independent objects of perception, but are always related to the will; they are not contents of consciousness and mechanical bodies in a continuous space, but suggestions which have a meaning, things which have a use. We find thus four factors of reality, beyond whose validity a constructive metaphysics alone can go. Metaphysics may ask whether the individual and overindividual acts do not blend in an absolute subject and whether the objects are not posited by such a subject of higher order; epistemology must be satisfied with the more modest task of settling how we deal with this reality in our scientific or æsthetic knowledge. Reality itself is, of course, neither art nor science, but life. Art and science must be thus transformations of the material which life offers to us, while these transformations themselves are acts of the subjects and thus belonging to those will-formations which claim for themselves an overindividual character, creating the values of beauty and truth.

The acts which lead from life to art and science are thus for epistemology free acts of that subjectivity which we find in ourselves by immediate feeling, and which we acknowledge in others by an understanding of their propositions and suggestions; they are not functions of the psychophysical organism, not psychophysical processes, as we must have reached already the artificial reconstruction of science before the subject is replaced by that object among other objects, the psychophysical personality. Scientific and æsthetic acts are not the only functions of

the real subject; the ethical and others stand coördinated, but we are concerned here only with the two functions which do not aim to change and to improve the world but to rethink it in beautiful or truthful creations. It seems to me now that the two attitudes are in every respect antagonistic; to express their direction in a short formula, I should say science connects the factors of reality; art, on the other hand, isolates them. The material of science and of art is then the same, though treated by a different method. Both can deal with all the four factors of reality, with individual acts and overindividual acts, with individual objects and overindividual objects. Life does not isolate fully and gives no complete connection; whatever we turn to with our will has features which lead us further and further to ever new interests; life does not let us sink into the one alone—we rush beyond it to new realities. And life does not give connections beyond the immediate needs of practical purposes in the narrow circle of chance experience. Wherever is full isolation of single facts there is beauty, wherever truth there must be full connection.

The assertion that every isolated fact in its singleness means beauty has for us here only the character of a critical argument and is not for itself object of our discussion. It has for us merely the negative purpose of proving that the singleness cannot be characteristic of history. We cannot thus defend here this assertion by detailed discussion; we have only to elucidate its meaning. Certainly the real life, too, brings us pulses of experience in which our will is captivated by the given experience, satisfied with the object in itself or in the acknowledgment of other subjective acts; then we have the beauty of nature, the beauty of forms and of landscapes, of love and of friendship. Of course, it is only an exception when life offers to us in the untransformed reality such complete beauty; it remains the duty of art to change the world till everything is eliminated that leads the subject beyond the single experience, and the will can rest in the single fact. The world of objects is thus transformed in painting and sculpture, the world of subjective acts remoulded in poetry. The sentiment or the conflict which the poet suggests to us, the bust or the landscape which the artist brings before

our eye, is severed from the practical world; as long as anything connects it with the background of the daily world it may be useful or inspiring or instructive, but it is not beautiful. The poet projects his work into an ideal past; the painter cuts an ideal space out of the reality, and the sculptor fills an ideal space, not the space of our surrounding, to take care thus that the acts and objects may not link into our real world, may never become causes for outer effects, motives for actions, or centers for associations which lie beyond the frame.

We ought not to become skeptical in regard to this point on account of the overhasty generalizations in which empirical psychology mostly characterizes the æsthetic act as rich in associations. The epistemological problem we are discussing can not be settled by psychology, but as soon as the facts are expressed in the terms of psychological language they can not possibly assert the opposite of the epistemological truth. But there is no reason for such a conflict, as psychology is undoubtedly in the wrong. The psychological claim is based on the general theory that all pleasant mental states represent an increase of activity, and with it an increase of associations, while all unpleasant states are marked by a decrease of activity and lack of associations. I think that is wrong; there are different kinds of increase and different kinds of decrease in both ideas and actions. The antithesis pleasure and displeasure does not at all coincide with increase and decrease if we do not arbitrarily select such emotions as joy on the one and grief on the other side. Increase of activity characterizes pleasant and unpleasant states, only in the pleasant states it produces action of the extensors, in the unpleasant states action of the flexors. In the same way decreases of activity can have a double type; it can have its ground in the absence of stimulations, and this is, indeed, characteristic of some unpleasant states, but the lack of outer action can have its ground also in the fact that every motor impulse goes to the antagonistic muscles equally. This increase of tonicity without possible action is characteristic for one pleasant state above all, the æsthetic one. The increase and decrease of associations is here, as always, parallel with the motor impulses. Here also increase of associations is essential

for some pleasant states, but for some unpleasant ones too, only like the muscle activity, in antagonistic directions, in the one case turning to the future, in the other case falling back to the past. And the same doubleness is to be noted in the decrease of associations; in some unpleasant states the decrease comes from a mere lack of ideational impulses, in some pleasant states from the fascination which leads every ideational impulse again to the object itself, so that no thought can lead beyond it. This is again true, above all, for the æsthetic state. The beautiful object includes all that it suggests in itself, and where we connect we sin against the spirit of beauty.

By the contrast with art the fullest light falls on the process of science; every step towards science leads in the opposite direction. The incomplete connections of life are severed by art, but made complete by science, while the material is the same. We had four groups of facts in reality, and we must thus have four groups of sciences which bring systematic connections into the four different fields. We have the science of the over-individual objects, that is, physics; secondly, the science of the individual objects, that is, psychology; thirdly, the sciences of the over-individual will-acts, that is, the normative sciences; and, last, not least, the sciences of the individual will-acts, that is, the historical sciences. Physics and psychology have thus to do with objects; history and the normative systems, ethics, logic, æsthetics, deal with will-acts. Psychology and history have thus absolutely different material; the one can never deal with the substance of the other, and thus they are separated by a chasm, but their method is the same. Both connect their material; both consider the single experience under the point of view of the totality, working from the special facts towards the general facts, from the experience towards the system. And yet the difference of material must, in spite of the equality of the methodological process, produce absolutely different kinds of systems of science. We must consider again from the standpoint of real life how the connections of objects is different from the connection of attitudes, and how the purposes of the systematizing reconstruction are different in the two cases.

We and the other subjects have objects which are in reality,

as we have seen, objects of our will. Why have we an interest in considering the objects from a scientific standpoint, that is in systematized connection? If we do so, it must serve, of course, a special purpose in our real life. The purpose is clear. We cannot do the duties of our life, that is, we cannot act on the objects, if we do not know what to expect from them with regard to the reality which we prepare, and we call the reality which we can still prepare the future. We must ask, therefore, what we have to expect for the future from the objects alone, that is from the objects thought as if they were independent from the subjective will reaction. The answer to this question as to our justified expectations is the system of physical and psychological sciences. To reach this end we must think the objects, the individual or over-individual ones, as if they were no longer objects of a will, as if the subject were deprived of its real activity and were a merely passive perceiving subject the objects of which are thus definitely cut away from the will. Our interest was to determine their influence on the future. We thus consider every object as the cause of an expected effect, and call those characteristics of the object which determine our expectation of the effect its elements. Physics and psychology thus look on their objects as complexes of elements. It is the task of science to reconstruct and to transform the objects till each is thought as such a combination of elements that the effects to be expected can be fully determined from the elements. In this service grew up the atom doctrine in physics and the sensation doctrine in psychology. Each object is thus linked into a causal system; each is considered not as that which it really is, but as a complex of constructed factors which are substituted for the purpose of the causal connection, and each is in question in its relation to all the others. The world thus becomes a system of causally linked objects which can be described by their elements, while these elements themselves are chosen from the point of view of explanation by causality. The determination of the effects by means of the elementary causes is expressed by the laws which give the rules for our expectations. We can say thus that physics and psychology may very well consider any special facts, and, as we have seen, they certainly do not ignore the spe-

cial facts at all, but they consider them with regard to the causal law, and the laws as types of causal connections are thus the only general facts towards which the systematized study of objects can lead us.

Quite different is the systematic connection of the subjective will-attitudes; we may abstract here at first from the over-individual attitudes and concentrate our interest on the individual will-acts. In psychology the will-attitude as such, as act of the real subject, cannot have any place whatever; psychology deals with objects; the subjective attitude is never an object; it is never perceived; it is experienced by immediate feeling and must be understood and interpreted, but not described and explained. If psychology wishes to treat of the will, the psychophysical organism must be substituted for the real subject and thus the will be considered as a process in the world of objects. The description of any known will-acts as psychophysical functions, that is, as illustrations of psychological laws, thus as a matter of course belongs to psychology, and if the psychologist should analyze into psychophysical elements and explain as causally determined all will-acts and human functions of the last three thousand years, he would not transcend the limits of psychology. It would be a very useless psychological undertaking, but it would be such and not history. History starts from and deals with the real subjective will-acts which cannot be found in the world of psychophysical objects.

Our personal life in its political, economical, religious, scientific, æsthetic, technical and practical aspects is a manifoldness of will attitudes and acknowledgments. We live in the midst of a variety of political and social, technical and practical institutions, but no institution means anything else than expectations and demands which reach our will, and suggestions towards which we take attitudes. State and church, legal community and social set, what else are they but will attitudes which we acknowledge and which are, therefore, never understood in their real meaning if they are considered as describable objects, but which must be interpreted and appreciated as subjective will relations, striving towards purposes and ends. And to understand all the technical and practical institutions which civilization brings to

us means again not to describe or explain them, but to interpret them as will suggestions to be imitated. The machine and the book, the law and the poem, are not physical and psychical objects for our interests as living men, but suggestions and demands for the understanding of the intentions and attitudes of other subjects which we can enter into only by taking an imitating or rejecting attitude, thus reaching will by will. All our knowing and believing, our enjoying and respecting—as long as we abstract from their over-individual values—all our education and civilization, our politics and our professional work, is such a complex of real affirmations and negations, demands and inhibitions, agreements and disagreements, which have to be understood and felt and interpreted, but which are not touched in their reality if merely their psychophysical substitutions are analyzed and causally explained. To be a Chinese or Mohammedan, a symbolist or a Hegelian or an atomist, means to be the subject of special complexes of will attitudes and nothing else. If, for instance, we substitute the race for the state, then, of course, we have objects before us and no longer subjective attitudes, but then we deal with biological conceptions and no longer with history.

The manifoldness of will-acts the totality of which forms my real personality thus refers in every act to the will-acts and attitudes of other subjects which I acknowledge or oppose, imitate or overcome. These demands and suggestions of others are not in question in my life as causes or partial causes of my will; they have not to be sought in the interest of a causal connection; they are merely conditions which I as subject of attitude and acts presuppose for my free decision and which are thus logically contained in it; the connection is, therefore, not a causal, but merely a teleological one. The endless world of will-acts which stands thus in teleologically determining relation to our own will-attitudes forms the only material of history.

The material is, of course, unlimited. If every act of ours means an attitude towards acts of others which we must try to understand, it is clear that those others are understood only if their acts again are interpreted as attitudes towards the propositions and demands and suggestions of others, and so on and

on. Every will-act is thus ideally related to an unlimited manifoldness of other acts, just as the movement of every grain of sand is causally related to every molecule in the universe. It is the unique task of history as a science to work out and make complete this teleological system of individual will-relations, thus to bring out the connections between our acts and all the acts which we must acknowledge as somehow teleologically influencing our own. While physics and psychology thus produce a connected system of causes and effects, linking all objects which stand in connection with our objects, history follows up all the subjective acts which stand in will-relation to our subjective attitudes.

Physics and psychology, as we have seen, reach this end through striving towards laws and causality; that, of course, cannot be the way of history. The objects interested us only as factors which influence the future, and the laws by which we have connected them have satisfied this expectant interest. The subjects, on the other hand, do not interest us in first line as causes of effects. Of course, we are able to consider them also as objects which produce effects, and that aspect may become important to us in many practical respects; psychophysics will fully satisfy this kind of interest. And in the same way we may look on the development of peoples with an interest in what we have to expect from them; they are then sociological organisms, the laws of which we study; but such study is not history. The aim of the real historian is not to prophesy the future. Peoples never learn from history, and the forgotten doctrine that we ought to study history to find out what we have to expect from the future stands on the same level with its contemporary, the doctrine that it is the purpose of art to instruct us and to make us better. No, the historian makes us understand the system of will attitudes to which our individual will is related. That, indeed, alone, is our primary interest in the will-acts of other subjects; we want to understand them, not to analyze them into elements; we want to interpret their meanings and not to calculate their future. The objects awake our expectations; the subjects interest our appreciation, and all that we want to know about them is with what other attitudes they agree or disagree.

We thus have the logical aim, to consider them in their relations to all other will attitudes and to work out the system of these connections; that is, to consider the institutions which are the representatives of will suggestions, together with the personalities themselves, as links of this endless chain of will relations.

The purpose of history is not reached until every institution and personality with which we may be in a direct or indirect will relation is understood as a complex of agreements and disagreements, that is, of will attitudes towards other subjects. This regress must be, of course, infinite, just as no physical process can be reached which has not again causes and effects; and this task demands also, like the naturalistic sciences, a continual transformation. Just as the physical object is not really a complex of atoms and the psychological idea not really a complex of sensations, but must be in thought transformed into such to make causal connection possible, so in exactly the same way history must reconstruct the personalities and institutions as complexes of will attitudes, which they really are not, but as which they must be considered to make the unbroken teleological connection possible. And again, like physics and psychology, history too cannot communicate to us the whole of the connected system, but has to work out the general facts which give to every single fact at once its place in the whole system. These general facts in the teleological will system cannot be causal laws, but must be will relations of more and more comprehensive character. Just as in the world of objects the general law covers and determines the causal changes of an unlimited number of objects, so the important will-actions cover and determine in the world of subjects the impulses and suggestions for the decisions and attitudes of an unlimited number. The regularity of the causal law and the importance of the imposing will lift in a corresponding way the general fact over the level of the single facts. It is the work of history to make conspicuous the increasingly important will influences, as it is the work of physics and psychology to work out the laws. If I say I am a German, I want to assert by that statement that I acknowledge by my will a world of laws, institutions, hopes and ideals which are the will

demands of an undetermined multitude of subjects ; this multitude constitutes the historical nation of Germany. But it would be unscientific if I should start to interpret the attitude of every one who is part of that chaotic mass of subjects ; it is the work of science to find those influences which determined the multitude, those will-acts which were imitated and acknowledged by the unimportant subjects. The chaos thus becomes order, and Goethe and Beethoven, Kant and Hegel, Luther and Bismarck, stand as the general facts for the millions and millions of less important subjects who were determined by their suggestions. Any individual's historical place is then characterized by his will attitudes towards the leaders. Just as the naturalist knows a whole hierarchy of sciences which work out increasingly general laws up to mechanics as the most abstract system, so history can consider in different stages the will relations of more and more comprehensive character. The most abstract view is represented by the so-called philosophy of history, which aims at understanding the history of the world as determined by one decision of the will. In this spirit the conception of original sin in the theological systems of the Middle Ages was in the field of historical thinking perhaps not less marvelous than the conception of atomistic mechanism in the realm of natural science. The fact that Adam did not exist in reality is as little an objection to the mediæval construction as the fact that no atom can really exist militates against our atomism ; both reconstructions of reality fill merely ideal places as necessary goals of thought.

On the other hand, in the same way that mechanics does not lower the importance of special natural sciences, no all-embracing theory of the history of man can interfere with the importance of the special historic disciplines down to the biographies of single personalities. But even the biography has to work in the same direction as the most abstract philosophy of history, in the direction of general connection. The real biography written in an historical spirit shows in the individual the attitudes towards the demands and suggestions which make the history of mankind ; the single man becomes thus the crossing point of all the political, technical, religious, æsthetic, intellectual impulses of his time, and he is thus by the will-attitudes which

constitute his personality connected with the whole universe of will-acts. As the astronomer in his calculations describes the one curve of a star as the combination of a large number of impulses by attraction, and thus brings the star in relation to the whole firmament, so the historical biographer reconstructs the one life as a system of single attitudes towards an endless multitude of demands and suggestions. It is a complete transformation in the service of connection. The man's life can be told also otherwise: the life as he feels it as a personal experience; so also do we learn to understand the man; but we have then poetry and not history; it is isolation and not connection. And if we, instead, describe and explain his life as a set of ideas, feelings, emotions and volitions which arose in his psychophysical system from birth to death, then we have again a transformation in the service of connection, but this time for the causal connection of objects, not for the teleological connection of subjects; it is again not history, but psychology.

The separation of the material of the two sciences is thus simple and clear; there can never be a doubt about the line of demarcation, as there is no psychophysical object in the world—from the sensations of a frog up to the ideas of Newton, the emotions of Byron, and the volitions of Cromwell—which is not a suitable object of psychology, and as there is no subjective individual act which cannot be linked into the endless teleological system of history. A division of material, as if a social psychology, for instance, were to deal with the psychical processes of the unknown masses, while history were to deal with the psychical processes of the well-known men, is an absurdity. Not less misleading would be an antithesis between savagery and civilization. From a psychophysical standpoint such a line is secondary; the organism which has outer appendages of his body to make the psychophysical functions more effective has reached merely a higher stage of biological development, but is not different in principle from the lower type in which nature does not provide for detachable acquisitions of the organism. The animal which runs with locomotives, sees with microscopes, hears with telephones, makes gestures of expression through newspapers, attacks through cannons, remembers through libra-

ries, stands above the savage as a dog stands above a jelly-fish, but it is by principle nothing new; it is a more complicated product of nature which, therefore, offers a more difficult problem to the descriptions and explanations of psychology and physiology, but does not become as such material for history. And still another line of separation has to disappear; the fight between the 'materialists' and the 'idealists' of the recent economical schools has nothing to do with the doubleness of psychological naturalism and real historical aspect. If the materialists claim that every occurrence among men is the direct or indirect effect of economical causes, while the idealists consider other causes still which seem to them independent of material conditions, for instance, religious and patriotic emotion or ambition and love, both sides stand fully on the ground of psychology and outside of history. Those emotions of practical idealism are in question only as psychophysical causes and are thus material merely for a causal system. In the system of history exists no causality.

Here is the point where even the historians themselves are inclined to compromises which, at least in principle, must be rejected. Whether or not practically quite interesting reports of periods of civilization can be written by mixing the two attitudes is secondary. Historians, we know, produced in earlier times their deepest effects by mixing history with ethics, but the philosopher at least must be clear that ethics is not history, and he ought to be still less in doubt that a causally explaining social psychology is not history either. As soon as it is acknowledged that we have, on the one side, an interest to consider human life as an object and thus to describe and to explain it, and that we have, on the other side, a logical aim to understand human life as subjective acts which can be only interpreted and linked together by will attitudes, then we must have the energy to keep the two systems separated. Each is logically valuable, each is therefore true, but if confused both become logically useless.

We can say that Socrates remained in the prison because his knee muscles were contracted in a sitting position and not working to effect his escape, and that these muscle-processes took

place because certain psychophysical ideas, emotions and volitions, all composed of elementary sensations, occurred in his brain, and that they, again, were the effects of all the causes which sense stimulations and dispositions, associations and inhibitions, physiological and climatic influences, produced in that organism. And we can say, on the other hand, that Socrates remained in the prison because he decided to be obedient to the laws of Athens unto death. This obedience means, then, not a psychophysical process, but a will attitude which we must understand by feeling it and living through it, an attitude which we cannot analyze, but which we interpret and appreciate. The first is a psychological description; the second is a historical interpretation. Both are true. They are, to be sure, not equally valuable for science, as that particular psychophysical process is not more important for the understanding of the psychological system than millions of other emotions in unknown men, while that will attitude influenced by its demand the acknowledging will of twenty centuries, and is thus most important in the historical system. And yet both are equally true, while they blend into an absurdity if we say that those psychophysical states in the brain of Socrates were the objects which inspired the will of his pupils and were suggestive through two thousand years.

A history which interprets subjectively and understands their purposes out of the deeds of men relinquishes, indeed, its only aim if it coördinates these teleological relations with the causal explanation of human happenings from climatic and geographical, technical and economical, physiological and pathological influences. The subject which is determined by purposes is free; the action which is the effect of causes is unfree. In the unfree world there cannot be any action which must not be understood causally, and we have no right to stop anywhere in our explanation; the unexplained action means only an unsolved problem which is in no way solved if we seek for its subjective meaning instead of its elements and causes. In the world of freedom, on the other hand, it would be meaningless to ask for cause, as the objects then come in question merely as objects for the willing subjects and not as realities for themselves. The

realm of freedom is not made up of oases in the world of necessity; the reality of history is not spread here and there over the field of nature, but lies fully outside of its limits. The antithesis between psychology and history is thus not law and single event, but causality and freedom, and this difference is the logical result of the ontological difference of the material, the one dealing with objects, the other with subjects. Both go methodologically the same way, considering the single facts from the point of view of the general fact, and both transforming the disconnected material until a perfectly connected system is reached. But because objects are understood by describing and explaining them, while subjects are understood by interpreting and appreciating them, the connection of the one system must be causal, that of the other system teleological, and the general fact in the one field must be a law and in the other field the will relation of importance. As every subjective act can be substituted by a psychophysical function of an organism in the world of objects, and as every object can be understood as a value for a will, the whole reality can be brought without any possible remainder under the one aspect as well as under the other. History, in the real historical spirit, then need no longer fear that the progress of psychology can inhibit its functions, and the psychologist need not feel discouraged that his psychological laws of history appear so utterly trivial to the historian. That which is important for psychology, that which is fit for constructing connections between psychological objects, has the privilege of being indifferent for the historian, that is, of being unfit to link subjective will attitudes. Psychology and history cannot help each other and cannot interfere with each other as long as they consistently stick to their own aims. Each of them has thus unlimited opportunities for development. The processions of the great psychologists from Aristotle to Herbart, and that of the great historians from Thucydides to Macaulay, can both have for the future an unlimited number of followers without any quarrel, in spite of the naturalistic claims of our age, which for a while was under the illusion that all is understood when all is explained, and that the historians should better become psychologists.

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As soon as the difference of the two standpoints is recognized, light falls on all the special characteristics of the two sciences. Now we understand why history stands so much nearer to real life than psychology. Not, as it was suggested, because history deals with single facts and psychology with general facts, but because psychology deals with objects which are thought as independent of the subject, while in reality and so in history the material is acknowledged only in relation to willing subjects. In real life we are subjects which must be understood but not described; psychology starts thus at once with a material which in its singleness is already farther away from reality than the material with which history deals. Now we understand also why the substance of history has value for us, while the objects of psychology and of all naturalistic sciences are emotionally indifferent. That is not, as it was suggested, because the single facts are important for us and the general facts indifferent; no, it is because the psychological objects, the contents of consciousness, are thought as cut loose from the will and thus no longer possible objects for appreciation, while the historical objects are thought as in their relation to the attitudes of the will. Now we understand also under which principle the historian selects his material. If we accept the view that all single facts belong to history as such, it is arbitrariness to chronicle Napoleon's battles and state acts but not his flirtations and breakfasts, while now we understand how it is that this selection means the most essential part of the historian's work, as it is the way to transform the reality into a system of teleological connections, thus dropping more and more the will-acts which have no teleological importance for will-attitudes of other subjects. Now we understand also why the language of the historian has so much similarity with that of the poet. The historian, we have seen, has aims which are directly antagonistic to those of the poet, as the poet isolates, while the historian, like every scientist, connects his material. But the materials themselves, the subjective acts, are common to the poet and the historian. Where the psychologist encourages the reader to take the attitude of the objectively perceiving observer, the poet and the historian speak of facts which can be understood only by interpreta-

tion and inner imitation; they cannot be described by enumerating their elements; they must be suggested and reach somehow the willing subject which enters into the subjective attitude of the other. Thus the means of both may approximate to each other. The poet and the historian may use the same methods of suggestion to reënforce in the reader the subjectifying attitude which is the presupposition for the understanding of the isolated will-acts in the work of poetry and the connected will-acts in the work of history, while the psychologist has to adapt even his style and his presentation to the service of his objectifying aim.

But we now understand and see in a new light also the relations of the psychological and historical sciences to the normative doctrines, to ethics, logic and æsthetics. As long as history appears merely as a part of psychology or as long as the one is given over to single facts, the other to laws, all the normative sciences stand without any inner relation to any empirical science, those speaking of duties, these of facts. For us the relation takes a very different form. We have seen that all the historical sciences are systems of individual will relations and nothing else. On the other hand, we have found that duty never means anything but our own over-individual will-act. All the normative sciences are thus the systematic connections of our over-individual will-attitudes, our will-attitudes aiming toward morality and truth and beauty and religion. As the over-individual will is, of course, thought as independent of the individual subject, the connection which is sought cannot lead as it did in history from subject to subject; as all subjects are presupposed as agreeing in their over-individual acknowledgment, the connection, the scientific aim can then lie here merely in the systematic connection of our own over-individual purposes and their interpretation. A transformation becomes here, too, necessary in the interest of connection; each single will attitude must be linked into this teleological system and must thus be transformed till it represents a crossing point of all the ethical, æsthetical, religious and logical impulses and demands. The normative sciences and history stand thus in the nearest relation to each other; both are transformations of will-acts in the service of teleog-

ical connection, only the one reconstructs and systematizes the individual will-acts in us, the other the over-individual will-acts.

The relation between these two groups of sciences, the historical and the normative ones, is thus perfectly parallel to the relation between the psychological sciences and the physical sciences, of which the one systematizes the individual objects and the other the over-individual objects. The proportion—history—stands to the normative doctrines, as psychology stands to physics—is, indeed, true in every respect and in every consequence. We may consider here as our last word only one of them. The historical development of the naturalistic sciences shows the continuous tendency to take more and more of the properties of the physical object into the psychological object, that is, to show that the apparent over-individual qualities of the thing are qualities which depend upon the individual; color and sound, smell and taste, go over from the physical thing into the idea, and thus the whole manifoldness of our experience moves over into the sphere of ideas. In exactly the same way and led by the same methodological motives, history takes more and more of the normative duties over into its own field, and shows how the special duties, the logical beliefs, ethical convictions, æsthetical demands and religious postulates are the results of individual attitudes under the suggestion of the individual groups of will-influences. The absolute duties and beliefs and obligations and truths seem thus lost in our life as the colors and sounds and smells are lost for the physical objects. But the parallelism holds for the end-point of this development too. We must deprive the physical object of its colors and sounds, but we cannot give up the truth that there is a physical object nevertheless, as the quantitative reality to which we project, with objective truth, our sensations and ideas; all the naturalistic sciences would be destroyed if we were to give up this realistic conviction of physics. In the same way we may take into the individual all the single over-individual special duties of special nations and ages and social groups, but the reality of the background of projection we cannot give up. Whatever history teaches, the postulate of the reality of duties, of absolute values, stands firm. The abso-

lute duties may be abstract and deprived of color and sound as is the world of physics, but they stand and must last like the physical universe, and whoever in striving towards truth denies the reality of absolute values and gives up the belief in morality and the belief in logic, thus destroys and undermines his own endeavor to find the truth as logical thinker and to stand for the truth as ethical man.