

Aus: "Collected Papers of C. S. Peirce", Band 5, Harvard UP

Von diesem Text gibt es auch eine - allerdings schlechte - Übersetzung, die im Meiner Verlag erschienen ist. Besonders wichtige Passagen zum Thema Anthropomorphismus und Objektivität sind kursiv hervorgehoben.

LECTURE II THE UNIVERSAL CATEGORIES

1. PRESENTNESS

41. . . . Be it understood, then, that what we have to do, as students of phenomenology, is simply to open our mental eyes and look well at the phenomenon and say what are the characteristics that are never wanting in it, whether that phenomenon be something that outward experience forces upon our attention, or whether it be the wildest of dreams, or whether it be the most abstract and general of the conclusions of science.

Peirce: CP 5.42 Cross-Ref:

42.³ The faculties which we must endeavor to gather for this work are three. The first and foremost is that rare faculty, the faculty of seeing what stares one in the face, just as it presents itself, unreplaced by any interpretation, unsophisticated by any allowance for this or for that supposed modifying circumstance. This is the faculty of the artist who sees for example the apparent colors of nature as they appear. When the ground is covered by snow on which the sun shines brightly except where shadows fall, if you ask any ordinary man what its color appears to be, he will tell you white, pure white, whiter in the sunlight, a little greyish in the shadow. But that is not what is before his eyes that he is describing; it is his theory of what ought to be seen. The artist will tell him that the shadows are not grey but a dull blue and that the snow in the sunshine is of a rich yellow. That artist's observational power is what is most wanted in the study of phenomenology. The second faculty we must strive to arm ourselves with is a resolute discrimination which fastens itself like a bulldog upon the particular feature that we are studying, follows it wherever it may lurk, and detects it beneath all its disguises. The third faculty we shall need is the generalizing power of the mathematician who produces the abstract formula that comprehends the very essence of the feature under examination purified from all admixture of extraneous and irrelevant accompaniments.

Peirce: CP 5.43 Cross-Ref:

43. A very moderate exercise of this third faculty suffices to show us that the word Category bears substantially the same meaning with all philosophers. For Aristotle, for Kant, and for Hegel, a category is an element of phenomena of the first rank of generality. It naturally follows that the categories are few in number, just as the chemical elements are. The business of phenomenology is to draw up a catalogue of categories and prove its sufficiency and freedom from redundancies, to make out the characteristics of each category, and to show the relations of each to the others. I find that there are at least two distinct orders of categories, which I call the particular and the universal. The particular categories form a series, or set of series, only one of each series being present, or at least predominant, in any one phenomenon. The universal categories, on the other hand, belong to every phenomenon, one being perhaps more prominent in one aspect of that phenomenon than another but all of them

belonging to every phenomenon. I am not very well satisfied with this description of the two orders of categories, but I am pretty well satisfied that there are two orders. I do not recognize them in Aristotle, unless the predicaments and the predicables are the two orders. But in Kant we have Unity, Plurality, and Totality not all present at once; Reality, Negation, and Limitation not all present at once; Inherence, Causation, and Reaction not all present at once; Possibility, Necessity, and Actuality not all present at once. On the other hand Kant's four greater categories, Quantity, Quality, Relation, and Modality, form what I should recognize as Kant's Universal Categories. In Hegel his long list which gives the divisions of his Encyclop'edia are his Particular Categories. His three stages of thought, although he does not apply the word Category to them, are what I should call Hegel's Universal Categories. My intention this evening

is to limit myself to the Universal, or Short List of Categories, and I may say, at once, that I consider Hegel's three stages as being, roughly speaking, the correct list of Universal Categories. . . .

Peirce: CP 5.44 Cross-Ref:

44. When anything is present to the mind, what is the very first and simplest

character to be noted in it, in every case, no matter how little elevated the object may be? Certainly, it is its presentness. So far Hegel is quite right. Immediacy is his word. To say, however, that presentness, presentness as it is present, present presentness, is abstract, is Pure Being, is a falsity so glaring, that one can only say that Hegel's theory that the abstract is more primitive than the concrete blinded his eyes to what stood before them. Go out under the blue dome of heaven and look at what is present as it appears to the artist's eye. The poetic mood approaches the state in which the present appears as it is present. Is poetry so abstract and colorless? The present is just what it is regardless of the absent, regardless of past and future. It is such as it is, utterly ignoring anything else. Consequently, it cannot be abstracted (which is what Hegel means by the abstract) for the abstracted is what the concrete, which gives it whatever being it has, makes it to be. The present, being such as it is while utterly ignoring everything else, is positively such as it is. Imagine, if you please, a consciousness in which there is no comparison, no relation, no recognized multiplicity (since parts would be other than the whole), no change, no imagination of any modification of what is positively there, no reflexion -- nothing but a simple positive character. Such a consciousness might be just an odour, say a smell of attar; or it might be one infinite dead ache; it might be the hearing of a piercing eternal whistle. In short, any simple and positive quality of feeling would be something which our description fits that it is such as it is quite regardless of anything else. The quality of feeling is the true psychical representative of the first category of the immediate as it is in its immediacy, of the present in its direct positive presentness. Qualities of feeling show myriad-fold variety, far beyond what the psychologists admit. This variety however is in them only insofar as they are compared and gathered into collections. But as they are in their presentness, each is sole and unique; and all the others are absolute nothingness to it -- or rather much less than nothingness, for not even a recognition as absent things or as fictions is accorded to them. The first category, then, is Quality of Feeling, or whatever is such as it is positively and regardless of aught else.

Peirce: CP 5.45 Cross-Ref:

2. STRUGGLE

45. The next simplest feature that is common to all that comes before the mind, and consequently, the second category, is the element of Struggle. It is convenient enough, although by no means necessary, to study this, at first, in a psychological instance. Imagine yourself making a strong muscular effort, say that of pressing with all your might against a half-open door. Obviously, there is a sense of resistance. There could not be effort without an equal resistance any more than there could be a resistance without an equal effort that it resists. Action and reaction are equal. If you find that the door is pushed open in spite of you, you will say that it was the person on the other side that acted and you that resisted, while if you succeed in pushing the door to, you will say that it was you who acted and the other person that resisted. In general, we call the one that succeeds by means of his effort the agent and the one that fails the patient. But as far as the element of Struggle is concerned, there is no difference between being an agent and being a patient. It is the result that decides; but what it is that is deemed to be the result for the purpose of this distinction is a detail into which we need not enter. If while you are walking quietly along the sidewalk a man carrying a ladder suddenly pokes you violently with it in the back of the head and walks on without noticing what he has done, your impression probably will be that he struck you with great violence and that you made not the slightest resistance; although in fact you must have resisted with a force equal to that of the blow. Of course, it will be understood that I am not using force in the modern sense of a moving force but in the sense of Newton's *actio*; but I must warn you that I have not time to notice such trifles. In like manner, if in pitch darkness a tremendous flash of lightning suddenly comes, you are ready to admit having received a shock and being acted upon, but that you reacted you may be inclined to deny. You certainly did so, however, and are conscious of having done so. The sense of shock is as much a sense of resisting as of being acted upon. So it is when anything strikes the senses. The outward excitation succeeds in producing its effect on you, while you in turn produce no discernible effect on it; and

therefore you call it the agent, and overlook your own part in the reaction. On the other

hand, in reading a geometrical demonstration, if you draw the figure in your imagination instead of on paper, it is so easy to add to your image whatever subsidiary line is wanted, that it seems to you that you have acted on the image without the image having offered any resistance. That it is not so, however, is easily shown. For unless that image had a certain power of persisting such as it is and resisting metamorphosis, and if you were not sensible of its strength of persistence, you never could be sure that the construction you are dealing with at one stage of the demonstration was the same that you had before your mind at an earlier stage. The main distinction between the Inner and the Outer Worlds is that inner objects promptly take any modifications we wish, while outer objects are hard facts that no man can make to be other than they are. Yet tremendous as this distinction is, it is after all only relative. Inner objects do offer a certain degree of resistance and outer objects are susceptible of being modified in some measure by sufficient exertion intelligently directed.¹

Peirce: CP 5.46 Cross-Ref:

46. Two very serious doubts arise concerning this category of struggle which I should be able completely to set to rest, I think, with only a little more time. But as it is, I can only suggest lines of reflexion which, if you perseveringly follow out, ought to bring you to the same result to which they have brought me. The first of these doubts is whether this element of struggle is anything more than a very special kind of phenomenon, and withal an anthropomorphic conception and therefore not scientifically true.

The other doubt is whether the idea of Struggle is a simple and irresolvable element of the phenomenon; and in opposition to its being so, two contrary parties will

enter into a sort of [alliance] without remarking how deeply they are at variance with one another. One of these parties will be composed of those philosophers who understand themselves as wishing to reduce everything in the phenomenon to qualities of feeling. They will appear in the arena of psychology and will declare that there is absolutely no such thing as a specific sense of effort. There is nothing, they will say,

but feelings excited upon muscular contraction, feelings which they may or may not be

disposed to say have their immediate excitations within the muscles. The other party will be composed of those philosophers who say that there can be only one absolute and only one irreducible element, and since Nous is such an element, Nous is really the only thoroughly clear idea there is. These philosophers will take a sort of pragmatistic stand. They will maintain that in saying that one thing acts upon another, absolutely the only thing that can be meant is that there is a law according to which under all circumstances of a certain general description certain phenomena will result;

and therefore to speak of one thing as acting upon another hic et nunc regardless of uniformity, regardless of what will happen on all occasions, is simple nonsense.

Peirce: CP 5.47 Cross-Ref:

47. I shall have to content myself with giving some hints as to how I would meet this second double-headed objection, leaving the first to your own reflexions. In the course of considering the second objection, the universality of the element of struggle will get brought to light without any special arguments to that end. But as to its being unscientific because anthropomorphic, that is an objection of a very shallow kind, that arises from prejudices based upon much too narrow considerations.

"Anthropomorphic" is what pretty much all conceptions are at bottom; otherwise other roots for the words in which to express them than the old Aryan roots would have to be found. (Fussnote. Peirce hierzu siehe unten) And in regard to any preference for one

kind of theory over another, it is well to remember that every single truth of science is due to the affinity of the human soul to the soul of the universe, imperfect as that affinity no doubt is. To say, therefore, that a conception is one natural to man, which comes to just about the same thing as to say that it is anthropomorphic, is as high a recommendation as one could give to it in the eyes of an Exact Logician.

(Fussnote Peirce: I would not have anybody accept any doctrine of logic simply because

minute and thorough criticism has resulted in making me perfectly confident of its truth. But I will not allow this scruple to prevent my saying that for my part -- who am characterized in some of the books as a sceptic in philosophy and have even been called a modern Hume ["David Hume Redivivus," Pt. I of "Mr. Charles S. Peirce's Onslaught on the Doctrine of Necessity" by Paul Carus in *The Monist*, vol. 2, pp. 560ff.] -- *I have after long years of the severest examination become fully satisfied that, other things being equal, an anthropomorphic conception, whether it makes the best nucleus for a scientific working hypothesis or not, is far more likely to be approximately true than one that is not anthropomorphic.* Suppose, for example, it is a question between accepting Telepathy or Spiritualism. The former I dare say is the preferable working hypothesis because it can be more readily subjected to experimental investigation. But as long as there is no reason for believing it except phenomena that Spiritualism is equally competent to explain, I think Spiritualism is much the more likely to be approximately true, as being the more anthropomorphic and natural idea; and in like manner, as between an old-fashioned God and a modern patent Absolute, recommend me to the anthropomorphic conception if it is a question of which is the more likely to be about the truth.)

----- Ende der Fussnote -----

Peirce: CP 5.48 Cross-Ref:

48. As for the double-headed objection, I will first glance at that branch of it that rests upon the idea that the conception of action involves the notion of law or uniformity so that to talk of a reaction regardless of anything but the two individual reacting objects is nonsense. As to that I should say that a law of nature left to itself would be quite analogous to a court without a sheriff. A court in that predicament might probably be able to induce some citizen to act as sheriff; but until it had so provided itself with an officer who, unlike itself, could not discourse authoritatively but who could put forth the strong arm, its law might be the perfection of human reason but would remain mere fireworks, *brutum fulmen*. Just so, let a law of nature -- say the law of gravitation -- remain a mere uniformity -- a mere formula establishing a relation between terms -- and what in the world should induce a stone, which is not a

term nor a concept but just a plain thing, to act in conformity to that uniformity? All other stones may have done so, and this stone too on former occasions, and it would break the uniformity for it not to do so now. But what of that? There is no use talking reason to a stone. It is deaf and it has no reason. I should ask the objector whether he was a nominalist or a scholastic realist. If he is a nominalist, he holds that laws are mere generals, that is, formulae relating to mere terms; and ordinary good sense ought to force him to acknowledge that there are real connections between individual things regardless of mere formulae. Now any real connection whatsoever between individual things involves a reaction between them in the sense of this category. The objector may, however, take somewhat stronger ground by confessing himself to be a scholastic realist, holding that generals may be real. A law of nature, then, will be regarded by him as having a sort of *esse in futuro*. That is to say they will have a present reality which consists in the fact that events will happen according to the formulation of those laws. It would seem futile for me to attempt to reply that when, for example, I make a great effort to lift a heavy weight and perhaps am unable to stir it from the ground, there really is a struggle on this occasion regardless of what happens on other occasions; because the objector would simply admit that on such an occasion I have a quality of feeling which I call a feeling of effort, but he would urge that the only thing which makes this designation appropriate to the feeling is the regularity of connection between this feeling and certain motions of matter.

Peirce: CP 5.49 Cross-Ref:

49. This is a position well enough taken to merit a very respectful reply. But before going into that reply, there is an observation which I should like to lay before the candid objector. Your argument against this category of Struggle is that a struggle regardless of law is not intelligible. Yet you have just admitted that my so-called sense of effort involves a peculiar quality of feeling. Now a quality of feeling is not intelligible, either. Nothing can be less so. One can feel it, but to comprehend it or express it in a general formula is out of the question. So it appears that unintelligibility does not suffice to destroy or refute a Category. Indeed, if you are to accept scholastic realism, you would seem to be almost bound to admit that *Nous*, or intelligibility, is itself a category; and in that case far from non-intelligibility's refuting a category,

intelligibility would do so -- that is, would prove that a conception could not be a category distinct from the category of Nous, or intelligibility. If it be objected that the unintelligibility of a Quality of Feeling is of a merely privative kind quite different from the aggressive and brutal anti-intelligibility of action regardless of law, the rejoinder will be that if intelligibility be a category, it is not surprising but rather inevitable that other categories should be in different relations to this one.

Peirce: CP 5.50 Cross-Ref:

50. But without beating longer round the bush, let us come to close quarters. Experience is our only teacher. Far be it from me to enunciate any doctrine of a *tabula rasa*. For, as I said a few minutes ago, there manifestly is not one drop of principle in the whole vast reservoir of established scientific theory that has sprung from any other source than the power of the human mind to originate ideas that are true. But this power, for all it has accomplished, is so feeble that as ideas flow from their springs in the soul, the truths are almost drowned in a flood of false notions; and that which experience does is gradually, and by a sort of fractionation, to precipitate and filter off the false ideas, eliminating them and letting the truth pour on in its mighty current.

Peirce: CP 5.51 Cross-Ref:

51. But precisely how does this action of experience take place? It takes place by a series of surprises. There is no need of going into details. At one time a ship is sailing along in the trades over a smooth sea, the navigator having no more positive expectation than that of the usual monotony of such a voyage, when suddenly she strikes upon a rock. The majority of discoveries, however, have been the result of experimentation. Now no man makes an experiment without being more or less inclined to think that an interesting result will ensue; for experiments are much too costly of physical and psychical energy to be undertaken at random and aimlessly. And naturally nothing can possibly be learned from an experiment that turns out just as was anticipated. It is by surprises that experience teaches all she deigns to teach us.

Peirce: CP 5.51 Cross-Ref:

In all the works on pedagogy that ever I read -- and they have been many, big,

and heavy -- I don't remember that any one has advocated a system of teaching by practical jokes, mostly cruel. That, however, describes the method of our great teacher, Experience. She says,

Open your mouth and shut your eyes
And I'll give you something to make you wise;

and thereupon she keeps her promise, and seems to take her pay in the fun of tormenting us.

Peirce: CP 5.52 Cross-Ref:

52. The phenomenon of surprise in itself is highly instructive in reference to this category because of the emphasis it puts upon a mode of consciousness which can be detected in all perception, namely, a double consciousness at once of an ego and a non-ego, directly acting upon each other. Understand me well. My appeal is to observation -- observation that each of you must make for himself.

Peirce: CP 5.53 Cross-Ref:

53. The question is what the phenomenon is. We make no vain pretense of going beneath phenomena. We merely ask, what is the content of the Percept? Everybody should be competent to answer that of himself. Examine the Percept in the particularly marked case in which it comes as a surprise. Your mind was filled [with] an imaginary object that was expected. At the moment when it was expected the vividness of the representation is exalted, and suddenly, when it should come, something quite different comes instead. I ask you whether at that instant of surprise there is not a double consciousness, on the one hand of an Ego, which is simply the expected idea suddenly broken off, on the other hand of the Non-Ego, which is the strange intruder, in his abrupt entrance.

Peirce: CP 5.54 Cross-Ref:

54. The whole question is what the perceptual facts are, as given in direct perceptual judgments. By a perceptual judgment, I mean a judgment asserting in propositional form what a character of a percept directly present to the mind is.² The percept of course is not itself a judgment, nor can a judgment in any degree resemble a

percept. It is as unlike it as the printed letters in a book, where a Madonna of Murillo is described, are unlike the picture itself.

Peirce: CP 5.55 Cross-Ref:

55. You may adopt any theory that seems to you acceptable as to the psychological operations by which perceptual judgments are formed. For our present purpose it makes no difference what that theory is. All that I insist upon is that those operations, whatever they may be, are utterly beyond our control and will go on whether we are pleased with them or not. Now I say that taking the word "criticize" in the sense it bears in philosophy, that of apportioning praise and blame, it is perfectly idle to criticize anything over which you can exercise no sort of control. You may wisely criticize a reasoning, because the reasoner, in the light of your criticism, will certainly go over his reasoning again and correct it if your blame of it was just. But to pronounce an involuntary operation of the mind good or bad, has no more sense than to pronounce the proportion of weights in which hydrogen and chlorine combine, that of 1 to 35.11 to be good or bad. I said it was idle; but in point of fact "nonsensical" would have been an apter word.

Peirce: CP 5.55 Cross-Ref:

If, therefore, our careful direct interpretation of perception, and more emphatically of such perception as involves surprise, is that the perception represents two objects reacting upon one another, that is not only a decision from which there is no appeal, but it is downright nonsense to dispute the fact that in perception two objects really do so react upon one another.

Peirce: CP 5.56 Cross-Ref:

56. That, of course, is the doctrine of Immediate Perception which is upheld by Reid, Kant, and all dualists who understand the true nature of dualism, and the denial of which led Cartesians to the utterly absurd theory of divine assistance upon which the preestablished harmony of Leibniz is but a slight improvement. Every philosopher who denies the doctrine of Immediate Perception -- including idealists of every stripe -- by that denial cuts off all possibility of ever cognizing a relation. Nor will he better his position by declaring that all relations are illusive appearances, since it is not

merely true knowledge of them that he has cut off, but every mode of cognitive representation of them.

Peirce: CP 5.57 Cross-Ref:

57. When a man is surprised he knows that he is surprised. Now comes a dilemma. Does he know he is surprised by direct perception or by inference? First try the hypothesis that it is by inference. This theory would be that a person (who must be supposed old enough to have acquired self-consciousness) on becoming conscious of that peculiar quality of feeling which unquestionably belongs to all surprise, is induced

by some reason to attribute this feeling to himself. It is, however, a patent fact that we never, in the first instance, attribute a Quality of Feeling to ourselves. We first attribute it to a Non-Ego and only come to attribute it to ourselves when irrefragable reasons compel us to do so. Therefore, the theory would have to be that the man first pronounces the surprising object a wonder, and upon reflection convinces himself that it is only a wonder in the sense that he is surprised. That would have to be the theory. But it is in conflict with the facts which are that a man is more or less placidly expecting one result, and suddenly finds something in contrast to that forcing itself upon his recognition. A duality is thus forced upon him: on the one hand, his expectation which he had been attributing to Nature, but which he is now compelled to

attribute to some mere inner world, and on the other hand, a strong new phenomenon which shoves that expectation into the background and occupies its place. The old expectation, which is what he was familiar with, is his inner world, or Ego. The new phenomenon, the stranger, is from the exterior world or Non-Ego. He does not conclude that he must be surprised because the object is so marvellous. But on the contrary, it is because of the duality presenting itself as such that he [is] led by generalization to a conception of a quality of marvellousness.

Peirce: CP 5.58 Cross-Ref:

58. Try, then, the other alternative that it is by direct perception, that is, in a direct perceptual judgment, that a man knows that he is surprised. The perceptual judgment, however, certainly does not represent that it is he himself who has played a

little trick upon himself. A man cannot startle himself by jumping up with an exclamation of Boo! Nor could the perceptual judgment have represented anything so out of nature. The perceptual judgment, then, can only be that it is the Non-Ego, something over against the Ego and bearing it down, is what has surprised him. But if that be so, this direct perception presents an Ego to which the smashed expectation belonged, and the Non-Ego, the sadder and wiser man, to which the new phenomenon belongs. . . .

Peirce: CP 5.59 Cross-Ref:

3. LAWS: NOMINALISM

59. Thus far, gentlemen, I have been insisting very strenuously upon what the most vulgar common sense has every disposition to assent to and only ingenious philosophers have been able to deceive themselves about. But now I come to a category which only a more refined form of common sense is prepared willingly to allow, the category which of the three is the chief burden of Hegel's song, a category toward which the studies of the new logico-mathematicians, Georg Cantor and the like, are steadily pointing, but to which no modern writer of any stripe, unless it be some obscure student like myself, has ever done anything approaching to justice. . . .

Peirce: CP 5.60 Cross-Ref:

60. There never was a sounder logical maxim of scientific procedure than Ockham's razor: *Entia non sunt multiplicanda praeter necessitatem*. That is to say; before you try a complicated hypothesis, you should make quite sure that no simplification of it will explain the facts equally well. No matter if it takes fifty generations of arduous experimentation to explode the simpler hypothesis, and no matter how incredible it may seem that that simpler hypothesis should suffice, still fifty generations are nothing in the life of science, which has all time before it; and in the long run, say in some thousands of generations, time will be economized by proceeding in an orderly manner, and by making it an invariable rule to try the simpler hypothesis first. Indeed, one can never be sure that the simpler hypothesis is not the

true one, after all, until its cause has been fought out to the bitter end. But you will mark the limitation of my approval of Ockham's razor. It is a sound maxim of scientific procedure. If the question be what one ought to believe, the logic of the situation must take other factors into account. Speaking strictly, belief is out of place in pure theoretical science, which has nothing nearer to it than the establishment of doctrines, and only the provisional establishment of them, at that.¹ Compared with living belief it is nothing but a ghost. If the captain of a vessel on a lee shore in a terrific storm finds himself in a critical position in which he must instantly either put his wheel to port acting on one hypothesis, or put his wheel to starboard acting on the contrary hypothesis, and his vessel will infallibly be dashed to pieces if he decides the question wrongly, Ockham's razor is not worth the stout belief of any common seaman. For stout belief may happen to save the ship, while *Entia non sunt multiplicanda praeter necessitatem* would be only a stupid way of spelling Shipwreck. Now in matters of real practical concern we are all in something like the situation of that sea-captain.

Peirce: CP 5.61 Cross-Ref:

61. Philosophy, as I understand the word, is a positive theoretical science, and a science in an early stage of development. As such it has no more to do with belief than any other science. Indeed, I am bound to confess that it is at present in so unsettled a condition, that if the ordinary theorems of molecular physics and of archaeology are but the ghosts of beliefs, then to my mind, the doctrines of the philosophers are little better than the ghosts of ghosts. I know this is an extremely heretical opinion. The followers of Haeckel are completely in accord with the followers of Hegel in holding that what they call philosophy is a practical science and the best of guides in the formation of what they take to be Religious Beliefs. I simply note the divergence, and pass on to an unquestionable fact; namely, the fact that all modern philosophy is built upon Ockhamism; by which I mean that it is all nominalistic and that it adopts nominalism because of Ockham's razor. And there is no form of modern philosophy of which this is more essentially true than the philosophy of Hegel. But it is not modern philosophers only who are nominalists. The nominalistic *Weltanschauung* has become incorporated into what I will venture to call the very flesh and blood of the average

modern mind.

Peirce: CP 5.62 Cross-Ref:

62. The third category of which I come now to speak is precisely that whose reality is denied by nominalism. For although nominalism is not credited with any extraordinarily lofty appreciation of the powers of the human soul, yet it attributes to it a power of originating a kind of ideas the like of which Omnipotence has failed to create as real objects, and those general conceptions which men will never cease to consider the glory of the human intellect must, according to any consistent nominalism, be entirely wanting in the mind of Deity. Leibniz, the modern nominalist par excellence, will not admit that God has the faculty of Reason; and it seems impossible to avoid that conclusion upon nominalistic principles.

Peirce: CP 5.63 Cross-Ref:

63. But it is not in Nominalism alone that modern thought has attributed to the human mind the miraculous power of originating a category of thought that has no counterpart at all in Heaven or Earth. Already in that strangely influential hodge-podge, the salad of Cartesianism, the doctrine stands out very emphatically that the only force is the force of impact, which clearly belongs to the category of Reaction; and ever since Newton's Principia began to affect the general thought of Europe through the sympathetic spirit of Voltaire, there has been a disposition to deny any kind of action except purely mechanical action. The Corpuscular Philosophy of Boyle -- although the pious Boyle did not himself recognize its character -- was bound to come to that in the last resort; and the idea constantly gained strength throughout the eighteenth century and the nineteenth until the doctrine of the Conservation of Energy, generalized rather loosely by philosophers, led to the theory of psycho-physical parallelism, against which there has, only of recent years, been any very sensible and widespread revolt. Psycho-physical parallelism is merely the doctrine that mechanical action explains all the real facts, except that these facts have an internal aspect which is a little obscure and a little shadowy.

Peirce: CP 5.64 Cross-Ref:

64. To my way of regarding philosophy, all this movement was perfectly good scientific procedure. For the simpler hypothesis which excluded the influence of ideas upon matter had to be tried and persevered in until it was thoroughly exploded. But I believe that now at last, at any time for the last thirty years, it has been apparent, to every man who sufficiently considered the subject, that there is a mode of influence upon external facts which cannot be resolved into mere mechanical action, so that henceforward it will be a grave error of scientific philosophy to overlook the universal presence in the phenomenon of this third category. Indeed, from the moment that the Idea of Evolution took possession of the minds of men the pure Corpuscular Philosophy together with nominalism had had their doom pronounced. I grew up in Cambridge, [Massachusetts] and was about 21 when the Origin of Species appeared. There was then living here a thinker who left no remains from which one could now gather what an educative influence his was upon the minds of all of us who enjoyed his intimacy, Mr. Chauncey Wright.¹ He had at first been a Hamiltonian but had early passed over into the warmest advocacy of the nominalism of John Stuart Mill; and being a mathematician at a time when dynamics was regarded as the loftiest branch of mathematics, he was also inclined to regard nature from a strictly mechanical point of view. But his interests were wide and he was also a student of Gray.¹ I was away surveying in the wilds of Louisiana when Darwin's great work appeared, and though I learned by letters of the immense sensation it had created, I did not return until early in the following summer when I found Wright all enthusiasm for Darwin, whose doctrines appeared to him as a sort of supplement to those of Mill. I remember well that I then made a remark to him which although he did not assent to it, evidently impressed him enough to perplex him. The remark was that these ideas of development had more vitality by far than any of his other favorite conceptions and that though they might at that moment be in his mind like a little vine clinging to the tree of Associationalism, yet after a time that vine would inevitably kill the tree. He asked me why I said that and I replied that the reason was that Mill's doctrine was nothing but a metaphysical point of view to which Darwin's, which was nourished by positive observation, must be deadly. Ten or fifteen years later, when Agnosticism was

all the go, I prognosticated a short life for it, as philosophies run, for a similar reason. What the true definition of Pragmatism may be, I find it very hard to say; but in my nature it is a sort of instinctive attraction for living facts.

Peirce: CP 5.65 Cross-Ref:

65. All nature abounds in proofs of other influences than merely mechanical action, even in the physical world. They crowd in upon us at the rate of several every minute. And my observation of men has led me to this little generalization. Speaking only of men who really think for themselves and not of mere reporters, I have not found that it is the men whose lives are mostly passed within the four walls of a physical laboratory who are most inclined to be satisfied with a purely mechanical metaphysics. On the contrary, the more clearly they understand how physical forces work the more incredible it seems to them that such action should explain what happens out of doors. A larger proportion of materialists and agnostics is to be found among the thinking physiologists and other naturalists, and the largest proportion of all among those who derive their ideas of physical science from reading popular books. These last, the Spencers, the Youmanses, and the like, seem to be possessed with the idea that science has got the universe pretty well ciphered down to a fine point; while the Faradays and Newtons seem to themselves like children who have picked up a few pretty pebbles upon the ocean beach. But most of us seem to find it difficult to recognize the greatness and wonder of things familiar to us. As the prophet is not without honor save [in his own country] so it is also with phenomena. Point out to the ordinary man evidence, however conclusive, of other influence than physical action in things he sees every day, and he will say: "Well, I don't see as that frog has got any points about him that's any different from any other frog." For that reason we welcome instances perhaps of less real cogency but which have the merit of being rare and strange. Such, for example, are the right-handed and left-handed screw-structures of the molecules of those bodies which are said to be "optically active." Of every such substance there are two varieties, or as the chemists call them, two modifications, one of which twists a ray of light that passes through it to the right, and the other, by an exactly equal amount, to the left. All the ordinary physical properties of the

right-handed and left-handed modifications are identical. Only certain faces of their crystals, often very minute, are differently placed. No chemical process can ever transmute the one modification into the other. And their ordinary chemical behaviour is absolutely the same, so that no strictly chemical process can separate them if they are once mixed. Only the chemical action of one optically active substance upon another is different if they both twist the ray the same way from what it is if they twist the ray different ways. There are certain living organisms which feed on one modification and destroy it while leaving the other one untouched. This is presumably due to such organisms containing in their substance, possibly in very minute proportion, some optically active body. Now I maintain that the original segregation of levo-molecules, or molecules with a left-handed twist, from dextro-molecules, or molecules with a right-handed twist, is absolutely incapable of mechanical explanation. Of course you may suppose that in the original nebula at the very formation of the world right-handed quartz was collected into one place, while left-handed quartz was collected into another place. But to suppose that, is ipso facto to suppose that that segregation was a phenomenon without any mechanical explanation. The three laws of motion draw no dynamical distinction between right-handed and left-handed screws, and a mechanical explanation is an explanation founded on the three laws of motion. There, then, is a physical phenomenon absolutely inexplicable by mechanical action. This single instance suffices to overthrow the Corpuscular Philosophy.

PEIRCE' Verwendung von anthropomorphic/ anthropomorphism in "Collected Papers"

Peirce: CP 1.316 Cross-Ref:

316. I hear you say: "This smacks too much of an anthropomorphic conception." I reply that every scientific explanation of a natural phenomenon is a

hypothesis that there is something in nature to which the human reason is analogous; and that it really is so all the successes of science in its applications to human convenience are witnesses. They proclaim that truth over the length and breadth of the modern world. In the light of the successes of science to my mind there is a degree of baseness in denying our birthright as children of God and in shamefacedly slinking away from anthropomorphic conceptions of the universe.

Peirce: CP 1.656 Cross-Ref:

656. Pray pardon my hopping about from one branch of my discourse to another and back again with no more apparent purpose than a robin redbreast or a Charles Lamb. Because it would hardly be logically consistent for me to arrange my matter with scrupulously logical accuracy when the very thing I am driving at is that logic and reasoning are only of secondary importance. There are two psychological or anthropological observations about our reasoning powers which it is convenient to insert here.

Peirce: CP 2.713 Cross-Ref:

713. We usually conceive Nature to be perpetually making deductions in Barbara. This is our natural and anthropomorphic metaphysics. We conceive that there are Laws of Nature, which are her Rules or major premisses. We conceive that Cases arise under these laws; these cases consist in the predication, or occurrence, of causes, which are the middle terms of the syllogisms. And, finally, we conceive that the occurrence of these causes, by virtue of the laws of Nature, results in effects which are the conclusions of the syllogisms. Conceiving of nature in this way, we naturally conceive of science as having three tasks--(1) the discovery of Laws, which is accomplished by induction; (2) the discovery of Causes, which is accomplished by hypothetic inference; and (3) the prediction of Effects, which is accomplished by deduction. It appears to me to be highly useful to select a system of logic which shall preserve all these natural conceptions.

Peirce: CP 2.753 Cross-Ref:

753. Nature is a far vaster and less clearly arranged repertory of facts than a census report; and if men had not come to it with special aptitudes for guessing right, it may well be doubted whether in the ten or twenty thousand years that they may have existed their greatest mind would have attained the amount of knowledge which is actually possessed by the lowest idiot. But, in point of fact, not man merely, but all animals derive by inheritance (presumably by natural selection) two classes of ideas which adapt them to their environment. In the first place, they all have from birth some notions, however crude and concrete, of force, matter, space, and time; and, in the next place, they have some notion of what sort of objects their fellow-beings are, and of how they will act on given occasions. Our innate mechanical ideas were so nearly correct that they needed but slight correction. The fundamental principles of statics were made out by Archimedes. Centuries later Galileo began to understand the laws of dynamics, which in our times have been at length, perhaps, completely mastered. The other physical sciences are the results of inquiry based on guesses suggested by the ideas of mechanics. The moral sciences, so far as they can be called sciences, are equally developed out of our instinctive ideas about human nature. Man has thus far not attained to any knowledge that is not in a wide sense either mechanical or anthropological in its nature, and it may be reasonably presumed that he never will.¹

Peirce: CP 5.212 Cross-Ref:

That he will have no difficulty with Thirdness is clear enough, because he will hold that the conformity of action to general intentions is as much given in perception as is the element of action itself, which cannot really be mentally torn away from such general purposiveness. There can be no doubt that he will allow hypotheses fully all the range they ought to be allowed. The only question will be whether he succeeds in excluding from hypotheses everything unclear and nonsensical. It will be asked whether he will not have a shocking leaning toward anthropomorphic conceptions. I fear I must confess that he will be inclined to see an anthropomorphic, or even a

zoomorphic, if not a physiomorphic element in all our conceptions. But against unclear and nonsensical hypotheses, [of] whatever 'gis [he will be protected]. Pragmatism will be more essentially significant for him than for any other logician, for the reason that it is in action that logical energy returns to the uncontrolled and uncriticizable parts of the mind.

Peirce: CP 5.536 Cross-Ref:

Pragmaticist. Why if you had said Anthropomorphism, I should have replied that I heartily embrace most of the clauses of that doctrine, if some right of private interpretation be allowed me. I hold, for instance, that man is so completely hemmed in by the bounds of his possible practical experience, his mind is so restricted to being the instrument of his needs, that he cannot, in the least, mean anything that transcends those limits. The strict consequence of this is, that it is all nonsense to tell him that he must not think in this or that way because to do so would be to transcend the limits of a possible experience. For let him try ever so hard to think anything about what is beyond that limit, it simply cannot be done. You might as well pass a law that no man shall jump over the moon; it wouldn't forbid him to jump just as high as he possibly could.

Peirce: CP 8.191 Cross-Ref:

CHAPTER 13

ON PRAGMATISM, FROM A REVIEW OF A BOOK ON COSMOLOGY

191. No criticism of such a book, no characterization of it, not even as slight a one as that here to be attempted, can have any meaning until the standpoint of the critic's observations be recognized. Our standpoint will be pragmatism; but this word has been so loosely used, that a partial explanation of its nature is needful, with some indications of the intricate process by which those who hold it become assured of its truth. If philosophy is ever to become a sound science, its students must submit themselves to that same ethics of terminology that students of chemistry and

taxonomic biology observe; and when a word has been invented for the declared purpose of conveying a precisely defined meaning, they must give up their habit of using it for every other purpose that may happen to hit their fancy at the moment. The word pragmatism was invented to express a certain maxim of logic, which, as was shown at its first enunciation, involves a whole system of philosophy. The maxim is intended to furnish a method for the analysis of concepts. A concept is something having the mode of being of a general type which is, or may be made, the rational part of the purport of a word. A more precise or fuller definition cannot here be attempted. The method prescribed in the maxim is to trace out in the imagination the conceivable practical consequences, -- that is, the consequences for deliberate, self-controlled conduct, -- of the affirmation or denial of the concept; and the assertion of the maxim is that herein lies the whole of the purport of the word, the entire concept. The sedulous exclusion from this statement of all reference to sensation is specially to be remarked. Such a distinction as that between red and blue is held to form no part of the

concept. This maxim is put forth neither as a handy tool to serve so far as it may be found serviceable, nor as a self-evident truth, but as a far-reaching theorem solidly grounded upon an elaborate study of the nature of signs. Every thought, or cognitive representation, is of the nature of a sign. "Representation" and "sign" are synonyms. The whole purpose of a sign is that it shall be interpreted in another sign; and its whole

purport lies in the special character which it imparts to that interpretation. When a sign determines an interpretation of itself in another sign, it produces an effect external to itself, a physical effect, though the sign producing the effect may itself be not an existent object but merely a type. It produces this effect, not in this or that metaphysical sense, but in an indisputable sense. As to this, it is to be remarked that actions beyond the reach of self-control are not subjects of blame. Thinking is a kind of action, and reasoning is a kind of deliberate action; and to call an argument illogical, or a proposition false, is a special kind of moral judgment, and as such is inapplicable to what we cannot help. This does not deny that what cannot be conceived today may be conceivable tomorrow. But just as long as we cannot help

adopting a mode of thought, so long it must be thoroughly accepted as true. Any doubt of it is idle make-believe and irredeemable paper. Now we all do regard, and cannot help regarding, signs as affecting their interpretant signs. It is by a patient examination of the various modes (some of them quite disparate) of interpretations of signs, and of the connections between these (an exploration in which one ought, if possible, to provide himself with a guide, or, if that cannot be, to prepare his courage to see one conception that will have to be mastered peering over the head of another, and soon another peering over that, and so on, until he shall begin to think there is to be no end of it, or that life will not be long enough to complete the study) that the pragmatist has at length, to his great astonishment, emerged from the disheartening labyrinth with this

simple maxim in his hand. In distrust of so surprising a result he has searched for some

flaw in its method, and for some case in which it should break down, but after every deep-laid plot for disproving it that long-working ingenuity could devise has recoiled upon his own head, and all doubts he could start have been exhausted, he has been forced at last to acknowledge its truth. This maxim once accepted, -- intelligently accepted, in the light of the evidence of its truth, -- speedily sweeps all metaphysical rubbish out of one's house. Each abstraction is either pronounced to be gibberish or is provided with a plain, practical definition. The general leaning of the results is toward what the idealists call the naive, toward common sense, toward anthropomorphism.

Thus, for example, the real becomes that which is such as it is regardless of what you or I or any of our folks may think it to be. The external becomes that element which is such as it is regardless of what somebody thinks, feels, or does, whether about that external object or about anything else. Accordingly, the external is necessarily real, while the real may or may not be external; nor is anything absolutely external nor absolutely devoid of externality. Every assertory proposition refers to something external, and even a dream withstands us sufficiently for one description to be true of it and another not. The existent is that which reacts against other things. Consequently, the external world, (that is, the world that is comparatively external) does not consist of existent objects merely, nor merely of these and their reactions; but on the contrary,

its most important reals have the mode of being of what the nominalist calls "mere" words, that is, general types and would-bes. The nominalist is right in saying that they are substantially of the nature of words; but his "mere" reveals a complete misunderstanding of what our everyday world consists of.

Peirce: CP 8.262 Cross-Ref:

262. As for humanism, it appears to me to be an allied doctrine, in perfect harmony with pragmatism, but not relating exactly to the same question. Indeed, since Schiller identifies it with the old humanism, I prefer the word "anthropomorphism" as expressive of the scientific opinion. For the old humanism was not a scientific opinion but an aim; and whether in harmony with scientific aims or not, quite exterior to the scientific aim. To Schiller's anthropomorphism I subscribe in the main. And in particular if it implies theism, I am an anthropomorphist. But the God of my theism is not finite. That won't do at all. For to begin with, existence is reaction, and therefore no existent can be clear supreme. On the contrary, a finite being, without much doubt, and at any rate by presumption, is one of a genus; so that it would, to my mind, involve polytheism. In the next place, anthropomorphism for me implies above all that the true Ideal is a living power, which is a variation of the ontological proof due, I believe, to Moncure Conway's predecessor, William Johnson (not James) Fox. That is, the esthetic ideal, that which we all love and adore, the altogether admirable, has, as ideal, necessarily a mode of being to be called living. Because our ideas of the infinite are necessarily extremely vague and become contradictory the moment we attempt to make them precise. But still they are not utterly unmeaning, though they can only be interpreted in our religious adoration and the consequent effects upon conduct. This I think is good sound solid strong pragmatism. Now the Ideal is not a finite existent. Moreover, the human mind and the human heart have a filiation to God. That to me is the most comfortable doctrine. At least I find it most wonderfully so every day in contemplating all my misdeeds and shortcomings. Pluralism, on the other hand, does not satisfy either my head or my heart. I am as sure as I am of anything that the logical doctrines connected with it, -- Achilles and the Tortoise etc., -- are utterly false.