The Categories (MS 403 of 1893) by Charles Peirce

An incomplete rewrite of the 1867 paper "On a New List of Categories"

(The original paper and the later rewritten version are both included here, in interleaved format, for purposes of comparison)

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EDITORIAL PREFACE

The material in the boxes is the original version of the 1867 paper "On a New List of Categories", provided here for purposes of comparison. The unboxed material is MS 403 of 1893, which was called by Peirce himself "The Categories". Both are complete in the sense that the complete text of the 1867 version is provided and the complete manuscript of the rewrite of 1893 is provided as well. But the later version is incomplete in the sense that it is not a complete rewrite of the original, breaking off just before the point in the original where Peirce draws the distinction between icons, indices, and symbols.

There is, however, a continuation of MS 403 which is not a rewrite of the 1867 version in another manuscript, namely, MS 404: "What is a Sign?", which is not included here. It is clear from inspection of the two 1893 manuscripts that MS 404 was written as a continuation of MS 403

(in spite of not being a rewrite of the 1867 paper) in the context of a plan for a logic textbook to be called The Art of Reasoning, in which 403 and 404 would be, respectively, Chapters 1 and 2 of Division I, called "Formal Study of General Logic." But MS 404 takes another and more intuitive approach to explaining the icon/index/symbol trichotomy by redescribing at the breakoff point the distinction he has already drawn very sketchily between the three categories -- quality, relation, and representation -- in terms of "three states of mind".

The reason for the change in direction at the point where 403 ends and 404 begins is clearly due to the importantly different audience being addressed in the projected logic textbook of 1893, which also explains the differences between MS 403 and the original version of the New List up to the breakoff point. (MS 404 is available in The Essential Peirce, Vol. 2, under the title "What is a Sign?" It is available on-line both on the Peirce Edition Project website and by hyperlink on the Arisbe website.)

Peirce divided both the New List and MS 403 into sections. There is not an exact correlation between the section numbers in the two versions though the sectioning is generally quite close overall -- close enough to be worth comparing, at least. (Actually, I have changed the numbers in MS 403 to begin with Section 1, to facilitate the comparison, whereas in the MS it begins the numbering at 16 since it was to be preceded by a 15-section general introduction to the volume. That introduction has either been lost or is yet to be identified in the Nachlass.)

I occasionally had to guess at an illegible word in transcribing MS 403. I indicate this by use of brackets and flanking question marks around the word guessed. Where I could not even guess at what the illegible word or words might be, I signify that with the use of dash marks, as e.g. [?---?]. In general, the occurrence of square brackets indicates an editorial insertion of some sort.

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- §1. This paper is based upon the theory already established, that the function of conceptions is to reduce the manifold of sensuous impressions to unity, and that the validity of a conception consists in the impossibility of reducing the content of consciousness to unity without the introduction of it.
- [§1] The one law of thought is the law of the association of ideas. The association of ideas consists in their blending and spreading over into one another. This is a process of unification. Kant, the father of modern philosophy, said that the function of conceptions is to reduce the manifold of sensuous impressions to unity.
- [§2] Sense is manifold in more than one way. It presents in the first place a multitude of qualities of feeling, originally (as the author will in another work show reason for believing) vastly greater than now. For feeling acts like thought in [unifying] reducing this multitude. It presents, in the second place, a manifold of excitations of sense; and it presents, in the third place, a manifold of consciousnesses, now segregated into distinct persons, as it seems to us. And in this seeming there is some truth, although personality, on both sides, that of the unification of all of a body's experiences, and that of the isolation of different persons, is much exaggerated in our natural ways of thinking -- ways that tend to puff up the *person*, and make him think himself far more real than he veritably is. A *person* is, in truth, like a cluster of stars, which appears to be *one* star when viewed with the naked eye, but which scanned with the telescope of scientific psychology is found on the one hand to be multiple within itself, and on the other hand to have no absolute demarcation from a neighboring condensation.

[from the New List of 1867]

- §2. This theory gives rise to a conception of gradation among those conceptions which are universal. For one such conception may unite the manifold of sense and yet another may be required to unite the conception and the manifold to which it is applied; and so on.
- §3. That universal conception which is nearest to sense is that of *the present, in general*. This is a conception, because it is universal. But as the act of *attention* has no connotation at all, but is the pure denotative power of the mind, that is to say, the power which directs the mind to an object, in contradistinction to the power of thinking any predicate of that object, -- so the conception of *what is present in general*, which is nothing but the general recognition of what is contained in attention, has no connotation, and therefore no proper unity. This conception of the present in general, or IT in general, is rendered in philosophical language by the word "substance" in one of its meanings. Before any comparison or discrimination can be made between what is present, what is present must have been recognized as such, as *it*, and subsequently the metaphysical parts which are recognized by abstraction are attributed to this *it*, but the *it* cannot itself be made a predicate. This *it* is thus neither predicated of a subject, nor in a subject, and accordingly is identical with the concept of substance.

[§3] There are distinguishable grades in the process of unification. That universal conception which is nearest to sense is the conception of *the present*, *in general*. This is a conception, because it is universal. It represents the object of *attention*, in general. [FOOTNOTE:] The author, as long ago as 1867, assigned this fundamental importance to attention, wherein he has been fully borne out by more recent psychological researches. [END OF NOTE] But the act of attention does not think its object has any particular suchness; it only seizes a fleeting phenomenon, as one might catch a fly, and makes an *It* of it. We will term this conception, Substance. It is the making of an *It* out of a group of feelings.

[from the New List of 1867]

§4. The unity to which the understanding reduces impressions is the unity of a proposition. This unity consists in the connection of the predicate with the subject; and, therefore, that which is implied in the copula, or the conception of **being** is that which completes the work of conceptions of reducing the manifold to unity. The copula (or rather the verb which is copula in one of its senses) means either **actually is** or **would be**, as in the two propositions, "There **is** no griffin," and "A griffin **is** a winged quadruped." The conception of **being** contains only that junction of predicate to subject wherein these two verbs agree. The conception of being, therefore, plainly has no content.

[§4] In like manner, as Substance is the generalized idea of the excitation of sense, so we can generalize the quality of sense. The understanding of a phenomenon consists in pronouncing something to be true. To the occasion of excitation is joined a thusness; and the conception, not of the thusness, but of the junction, makes the conception we call *Being*.

[from the New List of 1867]

If we say "The stove is black," the stove is the *substance*, from which its blackness has not been differentiated, and the *is*, while it leaves the substance just as it was seen, explains its confusedness, by the application to it of *blackness* as a predicate.

Though *being* does not affect the subject, it implies an indefinite determinability of the predicate. For if one could know the copula and predicate of any proposition, as "...is a tailed-man," he would know the predicate to be applicable to something supposable, at least. Accordingly, we have propositions whose subjects are entirely indefinite, as "There is a beautiful ellipse," where the subject is merely *something actual or potential*; but we have no propositions whose predicate is entirely indeterminate, for it would be quite senseless to say, "A has the common characters of all things," inasmuch as there are no such common characters.

Thus substance and being are the beginning and end of all conception. Substance is inapplicable to a predicate, and being is equally so to a subject.

If we say "The stove is black," the stove is the Substance, from which its blackness has not been differentiated; the *is*, while leaving the Substance just as it was seen, declares that it is about to rationalize its confusedness, which it does, in a measure, immediately after, by applying to it *blackness* as a quality.

§5. The terms "prescision" and "abstraction," which were formerly applied to every kind of separation, are now limited, not merely to mental separation, but to that which arises from attention to one element and neglect of the other. Exclusive attention consists in a definite conception or supposition of one part of an object, without any supposition of the other. Abstraction or prescision ought to be carefully distinguished from two other modes of mental separation, which may be termed discrimination and dissociation. Discrimination has merely to do with the essences of terms, and only draws a distinction in meaning. Dissociation is that separation which, in the absence of a constant association, is permitted by the law of association It is the consciousness of one thing, without the necessary simultaneous consciousness of the other. Abstraction or prescision, therefore, supposes a greater separation than discrimination, but a less separation than dissociation. Thus I can discriminate red from blue, space from color, and color from space, but not red from color. I can prescind red from blue, and space from color (as is manifest from the fact that I actually believe there is an uncolored space between my face and the wall); but I cannot prescind color from space, nor red from color. I can dissociate red from blue, but not space from color, color from space, nor red from color.

[§5] The medieval doctors speak of *praecisio*, by which they mean *praescissio*, or forth-cutting; and thus we have in logic the word *precision*, as a name for the same operation which is otherwise termed abstraction, drawing away. What is meant, we are told, is that kind of mental separation which results from attention to one element of an idea, and neglect of the rest. It may be doubted whether that is a very successful analysis of the operation. It would be less objectionable to say that in abstraction we *suppose* one part of a phenomenon, without any particular supposition about another part. Thus, I may *suppose* the chair on which I am sitting to have no action whatever on light, so that it is quite invisible. Then I am said to prescind its rigidity etc. and *abstract from* its color and visibility. Again, I can *suppose* space has four dimensions. I do not, myself, believe it has four dimensions; and with all the habits of a life-time of contemplating three dimensions, perhaps I cannot clearly *imagine* four dimensions. But I know perfectly well, in consequence of having diligently studied the subject, how things would look in four dimensions; that is, I can rather slowly and painfully make out the successive appearances which would present themselves, if I had power to walk about in such a space. Pictures and models of how such things would look have been made. A very learned and able man, Zöllner, actually believed there were four dimensions. I can, therefore, abstract from the tridimensionality of space.

The process of abstraction, or precision, must be carefully distinguished from the other modes of mental separation, one of which, *dissociation*, is a more complete separation, while the other, *discrimination*, is a less complete separation.

Discrimination is a mere distinction of meaning. Thus, it is impossible to suppose there is color, without supposing there is a surface. Accordingly, although one can

readily suppose the *sensation* of color to exist without any idea of space, yet color, as something objective, in the sense in which we understand it, cannot be supposed without three dimensions, at least. But one can perfectly well discriminate color from space; for this merely consists in recognizing that color involves something not necessarily involved in the supposition of space.

Dissociation is imagining one thing without imagining another; and the possibility of doing this depends upon the nature of our previous experience, upon our training in placing ourselves in imagination in novel situations, and other accidents of life. One man may be quite unable to dissociate elements of experience which a better trained mind can dissociate without difficulty. Very few people can imagine space without imagining color; but everybody can, and does, suppose uncolored spaces to exist.

[from the New List of 1867]

Prescision is not a reciprocal process. It is frequently the case, that, while A cannot be prescinded from B, B can be prescinded from A. This circumstance is accounted for as follows. Elementary conceptions only arise upon the occasion of experience; that is, they are produced for the first time according to a general law, the condition of which is the existence of certain impressions. Now if a conception does not reduce the impressions upon which it follows to unity, it is a mere arbitrary addition to these latter; and elementary conceptions do not arise thus arbitrarily. But if the impressions could be definitely comprehended without the conception, the latter would not reduce them to unity. Hence, the impressions (or more immediate conceptions) cannot be definitely conceived or attended to, to the neglect of an elementary conception which reduces them to unity. On the other hand, when such a conception has once been obtained, there is, in general, no reason why the premises which have occasioned it should not be neglected, and therefore the explaining conception may frequently be prescinded from the more immediate ones and from the impressions.

Precision is not a reciprocal process. It frequently happens that while A cannot be prescinded from B, B can perfectly well be prescinded from A. The reason of this is as follows. Elementary conceptions only arise upon the occasion of experience; that is, they are produced according to general laws, the condition of which is the existence of certain impressions. Now, if a conception does not reduce the impressions upon which it follows to unity, it is a mere arbitrary addition to these latter. But if the impressions would be definitely comprehended without the conception, this latter would not reduce them to unity. Here the impressions (or more immediate conceptions) cannot be definitely conceived or attended to, to the neglect of an elementary conception which reduces them to unity. On the other hand, has the conception once been obtained, there is, in general, no reason why the premises which have occasioned it should not be neglected; and therefore the explaining conception may frequently be prescinded from the more immediate conceptions and from the impressions.

§6. The facts now collected afford the basis for a systematic method of searching out whatever universal elementary conceptions there may be intermediate between the manifold of substance and the unity of being. It has been shown that the occasion of the introduction of a universal elementary conception is either the reduction of the manifold of substance to unity, or else the conjunction to substance of another conception. And it has further been shown that the elements conjoined cannot be supposed without the conception, whereas the conception can generally be supposed without these elements. Now, empirical psychology discovers the occasion of the introduction of a conception, and we have only to ascertain what conception already lies in the data which is united to that of substance by the first conception, but which cannot be supposed without this first conception, to have the next conception in order in passing from being to substance.

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[from the New List of 1867]

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It may be noticed that, throughout this process, *introspection* is not resorted to. Nothing is assumed respecting the subjective elements of consciousness which cannot be securely inferred from the objective elements. Some psychologists assume that that which is directly in the mind is the easiest possible thing to know. But this is a fallacy. Does the reader not know that it is possible to be angry without knowing that one is angry? There are different ways in which a thing may lie in consciousness. It is not enough to be in consciousness; the impressions must be worked over into perceptions, before they can be utilized.

§7. The conception of *being* arises upon the formation of a proposition. A proposition always has, besides a term to express the substance, another to express the quality of that substance; and the function of the conception of being is to unite the quality to the substance. Quality, therefore, in its very widest sense, is the first conception in order in passing from being to substance.

[§7] The conception of Being arises when something is asserted; is judged true. When we make a judgment, we think in the first place about something; and then we think something to be true of that thing. That is, we think that Substance of which we are thinking to have a Quality. [FOOTNOTE:] Quality is here used for a character not considered as relative to a second object. The word quality has several meanings so closely allied that it has become rather a vague term. It comes from the Latin *qualitas*, a word invented by Cicero to translate Aristotle's Greek word poiotês, "suchness". Aristotle gives a certain definition of it, which is called the "predicamental" sense; since in that sense it was taken as a predicament, or category, by that Prince of Philosophers. Namely, he defines it as (1) a character, (2) having a contrary, (3) admitting of differences in degree, and (4) being a respect in which things agree and differ. This is the most proper sense of the word; but no writer ever consistently confined it to this meaning. Aristotle very often uses it for a character upon which a moral judgment can be passed; and good characters are oftener called qualities than bad ones. In French, this has come to be the most familiar meaning; and it is very common in the older writers of our language. This is one of the innumerable instances in which Aristotle is the author of expressions we hear in the streets. From meaning rank or excellence, quality came to be used in logic to express the excellence of apprehension of an idea, that is, its clearness and distinctness. Propositions are also said to have the *quality* of being affirmative or negative. Kant uses the term for degree of intensity. There was a scholastic dispute about the intention and remission of [?---?], which concerned qualities.[END OF NOTE] Quality is thus the first conception in order in passing from Being to Substance.

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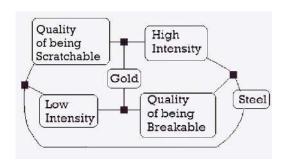
Quality seems at first sight to be given in the impression. Such results of introspection are untrustworthy. A proposition asserts the applicability of a mediate conception to a more immediate one. Since this is *asserted*, the more mediate conception is clearly regarded independently of this circumstance, for otherwise the two conceptions would not be distinguished, but one would be thought through the other, without this latter being an object of thought, at all. The mediate conception, then, in order to be *asserted* to be applicable to the other, must first be considered without regard to this circumstance, and taken immediately. But, taken immediately, it transcends what is given (the more immediate conception), and its applicability to the latter is hypothetical. Take, for example, the proposition, "This stove is black." Here the conception of *this stove* is the more immediate, that of *black* the more mediate, which latter, to be predicated of the former, must be discriminated from it and

considered *in itself* not as applied to an object, but simply as embodying a quality, *blackness*. Now this *blackness* is a pure species or abstraction, and its application to *this stove* is entirely hypothetical. The same thing is meant by "the stove is black," as by "there is blackness in the stove." *Embodying blackness is the equivalent of black*. [FOOTNOTE:] This agrees with the author of *De Generibus et Speciebus*, *Ouvrages Inédits d'Abélard*, p. 528. [END OF NOTE] The proof is this. These conceptions are applied indifferently to precisely the same facts. If, therefore, they were different, the one which was first applied would fulfil every function of the other; so that one of them would be superfluous. Now a superfluous conception is an arbitrary fiction, whereas elementary conceptions arise only upon the requirement of experience; so that a superfluous elementary conception is impossible. Moreover, the conception of a pure abstraction is indispensable, because we cannot comprehend an agreement of two things, except as an agreement in some *respect*, and this respect is such a pure abstraction as blackness. Such a pure abstraction, reference to which constitutes a *quality* or general attribute, may be termed a *ground*.

Reference to a ground cannot be prescinded from being, but being can be prescinded from it.

Quality seems at first sight to be given in the impression, but such results of introspection must not be trusted. We judge one conception to be applicable to another, more directly experienced. But the other conception, which is less experiential and more ideal, that is, more [?well-?]known in the way in which an idea is known, this, I say, is regarded as having a sort of ideal Being independent of its being embodied in that particular thing. For instance, upon watching a bee or an ant, I exclaim, what sagacity, what strange instinct. The bee or the ant which I judge to possess that semiunconscious mind, is experientially known; but like everything experienced it has something inscrutable about it which no description however elaborate can completely reveal. When I exclaim that I recognize a certain sort of mind in it, clearly I must have had already some idea of a mind. If I say, it has instinct, I must already have the idea of instinct. For if this animal were the only object which suggested that idea, I should not be able to separate the idea from that particular animal; and if I had no such separate idea I could not attribute, or assert, or *judge* it of that animal. I must then have an abstract thought, an idea of instinct; and that idea, brought from my previous reflections, is applicable to this thing I see before me -- that is not seen, but is rather a theory to account for what I see. The same thing is true in the case of every judgment. It is not given in sense; it is a theory of the sense-impression. This is the case even with what are called qualities of sensation. I look at a black stove. There is a direct sensation of blackness. But if I judge the stove to be black, I am comparing this experience with previous experiences. I am associating the sensation with a familiar idea derived from former black objects. When I say to myself the stove is black, I am making a little theory to account for the look of it. Say the theory is guite empty, if you please; that is, that it is only the impression thought over again. Yet it has been put into another form of thought: It is in the way of thinking it, at least, a theory in form.

The best way to think clearly is to think in visual diagrams, rather than in words, or auditory images. Suppose we were to compare two metals, one like gold, easily scratched but hard to break, the other a glass-like steel, hard to scratch but easy to break. Let us make a diagram of this state of things.



We see that in order to represent the relations of qualities distinctly we must treat those qualities as objects to which the things are connected. In the above diagram (and we could not make it simpler while making it show the same relations) we have ten separate objects between which 12 lines are drawn. Two of the objects are the things, gold and steel; two are the qualities, softness and brittleness; two are the intensities; and the remaining four, represented by black spots, are the facts.

When a quality is thought about as a distinct object, it is said to be thought abstractly, and is called an abstraction; and nouns formed from adjectives and expressive of such abstractions are called abstract nouns. It is a great blunder in logic to confound abstraction in this sense with the operation of *precision*, or separation in supposition. Many thinkers speak of "mere" abstractions, implying some degree of contempt. But thinking abstractly, in the sense of isolating characters and thinking them as distinct objects is the only way to think clearly and efficiently. Mathematics is only rendered possible by thinking in this way. Some persons have a notion that such thinking is futile and false. It would be false to think that "softness" and "brittleness" are things in the same sense in which chairs and tables are things. But if a chair or a table is a more real thing than softness and brittleness, what makes it so? Is it the accurate fitting and the friction which hold the different pieces together for a while? Are you quite sure a chair or a table is there while nobody is looking at it or using it? At any rate, is not the important feature of the chair or the table, the fact that we can think about it so as to bind ideas together in a manner analogous to the connection of experiences? If this be granted I ask if this same feature does not also belong to the words "softness" and "brittleness". Are they, or their equivalents, not very useful in the above diagram? Is not that utility justification enough, nay justification the best conceivable?

A word which helps us communicate our thoughts is a good thing; but surely a word which helps us think is a better thing. Now "abstractions" help us to think clearly. An abstraction is a tool of thought.

The student must think this out for himself; and deep meditation is required. He will say: yes, "softness" and "brittleness" are convenient words; but there are no such things. They are convenient fictions. With just as much reason, you might say "chair" and "table" are convenient words, but mere fictions; and some writers there are, such as Ernst Mach, who do say just that. But to say that is to ignore the distinction between truth and fiction. I say that for a metal to be soft is for it to be connected with a single quality, that of softness. The student will say "You cannot mean that *literally*." But that word implies that there is some truer way of thinking. On the contrary, no truer way of thinking is conceivable. The objector is fancying thoughts can be like things. Thoughts cannot be like things unthought. A true thought is one that *answers* to the natural thing, which leads to results thoroughly in harmony with nature. The perfect convenience of the expression is all the truth which is conceivable. You cannot conceive of a thought being *like* anything not thought. Likeness is thought. This is so true, that it is impossible any word should mean anything which contemplates anything else. Hence, when we talk of how things really are, we deceive ourselves if we fancy we possibly can mean anything more than how they are most conveniently and suitably *thought*.

We do not think objects are in themselves *red* or *blue*. We think red and blue are only our feelings, and that the things in themselves simply take up faster or slower vibrations from the ether. But when we think in that way, do you suppose that we have cleared away the element of *feeling* from our thought, and are thinking of things as they are *unfelt*? Not at all. If we were to expunge the sensuous element from our ideas, we should leave our minds a blank. If it be less true to think that things are red or blue than to say they are vibrating in a certain way, it can only be because the former way of thinking leads to some inconvenience to which the latter does not lead.

All this discussion is intended to show the student that it is perfectly correct to say that a *quality* is a single object with which a thing may or may not be connected, and that to object to this as not literally true of the things in themselves is like trying to tear off the peels of an onion in order to get to the onion itself.

The old Scotists -- or Dunces, as they were called -- brought abstractions into contempt in a way for which their master, Duns Scotus, was hardly responsible, by using verbal abstractions when positive theories were wanted. Thus, according to Molière, they would say that opium put people to sleep because it had a soporific virtue. That was mere verbiage, of course. But to jump from contemning such talk to contemning abstractions was to repeat the very same fault, namely, that of not distinguishing between useful abstractions and useless abstractions. To say that opium

has a soporific virtue was a useful expression *for some purposes*; but it could not supply the place of a physiological theory. One of the lessons which logic has to teach us is how to make useful abstractions and how to limit them to those applications in which they are useful.

[from the New List of 1867]

§8. Empirical psychology has established the fact that we can know a quality only by means of its contrast with or similarity to another. By contrast and agreement a thing is referred to a correlate, if this term may be used in a wider sense than usual. The occasion of the introduction of the conception of reference to a ground is the reference to a correlate, and this is, therefore, the next conception in order.

[§8] The study of psychology, from which we find it convenient to borrow a few principles, shows us that we can never know, or even think, that a thing has a quality without thinking or having thought of other things partaking that quality and of still others wanting it, or at least possessing it in smaller measure. This is the natural, common-sense belief of the mass of men; and it seems to be confirmed by careful observation. There are only a few thinkers who do not accept it. This is the doctrine which ought in strictness to be called the *doctrine of the relativity of knowledge*. [FOOTNOTE:] The designation is, however, more frequently applied to the doctrine properly called *phenomenalism*, namely, the doctrine that the true relations of our thoughts to their real external substrata can never be known. Many of those who profess to believe in the "relativity of knowledge" really deny that relations, as such, can be known, unless their correlates are immediately present to the mind. They do not admit that a man can have a direct knowledge that something acts upon him unless that thing is in his mind. But men advertise themselves as loose thinkers when they denominate a belief in the incognizability of relations "the doctrine of the relativity of knowledge." [END OF NOTE]

There is a corresponding truth in regard to existence. That is to say, things can only possess qualities by virtue of their mutual interactions. This proposition may be called the doctrine of the relativity of facts. For example, a thing cannot be hard, except by virtue of resisting other things; and if there were but one atom in the universe, to say that atom was hard would be a phrase without meaning. Against attraction at a distance some men have urged that a thing cannot act where it is not; but what can it mean to say that a thing is in a place, except that the forces it exerts upon other things center at that place? Is *feeling* an exception to this principle? Can a thing *feel* for itself, without reference to anything else? We do not mean to ask this as a question of fact; we only mean to ask whether it means anything to say a thing merely feels. This is the question; for to say that a thing feels and to say that it feels for itself, are one and the same. Undoubtedly, feeling is something; but feeling is continuous, and is not in and for itself alone. It has been suggested that perhaps anaesthetics do not destroy feeling, but only the memory of feeling. But a perfectly isolated feeling, instantaneous, not remembered for any length of time, not lasting for any time however brief -- in other words, a *mere* feeling -- may be set down as nonsense.

Thus, the occasion of the introduction of the conception of Quality is Relation; and thus Relation is the next conception in the passage from Being to Substance.

[from the New List of 1867]

Reference to a correlate cannot be prescinded from reference to a ground; but reference to a ground may be prescinded from reference to a correlate.

We cannot suppose things to be related without having corresponding qualities; but we may suppose them to have qualities without any particular relations. For example, if \underline{A} attracts \underline{B} , there are certain qualities \underline{A} and \underline{B} ipso facto possess; they must be movable, etc. But if \underline{A} is blue, and \underline{B} is sweet, though they must have, perhaps, some relations, they need not be supposed to have any particular relation.

[from the New List of 1867]

§9. The occasion of reference to a correlate is obviously by comparison. This act has not been sufficiently studied by the psychologists, and it will, therefore, be necessary to adduce some examples to show in what it consists. Suppose we wish to compare the letters p and b. We may imagine one of them to be turned over on the line of writing as an axis, then laid upon the other, and finally to become transparent so that the other can be seen through it. In this way we shall form a new image which mediates between the images of the two letters, inasmuch as it represents one of them to be (when turned over) the likeness of the other. Again, suppose we think of a murderer as being in relation to a murdered person; in this case we conceive the act of the murder, and in this conception it is represented that corresponding to every murderer (as well as to every murder) there is a murdered person; and thus we resort again to a mediating representation which represents the relate as standing for a correlate with which the mediating representation is itself in relation. Again, suppose we look out the word homme in a French dictionary; we shall find opposite to it the word man, which, so placed, represents homme as representing the same two-legged creature which man itself represents. accumulation of instances, it would be found that every comparison requires, besides the related thing, the ground, and the correlate, also a mediating representation which represents the relate to be a representation of the same correlate which this mediating representation itself represents. Such a mediating representation may be termed an interpretant, because it fulfils the office of an interpreter, who says that a foreigner says the same thing which he himself says. The term representation is here to be understood in a very extended sense, which can be explained by instances better than by a definition. In this sense, a word represents a thing to the conception in the mind of the hearer, a portrait represents the person for whom it is intended to the conception of recognition, a weathercock represents the direction of the wind to the conception of him who understands it, a barrister represents his client to the judge and jury whom he influences.

Every reference to a correlate, then, conjoins to the substance the conception of a reference to an interpretant; and this is, therefore, the next conception in order in passing from being to substance.

Reference to an interpretant cannot be prescinded from reference to a correlate; but the latter can be prescinded from the former.

§10. Reference to an interpretant is rendered possible and justified by that which renders possible and justifies comparison. But that is clearly the diversity of impressions. If we had but one impression, it would not require to be reduced to unity, and would therefore not need to be thought of as referred to an interpretant, and the conception of reference to an interpretant would not arise. But since there is a manifold of impressions, we have a feeling of complication or confusion, which leads us to differentiate this impression from that, and then, having been differentiated, they require to be brought to unity. Now they are not brought to unity until we conceive them together as being **ours**, that is, until we refer them to a conception as their interpretant. Thus, the reference to an interpretant arises upon the holding together of diverse impressions, and therefore it does not join a conception to the substance, as the other two references do, but unites directly the manifold of the substance itself. It is, therefore, the last conception in order in passing from being to substance.

[§9] One thing cannot be related to another, without they are brought together by some mediating representation or reason. Suppose one man murders another by giving him a poisonous drink. This supposes that there is some regularity, or tendency to regularity, with which people who drink similar potions experience similar effects; otherwise, the drink and the death are mere coincidences. True, the coincidence itself is a relation, though another kind of relation. But one thing's being subsequent to another implies a general system of relationship among events, constituting time. Even the relations of similarity and contrast imply regularities in the way the objects affect the comparing mind.

The reason is not necessarily a *good* reason; it is simply a representation according to which one of the two related things corresponds to the other.

[§10] The representation must itself have its reason, and so on in endless series. In fact, in the idea of regularity, the idea of endless multitude is involved. Nor is it possible to conceive *definitely* an endless multitude except by means of a regularity. Thus, from the idea of the rational representation we are carried, at once, to that of the manifold of Substance.

[from the New List of 1867]

§11. The five conceptions thus obtained, for reasons which will be sufficiently obvious, may be termed *categories*. That is,

BEING,

Quality (Reference to a Ground), Relation (Reference to a Correlate), Representation (Reference to an Interpretant), SUBSTANCE.

The three intermediate conceptions may be termed accidents.

[§11] We have thus obtained the following system of conceptions:

BEING

SUBSTANCE

These conceptions will be found to be of fundamental importance in logic.

[from the New List of 1867]

§12. This passage from the many to the one is numerical. The conception of a *third* is that of an object which is so related to two others, that one of these must be related to the other in the same way in which the third is related to that other. Now this coincides with the conception of an interpretant. An *other* is plainly equivalent to a *correlate*. The conception of second differs from that of other, in implying the possibility of a third. In the same way, the conception of *self* implies the possibility of an *other*. The *Ground* is the self abstracted from the concreteness which implies the possibility of an other.

§13. Since no one of the categories can be prescinded from those above it, the list of supposable objects which they afford is,

What is.

Quale--that which refers to a ground,

Relate--that which refers to ground and correlate,

Representamen--that which refers to ground, correlate, and interpretant.

It.

[§12] The three conceptions of Quality, Relation, and Representation, are numerical. The Quality is first, in the sense of the original, the fresh. Relation is simply otherness, or duality. Representation is mediation, or thirdness.

There is nothing fanciful in this connection of the conceptions with those of the numbers; on the contrary, the conceptions are not truly apprehended, are not conceived in all their generality, until they are seen to be essentially nothing but the first vocals of that mystic formula, "Eeny, meeny, mony, mi" etc. I call it *mystic* because, though mere nonsense, from it are evolved all the mysteries of numbers, and all the subtleties of metaphysics.

[§13] The three accidents suggest one another by a natural self-development of thought, which however does not clearly appear when stated in brief.

We must begin with the First: That which is first must be fresh and new; and that which is first and new must be vivid. That which is first must be original and free; for to be dependent is to be second. That which is quite free must be unlimited, and therefore endlessly varied. Endlessly varied spontaneous vividness is the manifold of pure quality.

The first, or one, is manifold. To be manifold, it must not be fixed; it must be new. To be not fixed but new, it must have just come. To have just come, it must be second. Secondness implies determination by a first. That this should be original and spontaneous, it must be arbitrary determination. To be arbitrary, it must be blind. Blind arbitrary determination is Force. The first of a second is second to that second; there is action and reaction, in a general sense, or Relation.

Freedom and determination can only co-exist as extremities of that which is neither absolutely free nor arbitrarily forced. There is a Third, or medium, between them. Now, that which so mediates that, through it, force comes to vividness and back to reaction is Mind, or representation.

Such a line of thought might, unchecked, lead almost anywhere. It is merely an attempt to compress into a few words a development that might fill a book. Set forth at large it would not appear so arbitrary.

[from the New List of 1867]

§14. A quality may have a special determination which prevents its being prescinded from reference to a correlate. Hence there are two kinds of relation.

1st. That of relates whose reference to a ground is a prescindible or internal quality 2nd. That of relates whose reference to a ground is an unprescindible or relative quality.

In the former case, the relation is a mere *concurrence* of the correlates in one character, and the relate and correlate are not distinguished. In the latter case the correlate is set over against the relate, and there is in some sense an *opposition*.

Relates of the first kind are brought into relation simply by their agreement. But mere disagreement (unrecognized) does not constitute relation, and therefore relates of the second kind are only brought into relation by correspondence in fact.

[§14] Relations are of two great genera:

1st, those whose ground is a prescindible or internal quality; 2nd, those whose ground is an unprescindible, or relative quality.

In the former case, the relation is a mere **concurrence** of the correlates in one character and relate and correlate are not distinguished. In the latter case, the correlate is set over against the relate, and there is in some sense an **opposition**.

Relates of the first kind are brought into relation simply by their agreement. But mere disagreement -- without an act of recognition of it -- does not constitute relation, and therefore relates of the second kind are only brought into relation by correspondence in fact. They are *really* related. (In the case of contrast, the fact is a mental fact.)

[§15] As for the genera of Representations, or Signs, they merit a separate chapter.

[END OF MS 403; THE 1867 VERSION CONTINUES AS FOLLOWS:]

[from the New List of 1867]

A reference to a ground may also be such that it cannot be prescinded from a reference to an interpretant. In this case it may be termed an *imputed* quality. If the reference of a relate to its ground can be prescinded from reference to an interpretant, its relation to its correlate is a mere concurrence or community in the possession of a quality, and therefore the reference to a correlate can be prescinded from reference to an interpretant. It follows that there are three kinds of representations.

- 1st. Those whose relation to their objects is a mere community in some quality, and these representations may be termed *Likenesses*.
- 2nd. Those whose relation to their objects consists in a correspondence in fact, and these may be termed *Indices* or <u>Signs</u>.
- 3rd. Those the ground of whose relation to their objects is an imputed character, which are the same as *general signs*, and these may be termed *Symbols*.
- §15. I shall now show how the three conceptions of reference to a ground, reference to an object, and reference to an interpretant are the fundamental ones of at least one universal science, that of logic. Logic is said to treat of second intentions as applied to first. It would lead me too far away from the matter in hand to discuss the truth of this statement; I shall simply adopt it as one which seems to me to afford a good definition of the subject-genus of this Now, second intentions are the objects of the understanding considered as representations, and the first intentions to which they apply are the objects of those representations. The objects of the understanding, considered as representations, are symbols, that is, signs which are at least potentially general. But the rules of logic hold good of any symbols, of those which are written or spoken as well as of those which are thought. They have no immediate application to likenesses or indices, because no arguments can be constructed of these alone, but do apply to all symbols. All symbols, indeed, are in one sense relative to the understanding, but only in the sense in which also all things are relative to the understanding. On this account, therefore, the relation to the understanding need not be expressed in the definition of the sphere of logic, since it determines no limitation of that sphere. But a distinction can be made between concepts which are supposed to have no existence except so far as they are actually present to the understanding, and external symbols which still retain their character of symbols so long as they are only capable of being understood. And as the

rules of logic apply to these latter as much as to the former (and though only through the former, vet this character, since it belongs to all things, is no limitation), it follows that logic has for its subject-genus all symbols and not merely concepts. [FOOTNOTE:] Herbart says: "Unsre sämmtlichen Gedanken lassen sich von zwei Seiten betrachten; theils als Thätigkeiten unseres Geistes, theils in Hinsicht dessen, was durch sie gedacht wird. In letzterer Beziehung heissen sie Begriffe, welches wort, indem es das Begriffene bezeichnet, zu abstrahiren gebietet von der Art und Weise, wie wir den Gedanken empfangen, produciren, oder reproduciren mögen." But the whole difference between a concept and an external sign lies in these respects which logic ought, according to Herbart, to abstract from. [END OF NOTE] We come, therefore, to this, that logic treats of the reference of symbols in general to their objects. In this view it is one of a trivium of conceivable sciences. The first would treat of the formal conditions of symbols having meaning, that is of the reference of symbols in general to their grounds or imputed characters, and this might be called formal grammar; the second, logic, would treat of the formal conditions of the truth of symbols; and the third would treat of the formal conditions of the force of symbols, or their power of appealing to a mind, that is, of their reference in general to interpretants, and this might be called formal rhetoric.

There would be a general division of symbols, common to all these sciences; namely, into,

- 1: Symbols which directly determine only their *grounds* or imputed qualities, and are thus but sums of marks or *terms*;
- 2: Symbols which also independently determine their *objects* by means of other term or terms, and thus, expressing their own objective validity, become capable of truth or falsehood, that is, are *propositions*; and,
- 3: Symbols which also independently determine their *interpretants*, and thus the minds to which they appeal, by premising a proposition or propositions which such a mind is to admit: These are *arguments*.

And it is remarkable that, among all the definitions of the proposition, for example, as the *oratio indicativa*, as the subsumption of an object under a concept, as the expression of the relation of two concepts, and as the indication of the mutable ground of appearance, there is, perhaps, not one in which the conception of reference to an object or correlate is not the important one. In the same way, the conception of reference to an interpretant or third, is always prominent in the definitions of argument.

In a proposition, the term which separately indicates the object of the symbol is termed the subject, and that which indicates the ground is termed the predicate. The objects indicated by the subject (which are always potentially a plurality, -- at least, of phases or appearances) are therefore stated by the proposition to be related to one another on the ground of the character indicated by the predicate. Now this relation may be either a concurrence or an opposition. Propositions of concurrence are those which are usually considered in logic; but I have shown in a paper upon the classification of arguments that it is also necessary to consider separately propositions of opposition, if we are to take account of such arguments as the following:

Whatever is the half of anything is less than that of which it is the half.

A is half of B:

∴ A is less than B.

The subject of such a proposition is separated into two terms, a "subject nominative" and an

"object accusative."

In an argument, the premises form a representation of the conclusion, because they indicate the interpretant of the argument, or representation representing it to represent its object. The premises may afford a likeness, index, or symbol of the conclusion. In deductive argument, the conclusion is represented by the premises as by a general sign under which it is contained. In hypotheses, something *like* the conclusion is proved, that is, the premises form a likeness of the conclusion. Take, for example, the following argument:

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M is, for instance, P1, P2, P3, and P4;
S is P1, P2, P3, and P4:
∴ S is M
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Here the first premise amounts to this, that "P1, P2, P3, and P4" is a likeness of M, and thus the premises are or represent a likeness of the conclusion. That it is different with induction another example will show.

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S1, S2, S3, and S4 are taken as samples of the collection M; S1, S2, S3, and S4 are P:
∴ All M is P.
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Hence the first premise amounts to saying that "S1, S2, S3, and S4" is an index of M. Hence the premises are an index of the conclusion.

The other divisions of terms, propositions, and arguments arise from the distinction of extension and comprehension. I propose to treat this subject in a subsequent paper. But I will so far anticipate that, as to say that there is, first, the direct reference of a symbol to its objects, or its denotation; second, the reference of the symbol to its ground, through its object, that is, its reference to the common characters of its objects, or its connotation; and third, its reference to its interpretants through its object, that is, its reference to all the synthetical propositions in which its objects in common are subject or predicate, and this I term the information it embodies. And as every addition to what it denotes, or to what it connotes, is effected by means of a distinct proposition of this kind, it follows that the extension and comprehension of a term are in an inverse relation, as long as the information remains the same, and that every increase of information is accompanied by an increase of one or other of these two quantities. It may be observed that extension and comprehension are very often taken in other senses in which this last proposition is not true.

This is an imperfect view of the application which the conceptions which, according to our analysis, are the most fundamental ones[,] find in the sphere of logic. It is believed, however, that it is sufficient to show that at least something may be usefully suggested by considering this science in this light.

[End of New List of 1867]