One very important triad is this: it has been found that there are three kinds of signs which are all indispensable in all reasoning; the first is the diagrammatic sign or icon, which exhibits a similarity or analogy to the subject of discourse; the second is the index, which like a pronoun demonstrative or relative, forces the attention to the particular object intended without describing it; the third is the general name or description which signifies its object by means of an association of ideas or habitual connection between the name and the character signified.

There may be a mere relation of reason between the sign and the thing signified; in that case the sign is an icon. Or there may be a direct physical connection; in that case, the sign is an index. Or there may be a relation which consists in the fact that the mind associates the sign with its object; in that case the sign is a name.

The third case is where a dual relation between the sign and its object is degenerate and consists in a mere resemblance between them. I call a sign which stands for something merely because it resembles it, an icon. Icons are so completely substituted for their objects as hardly to be distinguished from them. Such are the diagrams of geometry. A diagram, indeed, so far as it has a general signification, is not a pure icon; but in the middle part of our reasonings we forget that abstractness in great measure, and the diagram is for us the very thing. So in contemplating a painting, there is a moment when we lose the consciousness that it is not the thing, the distinction of the real and the copy disappears, and it is for the moment a pure dream, – not any particular existence, and yet not general. At that moment we are contemplating an icon.

Signs, or representations, are of three kinds: Icons, Indices, and Tokens. —

The icon represents its object by virtue of resembling it. It thus depends on a simple feeling. Mental association has nothing to do with it. The icon has no generality, because it does not analyze the character it exhibits. There is thus no more generality in the icon than there is in the object. Nor has the icon anything to do with the sense of contact with the world, nor with the actual existence of its object. It is a mere dream. Icons comprehend all pictures, imitations, diagrams, and examples. Every
algebraical formula, in so far as it shows the letters connected by signs analogous to the relations between the quantities those letters denote, is an icon: \( q \). No quality or character of any kind can be conveyed or made known, except by the means of an icon. With reference to qualities of feeling, this is evident. But it is equally true with regard to relations.

1898 | On Existential Graphs | MS [R] 484:4-5

An icon represents its object by being like it. It appeals to the so-called association by resemblance. This is not an accurate term, by the way, since resemblance consists precisely in different ideas being drawn together in our minds by an occult inward force. A pure icon, could such a sign exist, would present to us a pure sense-quality, without any parts nor any respects, and consequently without positive generality. But in fact there is no pure icon; and we apply the name icon to any sign in which the force of resemblance is the dominant element of its representativity.

1899-1900 [c.] | Notes on Topical Geometry | MS [R] 142:3-4

Signs are of three kinds,

1st, the icon, which represents its object by virtue of a character which it would equally possess did the object and the interpreting mind not exist;

2nd, the index, which represents its object by virtue of a character which it could not possess did the object not exist, but which it would equally possess did the interpreting mind not operate;

3rd, the symbol, which represents its object by virtue of a character which is conferred upon it by an operation of the mind.

[—]

An icon represents its object insofar as it resembles that object. It conveys no information, nor does it put the mind into a position to acquire information. Yet the utility of icons is evidenced by the diagrams of the mathematician, whether they involve continuity, like geometrical figures, or are arrays of discrete objects like a body of algebraical formulae, all of which are icons. Icons have to be used in all thinking.

1901-1902 [c.] | Definitions for Baldwin's Dictionary [R] | MS [R] 1147

An icon is a representamen which refers to its object merely because it resembles, or is analogous to, that object. Such is a photograph, a figure in geometry, or an algebraical array of symbols which by virtue of the “rules,” or permissions to transform, [...] are analogous to the objects they represent. An icon is so independent of its object, that it is immaterial whether the latter exists or not.
An icon is a sign which would possess the character which renders it significant, even though its object had no existence; such as a lead-pencil streak as representing a geometrical line.

A Sign degenerate in the greater degree is an Originalian Sign, or Icon, which is a Sign whose significant virtue is due simply to its Quality. Such, for example, are imaginations of how I would act under certain circumstances, as showing me how another man would be likely to act. We say that the portrait of a person we have not seen is convincing. So far as, on the ground merely of what I see in it, I am led to form an idea of the person it represents, it is an Icon. But, in fact, it is not a pure Icon, because I am greatly influenced by knowing that it is an effect, through the artist, caused by the original's appearance, and is thus in a genuine Obsistent relation to that original. Besides, I know that portraits have but the slightest resemblance to their originals, except in certain conventional respects, and after a conventional scale of values, etc.

...signs must be divided, first, into those which are signs by virtue of facts which be equally true even if their objects and interpretants were away and even non-existent, which are likenesses, or Icons; second, into those which are signs by virtue of facts which would subsist even if their interpretants were away, though not if their objects were away, which are indications, or Indices; and thirdly, into signs which are signs only by virtue of facts which would cease to be true if their interpretants were removed, which are intellectual signs, or Symbols.

An icon is a pure image, not necessarily visual. Being a pure image it involves no profession of being a sign; because such profession would be a sign not of the nature of an image. There is no known cause making it an image of its object; for if there were it would in part have a significant character of the Indexical type. [—] All icons, from mirror-images to algebraic formulae, are much alike, committing themselves to nothing at all, yet the source of all our information. They play in knowledge a part iconized by that played in evolution, according to the Darwinian theory, by fortuitous variations in reproduction.

It will be observed that an Icon represents whatever object it may represent by virtue of its own quality, and determines whatever interpretant it may determine by virtue of its own quality...
An *icon* is a representamen which fulfills the function of a representamen by virtue of a character which it possesses in itself, and would possess just the same though its object did not exist. Thus, the statue of a centaur is not, it is true, a representamen if there be no such thing as a centaur. Still, if it represents a centaur, it is by virtue of its shape; and this shape it will have, just as much, whether there be a centaur or not.

... the *Icon* may undoubtedly be divided according to the categories; but the mere completeness of the notion of the icon does not imperatively call for any such division. For a pure icon does not draw any distinction between itself and its object. It represents whatever it may represent, and whatever it is like, it in so far is. It is an affair of suchness only.

...there are three kinds of signs. The first kind consists of Icons, which like all signs are such only by virtue of being interpreted as such, but whose significant character which causes them to be so interpreted is their possessing a quality, in consequence of which they may be taken as representative of anything that may happen to exist that has that quality. Of course there are no signs that are exclusively iconic. But a geometrical diagram, for example, represents, say, a triangle, simply because it is like it.

An *Icon* is a Representamen whose Representative Quality is a Firstness of it as a First. That is, a quality that it has *qua* thing renders it fit to be a representamen. Thus, anything is fit to be a Substitute for anything that it is like. (The conception of “substitute” involves that of a purpose, and thus of genuine thirdness.) Whether there are other kinds of substitutes or not we shall see. A Representamen by Firstness alone can only have a similar Object. Thus, a Sign by Contrast denotes its object only by virtue of a contrast, or Secondness, between two qualities. A sign by Firstness is an image of its object and, more strictly speaking, can only be an idea. For it must produce an Interpretant idea; and an external object excites an idea by a reaction upon the brain. But most strictly speaking, even an idea, except in the sense of a possibility, or Firstness, cannot be an Icon. A possibility alone is an Icon purely by virtue of its quality; and its object can only be a Firstness.

An *Icon* [...] is strictly a possibility, involving a possibility, and thus the possibility of its being represented as a possibility is the possibility of the involved possibility. In this kind of Representamen
alone, then, the Interpretant may be the Object.

An icon is a sign which refers to the Object that it denotes merely by virtue of characters of its own and which it possesses, just the same, whether any such Object actually exists or not. It is true that unless there really is such an Object, the icon does not act [as] a sign; but this has nothing to do with its character as a sign. Anything whatever, be it quality, existent individual, or law, is an icon of anything, in so far as it is like that thing and used as a sign of it.

There are three modes of representation and three corresponding genera of representamens, these being icons, indices, and symbols. [—]

An icon, likeness, or image is a representamen whose representative force depends solely upon characters which it possesses materialiter* and which it might equally possess though its object had no existence.

For example, a geometrical figure of a triangle is an icon. For though no representation can take place without an object and an interpreter, yet it is the character which the shape has, in the sense in which anything really has characters, which makes it an image of any strict mathematical triangle there may be.

It is the appearance which constitutes the image; and any physical existence there may be connected with it is extraneous to it. Considered strictissime, it resides in the consciousness of the moment, and usually determines its interpretant by “association by resemblance,” calling it up out of the depths of memory. But in practice, it is impossible to keep up to such excessive strictness of language. One sign frequently involves all three modes of representation; and if the iconic element is altogether predominant in a sign, it will answer most purposes to call it an icon.

* That is, […] really, not representatively. Man materialiter consists of three letters, but formaliter of body and soul.
in consciousness the image itself. A geometrical diagram is a good example of an icon. A pure icon can convey no positive or factual information; for it affords no assurance that there is any such thing in nature. But it is of the utmost value for enabling its interpreter to study what would be the character of such an object in case any such did exist. Geometry sufficiently illustrates that.

1903 [c.] | P of L | MS [R] 800:4

...icons, that is signs whose reference to their proper objects is due to characters of the signs by themselves, so that the signs would possess these characters just the same even if their proper objects had no existence...

1904 | Letters to Lady Welby | CP 8.335

In respect to their relations to their dynamic objects, I divide signs into Icons, Indices, and Symbols (a division I gave in 1867). I define an Icon as a sign which is determined by its dynamic object by virtue of its own internal nature. Such is any qualisign, like a vision, - or the sentiment excited by a piece of music considered as representing what the composer intended. Such may be a sinsign, like an individual diagram; say a curve of the distribution of errors.

1904 | On the Foundations of Mathematics | MS [R] 7:14/5

Such a sign whose significance lies in the qualities of its replicas in themselves is an icon, image, analogue, or copy. Its object is whatever that resembles it its interpretant takes it to be the sign of, and is as sign of that object in proportion as it resembles it.

1904 | On the Foundations of Mathematics | MS [R] 8:3

Even an ‘icon,’ if it is going to be a sign, at all, must be related to an object of which it is the sign. But what makes it suitable to be a sign is that it possesses certain qualities. Those qualities it would possess just the same though the object did not exist.


...a sign may, in its secondness to the object as represented, [...] either, as an ‘Icon,’ be related to that object by virtue of a character which belongs to the sign in its own firstness, and which equally would belong to it though the object did not exist, or, as an ‘Index,’ [it] may be related to the object by a real secondness, such as a physical connection [...] to it, or it may, as a ‘Symbol,’ be related to its object only because it will be represented in its interpretant as so related, as is the case with any word or other conventional sign, or any general type of image regarded as a schema of a concept.
Of signs there are two different degenerate forms. But though I give them this disparaging name, they are of the greatest utility, and serve purposes that genuine signs could not. The more degenerate of the two forms (as I look upon it) is the icon. This is defined as a sign of which the character that fits it to become a sign of the sort that it is, is simply inherent in it as a quality of it.[—]

An icon is a sign fit to be used as such because it possesses the quality signified.

In their relation to their Dyadic Objects, Signs are, 1st, those which refer to their objects by virtue of their independent possession of some character of those objects, as a figure of a triangle used in a geometrical demonstration represents any triangle, because it has three rectilinear sides, which it would have, just the same, even if it were not considered as a sign and if there were no other possible triangle in the world for it to represent; 2nd, those signs which refer to their objects by virtue of being really related to them in existence, as a thermometer is a sign of the temperature of its environment; 3rd, those signs which refer to their objects not as resembling them, nor as being in fact actually connected with them, but simply by virtue of the circumstance that they will be interpreted as referring to those objects. I term these three kinds, Icon, Index, Symbol.

...icons, or those signs which represent their objects by virtue of a resemblance or analogy with them...

... an analysis of the essence of a sign, (stretching that word to its widest limits, as anything which, being determined by an object, determines an interpretation to determination, through it, by the same object), leads to a proof that every sign is determined by its object, either first, by partaking in the characters of the object, when I call the sign an Icon; secondly, by being really and in its individual existence connected with the individual object, when I call the sign an Index; thirdly, by more or less approximate certainty that it will be interpreted as denoting the object, in consequence of a habit (which term I use as including a natural disposition), when I call the sign a Symbol.

[An icon is] a sign which represents its object by virtue of being like it, whether qualitatively or by the analogy of its parts, such as a diagram. [—] The denotation of Icons is essentially indefinite.
... I had observed that the most frequently useful division of signs is by trichotomy into firstly Likenesses, or, as I prefer to say, Icons, which serve to represent their objects only in so far as they resemble them in themselves; secondly, Indices, which represent their objects independently of any resemblance to them, only by virtue of real connections with them, and thirdly Symbols, which represent their objects, independently alike of any resemblance or any real connection, because dispositions or factitious habits of their interpreters insure their being so understood.

1909 | Meaning Preface | MS [R] 637:33-34

...the mode of representation may be by likeness or analogy, in which case, the sign may be called an Icon; or it may be by a real connexion, as a certain kind of rapid pulse is symptom of a fever, in which case the sign may be called an indication or Index; or finally the only connexion may lie in the fact that the Sign (a word, for example) is sure to be interpreted as standing for the Object, in which case the Sign may be called a Symbol...

nd | Degrees of Degeneracy [R] | MS [R] 911

[A sign] may make the thought like object because it is itself of the same description, and in this case I term it an icon.

nd | Provisional Tables of the Division of Signs [R] | MS [R] S46

...an Icon is a mere image, a vague form. It makes no distinction between its Object and its Signification. It exhibits the two as one.