

Some Consequences of Four Incapacities

In 1868 “Some Consequences of Four Incapacities” (SCFI) was published in *Journal of Speculative Philosophy* (JSP). This paper is the second essay in a set of three articles published in the JSP by Peirce. The first being “Questions Concerning Certain Faculties Claimed for Man” (QCFC). In QCFC, Peirce raised several questions concerning various cognitive powers of human beings. SCFI summarizes Peirce’s answers from that essay into four incapacities and then draws out the consequences of these incapacities.

0.1 Cartesianism and the new platform for philosophy

Peirce begins SCFI with a characterization of a philosophy he calls **Cartesianism**. In characterizing Cartesianism, Peirce contrasts it with an earlier philosophical tradition he refers to as **scholasticism**.

1. **Method:** scholastics thought we should not question fundamentals, while Cartesians thought philosophy should begin with universal doubt
2. **Test of certainty:** scholastics took the test of certainty to rest on the testimony of sages and the Catholic Church, while Cartesians took the test of certainty to be found in one’s individual consciousness
3. **Type of argumentation:** scholastics made use of “multiform argumentation” while Cartesians contend that argumentation should take the form of a single thread of inference starting with clear and distinct premises
4. **Scope of explanation:** scholastics had mysteries of faith but attempted to explain everything while for Cartesians some facts are beyond explanation (absolutely inexplicable)

In contrast to these four tenets, Peirce contends that modern science and modern logic require a new platform for philosophy. There are four elements to this new platform

1. **Method:** We ought not to begin our philosophical inquiry with the beliefs that we have and not doubt our beliefs unless we have a positive reason for doubting them. Peirce contrasts this principle with that of the Cartesian maxim: the principle that we should begin our philosophical inquiry by doubting everything. He contends that (i) we cannot genuinely doubt a proposition P that we believe simply because a maxim tells us to doubt P and (ii) those that say they doubt a proposition P for this reason are pretending or engaging in fake doubt.

2. **Test of truth:** Truth can only be sought for the community of inquirers. Peirce contends that rather than making single individuals the absolute judges of truth (it is only true if it is something I am clearly convinced of), obtaining the truth of a proposition is social endeavor. And, he notes that if the community believes P, then this is reason for me to doubt not-P.
3. **Proof:** We ought to adopt the method of reasoning from tangible premises along with a multitude and a variety of arguments to a conclusion *rather than* the method of reasoning from abstract premises and a single line of argumentation to a conclusion.
4. **Idealism:** We ought not to adopt the position that something is incognizable or totally independent of our ideas. That is, we cannot suppose that there is anything that is real that is completely unrelated to our ideas.

Discussion 1 *In characterizing Cartesianism, Peirce contends that Cartesians thought philosophy should begin with universal doubt. And, in characterizing his new platform for philosophy, Peirce contends that philosophy ought to begin with the beliefs we have and only doubt something when we have a positive reason for doubting. What is wrong with starting an inquiry by first doubting everything, then identifying those propositions that cannot be doubted, and then only accepting those propositions that can be proven from those indubitable beliefs?*

0.2 The four incapacities

Peirce says that QCFC involves four denials. These four denials are the four of the theorems that Peirce argued for in QCFC and they reflect the four incapacities that Peirce intends to draw out the consequences of. They are as follows:

1. We have no power of introspection (??).
2. We have no power of intuition (??)
3. We have no power of thinking without signs (??)
4. We have no conception of the absolutely incognizable (??)

Peirce says that (1)-(4) are not certain. Even though he has argued for them in QCFC, he suggests that (1)-(4) require further testing by tracing out their consequences. The manner in which he does this is by first tracing out the consequences of (1), then tracing out the consequences of (1) and (2) together, then (1), (2), and (3) together, and finally the consequences of (1)-(4).

0.3 Consequence of incapacity 1

Let's begin with the consequence of there being no power of introspection (??).

If we have no power of introspection, then we have no power to directly perceive the inner facts of our minds. And, further, if we have no power of introspection, then any philosophy that derives facts about the external world using introspection is also flawed. If not by introspection, then our knowledge of our minds must come by way of *hypothetical reasoning* from external facts. For Peirce the nature of this hypothetical reasoning is that claims about how our mind works are hypotheses that we use to explain certain facts that occur in the external world. That is, I come up with a *hypothesis* about what happens in mind (or how it works) to make sense of facts outside of my mind.

In short, the **consequence** of their being no introspection is, as mentioned, that all of our knowledge about the external world and the internal world are by hypothetical reasoning from external facts.

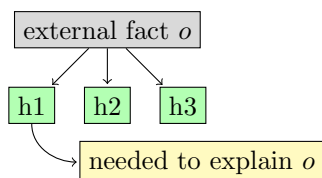


Figure 1: We are justified in positing a hypothesis about the mind in order to explain certain facts about the external world.

But Peirce does not suggest that we can posit *any* hypothesis about the mind to explain external facts.

First, he contends that once we make a hypothesis *h1* to explain some fact, we ought not to posit another hypothesis *h2* to explain that same fact. Instead, Peirce contends that we must carry the first hypothesis as far as it will go, only positing additional hypotheses when the first cannot explain certain facts. With respect to our minds, Peirce contends that this implies we ought to “reduce all kinds of mental action to one general type” (EP1:30). Namely, Peirce contends that if we ought not to explain what goes on in our minds with two faculties when it can be explained with one.

Second, Peirce contends that whatever hypothesis we make concerning our own minds, we ought to begin with positing a power whose “existence is indubitable”, “whose laws are best known”, and whose operations follow “external facts” (see [Figure 2](#)).

0.3.1 Consequence of incapacities 1 and 2

At this point, Peirce now introduces the second incapacity that we have no power of intuition (??). Since we have no power of intuition, it would follow that there is no way for us to determine which of our ideas are determined by object rather than determined by inference. Given ?? along with ??, which asserted that all of our ideas are determined by prior ideas, Peirce

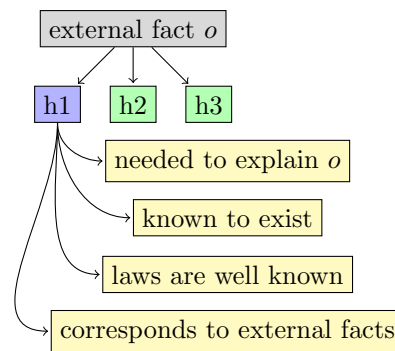
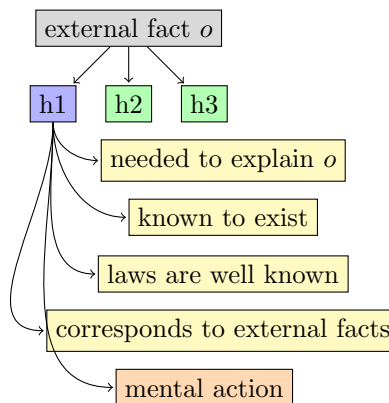


Figure 2: First, *h1* explains *o*, then we ought not posit *h2* or *h3* in addition if they explain the same facts. Furthermore, if we know *h1* exists, and the operations of *h1* are well-known, and *h3* follows external facts, then we ought to posit *h1* over *h2* or *h3*.

notes that (i) we have no absolutely first cognition of any object and (ii) and so our cognition arises by a *continuous process*.

In other words, if we are to propose a hypothesis to explain external facts, our hypothesis should be about a *process* or *action* or *operation* of the mind. We will simply refer to this process as **mental action**. See [subsection 0.3.1](#).



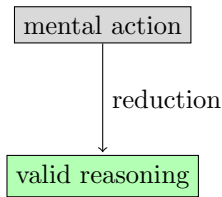
But what *single* power that is a process of the mind do we have that is not doubted and that closely follows external facts? Peirce's answer is *valid inference*. That is, Peirce contends that mind works by moving from premises $P1, P2, P3, \dots$ to a conclusion C only when C is true when $P1, P2, P3, \dots$ are true. As Peirce puts it:

We must begin, then, with a *process* of cognition, and with that process whose laws are best understood and most closely follow external facts. This is no other than the process of valid inference, which proceeds from its premise, A , to its conclusion, B , only if, as a matter of fact, such a proposition as B is always or usually true when such a proposition as A is true.

The consequence then of the first two incapacities is the following:

It is a consequence, then, of the first two principles whose results we are to trace out, that we must, as far as we can, without any other supposition than that the

mind reasons, reduce all mental action to the formula of valid reasoning (EP1:30)



To be clear, Peirce is not saying that whenever mental action (reasoning, thinking, making decisions) occurs our minds go through the step-by-step process of a formal proof. That is, suppose Tek believes that he will one day die based on the fact that (i) all humans are mortal and (ii) that he is human. Peirce says it is “very doubtful” that Tek’s mind operates as follows:

- P1: I have an image or idea in my mind that all humans are mortal.
- P2: Now I have an idea in my mind that I am human.
- C: These prior ideas are pushed aside for the idea that I am mortal.

Rather, he contends that there is something going in “within the organism which is equivalent to the syllogistic process” (EP1:31). And, this is confirmed by experience. As Peirce writes:

it is a matter of constant experience, that if a man is made to believe in the premises, in the sense that he will act from them and will say that they are true, under favorable conditions he will also be ready to act from the conclusion and to say that it is true.

In other words, if we have an individual who believes P1 and P2, we will find that the individual will also believe in C.

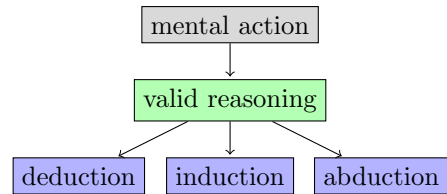
In EP1:31-37, Peirce articulates the three main types of valid logical reasoning. These are deductive, inductive, and hypothetical (or abductive) reasoning. We won’t discuss these in detail but a quick overview will be helpful to understand what Peirce means when he says that we ought to reduce *mental action* to the formula of valid reasoning.

Definition 1 (deductive argument) *An argument is a deductive argument if and only if it is logically impossible for the premises to be true and the conclusion is false.*

Definition 2 (inductive argument) *An argument is an inductive argument if and only if it reasons from the assumption that all members of a set A are assumed to have a characteristic P which are known to be found in a set B, where B is a subset of A.*

Another way that Peirce defines an inductive argument is an argument “which assumes that that is true of a whole collection which is true of a number of instances taken from it at random” (EP1:33).

Definition 3 (abductive argument) *An argument is an abductive argument if and only if it involves reasoning that an object o has a property P from the premise that the property P is known to always accompany other properties A, B, C,*



One problem with Peirce’s suggestion that our minds work according to the process of valid inference is the existence of fallacious reasoning (EP1:37). That is, individuals routinely reason from premises to conclusions that are not warranted by those premises. Peirce’s response is rather detailed so we won’t consider it either.

Discussion 2 *One consequence of not having a power of introspection along with not having a power of intuition is that our understanding of the external world and our own minds is that working of our own mind is reducible to the process of valid inference (proof). This seems to suggest that our minds are nothing more than powerful logical engines, viz., their main and perhaps only operation is to draw conclusions from prior ideas (premises). Does this square with the common sense view of how people understand how their minds operate?*

0.3.2 Consequence of incapacities 1, 2, and 3

Peirce begins his discussion of the third incapacity on EP1:38. Recall that Peirce contends that have no power of thinking without signs (??). He restates this denial more positively as follows:

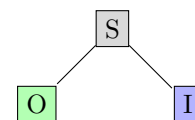
whenever we think, we have present to the consciousness some feeling, image, conception, or other representation, which serves as a sign (EP1:38).

Note that when Peirce says that whenever we think, we always think in signs, his conception of a sign is extremely broad as it can be a feeling, an image, or a number of other representations, e.g. words, diagrams, etc. But what is the consequence of all thought being through signs? Peirce answers this question by giving a more detailed account of the nature of signs. The field of study (largely pioneered by Peirce) of studying signs in general is called semiotics.

Definition 4 (semiotics) *Semiotics (also referred to as semiology and semiotic studies) is the study of the nature of signs, their relations, and impact on thought.*

First, we need a definition of a sign.

Definition 5 (sign) *A sign S is something that stands for something (and object, O) to some thought (interpretation, I).*



A sign is said to have three elements to it:

- its material quality
- its denotative character

- its representational function

The **material quality** of a sign are the characters of the sign itself independent of its capacity to represent anything to anyone. For example, the sign “man” has three letters on a page, a pointing finger has a particular shape and direction, a photograph is flat with colors, and so forth.

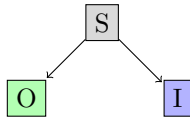
The **denotative application** of a sign is the character of a sign that allows it to stand for an object. For example, a weathervane has particular features that allow it to denote (refer to) the direction of the wind in that the weathervane is in physical relation to the wind itself. A drawing of a person has features that allow it to refer to that person in virtue of the fact that the drawing resembles that person.

Finally, the **representative function** is perhaps the most difficult to understand. This feature of a sign is neither its material quality nor its denotative application. Instead, Peirce takes this aspect of a sign to be found in how the sign is interpreted or thought of. One way of understanding this idea is through conventional signs. The sign “man” only stands for its object in virtue of the fact that individuals interpret the sign man in this way. The same is true for the weathervane and its physical connection to the wind. The sign has meaning only insofar as the direction of the weathervane is interpreted as being in a physical connection with the direction of the wind.

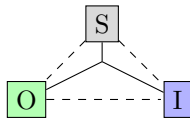
While Peirce’s analysis is rather detailed, we can distill some of the general consequences of all thought being in signs.

First, if we think of something, then that thought has some material quality to it, is about something, and is capable of being interpreted by someone else or ourselves. Putting this negatively, there are no invisible uninstantiated thoughts, there are not thoughts that don’t stand for something, and there are no meaningful thoughts that are incapable of being interpreted.

One way of thinking about this implication is through the claim that *all thought is triadic in nature*. The sign (and thought) is said to have a **triadic** relation (three-place relation) in that the **sign** can only *stand for* its **object** in virtue of *standing to* some **interpretation**. Thus, rather than thought proceeding by an object causing a sign which then causes an interpretation. Two two-place relations:

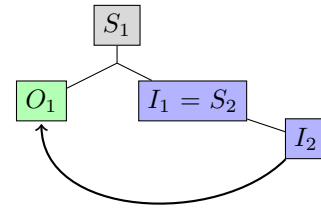


The sign is triadic in that the sign cannot be what it is without being interpreted as standing for an object to an interpretation.



Second, thought has a forward-looking direction. Consider that all thought is in signs (??) and that one element of a sign is that it stands to some interpretation (I). But if an interpretation

is nothing more than a thought, and all thoughts are in signs, then the meaning of a sign is found in its future interpretation.



More concretely, the consequence then is that ideas or thoughts you have at a given moment are not totally encapsulated. The meaning of any idea of you have is not totally found in the moment you have it. Instead, the *ultimate* meaning of various signs, e.g. emotions, scientific concepts like *electricity*, or political terms are ultimately found in some future interpretation.

Third, all new thought is thought that emerges out of prior thoughts. This is because all thoughts are in signs (??) and we lack the power to have thoughts not determined by prior signs (??). This implies that new, creative thinking does not emerge out of nothing. Instead, it emerges out of a prior chain or process of thought.

More concretely, individuals often like to claim they were divinely inspired or that they themselves were the sole creators of an idea or thought. But, while we might be able to contend that individuals are creative and responsible for new ideas, these ideas (i) do not come out of nowhere since they are determined by prior ideas and (ii) no individual is completely responsible for their ideas since we are social beings and our ideas are influenced by others.

Discussion 3 *There are three main consequences drawn from the fact that there is no power to think without signs. First, our thought has a triadic character (it always stands for something to someone through something). Second, the meaning of our thought is not found in the moment in which we think it but is instead found in its future development. Third, our ideas are historical in that they always are determined by prior ideas. What do you think of each of these consequences?*

1. *With respect to the second consequence, what would this imply for ideas like the meaning of my life, the meaning of the country, scientific ideas?*
2. *With respect to the third consequence, how ought we to understand any individual accomplishment?*

0.4 Consequence of incapacities (1)-(4)

The fourth incapacity is that we have no conception of the absolutely incognizable (??). In other words, we cannot conceive what cannot be conceived. We will focus on two consequences of this incapacity.

1. what it implies about the meaning and nature of reality
2. what it implies about the human being

0.4.1 What is real

In this section, we consider two points about reality. First, Peirce's argument for metaphysical idealism. Second, his account of what it means for something to be real.

Peirce claims that we have no conception of the incognizable. His argument is relatively terse:

- P1: The meaning of the word is the conception it conveys (the meaning of a sign is its interpretation)
- P2: To say something is "absolutely incognizable" has no meaning since it conveys no conception (it conveys no interpretation).
- P3: Therefore, "absolutely incognizable" is meaningless.

On the one hand, it seems obvious that we have no conception of the absolutely incognizable, but people often talk as though they do have such a conception. In fact, they make use of various signs whose meaning is beyond any idea or comprehension. Consider the following definition of what it means for something to be real.

Definition 6 (metaphysical realism) *To be real is that which is entirely independent of all thought such that if i is an idea and o is an object, then any change in i has any no effect on o and any change in o has no effect on i .*

Metaphysical realism takes *real objects* to be things that are absolutely beyond our ideas and so our ideas have no relation to these objects. On this approach, real things are things in themselves without any relation to our ideas. Metaphorically, this view takes reality to be *wholly beyond* our ideas.

But, if we have no conception of the incognizable and metaphysical realism makes reality incognizable, then we have no meaningful conception of metaphysical realism. It follows then that reality must be cognizable or relative to the mind. As Peirce puts it:

there is no thing which is in-itself in the sense of not being relative to the mind (EP1:52).

This is the position of **metaphysical idealism**.

Definition 7 (metaphysical idealism) *Metaphysical idealism is the position that reality is capable of being known or that which exists must exist relative to the mind.*

Note 1 *It is important, however, to note that this does not imply that just because I don't have a conception of something it follows that thing does not exist. It would imply, however, that if no one could ever have a conception of something, then that thing would not exist.*

The second point that Peirce considers is what it **means** for something to be real. Peirce notes that our *idea of reality* likely emerged when we encountered that there was something unreal, an illusion, or our own ignorance. This encounter prompted the distinction between something that is relative to our own minds and something that would stand *in the long run for any mind*. Peirce thus contends that our idea of reality implies:

the notion of a COMMUNITY, without definite limits, and capable of an indefinite increase of knowledge (EP1:52).

To put this simply, the meaning of *reality* is the object of an opinion held by some future collection of individuals who have extended their knowledge to such a significant degree that they hold constantly reaffirm the opinion and will never deny it. In short, the real is what is represented by the belief of a future group of individuals.

Discussion 4 *People commonly hold that reality is "out there" and "independent of our thoughts", but Peirce contends that reality is cognizable (must stand in relation to the mind and knowledge) and is what would be represented by a future community of individuals. How would you go about trying to convince someone of Peirce's position? Are you, yourself, convinced of it?*

0.4.2 The nature of human beings

The last consequence that we will consider concerns what the four incapacities imply about the nature of human beings. Peirce's general point is to insist that besides (i) the material properties that distinguish us and (ii) the differences in complexity, human beings are nothing more than signs. And so, Peirce will sometimes refer to human beings as man-signs.

There are a number of steps to Peirce's argument, but we will focus on the simple argument he makes halfway through this discussion.

- P1: Every thought is a sign (??)
- P2: Human life is a train of thought.
- C: Therefore, human life is a train of signs.

Peirce makes several points about this argument but we'll focus on two.

The first is that just as we grow as human beings so do signs. Peirce writes:

The man-sign acquires information, and comes to mean more than he did before. But so do words. Does not electricity mean more now than it did in the days of Franklin?

The second is that while we think that we are the master of meaning and signs have no meaning without us, Peirce notes that this isn't entirely true for if there were no signs, we would have no thoughts, and without any thoughts we wouldn't be who we are. Peirce writes:

Man makes the word, and the word meaning nothing which the man has not made it mean, and that only to some man. But since man can think only by means of words or other external symbols, these might turn round and say: "You mean nothing which we have not taught you, and then only so far as you address some word as the interpretant of your thought." (EP1:54).

In other words, human beings as signs exist with non-human signs in a reciprocal relation.

In fact, therefore, men and words reciprocally educate each other; each increase of a man's information involves and is involved by, a corresponding increase of a word's information (EP1:54).

Discussion 5 *What is there to be learned by thinking of ourselves as signs? That is, what is there to be learned by thinking of who we are as a train or chain of signs?*