

# Lecture 6: “Of Reasoning in General”

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This lecture discusses Peirce (1992a).

## 1 The Central Ideas

The sequence of definitions Peirce provides forms an elegant cascade.

**Logic** p. 11: “the art of reasoning”; “The science is largely, not wholly, one of rearrangement.”

1. Damn! Does that mean that Peirce has a “largely, not wholly,” syntactic view or formalist view of logic?
2. In any event, it does *not* entail he thinks logic to be trivial. The sun formed largely, not wholly, from rearrangement of the aboriginal intra-galactic nebula.<sup>1</sup>
3. [\*\*\* role of colligation \*\*\*]

**Reasoning** p. 11: “the process by which we attain a belief which we regard as the result of previous knowledge”

1. *our own* previous knowledge?

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1. Geroch (1982, p. 611): “After all, the process of building a log cabin, say, from a forest consists exactly of applying judiciously chosen stresses.”

2. any distinction between “knowledge” and “belief” intended?
3. will *any* old process do? (a Rube Goldberg device resulting in appropriate rearrangement of synaptic connectivity and neuronal firing patterns, *e.g.*, [https://en.wikipedia.org/wiki/Rube\\_Goldberg\\_machine#/media/File:Rube\\_Goldberg's\\_%22Self-Operating\\_Napkin%22\\_\(cropped\).gif](https://en.wikipedia.org/wiki/Rube_Goldberg_machine#/media/File:Rube_Goldberg's_%22Self-Operating_Napkin%22_(cropped).gif), with rather the result that the brain is composed than the mouth wiped)

**Belief** p. 12: “a state of mind of the nature of a habit, of which the person is aware, and which, if he acts deliberately on a suitable occasion, would induce him to act in a way different from what [*sic*] he might act in the absence of such habit”

1. a counterfactual definition—the modality is crucial, as not every habit gets actualized in the appropriate way, but Peirce will still want to talk of belief
2. a habit of thought? a habit of (corporeal, practical, social) action? a combination?
3. what kinds of differences are required? surely not every possible kind of difference, or every particular difference, can support the weight needed to confer believability on a habit; and what makes an occasion *suitable* for serving as part of the criterion on the basis of which one judges that a habit is in fact a belief?
4. what is the force of “deliberately”? the alcohol example (which clearly channels Aristotle’s discussion of *akrasia*) suggests that desires or rationally endorsed goals play some role
5. is there no tacit or implicit belief? how strong is the force of “aware” here? (think of my example, from the previous lecture, of automatically stepping over the bicycle while walking down the sidewalk reading—did I believe the bicycle to be there?)
6. on standard accounts, beliefs have as their object *facts*; and the way Peirce talks suggests that he has this picture in mind (*e.g.*, p. 18: “In the eye of logic, two propositions expressing the same fact are equivalent, or virtually (at least) identical.”); how can a habit have a fact as its object? is every recognition of a fact not a belief (unless it eventuates in a habit)?
7. one potentially fruitful way to get a handle on these issues: think about what it would mean, on this definition, to have a *mistaken* or *erroneous* belief, or for two people to have opposing (even contrary) beliefs

**Judgment** p. 12: “an act of consciousness in which a person thinks he recognizes a belief”

1. one’s own belief? surely so, otherwise the restriction to belief (other than, say, fact) is unwarranted
2. “recognize”: must mean something peculiarly strong here, something like “endorse”, for one is already aware of a belief, if it is a belief; so perhaps this is used in (at least) 2 kinds of cases: a new belief is formed, and I endorse it; reasons come to light for me to endorse a belief I previously had been merely aware of, without having had a firm evaluation of it one way or the other (I had never thought seriously about it before, say); this will all get clarified, one hopes, in the later discussion beginning on p. 19

3. “*thinks* he recognizes. . .”—for of course judgments may be mistaken; but what kind of mistake can one make here? it does not seem plausible that I might be mistaken about the fact *that* I endorse the belief; so perhaps the possible mistake is that my endorsement itself is erroneous, unfounded, or otherwise goes astray

**Proposition** p. 12: “the expression of a judgment”

1. presumably “expression” is to be taken liberally: verbal, graphic, using semaphor, in private thought, . . . (see the list straddling pp. 18–19)
2. and so a judgment is (surprise!) a sign
3. but then so must a judgment be
4. but then so must a belief be
5. but then so must a reasoning be
6. is it the case that every expression of a fact need not be a proposition, only those relevantly related to judgments? or is Peirce not being so strict with his definitions?

**Inference** p. 22: “the conscious and controlled adoption of a belief as a consequence of other knowledge”

1. *colligation*: “bringing together certain propositions which we believe to be true, but which. . . we have hitherto not considered together, or not as united in the same way”  
⇒ *conjunctive proposition*, the premises or antecedent or protasis
2. following colligation: “the contemplation of that complex icon [*i.e.*, mental representation of a proposition], the fixation of the attention upon a certain feature of it, and the obliteration of the rest of it, so as to produce a new icon [*i.e.*, mental representation of a proposition]”; note that this makes it an act of *prescision* (or *abstraction*) as defined in Peirce (1992b, §5, p. 2), with all that entails (see Curiel 2020)
3. finally, *reasoning*: “conscious control of the operation [of adopting a belief as a consequence of other knowledge]”

## 2 Broad Questions

1. How can Peirce avow that he is not a psychologist about logic? I think: because even though for him logic is about *reasoning processes* in cognitive beings, in the strong sense that one cannot understand what it is without understanding those actual processes, there is, nevertheless, right and wrong, better and worse—the processes must, in some sense, respect the facts, and by that I mean the *facts about reasoning*, not just the facts one reasons about (*cf.* p. 11, “The facts upon which logic is based. . .”)

## 3 Invitation to a Short Essay

As usual, I invite you to write me a short discussion (no more than 2 pages, *i.e.*, no more than 1000 words) on any issue discussed in this week’s reading. You can raise further questions, propose

answers or interpretations, or whatever seems of most interest to you. If you get it to me by the start of next lecture (16. Jun), then I will return it to you with my comments the following week.

## References

- Curiel, E. 2020. “Lecture Notes on Peirce’s “On a New List of Categories””. The basis for lectures given in the course “The Philosophy of Charles Sanders Peirce” taught by Curiel at the Munich Center for Mathematical Philosophy, summer semester 2020., <http://strangebeautiful.com/lmu/lectures/peirce-lect-02-categories.pdf>.
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- Peirce, C. S. 1868. “On a New List of Categories”. *Proceedings of the American Academy of Arts and Sciences* 7:287–298. Presented to the American Academy of Arts and Sciences on May 14, 1867., doi:[10.2307/20179567](https://doi.org/10.2307/20179567).
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