Phil273o (Objectivity and Subjectivity) will be the fourth seminar-course I’ve taught with Amartya Sen and Eric Maskin. Here are some directions our seminar may take; we will pay particular attention to topics that connect specifically with the experience, and interests, of the participants in our seminar.

1. Objective

The noun object, the adjective objective, and the notion objectivity capture quite a range of thought. And there are many ways to think about, and to use them.

To begin crudely, the adjective objective is sometimes used in a ‘via negativa’ sort of way; meaning: un-biased; that is: you label your assertion, or viewpoint, objective as a signal that despite the fact that one might worry that that viewpoint, or judgment, is tainted with the prejudices of complicating subjective or partial sentiments, you feel that it is not.

A (putative) objective view would then offer a take on the matter... with no hint of subjective bias.

It may be challenging to go on to give a more elaborate explanation of this usage. But the curious assumption here is that one can view something without actually taking a point of view; i.e., impartially, and either coordinate-free, or at least in an invariant way, independent of frame of reference—like the invariant formulations of Maxwell’s Laws.\(^1\)

\(^1\)But we also have Maxwell’s comment—in his essay Analogies in Nature—that

"the only laws of matter are those which our minds must fabricate, and the only laws of mind are fabricated for it by matter"
(of Electromagnetism) or Einstein’s Special Relativity.

Slightly different, and in expressed in a somewhat more formal setting, is Donald Davidson’s take on objectivity in his book: *Subjective, Intersubjective, Objective* [6].

Thought, propositional thought, is *objective* in the sense that it has a content which is true or false independent (with rare exceptions) of the existence of the thought or the thinker.

As Lorraine Daston and Peter Galison mention in their article “the Image of Objectivity” [5] and their book “Objectivity” [4], ‘the word “objectivity” has a somersault history.’ In the writings of Duns Scotus and William of Ockham the word appears in adjectival form rather than substantive. Moreover:

... the terms [objective/subjective] meant almost precisely the opposite of what they mean today. “Objective” referred to things as they are presented to consciousness, whereas “subjective” referred to things in themselves. (See page 29 of [4].)

Commentator’s on Acquinas try to explain his notion of *essence* (Essentia) —cf. [1]— as a way of bridging the distinction between *formal concept* and what they call *objective concept*. E.g., Thomas Cajetan (1469-1534) writes, in connection with Acquinas’s thought:

... For example, the formal concept of a lion is that representation where the possible intellect forms of a leonine quiddity when we want to know it; the objective concept of the same thing is the leonine nature itself, represented and known.

See page 326 of [8] and/or Page 103 of [10].

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2 And compare this to Kant’s ‘Copernican revolution’ discussed below.

Daston and Galison give a historical account of the evolution of the notion of scientific objectivity and as it applies to the daily practice of science. More specifically, they focus on the visual images in scientific atlases (from atlases of flora in the eighteenth century to more modern records—ranging over a host of different ‘objects of scientific enquiry’). They see a progression—an evolution—of ways of producing, and ways of understanding, the images presented as ‘science,’ and they label three phases in the manner of production and choice of those presentations; in chronological order: *truth-to-nature, mechanical objectivity, and trained judgment*. In effect, they offer a history of the changing attitudes toward objectivity in science.

3 Although, I think the phrase *substantive concept* might convey more accurately the sense of Acquinas’s text than *objective concept*. 

2
Regarding the noun ‘object,’

- the arresting turn of thought in Kant’s *Critique of Pure Reason* where *object* seems to be viewed as *object*—a thing that is thrown out’ by, in effect, the subject and dressed in clothes (such as “space and time”) so that it can be properly re-presented (back to that very subject) as something that can be thought about. This revision (of the ordinary sense of meaning of *object*—and consequently also of the very notion of *idea*) is described by Kant (in the Preface to the second Edition of the Critique) as a ‘Copernican Revolution.’

Kant paints a picture regarding *ideas as objects of thought* quite different from that offered by any of his predecessors;

e.g., (and here we’ll ignore chronological order, but nevertheless begin with):

- the transcendental nature of Plato’s *eide*—i.e., the main ingredient in what is often referred to as his *theory of forms*,

  or

- the axiomatic turn of mind of Spinoza, as reflected in his formulating “A true idea must agree with its object” as an Axiom in his *Ethics*,

  or, taking a somewhat different direction:

- Descartes offers the proposition that a greater measure of *objective reality* (“realitatis objectivae”) are conveyed by ‘ideas’ that represent *substances* (this occurs in a curious context in his *Méditations*—whose subtitle is “First Philosophy”),

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4 From Kant’s [7] (Bxvi):

Up to now it has been assumed that all our cognition must conform to the objects; but all attempts to find out something about them a priori through concepts that would extend our cognition have, on this presupposition, come to nothing. Hence let us once try whether we do not get farther with the problems of metaphysics by assuming that the objects must conform to our cognition, which would agree better with the requested possibility of an a priori cognition of them, which is to establish something about objects before they are given to us. This would be just like the first thoughts of Copernicus, who, when he did not make good progress in the explanation of the celestial motions if he assumed that the entire celestial host revolves around the observer, tried to see if he might not have greater success if he made the observer revolve and left the stars at rest. Now in metaphysics we can try in a similar way regarding the intuition of objects. If intuition has to conform to the constitution of the objects, then I do not see how we can know anything of them a priori; but if the object (as an object of the senses) conforms to the constitution of our faculty of intuition, then I can very well represent this possibility to myself.

5 The idea of a subject-less idea is... arresting.
these attitudes regarding ‘idea’ being in contrast to

* the relaxed view of John Locke who comes out against the existence of "innate ideas" and for whom the notion idea is simply
  “the best word to stand for whatever is the object of the understanding when a man thinks; I have used it to express whatever is meant by phantasm, notion, species, or whatever it is that the mind can be employed about in thinking.”

and consider the notions of idea or law as applicable to the sciences, with the expectation that such formulations

– have scientific objectivity; i.e., if they are experimental findings, are deduced objectively; e.g., by double-blind—and/or randomized controlled experiments

– and have the aim of describing Nature (as something that might admit objective description).

The concept of Nature, as the substrate of everything, and as the prime target of objective description (of “reality”)

– pervades ancient Greek thought (φυσις) but is, perhaps, most explicitly focused on in Aristotle’s Physics.
– It is succinctly encapsulated by Lucretius’s:

  All nature, then, as self-sustained, consists
  Of twain of things: of bodies and of void
  In which they’re set, and where they’re moved around.
  (this is in his De Rerum Natura).

– Francis Bacon brusquely sets forth the manner in which Nature should (not) be investigated[6] in the Preface to his Novum Organum:

  They who have presumed to dogmatize on nature, as on some well investigated subject, either from self-conceit or arrogance, and in the professorial style, have inflicted the greatest injury on philosophy and learning. For they have

tended to stifle and interrupt inquiry exactly in proportion as they have prevailed in bringing others to their opinion: and their own activity has not counterbalanced the mischief they have occasioned by corrupting and destroying that of others.

– Wordsworth, in his poem *The Prelude*, conceives of Nature as an agent, and one to whom one might show gratitude:

This verse is dedicate to Nature’s self
And things that teach as Nature teaches

or to whom one might address in praise:

...O Nature! Thou hast fed
My lofty speculations...

– In the era when the Theory of Relativity was freshly on the scene—and even before Quantum Mechanics had entered—one can see a slight shift of attitude toward the ”agent” Nature. Henri Poincaré in his treatise *Science and Method* asks, rhetorically.

Is nature governed by caprice, or is harmony the reigning influence? That is the question.

and offers:

It is when science reveals this harmony that it becomes beautiful, and for that reason worthy of being cultivated.

while Bertrand Russell, in the preface to that treatise offers:

The conception of the “working hypothesis,” provisional, approximate, and merely useful, has more and more pushed aside the comfortable eighteenth century conception of “laws of nature.” Even the Newtonian dynamics, which for over two hundred years had seemed to embody a definite conquest, must now be regarded as doubtful, and as probably only a first rough sketch of the ways of matter.

and Poincaré emphasizes the inherently subjective choices necessary to be made in the enterprise of science as it explores nature:

Trying to make science contain nature is like trying to make the part contain the whole.
He begins his treatise by noting:

Tolstoi explains somewhere in his writings why, in his opinion, “Science for Science’s sake” is an absurd conception. We cannot know all the facts, since they are practically infinite in number. We must make a selection; and that being so, can this selection be governed by the mere caprice of our curiosity? Is it not better to be guided by utility, by our practical, and more especially our moral, necessities?

– Nevertheless “Letting Nature speak for itself” as a label for “scientific objectivity” emphasizes a desire—idealized and unreachable as it may be. (See the discussion in [4].)

2. Subjective

As for the noun subject, the adjective subjective, and the notion subjectivity—these capture a similar range. Often only implicit is the presence (and nature) of the actual subject emanating from whom is the “subjective” viewpoint that is being examined. From

• Kant’s striking concept: the universal subjective—a yin/yang combination of objective and subjective thought—that, according to Kant, is a fundamental ingredient of aesthetic judgments. Namely, we are all equipped with an internal universal subjective temperament that—according to Kant—consists of a model (in our thoughts) of all-of-humanity (this ‘model’ may or not be an accurate portrayal of the sensibilities of all humanity; it doesn’t matter). We necessarily invoke this model, in order to make aesthetic judgments—e.g., “this song is beautiful”—by thinking (and referring to the model) that all humanity would/or/should concur with our judgment. This type of aesthetic judgment is on a different plane and is quite different from “simple likings,” such as liking this particular ice cream cone.

• the Bayesian view of probability, where the ‘subjectivity’ of one’s prior assessment of probability gets incrementally ‘educated” by the feedback loop of further data,
the vast literature regarding ‘the will’—including the conundra presented by the notions of free will and determinism. If anyone is interested in taking this up in a final paper project, we can offer an appropriate reading list: this topic certainly is within the span of our seminar-course.

3. The contrast: objective versus subjective

• It has a similar feel to the apposition: knowledge versus opinion as in the ancient literature (episteme versus doxa). A similar such dichotomy occurs in most of the later treatises regarding “human understanding.” E.g., John Locke formulates it in Chapter XXI Of the Division of the Sciences in his Essay Concerning Human Understanding: “discovery of truth” (or what Locke elsewhere delineates as “the objects of understanding;”) versus thoughts about “things in [the subject’s] own power, which are his own actions, for the attainment of his own ends.”

• In Ethics, where the subject as agent—willful, responsible, innocent or culpable—plays a predominant role, much has been made of various ’objective anchors’ (such as Kant’s categorical imperative) that may be expected to interact with that subjective will.

• In Mathematics, the issue (objective versus subjective) spans attitudes labelled mathematical platonism, intuitionism, formalism.
  – Mathematical platonism takes mathematical substance as having an essence independent of human thought; as being part of a pre-noetic structure of the cosmos; and the aim of mathematics is to faithfully describe it.
  – Intuitionism, in its various forms, puts the spotlight on the manner in which mathematics is actually thought.

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Footnotes:

7 Locke goes on to talk of:
“the signs the mind [that] makes use of both in the one and the other, and the right ordering of them, for its clearer information.”

8 There is quite a range of literature about this. Here’s one interesting example:
– (The Kantian take on this is marvelously subtle: not easily classifi-able.)
– A formalist approach focusses specifically on the language of math-
ematics as holding the key to its meaning.

A good start for understanding all this is to read David Hilbert’s essay: *On the Infinite.*

What genre of items (of viewpoints, assertions, etc.) can or should fall under the categories: objective, or subjective, or neither? What do these terms serve? I.e., what would we lose if we simply erased it from our thoughts? What, possibly, might we gain (if we ignore these notions)? How were (and how are) they used? Abused?

These are suggestions for some themes for our seminar-course.

Except for the first (“introductory”) session and the final (“wrapping up”) session, each of our other sessions will be ‘chaired’ by one of the professors. To say that we each ‘chair’ a session means that we expect full involvement of students in discussions and also, at times, presentations. That is, besides a final paper for the course, we may request a (usually very short) presentation on the part of some volunteers.

- The substance of the final paper should be ’topical,’ in the sense that it should be directly related to the discussions and reading that we have done.
- it should investigate some issue that you actually want to know about, or care deeply about;
- and (it would be great if it can) make use of your own expertise and experience.

References

[1] Thomas Aquinas, *De Ente et Essentia* (transl: *Aquinas on Being and Essence* a translation and interpretation, 1965; adapted and

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