Dialetheism and the History of (Western) Philosophy

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1 Lecture 1: Paraconsistent Logic

These lectures concern the topic of dialetheism, the view that some contradictions are true, and the bearing of this on some matters in the history of philosophy. This is mainly Western philosophy—Eastern philosophy has its own story to tell in this matter—though there will be a few comments on Eastern philosophy as we go along.

There is much more to be said about all the topics we will discuss, and certainly many of the things to be said may be contentious. However, this is not the place to go into matters in gruesome detail. The point of these lectures is to get the basic ideas across—the assumption being that most people in the audience will not have met these issues before. At the end of each lecture, we will a give reference or two where further and deeper discussions can be found.

It is impossible to understand contemporary dialetheism without understanding something about contemporary paraconsistent logics—logics which tolerate contradictions. This lecture will therefore be about that matter. We will start with a precise definition of the topic. Following that, we'll have a look at some of the history of the area, some of the basic formal ideas involved in a paraconsistent logic (bearing in mind that many of the members of the audience will not know a great deal about contemporary formal logic), and we'll finally turn to some of the applications of paraconsistent logic.

For non-logicians, a few words on terminology. The symbols \neg , \lor , and \land mean, respectively: *it is not the case that, or, and and.* 'iff' is logicians' jargon for *if and only if,* that is, a biconditional.

1.1 Definition of Paraconsistency

Paraconsistency concerns logical consequence relations. We will write such a relation as \vdash . The logical principle of *Explosion* (or, to give it one of its Medieval names, *ex impossibile quodlibet sequitur*—from an impossibility anything you like follows) is the following:

• for all A and B: $A, \neg A \vdash B$

That is, from any contradiction everything follows. Thus, according to this principle, the following inferences are all valid:

• Padua is in Italy; Padua is not in Italy ⊢ Melbourne is in Australia

- Padua is in Italy; Padua is not in Italy ⊢ Melbourne is in Germany
- The Moon is round; the Moon is not round ⊢ Slavery is legal in the United States
- The Battle of Waterloo was fought in 1815; the battle of Waterloo was fought in 1816 (and so not 1815) ⊢ Water is made of hydrogen and oxygen.

That these inferences are valid certainly seems odd, since the premises appear to have nothing to do with the conclusions.

Those who know little of contemporary formal logic will, then, find it surprising that Explosion is a valid principle of inference in the received logic of our day—the first logic that one will meet in an introductory course on logic. This logic is now standardly called "classical logic", though the name is highly inappropriate, since the logic was invented by Frege, Russell, and others, just over a century ago, to do justice the the inferences employed in the mathematics of their day. So it has nothing to do with any of the great classical civilisations of Greece, Rome (India or China).

Now, a logical consequence relation, \vdash , is *paraconsistent* if, according to it, Explosion is *not* valid. That is, not everything follows from a contradiction. Some things may follow, but not everything.

Incidentally, the name was coined by the Peruvian philosopher Miró Quesada in 1976, with reference to the work of Newton da Costa. The prefix 'para' has two distict meanings. The first is 'rather like', or 'sort of' as in *paramilitary*, and *parachute* (sort of falling). The second is 'beyond' as in *paranormal* or *paradox* (beyond belief). Newton tells me that Quesada intended the first meaning. Personally, I have always preferred the second.

1.2 The History of Paraconsistency

In the West, formal logic has undergone significant development in three periods, with two periods of relative stagnation interspersed between them. The first was in Ancient Greece; the second was in the Medieval European universities; the third is the contemporary period, starting towards the end of the 19th Century, and still in full flood. Paraconsistency features in each of these three periods:

1.2.1 Ancient Greece

The person who invented formal logic in the West is generally agreed to be Aristotle, who formulated a system of logic called *syllogistic*. Syllogistic inferences have two premises and a conclusion, each of the form: All/no/some S are P. Aristotle gave an account of which inferences of this form are valid. And despite what one might expect, given the name 'classical logic', Explosion is not valid. For example, the following inference is not a valid syllogism:

• No S are M; some M are S; so all Ss are Ss

even though the premises are contradictory. Indeed, Aristotle himself points out that contradictions entail some things but not others. Note also that in a syllogism, there are normally three distinct terms, S, M, and P. In the above syllogism, there are only two. (S is doing duty for P as well.) But Aristotle also says that this is quite permissible.

At about the same time as Aristotle, or a little later, Stoic logicians were also developing a formal logic. In modern terms one might say that Aristotle's logic was a quantifier logic, whereas Stoic logic was a propositional logic. We know much less about Stoic logic than about Aristotle's, since the original texts are no longer extant. Things have to be pieced together from what others report. Now, as far as we know, Explosion was not valid according to Stoic logic. There are no texts which tell us that the Stoics took it to be valid, and we certainly might expect this if it were the case. One of the major sources of what we know of Stoic logic is the Skeptic Sextus Empiricus, who was a fierce opponent the Stoics. If they had endorsed Explosion, Sextus would presumably have gone to town on the matter!

1.2.2 Medieval Logic

So if Explosion does not enter Western logic in the Ancient period, when does it enter? As far as we know, the first person to advocate it was the logician William of Soissons, working in Paris in the 12th Century. William was a member of a bunch of logicians called the *Parvipontinians*. And as well as living by a small bridge, William invented or discovered the following argument for Explosion:

$$\begin{array}{c} \neg A \\ \hline \neg A \lor B \\ \hline B \end{array}$$

The first inference is the right hand column is sometimes called *Addition*. The final inference is often called the *Disjunctive Syllogism*, or to give it its Medieval name, *modus tollendo ponens*.

It is worth noting that Stoic logicians certainly endorsed the Disjunctive-Syllogism, and had a truth-functional account of disjunction, which would seem to validate Addition. It is also unlikely that logicians as good as the Stoics would have missed this argument. So why did they not endorse Explosion? The answer appears to be that according to them one cannot even form a disjunction unless the disjuncts are exclusive and exhaustive. So today is monday, or today is tuesday, or ... today is sunday is fine. But the moon is not round or slavery is legal in the USA is not. It is probably no accident that William's argument appears at about the same time that the more modern notion of disjunction is starting to become common.

Anyway, after this, Explosion is well known in Medieval logic. Did Medieval logicians endorse it? That's a tricky question. Medieval logicians are very good at drawing distinctions, and an important one they drew was between formal validity (validity in virtue of form) and material validity (validity in virtue of content). Unfortunately, different logicians drew this distinction in different ways too. The simplest way to draw the distinction is to take formal validity to be validity in terms of syllogistic form. If one does this, Explosion is not formally valid, but it is materially valid because of the content of the premises, as can be seen from William's argument.

Of course, if there are different notions of validity, an obvious question is when you use which notion. Medieval logicians do not seem to have paid a great deal of attention to this question. Yet in some contexts, it would seem that Explosion could not have been allowed. There is an area of study called *Obligationes*. In this, someone is given a claim to defend, and then a challenger asks questions. The defendant has to answer *yes* or *no*. The challenger wins if they can trap the defendant in something agreed beforehand to be unacceptable. Now, it is fair game to give the defendant an impossible proposition to defend, such as that a man is an ass (taken to be metaphysically impossible), A. The defender may accept also that a man is not an ass (since this is a necessary truth), $\neg A$. But they will not use this in a Disjunctive Syllogism. The rationale for doing so would be that A rules out the $\neg A$ in $\neg A \lor B$, and obviously it does not do this in the context.

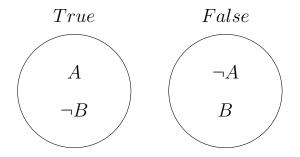
1.2.3 Modern Logic: Phase 1

After the rise of Humanism in the Renaissance, all the subtleties of Medieval logic fall into oblivion. All that is left is a knowledge of Syllogistic, and a few bits of Medieval logic (as one might guess, from names such as *modus ponens*). Formal logic then returns to being uncontroversially paraconsistent.

Things change at the beginning of the third great period, the modern one. Frege and Russell develop classical logic, according to which, Explosion is valid. Let me spell out why. In the semantics for classical logic, a situation (interpretation, model) divides formulas into the true and the false, this dichotomy being exclusive and exhaustive. That is, any A is in one of these two zones but not both. Negation works as follows:

- $\neg A$ is true in a situation iff A is false
- $\neg A$ is false in a situation iff A is true

Hence we have the following situation:



An inference is *invalid* if there is a situation in which the premises are true and the conclusion is not. It is valid otherwise. That is:

• an inference is valid iff in every situation where the premises are true, so is the conclusion

Given this set up, there is no situation in which A and $\neg A$ are both true. A *fortiori*, there is no situation in which A and $\neg A$ are both true and B is not true. Hence, Explosion, $A, \neg A \vdash B$. is valid—vacuously, as one might say.

Let us throw the truth and falsity conditions for disjunction and conjunction into the picture. These are as follows:

- $A \lor B$ is true in a situation iff A is true or B is true
- $A \lor B$ is false in a situation iff A is false and B is false
- $A \wedge B$ is true in a situation iff A is true and B is true
- $A \wedge B$ is false in a situation iff A is false or B is false

Given these conditions, it is easy to check that the Disjunctive Syllogism is also valid, as one might expect, and that $\neg(A \land \neg A)$ is a logical truth (that is, true in all situations).

1.2.4 Modern Logic: Phase 2

In the years after classical logic was invented, many different (non-classical) systems were also invented. Perhaps intuitionist logic is the best known of these. But according to all such systems Explosion was valid, and for essentially the same reason that it is valid in classical logic: there is no situation in which both A and $\neg A$ are both true.

Matters changed around the middle of the century, after which many different kinds of paraconsistent logic were developed. This was done by a number of people in very different places, working independently of each other. Though their approaches were various, the key, in each case, was to find some way of allowing for situations in which both A and $\neg A$ may hold. Some early contributors to the process were:

- The Polish logician Stanisław Jaśkowski (c. 1948). Jaśkowski interprets truth as truth at *some* possible world. A can be true at one possible world, and $\neg A$ at another.
- The Swedish logician Sören Halldén (c. 1949). Halldén introduces a third non-classical value both true and false. If A has this value, so does ¬A. In particular, they are both true.
- The Brazilian logician Newton Da Costa (c. 1963). Da Costa takes negation to be non-truth-functional. Thus, the truth value of A does not determine the truth value of $\neg A$. In particular, both may be true.
- The Australasian logicians Richard Routley (later Sylvan) and Val Routley (later Plumwood) (c. 1972). For the Routleys, each world, w, comes with a "mate", w^* , and $\neg A$ is true at w if A is not true at

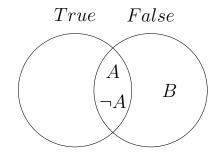
 w^* (not w). Hence if A is true at w and false at w^* , both A and $\neg A$ are true at w.

Since these early years, the subject of paraconsistent logic has been intensely investigated. (The subject has its own category in the American Mathematical Society classification of the areas of mathematics). It it is now a very well understood area of logic.

1.3 A Simple Paraconsistent Logic

As is clear, there are many different approaches to formal paraconsistent logic, but let me explain one in more detail. This is perhaps the simplest of all, and is the paraconsistent logic LP. It may itself be set up in different ways, but the following is particularly easy to grasp. The semantics of LP are *exactly* the same as those of classical logic—with one exception: in a situation the True and the False zones may overlap. That is, something may be true and false in an interpretation. If one allows the two zones to underlap as well (that is, something may be in neither), we get a paraconsistent logic that allows for things to be neither true nor false as well. This logic is called FDE—First Degree Entailment. However, this variation does no real paraconsistent work.

Given this set-up we may have the following situation:

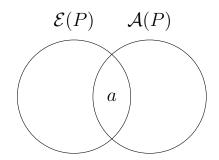


This situation gives a counter-example to Explosion. A is true and false. So $\neg A$ is false and true (the same thing); so both are in the lens where the truths and the falses overlap. In particular, both are true. But B is not true. Hence Explosion is invalid.

Beware: in classical logic being false is the same as not being true. But this is no longer the case once truth and falsity may overlap. Something's being false does not rule out its being true too. And an invalid inference, note, is one where there is some situation in which the premises are true and the conclusion is *not true* (not *false*).

As is easy to check, this situation also shows that the Disjunctive Syllogism to be invalid. A and $\neg A \lor B$ are both true, and B is not. It is also easy to check something one might not have expected: $\neg(A \land \neg A)$ is a logical truth. Indeed, one may prove that LP has exactly the same logical truths as classical logic (though not, of course, the same consequence relation).

This logic can be extended to a first-order logic in exactly the same way as in classical logic. The only difference with classical first-order logic is that, just as truth and falsity may overlap, the extension of a predicate (the things which make it true), and the anti-extension (the things that make it false) may overlap. Thus, let P be any monadic predicate, and let $\mathcal{E}(P)$ and $\mathcal{A}(P)$ be its extension and anti-extension. Then in some situations we may have the following:



The circles now contain all the objects in the domain, and a is in the overlap between $\mathcal{E}(P)$ and $\mathcal{A}(P)$. Hence, Pa and $\neg Pa$ are both true. That is, Pa is both true and false. (Strictly speaking it is an object that is in the domain, and its name that occurs in the sentence; but we needn't worry about that distiction here.)

1.4 Reasons to be Interested in Paraconsistent Logic

The final question to be discussed in this lecture is why one might be interested in using a paraconsistent logic. The quick answer is that we will be so interested when we have information or a theory which is (or is liable to be) inconsistent, but where we do not want the whole thing to blow up in our face. That is, any inconsistencies must be kept firmly under control, and not allowed to spread where they are really not wanted. Let us now look at some examples of this kind.

1.4.1 Data Processing

Modern systems of artificial intelligence store a great deal of data; but they do more than this: they also make inferences from the stored data. Now, any big data are liable to be inconsistent: some sources may be unreliable; errors may have been made in keying in the data; and so on. And one does not want inconsistent data about one thing to infect other matters.

To take a very simple example, suppose that according to stored information the next flight from Melbourne to Sydney is at 12.43 and at 12.44 (and so not at 12.43). If the system is inferring using classical logic, and we ask it if the next flight from Melbourne to Brisbane is as 13.00, it will tell us yes, since it can infer this from the stored data, even if this contains no information about Brisbane flights. In other words, it is sensible to use a paraconsistent inference engine.

It might be suggested that we can just run a consistency check on our data, and where we find inconsistencies, get rid of them before making any inferences. Unfortunately, this is impossible. By a standard and very well known result in logic, there is in general no decision procedure for inconsistency. That is, there is no algorithmic test for consistency.

1.4.2 Interpreting Philosophical Theories

Next, there are a number of interesting philosophical theories which are inconsistent, and not simply because a mistake has been made, but because inconsistency is baked into the very core of the theory. Clearly, if one uses an explosive logic to understand what is going on in the theory (what it entails and what it does not), things will go badly awry. A paraconsistent logic is necessary. And, note, this is to *not* to keep the theory from being untrue. It is so we can *understand* the theory, a matter prior to trying to decide whether it is true or not.

Two interesting examples of such philosophical theories are those of Hegel and Heidegger. Hegel certainly endorses contradictions, and indeed, these play a central role in his dialectics. Heidegger's situation is slightly different. He is concerned with being, that is, whatever it is that makes a being be. And he is quite clear that being, whatever it is, is not itself a being. The trouble is that even to talk about being—which Heidegger often does, and, given his project, cannot avoid doing—one has to treat it as a being, an object. So he is stuck with the fact that being *is* a being as well. There will be much more to be said about Hegel and Heidegger in later lectures; so let us leave matters there for now.

Let me give, instead, one further example from Asian philosophy. In early Indian philosophy, and especially Buddhism, there is a logical/metaphysical principle called the *catuşkoți* (literally, for corners), which is deployed in a number of different ways. The principle says that, given any statement, there are four possibilities: that it is *true* (only), *false* (only), *both true and false*, or *neither true nor false*. Modern scholars certainly worry about how to interpret this principle, but the obvious way is to use a paraconsistent logic, such as FDE, which allows for exactly these four possibilities. And, it must be said, attempts to force the *catuşkoți* into the framework of classical logic by modern Western scholars have not met with great success.

1.4.3 Reconstructing Theories in the History of Science and Mathematics

It might be thought that this is not a problem one would have to deal with in scientific theories. But it is. There are well know theories in the history of science which were not only inconsistent, they were recognised to be so; and yet they were empirically very successful. Obviously the theorists were not using an explosive logic—though what paraconsistent logic they were using to govern their inferences was left as an entirely informal matter. (Physicists are not logicians.)

One example of this kind is the original Bohr quantum theory of the atom. This was the "solar system" model of an atom: a nucleus composed of heavy protons and neutrons, circled by electrons—as planets circle the sun. The theory deployed classical electro-magnetic theory—based on the idea that energy is a continuous quantity—in a number of places, for example to determine the energy change when a electron moves from one orbit to another. However, electrons in orbit are not moving in a straight line, and this means that they are accelerating. Classical electro-magnetic theory tells us that a charged particle which accelerates will radiate energy; and in this case, the electron will spiral into the nucleus. So the atom is not stable. To solve this problem Bohr imposed, on top of classical electro-magnetic theory, the idea that energy was not continuous but came in discrete packets (quanta). Since spiraling requires a continuous loss of energy electrons could not spiral. Energy loss/gain could occur only when an electron "jumps orbit". So the theory has to assume that energy is both a contunuous and a discrete quantity

It might be thought that even if physics has some inconsistent theories, mathematics does not. But even this is incorrect. The original infinitesimal calculus of Newton and Leibniz required infinitesimals to behave inconsistently. True, infinitesimals were removed from the theory in due course, but this was some two hundred years later. In the meantime, the theory was inconsistent; the inconsistency was well recognised; and yet the theory had enormously successful empirical applications in physics.

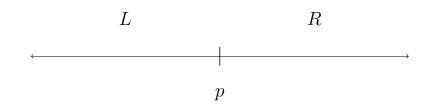
To see the inconsistency, let's take a simple example. Suppose that you want to compute the derivative of the function $y = x^2$, that is, the rate of change of y with respect to x. To compute this, we add an infinitesimal quantity, i, to x. y then becomes $(x+i)^2$. So the amount that y has changed is $(x+i)^2 - x^2$. That is, $2xi + i^2$. To determine the ratio of the change in y with respect to x, we simply divide this by i. This gives 2x + i. Now, i is so small that we take it to be 0, giving the answer 2x. The trouble is that if i is indeed 0 one could not have divided by it in the first place: dividing by 0 makes no mathematical sense. Hence, at different points in the computation one has to assume that i is 0 and is not 0.

1.4.4 Inconsistent Mathematics

The example of the original infinitesimal calculus is, of course, an example from the history of mathematics. But work in modern mathematics has showed that there are theories with clear mathematical interest which are based on non-classical logics, such as intuitionist or parconsistent logic—and, moreover, where to impose classical logic would result in the theory collapsing into triviality: everything would follow.

In the case of paraconsistent logic, many such theories are known; for example, in set theory, linear algebra, topology and other areas. Let me give just one example from topology, an area of mathematics which concerns, amongst other things, boundaries.

Take a simple topological space, say the one-dimensional real line. Divide it into two disjoint parts, left, L, and right, R, thus:



Now consider the point of division, p. Is p on L or R? Of course, the description under-determines an answer to the question. But when the example is fleshed out, considerations of symmetry might suggest that it is on both. So p is on L and R. But L and R are disjoint. So if p is on L, it is not on R; and if p is on R, it is not on L. So a description of the space might be:

- if x < p, x is (consistently) on L
- if p < x, x is (consistently) on R
- p itself is both on and not on L, and on and not on R

Given an appropriate paraconsistent logic, the description is perfectly coherent.

This might not seem particularly profound, but the idea of inconsistent boundaries has interesting applications. One of these is to describe the geometry of "impossible pictures". Consider the following picture:



The three-dimensional content of the picture is impossible. How should one describe it mathematically? Any mathematical characterisation will specify, amongst other things, the orientations of the various faces. Now, consider the left-hand face, and in particular its lighter shaded part. This is 90° to the

horizontal. Next, consider the top of the lower step on the right-hand side of the picture. This is 0° to the horizontal. Finally, consider the boundary between them (a vertical line on the diagram). This is on both planes. Hence it is at both 90° and 0° to the horizontal. That's a contradiction, since it cannot be both; but that's exactly what makes the content of the picture impossible. Note that the characterisation of the content must deploy a paraconsistent logic, since it should not imply, e.g., that the top of the higher step is at 90° to the horizontal.

1.4.5 Inconsistent Fictions

A quite different example of the application of a paraconsistent logic concerns inconsistent fictions. We look to what the author explicitly says in a work of fiction to see what is true in the fiction. But we also infer things that are not said. So in a standard novel, if the author tells us that Jo went to the gym only once that week, and that she went on Monday, we infer (for reasons that might be important to the plot) that she did not go on Tuesday.

Now a novel can be inconsistent. For example, in the Holmes stories Watson has a war wound—one. In some stories it is said to be in the arm; in some stories it is said to be in the leg. When we read the novels and interpret what is going on in these, we usually ignore the inconsistency. Conan Doyle simply made a mistake, and we disregard it.

But there are inconsistent stories where the inconsistency is deliberate and, moreover, integral to the plot. One cannot understand what is happening if one does not take the affairs described in the plot to be contradictory. The story 'Sylvan's Box' is of this kind, for example.

Now, when one draws inferences about what it going on in the plot of such a story, one cannot use an explosive logic, or one would infer that everything holds in the scenario described, which would make a nonsense of it. Using a parconsistent logic is necessary to make the story coherent, even if it is inconsistent.

1.5 And Next...

None of the examples above requires the inconsistent information/theory/story to be true. They are all quite compatible with the truth itself being consistent. (Even if the examples from the history of science and mathematics were taken to be true at one time, they are certainly no longer taken to be so.)

But another example of an application of paraconsistent logic is dialetheism: the view that what is actually true may be contradictory. We will turn to this in the next lecture.

1.6 Further Discussions

1.1: Priest, Tanaka and Weber (2018).

1.2: Priest (2007); Priest and Routley (1984), ch. 1.

1.3: Priest (2008), chs. 7, 8.

1.4: Priest and Routley (1984), ch. 4; Tanaka, Berto, Mares, and Paoli (2013). The *catuşkoți*: Priest (2010). Inconsistent mathematics: Mortensen (2013). Inconsistent fictions: Priest (1997).

2 Lecture 2: Dialetheism

In this lecture we turn to dialetheism itself: the view that some contradictions are true. Again, we will start with a definition, characterising the subject. Next, we will look at some of the history of the subject. We will then have a look at some of the examples of dialetheisas that have been offered, after which we will turn to some arguments against dialetheism.

2.1 Definition of Dialetheism

Let us start by characterising the topic. Paraconsistency is a view about logical consequence. Dialetheism is a view about truth.

A dialetheia is a sentence (statement, proposition—take your pick), A, such that both A and $\neg A$ are true. Assuming that we agree to call a sentence false if its negation is true, one can say, equivalently, that a dialetheia is a sentence that is true and false. A contradiction is a conjunction of the form $A \land \neg A$. So assuming the relatively uncontentious claim that a conjunction is true iff both conjuncts are true, one can equally define a dialethia as a true contradiction. *Dialetheism* is the view that there are some dialetheias. And a *dialetheist* is someone who endorses dialetheism. These definitions, note, presuppose no particular theory of truth. People can choose their own favourite theory! The terminology concerning dialetheism was coined by Priest and Routley in 1979 because, at that time, the view was not clearly distinguished from paraconsistency. The neologism di/aletheia (two way truth) was inspired by a passage in Wittgenstein's remarks on the *Foundations of Mathematics*, where he likens the Liar sentence to a Janus-headed sentence facing both truth and falsity.

Notice that dialetheism should be clearly distinguished from *trivialism*, the view that *all* contradictions are true. Trivialism is clearly a much stronger view. (The difference between *some* and *all*.) Now, if all contradictions are true, then, for any $A, A \wedge \neg A$ is true; so then is A. Everything is true. Conversely, if everything is true, all contradictions are true. So trivialism could equally be defined as the view that everything is true. (In mathematics, to say that something is trivial is to say that it is uninteresting. So paraconsistent logicians have come to call a theory in which everything is provable trivial. This is the origin of the term 'trivialism'.)

Finally, someone who subscribes to the use of a paraconsistent logic does not have to be a dialetheist, as we observed at the end of the last lecture. In the semantics of LP, it is true, there are situations where, for some As, both A and $\neg A$ hold. But we reason about all kinds of situations which are not actual, where Clinton beat Trump in the 2016 US presidential election, where Hobbes squared the circle, and so on. It is entirely possible for someone to hold that the contradictory situations in the LP semantics are of this kind, so that *actual* situations are consistent.

On the other hand, a dialetheist obviously *does* have to endorse the use of a paraconsistent logic, unless they wish to be committed to trivialism.

2.2 The History of Dialetheism

Let us now turn to the history of dialetheism. Here we will be dealing with the Principle of Non-Contradiction (PNC), a principle that says that no contradictions are true. Dialetheism evidently flies in the face of this.

As we saw in the last lecture, the entrenchment of Explosion as a valid inference is a relatively modern phenomenon. The matter with the PNC is quite different—in fact, exactly the opposite. Since Aristotle, it has been high orthodoxy in Western philosophy.

In *Metaphysics* Γ , Aristotle tells us that some of his predecessors were dialetheists. He gives as examples Heraclitus and Protagoras. Whether this is an accurate representation of their views, modern scholars may contest;

but Aristotle attacks what he takes to be their view and defends the PNC. The text in question is somewhat rambling and contorted. Aristotle starts by telling us that the PNC cannot be proved since it is too basic, but that it can at least be established *ad hominem* (by *elenchos*) if only a dialetheist will say something. They do not even have to say *that* something; they only have to say something meaningful. It will turn out that they say 'man'.

The text then containst one long argument, and six or seven very brief arguments. The long argument is so tangled that scholars do not agree about how it is supposed to work, let alone that it works. The best way to make sense of it seems to be as follows. The dialetheist says man, though this is just an example: they can say anything. Fix on one particular meaning of this. Aristotle takes this to be two footed animal. (Clearly it is not a dialetheia if someone is a man in one sense (e.g., human), but not another (e.g., male).) We then reason as follows. Necessarily, if someone is a man they are two footed. So it is impossible for someone to be a man and not two footed. So it is impossible for something to be a man and not a man (since man means the same as two footed). Now, whatever else one might wish to say about this argument, it fails, simply because it is open to a dialetheist to accept the conclusion: nothing can be a man and not a man, even though some things are. That is a contradiction; but of course Aristotle cannot rule out accepting that contradiction without begging the question. Indeed, as we noted in the last lecture, in LP, $\neg(A \land \neg A)$ is a logical truth even though there may be things of the form $A \wedge \neg A$ that are true in some situations as well.

The most notable thing about the following six or seven brief arguments, is that the the *elenchos* has disappeared entirely. So what does Aristotle think he is doing? But the arguments fail anyway since they are all *ignoratios*. Even if they are a sound (which is somewhat dubious anyway), they clearly establish only that it is not the case that *all* contradictions are true. We might call this the Principle of Non-Triviality (PNT), and obviously a dialetheist can happily accept this. Indeed, towards the end of the passage, the arguments establish something even weaker: that no one can *believe* that all contradictions are true.

Given these things, the scholarly consensus, since at least Łukasiewicz, is that Aristotle's defence of the PNC fails (which is not to say that the scholars take its conclusion to be false). Despite this fact, Aristotle's defence of the PNC established it as high orthodoxy in Western philosophy—so much so that virtually every Western philosopher since has taken it for granted. Indeed, there is hardly a sustained defence of the PNC by any Western philosopher since Aristotle. How it is that such poor arguments can manage to do this is an interesting sociological question, which Iwe won't pursue here.

There are a few post-Aristotelian Western philosophers before the 20th Century who have gone against the grain. Arguably, some Neoplatonists, such as Plotinus and Cusanus did so, since they held that the One or God has contradictory properties. However, the clearest example of such a person is Hegel. We will devote the whole of the next lecture to him, so let us leave that matter now. Though there are such exceptions to the general picture, their scarcity just underlines the orthodoxy of the PNC.

Before we leave the history of dialetheism, a final mention of Asian philosophy. There have certainly been Asian philosophers who endorsed the PNC, but its place in the Asian traditions has been much less secure. In the last lecture we met the *catuṣkoți*, which rejects the PNC. And there are a number of Buddhist philosophers who are arguably dialethiests, such as Nāgārjuna and Jizang. However, this is not the place to go into this matter.

Contemporary dialetheism is very much a creature of the 20th Century. Some thinkers, such as Łukasiewicz and Wittgenstein clearly toyed with the idea in the first half of the century, but they did not have the resources of contemporary paraconsistent logic to draw on. It was Priest and Routley who, having such resources, started to advocate the view in the 1970s; and I think it fair to say that the first full-blooded defence of the view was *In Contradiction* (1987).

2.3 Examples of Dialetheias

Of course, if someone claims that some contradictions are true, the natural next question is 'Such as?'. In this section, we will look at some of the answers that have been offered. It should be said straight away that all these examples are contentious (unlike the rest of philosophy...). However, the examples certainly deliver possible applications of dialetheism.

2.3.1 The Paradoxes of Self-Reference

Probably the most discussed application of dialetheism is to the paradoxes of self-reference—so much so, that some people seem to think of the view as simply one about these paradoxes. The paradoxes of self-reference form a family, and the first known member of the family is the Liar paradox, traditionally taken to have been discovered by Eubulides (4th C, BCE). Paradoxes of the same kind were discussed by most of the great Medieval logicians. Many more were discovered in the foundations of mathematics at the turn of the 20th Century. Indeed, it is no over-statement to say that these paradoxes have driven much of the development of logic since then. The paradoxes are all apparently sound arguments which end in a contradiction. Traditional approaches have attempted to diagnose and explain what is wrong with the arguments. The dialetheic approach is simply to accept the arguments as what they appear to be: sound arguments which therefore establish their conclusions as true.

The Liar Paradox is probably the simplest argument of the family, so let us focus on this. The paradox concerns the following sentence, call it L:

• This sentence is false.

Suppose L is true. Then what is says is the case, so it is false. Suppose L is false. Well, that's what it says, so it is true. Either way then, L is both true and false: $L \wedge \neg L$.

The Liar paradox is driven by a condition on truth called the T-Schema, which is to the effect that all sentences such as:

- 'Trump is an idiot' is true iff Trump is an idiot
- 'Australia is in the Northern Hemisphere' is true iff Australia is in the Northern Hemisphere

are all true. Let write T for *is true*, and if A is any sentence, let [A] be its name. Then the T-Scheme comprises all biconditionals of the form:

• T[A] iff A

The principle seems obvious to the point of banality; and no one would ever have doubted it had it not been for paradoxes like the Liar. L is a sentence of the form F[L] (that is, $T[\neg L]$). Substituting this in the T-Schema gives:

• T[L] iff F[L]

And an instance of the Principle of Excluded Middle, $T[L] \lor F[L]$, does the rest.

One familiar attempt to solve the Liar Paradox is to suggest that this instance of Excluded Middle fails; that is, that L is neither true nor false. However, if one takes this line, one merely has to tweak the argument. Let L' be the sentence:

• This sentence is either false or (neither true nor false).

That is, L' is $F[L'] \vee (\neg T[L'] \wedge \neg F[L']$. If L' is true, then it is either false or neither true nor false. If it is false then it is certainly *either* false *or* neither true nor false, so it is true. And now, in the third possibility, if it is neither true nor false, it is *either* false *or* neither true nor false. So again it is true. In all cases, we are back with a contradiction.

This situation is an example of a quite general phenomenon, called *ex*tended or revenge paradoxes. Whenever a solution is suggested, it appears to be the case that we can simply use the machinery involved in the supposed solution to reformulate the argument for contradiction. The phenomenon provides a quite general argument against non-dialetheic accounts of the paradox. You just can't get rid of the contradiction.

It is sometimes held that revenge paradoxes beset a dialetheic account as well. Just consider the sentence L'':

• This sentence is just false (i.e., false and not true).

That is, L'' is: $F[L''] \wedge \neg T[L'']$. With a bit of fiddling, which we leave as an exercise, one can establish that L'' is just false, but also true $(F[L''] \wedge \neg T[L'']) \wedge T[L''])$; and that, of course, is a contradiction. But this is hardly a problem. Unlike the consistent solutions to the Liar, the point is not to avoid contradiction, but to tame it. The dialetheist can just accept that this is another paradox of self-reference.

The Liar paradox has been investigated intensively now for two and a half thousand years, and all attempts at finding a consistent solution have failed—at least if consensus is a mark of successes, since there still in none. Such long-term failure itself speaks against the enterprise. Dialetheism offers a simple novel account of matters. Those trying to show what was wrong with the paradoxical argument were simply barking up the wrong tree. There is nothing wrong.

2.3.2 Motion: Zeno's Arrow Paradox

A second application for dialetheism concerns a different bunch of paradoxes: those of Zeno. These paradoxes are of equal antiquity to the Liar, but their history is quite different. The paradoxes were much discussed in Ancient Greek philosophy and Medieval philosophy. However, it is usually claimed, they were finally solved by developments in 19th Century mathematics. For the most part, this seems right. However, this is arguably not the case for one of the paradoxes: the Arrow.

One may formulate this paradox as follows. Take an arrow—or to avoid irrelevant worries, a point particle—in motion from a to b. At any instant of its motion, the progress made by the particle in its journey is zero, since this *is* just an instant. But the time of flight is composed of such instants. So the progress made on the journey is the sum of the progresses made at each instant. Now zero plus zero plus ... as many times as you like—even infinitely many times—is zero. So the particle makes no progress on its journey at all: it does not move.

The standard solution to this paradox is just to bite the bullet. The particle makes no progress at each instant, but somehow, in the sum of instants, it does. Dialetheism provides a more illuminating answer. Suppose at some instant, t, the particle is at position x. Then, since it is in motion, it is also at a place a little bit after it, say $x + \varepsilon$; and maybe also a place a little bit before it, say $x - \varepsilon$. Since it is at all these places, it does make progress at t. Hence it can make progress in the sum of all instants.

This solution implies that the particle is in a contradictory state at t (and in the same way, at every other instant). For since it is at $x + \varepsilon$ it is not at x, even though it is. In fact, for the particle to be in motion is exactly for it to realise such a contradictory state. If it were not in motion at t, it would simply be at x. End of story.

2.3.3 Inconsistent Law

The two previous examples concern paradox solution. However, these have never struck me as the most transparent cases of dialetheism. The one I, personally, take to be so concerns the philosophy of law, where the premises of the argument for a contradiction may be made true simply *by fiat*. Many things cannot be made true by fiat (e.g., that the Moon is more than a kilometer from the Earth, that the Sun is shining); but duly constituted legislature can make some things the case, simply by passing the appropriate legislation (e.g., that people in a certain class have a legal right or duty).

Now suppose that the legislature passes laws with the following clauses:

• Any person in category X (a property owner, white) may vote

• Any person in category Y (a woman, black) may note vote

One may suppose that at the time when the legislation was passed, the possibility that there might be someone in both category X and category Y was unthinkable. And as long as this is the case, matters are consistent.

But what the law requires is a somewhat fragmented, and not always well coordinated, matter. So we may imagine that in due course someone in both categories does appear. Call that person Jo. Then clearly, Jo may vote and Jo may note vote.

Now, in many jurisdictions there are some standard procedures for resolving contradictions of this kind. Thus, laws may be ranked in increasing order of weight: precedence law, statute law, constitutional law. And where a law from one level conflicts with one of higher order, it is the one of higher order which takes precedence. Or again, in some jurisdictions, there is a principle of *lex posterior*, according to which, if an early law conflicts with a later law, the later one takes precedence. But we may suppose that none of these mechanism applies in the present case: both clauses were in the same piece of legislation, passed at the same time, and so on. Then the contradiction stands.

Of course, if this situation were to arise, the legislation would be changed or a judge would make a ruling (which would amount to the same thing). The function of the law is a very practical one, and the contradictory situation is not practical. But this does not alter the fact that before the change, the situation ias contradictory. That, indeed, is why the change is necessary.

2.3.4 The Limits of Thought

A fourth application of dialetheism is quite different again, and concerns things which are beyond the limits of our language/concepts. If one can establish that there are such things, then establishing this obviously shows that they can be described and conceptualised. So they both are describable/conceptualisable, and are not. This sort of situation is so important, we will return to it for a detailed treatment in the fourth lecture.

2.4 Arguments Against Dialetheism

Let us now turn to arguments against dialetheism. One may object to a possible application of dialetheism, such as those in the previous section, on the ground that there are better and consistent ways of handling the matter. Let us call these *local* objections. But one may object not simply to a particular application of dialetheism, but to dialetheism as such. Call these *global* objections. In this section we will consider some global objections.

People who meet dialetheism for the first time tend to object to it by appealing to Explosion: dialetheism cannot be true, or everything will be true, which is absurd. Given what we have already seen, such an objection is worthless, since a dialetheist will not accept Explosion. Indeed, if some contradictions are true, but not everything is, then Explosion *has to be* invalid. So such an argument begs the question.

Let us consider some more substantial objections.

2.4.1 Contradictions Cannot be Believed

The first is that one cannot believe a contradiction, so dialetheism is literally incredible. Now, in fact most people believe contradictions. In teaching philosophy one can frequently, with a little Socratic questioning, get people to see that they hold contradictory views. In the light of this, they may change their views; but this is irrelevant, since they *did* hold those views.

Indeed there appear to be people in the history of Western (and Eastern) philosophy who held contradictory views, and were quite happy about it. Hegel is an obvious example; we will come back to him later.

Then of course there are contemporary dialetheists such as myself. Where L is the Liar sentence, I believe that L and that $\neg L$. Of course, people may not believe what they say they believe. They may misunderstand the words they use, or just be insincere. But if someone does endorse something, there had better be a pretty good reason to suppose that they don't believe what they say they believe. To suppose otherwise without an independent reason is terrible methodology. And I can assure anyone that when I endorse the Liar contradiction, I understand the words very well, and I am completely sincere. So I am a living counter-example.

2.4.2 Contradictions cannot be Believed Rationally

The next objection is that, though contradictions can be believed, they cannot be believed rationally. This raises the question of when a belief is rational. The quick answer to the question is, as Hume says, that a rational person apportions their beliefs according to the evidence—something that advocates of the PNC do not seem to have been very good at doing! And if any of the cases for the existence of dialetheias of the last section works, they provide just such evidence. (Hume's principle, note, also answers the question of how you know which contradictions may reasonably be taken to be dialetheias: look at the evidence.)

Of course, matters are a little more complicated than this. At least in the case of the paradox solutions, there are various different possibilities on the market, and what we really face is a matter of choosing rationally between these theories. It might be suggested that a theory that is inconsistent is *ipso facto* ruled out as a rational choice. Without an independent justification for the claim that the PNC is rationally obligatory, this is, of course, entirely question-begging. But in any case, it is false.

There are many criteria that speak in favour of a view: adequacy to the data (whatever constitutes data in the appropriate context), simplicity, unifying power, and so on. The failure of any one of these criteria speaks against the view. And let us accept—at least to give as much weight to the objection as possible—that consistency is good, and inconsistency is bad.

In evaluating a theory, the criteria of rational choice may well not line up on the same side. Thus, consider the pre-Gallilean debate between a Copernican view of the cosmos and a Ptolemaic view. Both theories were about equal on adequacy to the astronomical data. The Copernican view was simpler (not because it did not use epicycles, but because it did not use the equant); but the Copernican view was at odds with the accepted (Aristotelian) dynamics of the day, which the Ptolemaic view was not. Astronomy plus dynamics was therefore less unified for a Copernican. Things changed with the invention of the dynamics of Gallileo and Newton, but the point is made: the criteria for a view's being rational may not all pull in the same direction.

Now, given this, when is it rational to believe a theory? When it performs best overall, given the relevant criteria. So a contradictory theory may be rationally believable because its being contradictory is outweighed by the other criteria. Thus, suppose we compare a dialetheic solution to the Liar paradox with the many consistent solutions. Arguably, the other theories are much more complex, fail to do justice to the data, avoid contradiction only by appealing to *ad hoc* hypotheses, and so on. If so, the dialetheic theory is the rationally preferable one (given the current evidence); and even if not, an evidential situation *could* be like this.

A related objection is to the effect that if one could accept a contradiction

one could not be rationally forced to revise one's beliefs. My views entail A. You show me that $\neg A$ is true. I don't have to reject anything I believe. I can simply add $\neg A$ to my beliefs. Given what we have just seen, the problem with this objection is clear. One can indeed add $\neg A$ to one's beliefs, but it does not follow that this can be done rationally. *Ceteris paribus*, this will be an entirely *ad hoc* move, and weaken the rationality of the view.

2.4.3 A Dialetheist cannot Express Disagreement

The final objection we will consider is to the effect that a dialetheist cannot express disagreement. You say A; I (a dialetheist) say $\neg A$. For all you know, I might well endorse A too, so I need not be disagreeing with you.

Actually, this point has really nothing to do with dialetheism. Suppose that you are not a dialethiest. I say A, and you say $\neg A$. How am I supposed to know that you are disagreeing with me? For all I know, you could be a dialetheist, or have just become one. And of course, your saying that you are not a dialetheist does not help either. For all I know, you might be one as well.

To understand what is going on here, we need to think a little about speech-act theory a little. When one utters a sentence, the utterance comes with a certain illocutory force: asserting, questioning, commanding. And one and the same utterance could be any of these things. I say 'the door is open'. This could be a statement to the effect that the door is open, a question asking whether this is so, a command telling you to close the door. How do you know which speech act I am performing in uttering the sentence? You have to understand my intentions, and this will depend on the context, the background beliefs, power relations, and so on. Doubtless how one does this is a complex matter, but we do it all the time.

There is also a speech act of denying. Frege and others held that to deny A is simply to assert $\neg A$. This is clearly false. Thus, suppose someone discovers that their beliefs are inconsistent by being brought to assert A and $\neg A$. Clearly the latter assertion is not a denial, since they accept A too. That's what they may find problematic. Even more obviously: you and I are dialetheists about the Liar paradox. You assert L. I assert $\neg L$. I am not denying what you say: I am adding to it. Denial, then, is a *sui generis* kind of speech act. To assert something is, roughly, to utter something with the intention of getting the hearer to accept it, or at least, getting them to believe that I accept it. To deny something is, roughly, to utter something with the intention of getting the hearer to reject it, or at least, getting them to believe that I reject it.

Now, an utterance of $\neg A$ may be an assertion of A or it may be a rejection of A. It all depends on my intentions. If I utter $\neg A$ with the intention of getting you to accept it, it is an assertion. If I utter it with the intention of getting you to reject A, it is a denial. Thus if you say 'the Liar sentence is consistent', and I say 'no, it is *not*'. This is is surely a denial.

And by now, the answer to the objection is quite clear. A dialetheist can disagree with someone by denying what they assert. You assert A. I disagree with you if I deny A. I may do this by uttering $\neg A$ if this makes my intentions clear. If not I may resort to a different utterance, such as 'no, of course not, you idiot'.

Let me end by returning to our discussion of the PNC in §2. How should this principle be phrased? Following Aristotle, one may take the PNC to be an assertion of the statement: for all A, $\neg(A \land \neg A)$. However, as we saw in the reply to his first long argument, this will not do. A dialetheist may simply accept this. How, then should the PNC be framed? Simply as a denial of: for some A, $A \land \neg A$.

2.5 And Next...

So much for paraconsistency and dialetheism in general. The following lectures concern the application of these ideas to some important episodes in the history of philosophy, starting, in the next lecture, with Hegel.

2.6 Further Discussions

2.1: Priest, Berto, and Weber (2018).

2.2: Priest (2007). Aristotle: Priest (2006) ch. 1. Nāgārjuna: Priest (2002), ch. 16.

2.3: Priest and Routley (1984), ch. 5; Priest (1987).

2.4: Priest (1998); Priest (1987); Priest (2006).

3 Lecture 3: Hegel

In the last two lectures Hegel has appeared a couple of times. In the present context he is a particularly interesting philosopher, just because he went against the hegemony of the PNC. In this lecture we will look at some of the relevant aspects of his philosophy. We will start by seeing that he was indeed a dialetheist. We will then see how he got there. This will require us to look at Kant and Kant's influence on him. We will end by looking at the role that dialetheism plays in what is arguably the centre-point of Hegel's philosophy—his dialectics—and a simple paraconsistent model of this.

3.1 Hegel and Dialetheism

Many interpreters of Hegel, in the thrall of the PNC, have wished to claim that Hegel was not a dialetheist—for fear of making him seem patently irrational. In the light of what we have seen in previous lectures, this fear is itself irrational. And if one looks at what Hegel actually says, one can interpret him as a non-dialetheist only by torturing his texts. Dialetheism, then, provides an important new hermaneutic tool for interpreting historical texts.

To see Hegel's dialetheism, we can start with his discussion of contradiction in the *Logic*, where he says:

... ordinary experience itself declares that at least there are a number of contradictory things about, contradictory arrangements, and so forth, the contradiction being present in them, and not merely in an external reflection.

And just in case one thinks that he is not talking about what logicians call contradictions, he says a few lines later (my italics):

External, sensible motion is itself its [contradiction's] immediate existence. Something moves not because it is here at one point of time and there at another, but because *at one and the same point of time it is here and not here, and in this here both is and is not*. We must grant the old dialecticians the contradictions which they prove in motion; but what follows is not that there is no motion, but rather that motion is existent contradiction itself.

As the reference to 'old dialecticians' makes clear, Hegel is appealing to Zeno's paradoxes. And indeed, his account of motion is eactly that at which we looked in Lecture 2. To be in motion is to be in a certain contradictory state. Something in a consistent state at each instant of a period of time is simply at rest at each instant. Another plain example of Hegel's dialetheism is his view of the Liar paradox. In the discussion of Eubulides in his *Lectures on the History of Philosophy*, he says that that the Liar sentence:

both lies and does not lie... For here we have a union of opposites, lying and truth, and their immediate contradiction...

He also berates the error of those who have tried, futilely, to give a 'one sided' answer to the question of the status of the liar.

Hegel's dialetheism is, then, patent.

3.2 Kant and the Antinomies

Nor are these comments an aberration in his thinking. To see why, it will help to see how Hegel arrived at his dialetheism. To do this, we need to consider some aspects of Kant.

3.2.1 Phenomena, Noumena, and the Categories

In the *Critique of Pure Reason*, Kant draws a distinction between phenomena and noumena. Phenomena are the things that can be experienced by the senses; in particular, they are in space and/or time. Noumena can neither be experienced; nor are they in space and time. To the extent that we have any grasp of them at all, they are simply objects of thought. Moreover, space and time are not "out there in reality". They are simply a conceptual structure that we impose on our sensations ('intuitions') to constitute the phenomenological objects. In particular, the whatever-it-is that gives rise to our experiences which our mind conceptualises is a particular kind of noumenon, which Kant calls the thing in itself (*ding an sich*).

Another part of our conceptual structure which does the same thing is delivered by the categories. These are things like *plurality*, *negation*, *substance*. Kant abstracts these categories from the syntactic form of statements in Aristotelian logic. Moreover, any statement will deploy a number of such categories. Thus, for example, to say that *all men are mortal* deploys the categories of *totality* ('all'), *reality* ('are'), and *existence* (no modal operators).

Now, and crucially, the categories are things which constitute phenomena, and can therefore apply only to such. As Kant puts it in the *Critique*, the categories are:

strictly *a priori* conditions for a possible experience, as that alone on which its objective reality can rest.

It follows that the categories have no application to noumena, since it is not possible to experience these things. Kant is quite clear about the matter. As he puts in *Prolegomenon to Any Future Metaphysics*:

even if the pure concepts of the understanding are thought to go beyond objects of experience to things in themselves (noumena), they have no meaning whatever.

One cannot make meaningful statements about noumena.

Kant gives a number of arguments for the claim that the categories cannot apply to noumena, but the simplest and clearest is this. To apply any concept, one needs criteria of application. Kant calls these 'schemata'. Moreover, the criteria for the application of each of the categories concerns time. To give a couple of the simpler examples :

- the schema of substance is permanence in real time
- the schema of necessity is existence of an object at all times

This being so, the concepts cannot be applied to noumena, since these are not things in time.

3.2.2 The Antinomies

Let us now turn to the matter of Kant's antinomies. In the section of the *Critique* called the Transcendental Dialectic, Kant gives four pairs of arguments, which he calls antinomies. The first of each pair (Kant calls it the thesis) has a conclusion of the form A; the second (Kant calls it the antithesis) has a conclusion of the form $\neg A$. The four antinomies concern the cosmos as a whole, the ultimate constituents of matter, causation, and ultimate ground—respectively. Thus, for example, the first antinomy argues that the cosmos must be infinite in time, since (for good Newtonianian reasons) before or after any time there must be another. But it cannot be infinite in time, otherwise by now an infinite amount of time would have been completed, and by definition, an infinite totality cannot be completed.

Now, Kant does not take these arguments to be sound. He is no dialetheist. But he is also clear that these arguments are not simple sophisms either. In some sense, they are inherent in thought, and a manifestation of the fact that this has a tendency to over-reach itself. He diagnoses a subtle flaw in all of the antinomic arguments. All the arguments concern noumena. Thus, for example, the first antinomy concerns the cosmos in its entirety; and this is not something that can be experienced as such. Since the premises of all the antinomic arguments are statements, they perforce apply the categories to these noumena. And this, one cannot do meaningfully.

3.2.3 Kant's Problem

But now, Kant has a problem, as noted by many. The *Critique* contains many judgments about noumena. So Kant would appear to be committed to the fact that we can make meaningful, and indeed true, judgments about noumena. He seems to express things that he, himself, holds to be inexpressible. We meet here the issue of contradictions at the limits of thought/expression. We will turn to a general discussion of this matter in the next lecture, so let us pass it over here.

Of course, Kant's situation would be a problem for him quite independently of what he says about the antinomies. If Kant can express these things then, absent some move into dialetheism, his theory is just self-refuting. But there is a particular problem for Kant's account of the antinomies. If one can, indeed, make judgements about noumena, this undercuts his solution to the antinomies.

Naturally, Kant is well aware of the issue, and tries to avoid it. In a section of the *Critique* entitled 'The Ground of the Distinction of all Objects in General into Phenomena and Noumena'—with which Kant was so dissatisfied that completely rewrote it for the second edition of the *Critique*—he draws a distinction between a positive notion of noumenon and a negative notion. The positive notion of a noumenon as an object about which one can say something is indeed illegitimate. But, insists Kant, there is a perfectly good negative notion of noumenon, namely, of something which is beyond the limits of the application of our categories, and so which shows the limits of those categories. But to say that there are (or even may be) things of such a kind is precisely to make a judgment about them. The problem, then, has not been avoided.

3.3 Hegel on Kant

Hegel was well aware of Kant's problem. As he puts it in his critique of Kant in the *Lesser Logic*:

It argues an utter want of consistency to say, on the one hand, that understanding only knows phenomena, and, on the other, assert the absolute character of this knowledge, by statements such as 'Cognition can go no further'.

Not that Hegel has a problem with the division between phenomena and noumena (such as the thing in itself). That makes perfectly good sense. But clearly one *can* talk about noumena. So there is no important conceptual distinction between the two. Hence Hegel rejects the categorical inaccessibility of noumena:

The thing in itself ... expresses the object when we leave out of sight all that consciousness makes of it, all its emotional aspects, and all specific thoughts of it. It is easy to see what is left—utter abstraction, total emptiness, only described still as in an 'outer world' ... Hence one can only read with surprise the perpetual remark that we do not know the thing in itself. On the contrary there is nothing we can know so easily.

Of course, if you accept the categorical accessibility of noumena, then Kant's solution to the antinomies lapses. Hegel took the point: the antinomies establish the contradictory nature of the objects with which they deal. Thus, commenting on the antinomies and Kant's supposed solution of them, he says (we quote at length):

In the attempt which reason makes to comprehend the unconditioned nature of the world, it falls into what are called antinomies. In other words, it maintains two opposite propositions about the same object, and in such a way that each of them has to be maintained with equal necessity. From this it follows that the body of cosmical fact, the specific statements descriptive of which run into contradiction, cannot be a self-subsistent reality, but only an appearance. The explanation offered by Kant alleges that the contradiction does not affect the object in its proper essence, but attaches only to the reason which seeks to comprehend it. In this way the suggestion was broached that the contradiction is occasioned by the subject-matter itself, or by the intrinsic quality of the categories. And to offer the idea that the contradiction introduced into the world of reason by the categories of the understanding is inevitable and essential was to make one of the most important steps in the progress of Modern Philosophy. But the more important the issue thus raised, the more trivial the solution. Its only motive was an excessive tenderness for the things of the world. The blemish of contradiction, it seems, could not be allowed to mar the essence of the world; but there could be no objection to attaching it to the thinking reason, to the essence of mind. Probably nobody will feel disposed to deny that the phenomenal world presents contradictions to the observing mind; meaning by "phenomenal" the world as it presents itself to the senses and understanding, to the subjective mind. But if a comparison is instituted between the essence of world and the essence of mind, it does seem strange to hear how calmly and confidently the modest dogma has been advanced by one, and repeated by others, that thought or reason, and not the world, is the seat of contradiction.

Kant suffers from, as Hegel puts it, an excessive tenderness for things in the world. In other words, Hegel took Kant's antinomies to establish dialetheism. And as he goes on to explain in the next paragraph, he thinks that the Kantian contradictions are just some amongst many. *All* our *a priori* concepts, and not just those figuring in the antinomies, are embroiled in contradiction.

3.4 Hegel's Dialectic

Hegel makes good use of this fact in the core of his philosophy: his dialectic. Under the influence of Fichte, Hegel adds a dynamic element to the story of the categories. There is a sort of cosmic mind, *Geist. Geist* wishes to understand what it, itself, is. So it starts with the most elementary but vacuous category, *being*, and then works its way though a sequence of more and more complex categories in a dialectical fashion until it arrives at the concept of the absolute. This is the concept which most adequately characterises what it is. So when it reaches this, *Geist* understand what it is: (the) absolute.

The concepts in the progression show a simple pattern. They are struc-

tured as a hierarchy of triples, so that each category (except those at the tips of the hierarchy) has three sub-categories. (There is one exception: there are four sub-categories of *judgment*. This is somewhat ironical, since these subcategories or at least their sub-categories are essentially Kant's categories.) The triples are also structured. The second of each triad is a category opposing the first. Hegel calls the second the *negation* of the first. And, in the simplest cases at least, the negation is logician's negation.

By consideration of the contradiction between the first two categories of the triad, we arrive at the third category. This is often referred to by Hegel as the *negation of the negation*. What, exactly, this means is somewhat moot. What is clear is that the third category is supposed to be the dialectical union of the first and second, in some sense. Having reached here, a totally new category then occurs (to *Geist*). The previous categories are *aufgehoben* in this. *Aufheben* is a dark term of Hegelian art, which is virtually impossible to translate into English, since it means—very appropriately—both *to remove* and *to preserve*.

As the dialetical development in the *Logic* goes on, it is clear that Hegel is trying to fit a lot of things into this Procrustean bed. However, as an example of the idea, and where it is at its simplest, we may consider the very first stage of the dialectic. This starts with *being*. So *Geist* realises that it *is*. But to say that something is is so vacuous as to say nothing. One might just as well say that it is not. So the second category is *non-being*, or *nothing*, as Hegel calls it. So *Geist* is not. Since it is both of these things, *Geist* both is and is not. This conjunction is the third category in the progression. Hegel refers to it as *becoming*:

Becoming is the unseparateness of being and nothing, not the unity which abstracts from being and nothing; rather, becoming as the unity of being and nothing is this determinate unity in which there *is* being as well as nothing.

Why *becoming*? This is because of Hegel's account of motion—and, more generally, change—which we looked at above. Something that is in a state of change (*becoming*) is in a contradictory state. It is what/where it is, but it is also what/where it is not—what/where it *was* and what/where it *will be*.

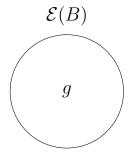
The next concept is *determinate being*, since something in a state of becoming has some determinacy to its being, unlike something that simply *is*. As Hegel puts it: Determinate being issues from becoming; it is the simple oneness of being and nothing. From this simplicity it derives its form as something immediate. Becoming, which mediated it, is left behind; it has transcended itself, and determinate being therefore appears as something primary and as something from which a beginning is being made. First, then, it is one-sidedly determined as being; the other determination it contains, that of nothing, will also develop itself in it, in opposition to the other.

And with *determinate being*, the next triple in the cycle kicks off.

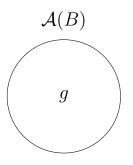
It should be stressed that the fact that the old categories are *aufgehoben* does not make the contradictions in them disappear. We have new and more adequate categories, certainly. But the old categories with their contradictions haven't gone away.

3.5 A Simple Model

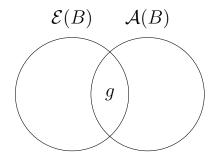
We can, in fact, make a simple model of the progression using the semantics of LP. Let us write g for *Geist*, and B for the property of being. As in Lecture 1, $\mathcal{E}(B)$ is its extension, and $\mathcal{A}(B)$ is its anti-extension Then in the first stage, g is in the extension of B:



That is, at Stage 1, Bg. At Stage 2, g is in the anti-extension of B:

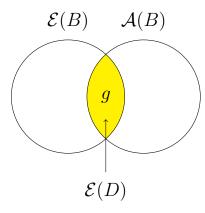


That is, at Stage 2, $\neg Bg$. At the third stage, g is in the intersection of these:



That is, at Stage 3, $Bg \wedge \neg Bg$. So, in particular, Dg.

Finally, in Stage 4, a new concept appears, determinate being, D. The extension of this is exactly the intersection of $\mathcal{E}(B)$ and $\mathcal{A}(B)$, $\mathcal{E}(B) \cap \mathcal{A}(B)$. What the anti-extension of D is, $\mathcal{E}(D)$, is of no concern at this stage. Thus, we have:



Thus, for any x, Dx iff $Bx \land \neg Bx$.

With the new concept, D, the whole process kicks off again, D playing the role that B played before. Notice that the old contradiction, $Bg \wedge \neg Bg$, has not disappeared; but it may now be expressed quite consistently by Dg. In that sense, the contradiction is preserved and removed, that is, *aufgehoben*.

3.6 And Next...

In our discussion of Kant, we met him running up against the phenomenon of the limits of what is describable/conceivable—the limits of thought as we may call it. We also noted Hegel's critique of Kant in this regard. The phenomenon is, in fact, a quite general one. As Hegel puts it in the *Logic*: great stress is laid on the limitations of thought, of reason, and so on, and it is asserted that the limitation *cannot* be transcended. To make such an assertion is to be unaware that the very fact that something is determined as a limitation implies that the limitation is already transcended.

In the next lecture we will look at this phenomenon.

3.7 Further Discussions

- **3.1**: Priest (1990).
- **3.2**: Priest (2002), chs. 5, 6.
- **3.3**: Priest (2019a).
- **3.4**: Priest (2019a).
- **3.5**: Priest (2002), ch. 7.

4 Lecture 4: The Limits of Thought

In the second lecture, we noted that there was another sort of situation which provides an important application of dialetheism: one concerning the limits of thought. This is rather different from the others, and also very important for the history of philosophy. In this lecture we will look at it in more detail.

We'll start by having a look at the phenomenon in question. Next, we will look more closely at two particular philosophers whose work displays it. Following that, we will turn to a dialetheic analysis of the situation they face. We will end by returning to the paradoxes of self-reference, and in particular, to König's paradox.

4.1 The Phenomenon in Question

So let us start with the general situation. There are many theories in the history of philosophy according to which there are things which are beyond our ability to describe or conceptualise. Of course, even to say that there are things of this kind is to describe/conceptualise them. So there appears to be a contradiction here. Conceivably, one might try to say that, in saying that these things are not conceivable/describable, one means that one can say nothing *else* about them.

However, matters are much worse than that. For the philosophers who endorse these views do not merely say that there are such things, they *argue* that there are. In the process they obviously apply many concepts to the objects in question. It appears, then, that one can say many things about these ineffable objects. And if one can, they are certainly dialetheic.

Of course the dialetheic conclusion follows only if the theories in question are correct. And one might well take the situation to show that the theories in question are not true. Naturally, the philosophers in question did not react this way.

We have already met one philosopher of this kind in the last lecture: Kant. We will say no more about him here. Another philosopher of the same kind is Heidegger. There is a lot to be said about him, and we will devote the whole of the next lecture to it.

Philosophers from two religious traditions also find themselves in this situation. It is fairly orthodox Christianity that God is so different from his creatures that our human concepts cannot apply to him. Yet clearly Christian philosophers say a great deal about God, and they take themselves be speaking truly.

In Buddhist philosophy there is a standard distinction between conventional reality and ultimate reality. Conventional reality is the world with which we are familiar, our *Lebenswelt*. Ultimate reality is the way that reality actually is. Different Buddhist schools understand the nature of ultimate reality in different ways; but there are a number of schools of Mahāyāna Buddhism which take it to be ineffable, since language/concepts are constitutive of conventional reality. They say quite a lot about ultimate reality, however.

The philosophers in these traditions are rarely dialetheists; and they are well aware of the issue. Hence they often attempt some—dubiously effective—evasive action. Thus, for example, in Christianity it is common for philosophers to claim that the things said of God are not literally true of him: they are analogically true. However, this itself is a claim about God, and can hardly be meant analogically. Some Buddhist philosophers distinguish between the genuine ultimate and a nominal ultimate—the way that the genuine ultimate appears conventionally. The genuine ultimate is indeed ineffable. When we talk about the ultimate, we are talking about the nominal ultimate, which *can* be described. Of course, if this is the case, when we say that ultimate reality is ineffable, then what we say is just false, since we are talking about the nominal ultimate.

We won't discuss these two traditions any further here. Instead, let us

look at two important philosophers whose theories generate our target phenomenon for a very specific reason concerned with the unity of compound entities.

4.2 A Closer Look at Two Examples

4.2.1 Wittgenstein

The first of these is Wittgenstein, specifically the Wittgenstein of the *Trac*tatus.

According to the *Tractatus*, language is composed of atomic propositions (which may be combined in certain ways), and reality is composed of states of affairs. States of affairs are composed of objects, and atomic propositions are composed of names (themselves objects of a certain kind). These things are no mere congeries of objects/names however. They are structured in a certain way. That is, they have a certain form. The form, however, is not a constituent of the proposition or state of affairs. It is how their constituents are structured within them. (If form were another constituent, then there would have to be a hyper-form, accounting for how it and the other constituents are structured. And so on.)

Names in a proposition refer to objects, and the proposition is about the objects named. A proposition is true if the corresponding state of affairs exists. The corresponding state of affairs is the one composed of the denotations of the names and having the same form as the proposition. We might call this the *isomorphism* theory of truth.

We then face the following situation. Since form is not an object, it follows that there can be no propositions about it. Yet the *Tractatus* is full of statements about form—and other notions which give rise to the same problem. As Russell wryly notes in his introduction to the English language edition of the *Tractatus*:

Everything ... which is involved in the very idea of the expressiveness of language must remain incapable of being expressed in language, and is, therefore, inexpressible in a perfectly precise sense. ... [One may have] some hesitation in accepting Mr Wittgenstein's position, in spite of the very powerful arguments which he brings to its support. What causes hesitation is the fact that, after all, Mr Wittgenstein manages to say a good deal about what cannot be said... That is, Wittgenstein says what, according to him, cannot be said—our target phenomenon.

Wittgenstein is, of course, well aware of the situation, and faces it in the final stunning statements of the *Tractatus*:

6.54. My propositions are elucidatory in this way: he who understands me finally recognizes them as senseless, when he has climbed out through them, on them, over them. (He must so to speak throw away the ladder, after he has climbed up on it.) He must surmount these propositions; then he sees the world rightly.

7. Whereof one cannot speak, thereof one must be silent.

In other words, Wittgenstein declares much of the *Tractaus* meaningless. (One might also note that the last statement is also contradictory, since Wittgenstein is speaking of that of which one cannot speak!)

Wittgenstein's response appears to be plain false: we do understand the *Tractatus*, so its statements are not meaningless. Worse than that, this move actually saws off the branch on which Wittgenstein is sitting. If those statements of the *Tractatus* are meaningless, they cannot establish anything. In particular, they cannot establish that there are no propositions about form, and so provide the rationale for saying that the propositions of the *Tractatus* are meaningless.

4.2.2 Frege

Let us now turn to Frege and his problem of the unity of propositions/states of affairs. The matter is most easily seen with respect to simple atomic propositions. Take an example of such, say *Socrates is running*. This has a subject and a predicate, and both parts of the proposition refer. Names and other singular terms, like 'Socrates' refer to objects—in this case to *Socrates*, the snub-nosed Ancient Greek philosopher we know and love. Predicates refer to concepts, in this case, the concept *is running*.

The trouble is that what the proposition *Socrates is running* means is not simply a list of two things $\langle Socrates, is running \rangle$. The two parts cooperate to produce a unity. For Frege, this is a truth value, but to understand matters, it is easier to think of this as a state of affairs, *that Socrates is running*. Nothing hangs on this for present considerations.

Frege's solution is to say that a concept like *is running* is a different kind of thing from an object. In particular, concepts are "unsaturated". They have a gap in them. The object *Socrates* can then come along and "plug" the gap in the concept *is running*, to create a unity.

Talk of gaps and unsaturation is obviously a metaphor, but none the worse for that; sometimes metaphors are all we have. The problem is the following. Consider Frege's claim to the effect that the concept *running* has a gap in it. 'The concept *is running*' is a noun phrase, and so, according to Frege, refers to an object. Objects do not have gaps in them. So this claim is simply false. In Frege's discussion of the matter, the concept used as an example is not *is running*, but *is a horse*. So this is sometimes called the 'problem of the concept horse'.

One might note that there is historical evidence that Wittgenstein's notion of form in the *Tractatus* was an (unsuccessful) attempt to address this problem. In the *Tractatus*, predicates like *is running* refer to objects. And the thing whose special properties are supposed to account for the unity of a proposition becomes form, not something that any component of the proposition refers to.

Again, Frege is aware of his problem. The solution he offers is not Wittgenstein's heroic response. In fact, he has no solution, but simply throws up his hands. In his essay 'Concept and Object' he says:

I admit that there is a quite peculiar obstacle in the way of an understanding with my reader. By a kind of necessity of language, my expressions, taken literally, sometimes miss my thoughts; I mention an object when what I intend is a concept. I fully realize that in such cases I was relying on the reader who would be ready to meet me half-way—who does not begrudge me a pinch of salt.

In other words, Frege means something that cannot be expressed, though he clearly does express it (as we all understand)—our target phenomenon.

Frege is clearly embarrassed about the situation—but not embarrassed enough. Given what Frege says about concepts and objects, what he says about concepts and objects is untrue. This is a standard case of self-refutation.

4.3 Objects that are not Objects

The fundamental problem which both Wittgenstein and Frege face is this. Whatever it is that accounts for the unity of a structure composed of objects (a concept, form) cannot itself be an object. Adding one object to a congeries of objects just produces a larger congeries. But it *is* an object, since we can refer to it as such. Hence, the "unifying factors", whatever they are, would seem to be both objects and not objects. That is, they are dialetheic.

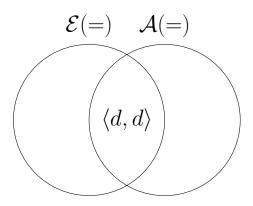
Since both Frege and the Wittgenstein of the *Tractatus* subscribed to classical logic, they are in no position to accept this conclusion. With the resources of a paraconsistent logic, one can. Nor, note, is there anything about Frege's philosophy of language—as opposed to his philosophy of mathematics—or the semantics/metaphysics of Wittgenstein's *Tractatus* which requires classical logic. These theories can be built atop an appropriate paraconsistent logic.

Let us see how the contradictory status of objects can be handled dialetheically.

4.3.1 Objects

Ask, first, what it is to be an object. A natural answer is that to be an object is to be *something*. That is, x is an object, Ox, if $\exists y \ y = x$, or more simply x = x, which is logically equivalent. Since x = x is a logical truth, everything is an object—of course! So let us define Ox as x = x. x is not an object, $\neg Ox$, just if $\neg x = x$ (which we can write as $x \neq x$).

Next, we need to consider how identity works in a paraconsistent context. Identity is a binary predicate, so its extension and anti-extension are not members of the domain, but *pairs* of members of the domain. For identity to have its usual meaning, its extension in any situation, $\mathcal{E}(=)$, must be all pairs of the form $\langle d, d \rangle$. The anti-extension in a situation, $\mathcal{A}(=)$, can be anything one likes, except that every pair must find itself in either $\mathcal{E}(=)$ or $\mathcal{A}(=)$. Hence, we may have have the following situation:



In this situation $d = d \wedge d \neq d$, that is $O(d) \wedge \neg O(d)$. d is both an object and not an object.

4.3.2 ... and Ineffability

What has this to do with the contradiction about ineffability? When we discussed the Liar paradox in Lecture 2, we saw that this paradox turned on a principle concerning truth, the *T*-Schema, which is expressed by all things of the form:

• T[A] iff A

Now, a number of semantic notions appear to be characterised by similar schemas. One of these is denotation. Denotation seems to be characterised by things like:

- 'George Eliot' denotes Mary Ann Evans iff George Eliot = Many Ann Evans
- 'The 44th President of the United States' denotes Abraham Lincoln iff the 44th President of the United States = Abraham Lincoln

and so on. If we write D(x, y) for 'x denotes y' and use square brackets again as a quotation device, then these things may be captured in what we may call the *D*-Schema. Namely, if n is any name then, then for any object, x:

• D([n], x) iff n = x

Now, take any object that is not an object, and let d be its name. Then we have both d = d and $d \neq d$. Substituting d for both n and x in the D-Schema gives:

• D([d], d) iff d = d

Hence, by modus ponens, D([d], d). That is, as one would expect, 'd' is a name for d. And since it has a name, we can say things about it—for example that d is an object. Thus, it is not ineffable.

However, let n be any name (including 'd'). Then the D-Schema tells us that:

• D([n], d) iff n = d

Now either n = d or $n \neq d$. But in the first case, since $d \neq d$, $n \neq d$, by the simple principle of substituting identicals for identicals. Hence, in either case, $n \neq d$. So from the *D*-Schema (contraposing) it follows that $\neg D([n], d)$. But *n* was *any* name one likes. Hence, *d* has *no* name. To say anything about an object, one needs to be able to refer to it by a name. Since *d* has no name, one can say nothing of it. That is, *d* is ineffable.

Thus, d is both effable and ineffable—which is exactly a case of those things beyond the limits of langauge that we can refer to.

4.4 König's Paradox

It might be thought that things that are effable and ineffable are creatures produced by strange metaphysics. But such would be false. They can occur in mathematics.

In Lecture 2 we discussed the paradoxes of self-reference. Now, a number of these paradoxes which were discovered at the turn of the 20th Century concern sets. The simplest such paradox was discovered by Russell, and is therefore called Russell's paradox. This goes as follows.

The set of all chairs is not itself a chair. So the set of all chairs is not a member of the set of all chairs. However, the set of all sets is itself set. So the set of sets is a member of itself. Hence, some sets are members of themselves and some are not. Now, consider the set of all sets that are *not* members of themselves. Call this R. If R is a member of itself, it is one of those sets that is not a member of itself, so it is not a member of itself. If, on the other hand, R is not a member of itself, it is one of those sets that is in R, so it is a member of itself. So R is a member of R iff it isn't. By an application of Excluded Middle, it both is and isn't.

Now, most of the set-theoretic paradoxes are more complicated that this, and depend on additional set-theoretic machinery. The one we are interested in was discovered, in effect, by König, and uses the notion of an ordinal number. The natural numbers, 0, 1, 2, ... are the finite ordinals. There is, however, a least ordinal greater than all these, and so infinite. Thus is usually written as ω . But then we can keep going: $\omega + 1$, $\omega + 2$, There is a least ordinal greater than these, $\omega + \omega$, that is 2ω . But we can still keep going, $2\omega + 1$, $2\omega + 2$,.... And then, $3\omega, ..., 4\omega, ..., \omega\omega$ (that is ω^2). Then $\omega^2 + 1$, and so on. So we have:

• $0, 1, 2, \dots \omega, \omega + 1, \omega + 2, \dots 2\omega, \dots 3\omega, \dots \omega^2, \dots \omega^3, \dots \omega^{\omega}, \dots$

And we have only just started! The most important thing about ordinals for present purposes is that they share with the natural numbers the property that any set of them has a least. There is no way that you can get an infinitely *descending* collection of ordinals.

Now, how far the sequence of ordinals goes is a somewhat ticklish question, both mathematically and philosophically. However, it is not at issue that there are far more ordinals than can be singled out by any description we can construct. (There is a simple combinatorial mathematical proof of this.) Hence, there are many ordinals we cannot refer to. Now, by the property of ordinals, there must be a least such; by definition, one cannot refer to this. But one can refer to it by the description 'the least ordinal that one cannot refer to'. This is König's paradox.

There is no suggestion here that this paradoxical ordinal both is and not an object, or even both an ordinal and not an ordinal. However, it is effable and ineffable. This is exactly characteristic of objects at the boundaries of our linguistic/conceptual apparatus.

4.5 And Next...

We can now leave heavy-duty mathematics behind us, but not the issue of the limits of thought. As we noted, another philosopher who fits the bill of transgressing the limits of language is Heidegger, who has a problem with one very important object that is not an object. We will turn to this in the next lecture.

4.6 Further Discussions

4.1: Priest (2002), chs. 1, 4. Buddhist ultimate reality: Priest (2014a).

- **4.2**: Priest (2002), ch. 12.
- **4.3**: Priest (2019b).
- **4.4**: Priest (2002), ch. 9; Priest (2019c).

5 Lecture 5: Heidegger

In the last lecture, we noted that there are philosophers whose work, if it is right, takes them across the limits of language, saying things that cannot be said. In particular, we saw that for some of these there are objects which are also not objects.

In the present lecture will look at another important philosopher of this kind: Martin Heidegger. As we shall see, he clearly recognises the problem he faces, and struggles with it for many years. As we shall also see, after the turn in his thinking (the *Kehre*), he—unlike the philosophers we met in the last lecture—arguably comes to espouse a dialetheic position on the matter. Many Heidegger exegetes, in thrall to the Principle of Non-Contradiction, would deny this; but we may let the texts speak for themselves. We therefore have a another lesson in how dialetheism adds a new dimension to the hermeneutics of philosophical texts.

We might take as a motto of this lecture, a quote from Novalis, noted by Heidegger [BF: 86]:

To deny the logical law of contradiction is perhaps the highest task.

Note that in this lecture there will be a substantial amount of quoting from Heidegger's texts. At the end of these lectures, there is a separate bibliography of these texts, where the acronyms of references can be found. Other references in the lecture can be found in the general bibliography.

5.1 $BEING_{met}$

Let us start with some words from a letter from Heidegger to a certain Mr Buchner in 1950 [PLT: 181-183]:

Dear Mr. Buchner ... Thinking of Being is highly errant and, in addition, a very destitute matter. Thinking is, perhaps, after all, an unavoidable path, which refuses to be a path of salvation and bring no new wisdom. ... [However,] stay on the path, in genuine need, and learn the craft of thinking, unswerving, yet erring. Yours in friendship, Martin Heidegger

Even though this is just a small fragment of a letter that Heidegger wrote to one of his students, such a fragment is enough to represent well the obsession that moved him from the beginning to the end of his philosophical career. Faithful to the suggestion that he made to Mr. Buchner, Heidegger himself invested his whole life in trying to answer the so-called question of Being: What does Being mean? How shall we understand it? What is Being? Of course, someone may think that all these questions are concerned with highly abstract matters: *prima facie*, Being seems to be nothing more than an obscure metaphysical riddle. However, contrary to this idea, Heidegger believes that Being is involved with the most fundamental aspects of our everyday life. As Heidegger poetically claims, "Being is the ether in which man breathes" [STE: 98]. In particular, two aspects of our life seem to be immediately concerned with Being. On the one hand, 'Being' is a fundamental part of our languages: it is an expression that we constantly use and immediately understand in sentences like 'the cup *is* golden', 'the sky *is* blue' or 'I *am* happy'. On the other hand, Being is the metaphysical precondition for the existence of the world into which, according to Heidegger, we are thrown. In this world, human beings live surrounded by entities that *are*. There are rooms, mathematical theorems, tables, ideas and trees. In one way or another, all these entities are concerned with Being for the simple reason that they *are* all something—rooms, theorems, tables, ideas and trees

These two everyday encounters with Being are not lost on Heidegger. Indeed, in some of his early works, Heidegger himself seems to distinguish between a grammatical understanding of Being (call it BEING_{gra}) and a metaphysical understanding of Being (call it BEING_{met}). Let us begin by discussing the former.

BEING_{gra}: Being as the being of predication, the being of existence and the being of identity.

Heidegger takes $\operatorname{BEING}_{gra}$ to be a fundamental expression of our language and he is careful enough to distinguish between, at least, three different ways in which $\operatorname{BEING}_{gra}$ can be used. First of all, according to Heidegger, $\operatorname{BEING}_{gra}$ can be used as the being of predication. In this first case, $\operatorname{BEING}_{gra}$ appears in statements of the form 'x is y' and it behaves as "a connecting word" [BC: 30] which unifies subjects and predicates (such as 'table' and 'red') into meaningful sentences (such as 'the table is red'). Heidegger writes: "The 'is' has the task of connecting the 'subject' with the 'predicate'. The 'is' is, therefore, called 'link' or 'copula"' [BC: 29]. An example of $\operatorname{BEING}_{gra}$ used as the being of predication is: "the weather is fine" [BC: 23].

Secondly, Heidegger believes that $\operatorname{BEING}_{gra}$ can be used as the being of existence. In this second case, $\operatorname{BEING}_{gra}$ appears in statements of the form 'x is' and it expresses "the objective presence of something, [the] subsistence, [the] existence" [BT: 23]. An example of $\operatorname{BEING}_{gra}$ used as the being of existence is: "'God is' [which] is supposed to mean: God exists, he is actually

there" [BC: 26]. Finally, Heidegger believes that $BEING_{gra}$ can be used as the being of identity. In Heidegger's jargon, the being of identity expresses the sameness of either a term with another term (as in the case of 'George Elliot is Mary Ann Evans') or a term with itself (as in the case of 'number 2 is number 2'). Due to his interest in the Principle of Identity, Heidegger focuses his attention on the latter case, represented by statements of the form 'x is x'. He writes: "'A is A'. What do we hear? With this 'is', the principle [of Identity] tells us how every being is: it itself is the same with itself" [ID: 26].

At this point, changing tack for a moment, it is important to recall that Heidegger is a phenomenologist and, as such, he is primarily concerned with *phenomena*. He writes: "[A] *phenomenon* signifies *that which shows itself in itself*, the manifest . . . — what the Greek sometime identifies simply with to onta (entities)" [BT: 51]. Entities are hammers, wave functions, mountains, prime numbers and everything else we engage with. Now, according to Heidegger, we would not be able to engage with all these entities without an implicit sense that these entities *are* and, therefore, an intuitive understanding of their Being. As he writes: "All comportment toward entities carries within it an understanding of the manner and constitution of the Being of the entities in question" [PIK: 16]. Such Being (that is BEING_{met}) is not intended to be interpreted as an expression of the language but as a substantial metaphysical concept that Heidegger understands in the following way:

BEING_{met}: Being as what makes all entities entities.

Something is an entity because it *is*: exactly its $BEING_{met}$ makes such an entity be. In Heidegger's words, $BEING_{met}$ "determines entities as entities" [BT: 25]. But what does 'making all entities entities' mean? How can we understand Heidegger's expression 'determining entities as entities'? Unfortunately, it is difficult to find any clear answer in Heidegger's *corpus* and, for this reason, philosophers have defended many different understandings of Heidegger's BEING_{met}. The majority of these interpretations can be classified into four main clusters: (i) the *intelligibility interpretation*, (ii) the *objecthood interpretation*, (iii) the *pluralistic interpretation* and (iv) the *sense making interpretation*.

(i) Intelligibility interpretation. According to this first interpretation, there is a deep connection between $BEING_{met}$ and the fact that, following Heidegger's phenomenology, entities appear to be intelligible for human beings. Such a

connection has been cashed out in, at least, three different ways. First of all, some interpreters think that $\operatorname{BEING}_{met}$ is what makes an entity intelligible and, therefore, the $\operatorname{BEING}_{met}$ of an entity is just its intelligibility. Secondly, some other interpreters think that $\operatorname{BEING}_{met}$ is not the intelligibility of an entity but the condition of such intelligibility. Since the condition of x is not necessarily identical with x, $\operatorname{BEING}_{met}$, understood as the condition of the intelligibility of an entity, is not necessarily identical to the intelligibility of an entity either. Finally, $\operatorname{BEING}_{met}$ has been understood in terms of the modal constraints an entity is subject to. In other words, an entity is intelligible to us when we grasp its $\operatorname{BEING}_{met}$ (namely its intelligibility) in terms of what is possible and impossible for the entity in question.

(ii) Objecthood interpretation. According to this second interpretation, $BEING_{met}$ is simply taken to be the *being an entity* of an entity. Using 'object' as a synonym of 'entity', we can also say that $BEING_{met}$ is the objecthood of an object. This idea has been understood in two ways. First of all, some interpreters explain $BEING_{met}$ in terms of metaphysical dependence. In this case, objects are objects because of $BEING_{met}$. In other words, for their being an entity, all entities are grounded in or metaphysically depend upon $\operatorname{BEING}_{met}$ Here, 'y is grounded in x' or 'x metaphysically depends on y' means 'x makes y be (an entity)'. Secondly, some other interpreters explain $BEING_{met}$ by drawing an analogy with Meinong. In particular, Priest [2014b] argues that, as for Meinong's Aussersein, Heidegger's $BEING_{met}$ is the being an entity of an entity, regardless of its ontological status. Pushing the analogy with Meinong a little bit further, Priest also claims that BEING_{met} is equivalent to having a Sosein, that is, in Meinong's term, having properties. Since something has $BEING_{met}$ iff it is an object and since, at least in the Meinongian framework, something is an object iff it has properties, then something has BEING_{met} iff it has properties.

(iii) Pluralistic interpretation. According to this third interpretation, Heidegger defends ontological pluralism. Ontological pluralism is the view according to which, even though there is a generic sense in which all entities have $BEING_{met}$, since different entities are in different ways, entities have different modes of $BEING_{met}$ as well. For instance, Heidegger certainly believes that, in a generic sense, both a hammer and a prime number have $BEING_{met}$ However, according to the pluralistic interpretation, Heidegger also believes that a hammer is ready-to-hand and a prime number subsists. In the former case, readiness-to-hand is the mode of BEING_{met} that (roughly) characterizes tools or pieces of equipment [BT: 97-8; BP: 304]; in the latter case, subsistence is the mode of BEING_{met} that (roughly) characterizes abstract entities such as numbers or propositions [BT: 258-9; BP: 382]. Following McDaniel [2016, 2017], the generic sense in which all entities have BEING_{met} can be expressed by the unrestricted quantification while, for each mode of BEING_{met} there is a restricted quantifier whose domain is a proper subclass of the domain of the unrestricted one. Moreover, each restricted quantifier ranges over all and only those entities that share the same mode of BEING_{met} .

(iv) Sense making interpretation. This fourth and last interpretation is championed by Moore [2012]. According to Moore, metaphysics is the most general attempt of making sense of things and Heidegger's $BEING_{met}$ is what gives us the possibility of making sense of things. This means that Heidegger's thought perfectly fits Moore's characterization of metaphysics because Heidegger tries to make sense of *literally* everything, including what makes sense of everything, namely $BEING_{met}$ itself. It is also important to specify that, according to Moore, 'sense' is a vague notion which can refer to either "the meaning of something, the purpose of something, or the explanation for something" [2012: 5]. If so, this fourth interpretation is compatible with all the accounts presented above. Indeed, when $BEING_{met}$ is understood as intelligibility, $BEING_{met}$ makes sense of the fact that entities are intelligible for us. When $BEING_{met}$ is understood as the objecthood of an object, BEING_{met} makes sense of why objects are object. Finally, when $BEING_{met}$ is understood as ways of being, BEING_{met} makes sense of why entities are in different ways.

At this point, it is evident that these four understandings of BEING_{met} do not have much in common. However, it is important to notice that they agree on, at least, one point: whatever BEING_{met} means, BEING_{met} is not an entity. According to this idea, also known as the *ontological difference*, BEING_{met} cannot be a chair, a star, a number or any other entity, because it is purely transcendental: BEING_{met} transcends the ontic realm, that is, the collection of all entities. Moreover, following Heidegger, Western metaphysics is guilty of having forgotten the ontological difference. As a consequence, the two main branches of Western metaphysics, namely ontology and theology, have traditionally understood BEING_{met} only in terms of entities: ontology discusses BEING_{met} in terms of what entities have in common while theology discusses $\operatorname{BEING}_{met}$ in connection with God, the highest of all entities. If so, the whole Western metaphysics is reduced to what Heidegger calls 'ontotheo-logy': since both *onto*logy and *theo*logy treat $\operatorname{BEING}_{met}$ as an entity, the ontological difference is forgotten. Now, exactly because Heidegger wants to overcome any form of onto-theo-logy, he takes the ontological difference to be the most important guiding principle for his quest into the meaning of $\operatorname{BEING}_{met}$. Such an uncompromising commitment is shown by the fact that Heidegger explicitly endorses the ontological difference from the beginning to the end of his philosophical trajectory. He writes [BT: 62, IM: 92, ID: 62, resp.]:

Being, as the basic theme of philosophy, is no class or genus of entities; yet, it pertains to all entities. Its 'universality' is to be sought higher up. Being and the structure of Being lie beyond every entity and every possible character which an entity may possess. *Being is the transcendent pure and simple*.

Is Being a being like clocks, houses, or any being at all? We have run up against this already—we have run up against this quite enough: Being is not a being, nor any ingredient of being that is itself in being.

We think of Being rigorously only when we think of it in its difference with beings, and of beings in their difference with Being.

Of course, since the ontological difference states that $\operatorname{BEING}_{met}$ is not an entity, given the four different interpretations of $\operatorname{BEING}_{met}$ presented above, there are four different ways of understanding the ontological difference as well. Assuming the intelligibility interpretation, the fact the $\operatorname{BEING}_{met}$ is not an entity means that the (condition of the) intelligibility of an entity is not an entity. Assuming the objecthood interpretation, the fact the $\operatorname{BEING}_{met}$ is not an entity means that the objecthood of an object is not an object. Assuming the pluralistic interpretation, the fact that $\operatorname{BEING}_{met}$ is not an entity means that all the different ways of being are not entities. Finally, assuming the sense-making interpretation, the fact the $\operatorname{BEING}_{met}$ is not an entity means that allows us to make sense of entities is not an entity. Throughout this lecture, the ontological difference will play an essential role in the development of the argument. However, no argument will directly hang on any particular interpretation of $\operatorname{BEING}_{met}$.

That's enough for the notion of BEING_{met} introduced by Heidegger. We may now focus our attention on the paradox that this notion generates, and how Heidegger can be seen as dealing with such a paradox in a dialethetic fashion.

5.2 The Paradox of BEING_{met}

Before continuing, let's go back to where we began. Even though the letter that Heidegger wrote to Mr. Buchner praises his student's interest in the question of BEING_{met} , Heidegger himself does not seem to be particularly optimistic about the possibility of finding an easy answer to it. In this very same letter, without hiding his pessimism, Heidegger says that whoever aims at answering the question of BEING_{met} "already has renounced ... the claim to a binding doctrine and a valid cultural achievement" [PLT: 185]. The strange thing is that, given what we have seen, answering the question of BEING_{met} does not seem hopeless at all. At the end of the day, aren't all the interpretations presented in 5.1 different ways of understanding what BEING_{met} means? And, if so, why is Heidegger so pessimistic about trying to grasp the meaning of it?

Many scholars have tried to explain Heidegger's pessimism concerning the question of BEING_{met}. In this lecture, let us follow those interpreters who have explained it by appealing to the idea that, according to Heidegger, when we speak about something, we always engage with an entity, and that is the entity we speak about. If so, speaking has, using Kaufer's expression [2005: 491], an ontic-reference structure: speaking is necessarily bounded to the entity or the ontic realm it is about. As Heidegger himself puts it in *Contributions to Philosophy*, "All talk keeps itself in words and namings which ... are intelligible to the everyday thinking of ontic being" [CP: 83]. Consistently with this idea, in his *Basic Concepts*, Heidegger argues that, when we say that 'the weather is fine', there is something, an entity, that is fine, namely the weather. He writes: "When we say, for example, completely outside scientific deliberation and far from all philosophical contemplation, 'the weather is fine'..., 'the weather' name[s] a being" [BC: 23].

Reading this last quotation, someone may wonder whether speaking about something means speaking about an entity only when we reason 'far from philosophical contemplation', that is, when we do not reason about it properly. However, following Witherspoon [2002: 100], if we consider Heidegger's account of 'assertions', we can easily see that this is not the case. According to Heidegger, an assertion is what we use when we communicate something. Heidegger also believes that an assertion can convey content only because it points out the features of the entity the assertion is about. Consider the following example: 'the hammer is too heavy'. Such an assertion points out a specific feature (namely the heaviness) of a specific entity (namely a hammer). Of course, when we engage with entities *via* assertions, we engage with these entities in a very abstract way. It is intuitively clear that, when we speak about a hammer, the hammer is phenomenologically given to us in a different way than, for instance, when we actually use it to hammer in a nail. Nonetheless, it still remains an entity. In *Being and Time*, Heidegger expresses this idea in the following way [BT: 196]:

The primary signification of 'assertion' is 'pointing out'. In this, we adhere to the primordial meaning of *Logos* as *apophansis*—letting an entity be seen from itself. In the assertion 'The hammer is too heavy', what is discovered for sight is not a 'meaning', but an entity in the way that it is ready-to-hand. Even if this entity is not close enough to be grasped and 'seen', the pointing-out has in view the entity itself.

Now, someone may want to say that, here, Heidegger is working with the notion of 'intentionality': speaking, which is an intentional act, is always directed towards entities because all intentional activities are directed towards entities, namely objects of intention. Among the interpreters that have actually supported this idea, there is Moore who convincingly argues that the concept of intentionality defended by Husserl permeates Heidegger's philosophy as well. Of course, as with many other aspects of Heidegger's philosophy, the fact that he relies on a Husserlian account of intentionality is highly controversial. However, for the purpose of this lecture, it is not necessary to be committed to any account of intentionality, and certainly not to the Husserlian one. It is enough to accept that, according to Heidegger, every time we speak about something, we speak about an entity. And one can clearly hear this idea in the following passages [BT: 26, PR: 51, resp.]:

There are many things which we designate as 'being' [*seiend*], and we do so in various senses. Everything we talk about, everything we have in view, everything towards which we comport ourselves in any way, is [a] being. When we say that something 'is' and 'is such and such', then something is, in such an utterance, represented as an entity.

At this point, it should be clear that Heidegger faces a predicament because he is wrestling with the extreme limits of the language. Indeed, $BEING_{met}$ is not an entity and, since speaking is always speaking about an entity, $BEING_{met}$ is unspeakable. Nevertheless, we do speak about $BEING_{met}$. Since speaking is always speaking about an entity, $BEING_{met}$ must be an entity too. The predicament can be clearly summarized by the following argument:

- [1] BEING_{met} is not an entity
- [2] Everything we speak about is an entity
- [3] We speak about $BEING_{met}$
- [C] BEING_{met} is not an entity and BEING_{met} is an entity

Premise number [1] is motivated by the ontological difference. Premise number [2] captures Heidegger's idea that every time we speak about something, we speak about an entity. Premise number [3] expresses the phenomenological evidence that we do speak about BEING_{met}. Finally, from these three premises, it validly follows that BEING_{met} is not an entity and, at the same time, however, it is. This is conclusion [C], and is what we may call the paradox of BEING_{met}.

Before moving on to discuss how Heidegger deals with the contradiction of BEING_{met}, note two things concerning this argument. First of all, notice that Heidegger faces the same kind of predicament in speaking about 'nothing'. Contrary to what Carnap had argued for, Heidegger thinks that, even though 'nothing' can be used as a quantifier, it can also function as a legitimate nounphrase. In the latter case, we refer to 'nothing' as the nothing or nothingness. Moreover, since, according to Heidegger, "the nothing is neither an object nor any being at all" [P: 91], he faces the same predicament discussed about BEING_{met}. On the one hand, the nothing is not an entity because it is characterized as such. On the other hand, since everything we speak about is an entity and since we do speak about the nothing, the nothing is an entity as well. Therefore, the nothing is an entity and not an entity. Witherspoon is well aware of the problem [2002: 100]:

Heidegger declares that the Nothing is distinct from entities, from any possible object of thought; but he wants to think and talk about the Nothing, and thought and talk always have an object. Thus it seems that Heidegger is committed both to the claim that the Nothing is not an object of thought and to the claim that the Nothing is an object of thought.

The second observation is that our reconstruction of Heidegger's paradox does not presuppose any particular understanding of $BEING_{met}$. Regardless of the interpretation we work with, the argument will remain valid. To see why, it is enough to reformulate the argument in question by using the four characterizations of $BEING_{met}$ presented in 5.1. As an example, consider the intelligibility interpretation which takes $BEING_{met}$ to be the intelligibility of an entity. If so, premise [1] can be rephrased in the following way: the intelligibility of an entity is not an entity. Premise [2] does not change because it does not contain any reference to BEING_{met} . Finally, replacing ' BEING_{met} ' with 'the intelligibility of an entity', premise [3] states that we speak about the intelligibility of an entity. Once again, from premise [1] we can conclude that the intelligibility of an entity is not an entity and, from premise [2] and premise [3], we can conclude that the intelligibility of an entity is an entity. Since everything we speak about is an entity (premise [2]) and since we do speak about the intelligibility of an entity (premise [3]), the intelligibility of an entity is an entity. The same holds for the characterizations of $BEING_{met}$ defended by the objecthood interpretation, the pluralistic interpretation and the sense making interpretation.

Having said that, we need to be careful. From the fact that the validity of the argument in question does not depend on any specific interpretation of BEING_{met}, it does not follow that all scholars, regardless of which cluster of interpretaters they belong to, are equally willing to admit the existence of such a predicament in Heidegger's philosophy. In fact, when interpreters don't admit the paradox of BEING_{met}, it is not because of their account of BEING_{met} but because of some other additional ideas they are committed to. For instance, Kaufer believes that, according to Heidegger, speaking does not necessarily presuppose an entity that is spoken of. According to him, "this ontic theory of meaning is not Heidegger's" [2005: 491]. If so, this interpretation rejects premise number [2] and, of course, this makes the paradox disappear.

In this lecture, we take no stance about which understanding of BEING_{met} is the correct one. However, we are committed to the fact that Heidegger faces the paradox of BEING_{met} exactly because he endorses the three premisses

discussed above. Moreover, as we'll see, it is possible to read the so-called later Heidegger as a dialetheist; that is, Heidegger takes the contradiction of $BEING_{met}$ to be unavoidable and, therewith, true.

5.3 The Dialetheic Solution

To begin with, it is important to notice that the dialetheic idea that the contradiction of BEING_{met} should be accepted as true is not clearly and systematically addressed by Heidegger. However, a careful examination of some important works of the later Heidegger, delivers strong evidence that he defends the possibility of abandoning the Principle of Non-Contradiction in order to accept the contradiction of BEING_{met}.

Heidegger starts explicitly to cast some doubts on the Principle of Non-Contradiction in his *What is Metaphysics?* Here, as we have already noted, Heidegger shows that in speaking about the nothing, we confront the same contradiction faced in speaking about BEING_{met}. He writes [P: 85]:

What is the nothing? Our very first approach to this question has something unusual about it. In our asking, we posit the nothing in advance as something that 'is' such and such; we posit it as a being. But this is exactly what it is distinguished from. ... Accordingly, every answer to this question is also impossible from the start. For it necessarily assumes the form: the nothing is such and such. With regard to the nothing, question and answer alike are inherently absurd.

One paragraph later, Heidegger suggests that speaking about the nothing is inherently absurd because it leads us to an inconsistency and that, according to the Principle of Non-Contradiction, inconsistencies are unacceptable. However, Heidegger is also explicit in suggesting that, maybe, what needs to be challenged is not the contradiction implied by speaking about the nothing, but the logical principle according to which such inconsistency is unacceptable [P: 85]:

Since it remains wholly impossible for us to make the nothing into an object, have we not already come to the end of our inquiry into the nothing—assuming that in this question 'logic' is of supreme importance...? But are we allowed to temper the rule of logic? Heidegger questions logic and, in particular, the Principle of Non-Contradiction in many other essays as well. For instance, in the *Postscript* of *What is Metaphysics?*, Heidegger suggests that the problem of BEING_{met}, as the problem of the nothing, pushes us to ask whether it is really true that the only correct and acceptable way of thinking needs to presuppose logic [P: 235]:

It now also becomes necessary to ask the question, which is barely posed, whether this thinking [the thinking about $BEING_{met}$ and the nothing] already stands within the law of its truth when it merely follows the thinking whose forms and rules are conceived with 'logic'.

First of all, he clearly states that the suspicion about logic becomes particularly strong when we try to investigate, not the entities that are around us, but what determines all these entities as entities, namely BEING_{met} [P: 235]:

The suspicion regarding 'logic', whose consequential development degenerates into logicistic, springs from a knowledge belonging to that thinking which finds its source in the experience of the truth of Being [BEING_{met}], but not in contemplating the objectivity of beings.

Secondly, he ponders the possibility that "logic is only *one* interpretation of the essence of thinking" [P: 235]. And this seems to open up the possibility that there are other ways of thinking that, without relying on logic and its principles, can accept and not necessarily reject the contradiction of $BEING_{met}$.

Thus far, Heidegger has simply introduced the possibility of abandoning logic and, perhaps, the Principle of Non-Contradiction. No dialetheic solution is explicitly and coherently endorsed yet. The first essay in which Heidegger seems to suggest a dialetheic approach to the paradox of $BEING_{met}$, accepting its contradictory nature as true, can be found in his *Introduction to Metaphysics*. He writes [IM: 82]:

the word 'being' is thus indefinite in its meaning, and nevertheless we understand it definitely. 'Being' proves to be extremely definite and completely indefinite. According to the usual logic, we are here on obvious contradiction. But something contradictory cannot be. There is no square circle. And yet, there is this contradiction: being as definite and completely indefinite. We see, if we do not deceive ourselves, and if for a moment amid all the day's hustle and bustle we have time to see, that we are standing in the midst of this contradiction. This standing of ours is more actual than just about anything else that we call actual—more actual than dogs and cats, automobiles and newspapers.

In this paragraph, Heidegger rephrases the paradox of $BEING_{met}$. On the one hand, he claims that the word 'being' ('BEING_{met}') refers to something that does not have any determination (something about which nothing can be said because there are no determinations to be said). On the other hand, he claims that the word 'being' ('BEING_{met}') refers to something that has, at least, one determination (something about which it can be said that it has the determination of not having any determinations). In other words, 'BEING_{met}' is indeterminate (it has no determination whatsoever) and it is determinate (it has, at least, one determination). It is also very important to notice that, here, Heidegger does not simply rephrase the contradiction of $BEING_{met}$. He also states that this contradiction is actual. Heidegger explicitly endorses the idea that the contradiction of $BEING_{met}$ has to be accepted as true because real and actual. According to Heidegger, such a contradiction is as actual and real as all the other actual and real things in the world. It is as actual and real as dogs and cats, automobiles and newspapers.

At this point, it would be intuitive to expect that, since Heidegger explicitly accepts the idea that there is one actual contradiction (namely the contradiction of BEING_{met}), he systematically accepts the idea that contradictions are not necessarily unacceptable too. Unfortunately, this is not the case. The idea that the Principle of Non-Contradiction should (or simply could) be abandoned, accepting the contradiction of BEING_{met} as true, is not consistently presented throughout his *Introduction to Metaphysics*. Besides the paragraph just noted, there are no other significant indications of this direction of thought.

Only some years after the publication of Introduction to Metaphysics was the dialetheic solution to the paradox of BEING_{met} more coherently articulated in the *Contributions to Philosophy*. In this work, Heidegger presents what he describes as an innovative idea: a new beginning for philosophy that can be seen as a defense of the dialetheic position, according to which BEING_{met} should be taken to be both an entity and not an entity. In order to mark the difference between the traditional and the innovative understanding of BEING_{met} , he starts to write Being [Sein] as Beyng [Seyn]. Following Heidegger, I write BEYNG_{met} as well.

As already mentioned, the *Contributions to Philosophy* are meant to explore the possibility of 'another beginning' for philosophy and, in general, for any quest in search of the meaning of $BEYNG_{met}$. On the one hand, such a new beginning is meant to overcome how metaphysics has been traditionally done. He writes that "these 'contributions' question along a way which is first paved by the transition to the another beginning" [CP: 6]. On the other, this new beginning is supposed to help us to grasp the truth of $BEING_{met}$ in a completely new way. He writes [CP: 4]:

In crossing to another beginning, philosophy has to have achieved one crucial thing: projecting-open ... of the time-space of the truth of Seyn [BEYNG_{met}].

These two features of Heidegger's new beginning make it necessary that "[an]other beginning must be attempted" [CP: 6].

This new beginning of philosophy is represented by what Heidegger calls the 'event' (*Ereiqnis*). As early as the second paragraph of *Contributions* to Philosophy, he clearly claims that the event is deeply connected with the question of $BEYNG_{met}$ because it is "the first answering of the question of being" [CP: 8]. As such, Heidegger characterizes the event as that specific moment in which $BEYNG_{met}$ is revealed to human beings. This means that the very same BEYNG_{met} that was purely transcendent and, therefore, unsayable, now, in the second beginning, through the event, is given to human beings in such a way that it is possible to have access to it and its truth. Heidegger describes the epiphany of $BEYNG_{met}$ as the essential occurrence of $BEYNG_{met}$ itself. "Beyng $[BEYNG_{met}]$ must occur essentially" and exactly this "essential occurrence of beyng $[BEYNG_{met}]$ constitutes the event" [CP: 9]. Embracing the new beginning defended in the Contributions to Philosophy, something fundamental happens: BEYNG_{met} and its truth become accessible and sayable. During the event, in a spatio-temporal fragment of the world, $BEYNG_{met}$ opens up to the human being [CP: 6].

In the interim, in the transition to the other beginning, philosophy needs to have accomplished something essential: the projection, i.e., the grounding and opening up, of the temporal-spatial playing field of the truth of beyng [BEYNG_{met}]. As it is clear from Paragraph 11 of the *Contributions to Philosophy*, Heidegger also believes that there is a deep connection between the new beginning represented by the event and human beings. Indeed, the event, understood as the moment in which BEYNG_{met} essentially occurs, can take place only via *Da-sein* or, so to speak, through the human being. In particular, Heidegger writes that the "*Event* [is] the sure light of the essential occurrence of beyng [BEYNG_{met}] in the most outer horizon of the most inner plight of the historical human being" [CP: 26]. Such an inner plight, such a struggle, is represented by a decision that the human being should take for the happening of the essential occurrence of BEYNG_{met}. Heidegger writes that "the extreme decision is about the truth of beyng [BEYNG_{met}]" [CP: 78]. Exactly Before this new beginning of philosophy, BEYNG_{met} and the human being have never been properly bridged exactly because, only by making such a fundamental decision does the human being reach BEYNG_{met} in the event. He writes [CP: 27]:

The event and Da-sein in their essence—i.e., in their belonging as grounding of history—are still fully concealed and will be strange for a long time. The bridges are lacking; the leaps have not yet been carried out. Still missing is the depth of a meditation and of an experience of truth which would be capable of those bridges and leaps: the power of the crucial *decision*.

This 'crucial decision' is exactly the one that determines the essential occurrence of BEYNG_{met} bridging the event and Da-sein. But, then, what is this decision about? What is the human being supposed to choose between? What are the options among which the human being should decide? An intuitive idea is that the decision must be between one of the two contradictory conjuncts of conclusion [C]. To see why, let's recall that, according to conclusion [C], BEYNG_{met} is not an entity, which is the first conjunct, and, at the same time, BEYNG_{met} is an entity, which is the second conjunct. However, if we assume the Principle of Non-Contradiction, conclusion [C] becomes unacceptable. It would be, therefore, natural to think that, in order to avoid the contradiction, the human being must decide between one of the two following options: *either* BEYNG_{met} is not entity or BEYNG_{met} is an entity. In this case, "the essence of the decision" is understood as the choice between either the "being or [the] non-being" of BEYNG_{met} itself [CP: 45].

Having said that, note that Heidegger does not seem to characterize the decision in this way. Indeed, according to Heidegger, when we face the *either*

... or ... discussed above, a preliminary and more radical decision has already been taken: indeed, it has already been decided that a decision needs to be taken between the *either* ... or ... in question. Heidegger seems to suggest that the crucial decision, the decision which is the essence of the event, is the one that decides if we actually need to decide between one of the conjuncts of the contradictory conclusion [C]. Moreover, Heidegger thinks that, in taking such a crucial decision, the human being is meant to challenge exactly the necessity of choosing between either the fact that BEYNG_{met} is not an entity or the fact that BEYNG_{met} is an entity. He provocatively asks: why do we blindly assume that we need to choose between these two possibilities? What is the necessity of such a choice grounded in? [CP: 80]:

The essence of the decision—being or non-being—can be determined only out of the essential occurrence of decision itself. Decision is decision between an either and an or. Thereby, however, what is proper to decision is indeed already forestalled. Whence the either—or? Whence the only this or only that? Whence the unavoidability of this way or else that way?

Heidegger's answer to this chain of questions is clear: the decision between the *either* ... or ... explained above is avoidable. No one and nothing force us to choose. As a radical exercise of freedom, the human being can simply decide not to decide. Consistently with this idea, Heidegger suggests that, since "the [crucial] decision is originally about whether there is decision or non-decision" [CP: 80], the human being should choose the latter. Facing the *either* ... or ... described above, Da-sein should simply be indifferent, where "the indifference [is understood] as non-deciding" [CP: 80]. Heidegger suggests that deciding not to decide means to endorse both contradictory conjuncts of conclusion [C]. In other words, according to this radical new beginning of philosophy, BEYNG_{met} becomes accessible as a result of the human being's decision to accept its inconsistent nature. In the event, both BEYNG_{met} is and is not. It is both an entity and not an entity.

At first, Heidegger introduces his dialetheic position in a figurative way. He claims that it is necessary to abandon the idea according to which either $BEYNG_{met}$ is an entity or $BEYNG_{met}$ is not entity because $BEYNG_{met}$ and entities are not necessarily incompatible. Metaphorically speaking, $BEYNG_{met}$ and entities are not two opposite riverbanks which the human being constantly, but unsuccessfully, tries to bridge: as there are no opposite riverbanks, there is no necessary separation (Heidegger uses the ancient Greek word $\chi \omega \rho \iota \sigma \mu \delta \varsigma$) between BEYNG_{met} and entities either [CP: 14]:

Da-sein overcomes the $\chi \omega \rho \iota \sigma \mu \delta \varsigma$ (separation) not by slinging a bridge between beyng (beingness) and beings as if they were two objectively present riverbanks but by transforming together ... both beyng and beings.

From the metaphor, Heidegger clearly takes conclusion [C], that is, BEYNG_{met} is an entity and BEYNG_{met} is not an entity, to be a *dialetheia*, namely a true contradiction. In the event, BEYNG_{met} truly is an entity and not. The same holds for the nothing. Consistently with this idea, Heidegger begins by discussing the contradiction of the nothing. He clearly claims that, according to the new beginning of philosophy, an entity, a being, is not only everything that *is* or, in Heidegger's jargon, everything that 'stands in BEYNG_{met}': entities are not only actual things (such as my laptop), objects of knowledge (such as the theorem I proved yesterday) and possible things (such as the possible present I will receive for Christmas). According to Heidegger, something that is not and, therefore, does not stand in BEYNG_{met} is also a being. Thus, as strange as it may seem, Heidegger claims that the nothing is an entity too [CP: 59-60].

'Beings' [entities]—this term names not only the actual (and certainly not if this is taken as the present at hand and the latter merely as the object of knowledge), not only the actual of any sort, but at the same time the possible, the necessary, and the accidental, everything that stands in beyng [BEYNG_{met}] in any way whatever, even including negativity and nothingness.

Of course, given what has been said until now, it is easy to spot a contradiction. What is an entity, namely a being, is—it stands in BEYNG_{met}. What is not an entity, namely a non-being, is not—it does not stand in BEYNG_{met}. Now, when Heidegger claims that the nothing, which is a non-being, is an entity, he actually states that the nothing both is not an entity (it does not stand in BEYNG_{met}) and it is an entity (it stands in BEYNG_{met}). Such a contradiction is unacceptable only if the Principle of Non-Contradiction is assumed; nevertheless, according to the *Contributions to Philosophy*, whoever takes the 'non-contradiction' as an inescapable law for any meaningful engagement with what Heidegger calls the essence of entities, namely BEYNG_{met} and the nothing, thinks too narrowly [CP: 60]. Those who fancy themselves only too clever and immediately uncover a contradiction here, since indeed non-beings [such as $BEYNG_{met}$ and the nothing] cannot be, are thinking in much too narrow way with their 'non-contradiction' as the measure of $[BEYNG_{met}, namely]$ the essence of beings.

Heidegger defends exactly the same idea in discussing BEYNG_{met} . As with the nothing, BEYNG_{met} is a non-being: it is not an entity. Nevertheless, at the same time, it is a being: it is an entity. BEYNG_{met} both is and is not [CP: 80].

For 'being' does not here mean objective presence in itself, and non-being does not here mean complete disappearance. Instead, non-being as a mode of being: it is [*Seiend*] and yet is not. And likewise being: permeated with the 'not' and yet it is [*Seiend*].

In summary, we can say that, in the new beginning of philosophy, $BEYNG_{met}$ essentially occurs in the event; and the event, in turn, is grounded on the human being's decision of not deciding whether $BEYNG_{met}$ is an entity or not. Here, the decision of not deciding is understood as accepting the contradictory nature of $BEYNG_{met}$, expressed by conclusion [C], according to which $BEYNG_{met}$ is an entity and $BEYNG_{met}$ is not an entity. As such, what is revealed in the new beginning is the $BEYNG_{met}$ of what does not have any $BEYNG_{met}$ or, in Heidegger's words, the "being of nonbeings" [CP: 80]. This is the true contradiction of both $BEYNG_{met}$ and the nothing: they are entities that are also not entities.

To conclude, Heidegger's endorsement of a dialetheic approach to BEYNG_{met} and the nothing is at its most explicit in the *Contributions to Philosophy*. However, there are certainly many other allusions to the matter in his later work. For instance, in a seminar given at the University of Freiburg during the summer semester 1934, Heidegger claims that his philosophy has "the necessary task of a shaking up of logic" [LQ: 1] while, in *What is a Thing?*, he claims that "the Principle of Non-Contradiction is not a basic principle of metaphysics" [WT: 137]. Moreover, in *The History of Beyng*, Heidegger explicitly states that "a contradiction is not a refutation ... but rather fathoming the ground of an inceptual fundamental position within the truth of beyng [BEYNG_{met}]" [HB: 15]. These statements are, perhaps, somewhat coy, compared with the remarks on the matter in the *Contributions to Philosophy*; but given these remarks, their intent is clear. In this part of the lecture, we have seen that, assuming as plausible the interpretation according to which Heidegger faces a contradiction in speaking about $BEYNG_{met}$ and the nothing, it is also plausible to interpret some of his later works as an initial attempt at accepting such a contradiction as true. It is important to say that we claim neither that such a dialetheic attempt is fully developed by Heidegger nor that Heidegger blindly endorses it. Nevertheless, we do believe that Heidegger takes the dialetheic solution very seriously or, at least, seriously enough to turn it into one of the main topics of the *Contributions to Philosophy*.

5.4 Possible Objections

Let us end by considering some objections to this view.

(a) The neither ... nor ... objection. Some scholars may object that the interpretation defended here is wrong because, according to Heidegger, the decision of not taking any decision needs to be understood as deciding that neither is it the case that $BEYNG_{met}$ is an entity nor is it the case that $BEYNG_{met}$ is not an entity. If so, Heidegger does not give up the Principle of Non-Contradiction but he challenges the Principle of Excluded Middle. Therefore, according to the neither ... nor ... objection, Heidegger does not endorse any dialetheic solution to the problem of BEYNG_{met}.

Reply: This objection does not seem to be successful for two reasons. First of all, in all the quotations discussed above, $BEYNG_{met}$ is taken to be an entity and not to be an entity. Heidegger writes: "It [BEYNG_{met}] is and yet is not" [CP: 80]. Secondly and more importantly, it is natural to think that, if the *neither* ... nor ... objection is successful, it should be easy to find quotations in which Heidegger openly challenges the Principle of Excluded Middle. However, this is not the case. Even though Heidegger is clearly aware that the Principle of Excluded Middle represents an important law of logic, his corpus rarely discusses it, while it is brimming with attacks on the Principle of Non-Contradiction. This makes the *neither* ... nor ... objection particularly problematic.

(b) The temporal objection. Someone may challenge the interpretation by suggesting that, according to Heidegger, it is true that $BEYNG_{met}$ is both an entity and not an entity, but not at the same time. This idea seems to be backed up by the fact that Heidegger himself often describes the event of $BEYNG_{met}$ as an 'oscillation' [see CP: 198]. For this reason, it may be

tempting to think that BEYNG_{met} is an entity at one extreme of the oscillation (let's say at $time_1$) and BEYNG_{met} is not an entity at the other extreme of the oscillation (let's say at $time_2$). If so, in the event, the contradiction of BEYNG_{met} would not occur.

Reply: This objection also faces a major problem. In fact, it is true that Heidegger clearly states that the event of $BEYNG_{met}$ takes place in time; however, from this, it does not follow that time is an integral part of the event itself. The event must happen in time just because it depends on the human being's decision of not taking any decision whether $BEYNG_{met}$ is an entity or not. Since the human being's decision happens in time, the event, which depends on the human being's decision, happens in time as well. Nevertheless, Heidegger is clear that, in the event, $BEYNG_{met}$ is "instantly" both an entity and not an entity [CP: 13]. Moreover, as in the case of the neither ... nor ... objection, the temporal objection leaves unexplained why Heidegger is so concerned with the Principle of Non-Contradiction.

(c) The 'verb' objection. Some interpreters claim that, according to Heidegger, in the event of $BEYNG_{met}$, ' $BEYNG_{met}$ ' itself should not be understood as a noun but as a verb. According to this interpretation, $BEYNG_{met}$ is just the activity that every entity engages with, that is, the activity of being. As such, $BEYNG_{met}$ is not an entity; on the contrary, it is that specific action, the action of being, which characterizes all entities. If so, no contradiction occurs because is not an entity only.

Reply: This objection does not seem successful for two reasons. First of all, Heidegger explicitly uses 'BEYNG_{met}' as a nominalized verb. Of course, it is formed from the verb to be; nevertheless, it remains a noun and Heidegger uses it as such. Secondly, we should not forget that, according to the interpretation we have assumed, Heidegger believes that everything we speak about is an entity. Therefore, even if we understand BEYNG_{met} as the action or the activity of being, since we do speak about such an action or such an activity, the action or the activity of being needs to be an entity. For this reason, what we have called the paradox of BEYNG_{met} still remains.

The charitability objection. Let's consider one final worry. Someone may argue that our interpretation is uncharitable because it attributes to Heidegger inconsistent views. Who can tolerate contradictory positions? Who would seriously take into consideration a philosopher that endorses inconsistent views? Attributing a contradictory position to an author seems immediately to lead us to discharge their position as non-sensical and absurd.

Reply: This objection is successful only if we assume that inconsistent philosophical positions are necessarily wrong and unacceptable; and as we have seen in these lectures, it may be quite acceptable to hold that some contradictions are true. If so, the interpretation defended here is not uncharitable. As for our discussion of Hegel, it simply takes what he says at face value, and attributes to Heidegger some heterodox but coherent ideas.

5.5 And Finally...

With this discussion of Heidegger, we bring these lectures to a close. Dialetheism is the view that some contradictions are true. The view is highly heterodox in Western philosophy. However, we have seen that, drawing on the resources of modern paraconsistent logic, it is a view that is quite coherent; and it may be quite rationally applied to situations of the kind at which we have looked. We have also seen how, appealing to the view shows important episodes in the history of Western philosophy in a whole new light.

We recommend dialetheism, its many applications and implications, for your further consideration.

5.6 Further Discussions

5.1-5.4: Casati (2018), (2019); McManus (2013); Moore (2012), ch. 18; Priest (2015); Witherspoon (2002).

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