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Philosophy as conceptual negotiation

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Chapter 1 The philosopher is a conceptual negotiator

Delivering an opening lecture in philosophy is a challenge.¹ It is not enough to write an introduction or draw a historical overview of philosophy. It is not even said that an opening lecture - even if entrusted to a philosopher - is a philosophical exercise. In these pages I will try to show how a perhaps unusual, perhaps unphilosophical theory of philosophy can explain what philosophers do or have done; not only professional philosophers but also people who without really thinking of it were actually doing philosophy. I would also like to show what we should expect from philosophical work, and why this is important.

So I'll tell you right away what I think a philosopher is. A philosopher is a *conceptual negotiator*. Some will agree, others less so: but let's keep this idea of negotiation firm. When is a conceptual negotiation made? Very often and in many places. Here is an example. In a certain country, at some point in history, you move from monarchy to republic. Before then, we were almost all of us (except the king and queen, I mean, and their family) *subjects*. Now we are *citizens*.

Moving from subject to citizen means redefining the perimeter of rights and duties; redefining the conception that each of us has of ourselves in front of others; changing hierarchies and organizations; discovering that our opinion counts and deciding how to choose our representatives. The list is long. These changes do not happen with a touch of a magic wand; and they do not happen blindly. *You have to think about it.*

¹ Note 2022. The original version of this book was published in Italian in 2011, is a series of "First lecture in...". The translation does not diverge from the original version but in minor points and small corrections. In the last decade conceptual engineering as a core mission of philosophy has attracted a lot of interest. Conceptual negotiation as defended in this book is best conceived as a contribution to conceptual engineering. I could not engage with recent literature, as I limited myself to making this 2011 contribution available in English.

For example, many laws have to be rewritten, and above all, a kind of handbook has to be written that tells us how to write laws - that is, a Constitution has to be drafted. In all this we have to negotiate conceptually. What is a citizen?

Typically, in a conceptual negotiation we try to build an explanation or a narrative that allows us to recompose a conceptual *tension*. Now I am a subject, can you explain me what it means to be a citizen? Can you explain it to me so that I can understand it, on the basis of my experience, of the tradition in which I have lived until now?

A simple example, I said. The fact is that examples of this type abound. If we start to look around, we see them easily. We find them everywhere changes in what we know or what we do put pressure on the ideas we had been lulled into until then about the world around us. They are changes due to the new knowledge that science proposes to us; to new structures in society; to profound transformations in our personal lives. The Sun does not gravitate around the Earth. Not everything my brain does is known to me. Matter is energy. A urinal is exhibited as a work of art in a museum. My daughter speaks perfectly a language that I barely understand. The chimpanzee and I have a common ancestor. I can talk to a friend on the other side of the planet in real time. Laura went to Spain to be married to Luisa. A sudden mourning struck me.

Ancient ideas and habits are difficult to abandon: maybe they have their own legitimacy; maybe we got there with a hard path and we find it difficult to renounce them; maybe they are an even more ingrained, biological legacy, and we cannot see beyond them even if we try hard. And yet the *new* situation forces us to confront them, and eventually transform them. How do you change your mind? Somewhere we have to start. A conceptual negotiation opens. What is a planet? What am I? What is a marriage? And how do I accept the new state of things? It is not only a theoretical interest. What new narrative of the world allows me to act, if I accept that the world is no longer what it used to be? How can I act, if anyway the concepts I use to orient my action are the old ones?

Here there is room for the intervention of philosophers, who are conceptual negotiators by vocation or profession. Since there are traces

of philosophy in history, there are traces of conceptual negotiation. Of course, philosophers also negotiate conceptually with each other at a more or less close distance. Aristotle negotiates with Plato and Kant negotiates with Hume, Heidegger with Husserl, Russell with Frege: are individual things all there is or are there universal entities that they exemplify? Are there ultimate constituents of the world? Am I truly free or is nature also called law over my action? Can we really know reality or are we clouded by the veil of perception? Are numbers like other things? But as we will see these are not the only philosophical negotiations.

Two words then on the non-philosophical negotiation. There are many ways to negotiate, but two attract our attention. You can haggle, that is to say to probe little by little your counterpart's objective, revealing little by little your own, until you reach a point of equilibrium or stall in which you declare that a certain price is the highest that you want to pay, and you learn that a certain price is the lowest to which our interlocutor intends to sell. This type of negotiation essentially tries to find out what our counterpart wants, who does everything possible not to reveal it, and to hide what we want from the counterpart, while you do everything possible to find out. Negotiation theorists in general are not very satisfied with this procedure, which takes away the depth of the negotiation work, relegating it to the cognitive dimension only - the negotiation would mainly serve to obtain information, and gets stuck for a thousand extrinsic reasons, such as the dislike we may feel for the other party. A more articulated way of negotiating described in the classic *Getting to yes* of the Harvard Negotiation Project is based on some cornerstones: "separating people from problems, focusing on interests and not on declared positions, inventing options that can lead to mutual benefits, and insisting on the use of objective criteria". The last two points are fundamental to what I mean in this Lesson. In fact, the invention of options is a pervasive feature of philosophical work; and the demand for common criteria of judgment, though perhaps less pervasive, is part of good philosophical rhetoric. These two ways of proceeding in philosophy do not make much sense in themselves, but they acquire it fully if they are seen as *tools* to allow dialogue between different positions or worldviews. In a mature negotiation you also often have to negotiate with yourself; a negotiator sometimes has to leave the table to return to his

positions, convince his side, rethink what she really wants. At the same time, the openness to the revision of one's own ideas is accompanied by the need to offer the other party help, or options, so that the latter can in turn revise its own ideas in order to find a common point or in any case to unlock the action.

Let me immediately show you some consequences of this way of looking at philosophy. *One*: If the philosopher is a conceptual negotiator, it follows that philosophy, more than a subject, is an art; the art of negotiating concepts, which requires not only rigor but a good dose of imagination. This means, *two*, that there is no canon of philosophy in the sense that there can be a canon of physics or biology, or historical method. *Three*, then explaining philosophy means explaining the techniques of negotiation based on examples. Of course, there are recurring themes; but we will see how, perhaps surprisingly, these themes show that the skills of the philosopher are close to those of the artist, or of the creative mathematician, or of the engineer, for one aspect or another. Another consequence (*four*) is that philosophy is much more widespread in society than one would expect, or is represented. We find conceptual negotiations when we have corporate mergers and we need to bring different business cultures into dialogue, when we decide what statistics are relevant to assess the sense of insecurity, when we ask ourselves questions about the corpuscular or wave nature of light, when we set ourselves educational goals, when we help our children to grow up, when we accept that we are getting older. *Five*, we have a simple key to much history of philosophy, which is nothing more than the trace left by ambitious conceptual negotiations, which took place in coincidence of sometimes brutal changes: when we begin to understand that the human body is a kind of machine (Descartes), when cities endow themselves with autonomous laws (Plato), when we try to stop the spiral of violence between religious communities (Locke), when people choose to decide their own destiny instead of supinely conforming to sermons (Kant) - for example. And this means that, *six*, countless other negotiations have not been recorded under the label of 'philosophical negotiation', but their traces are present in the society that has been shaped by them. We can also make a prediction: *seven*: we will find many explicit traces of conceptual negotiations when social, economic and scientific transformations are particularly radical. The history of philosophy is

discontinuous and heterodirected; the world changes, philosophy comes handy; philosophy rushes to help. *Eight*, it will turn out that some things to which we stick the label of philosophy are such only in name. *Ninth*, to finish: philosophy has good days ahead of it: we have no reason to think that the future does not always reserve us new surprises, which will put us and those who will come after us in front of the need to negotiate conceptually. And we know that there are many people who are different from us, whose ideas can be very far from ours. We must accept these facts as a treasure and a challenge.

Chapter 2 Philosophy at work

Let's take a closer look at three cases in which conceptual negotiation has taken center stage. The first two examples date back to the last century and concern the concept of a work of art and the concept of family, respectively. The third, much older, draws from the discovery that the Earth is not immobile at the center of the universe. These examples are distant from each other in space and time; they seem very distant in spirit from each other, but as we will see they are joined by a robust thread. The point to which I intend to draw the reader's attention is that these discussions do not take place in an institutionally philosophical venue such as a university lecture hall or a philosophy book; but that they are nevertheless philosophical.

1927: But is it *really* art?

MR. HIGGINBOTHAM: When you say you consider that a work of art, will you kindly tell me why?

WITNESS (Jacob Epstein): Well, it pleases my sense of beauty, gives me a feeling of pleasure. Made by a sculptor, it has to me a great many elements, but consists in itself as a beautiful object. To me it is a work of art.

MR. HIGGINBOTHAM: So, if we had a brass rail, highly polished, curved in a more or less symmetrical and harmonious circle, it would be a work of art?

WITNESS: It might become a work of art.

MR. HIGGINBOTHAM: Whether it is made by a sculptor or made by a mechanic?

WITNESS: A mechanic cannot make beautiful work.

MR. HIGGINBOTHAM: Do you mean to tell us that Exhibit One, if formed up by a mechanic---that is, a first class mechanic with a file and polishing tools---could not polish that article up?

WITNESS: He can polish it up, but he cannot conceive of the object. That is the whole point. He cannot conceive those particular lines which give it its individual beauty. That is the difference between a mechanic and an artist; he (the mechanic) cannot conceive as an artist.

JUSTICE WAITE: If he can conceive, then he would cease to be a mechanic and become an artist?

WITNESS: Would become an artist; that is right.

In this fragment of dialogue, it seems, two people are trying to assess what is art and what is not. But what is the context of this curious staging, that seems to take place in the courtroom? In fact it is a real philosophical discussion; and the context is a real trial. In 1927 the sculptor Constantin Brâncuși (1867-1957) sued the United States. The year before, the photographer Edward Steichen had purchased a sculpture by Brâncuși, *Oiseau dans l'espace*, but at the time of filling the tax form for import he could not obtain the exemption from customs costs usually granted to works of art. The U.S. customs officers, after a quick examination of the stylized and abstract form of *Oiseau*, classified the sculpture of Brâncuși as a kitchen utensil and imposed a tax of 240 dollars of the time: it is not really art, it is a utilitarian object, the importer must pay. Obviously it was not so much the tax that annoyed Brâncuși, but the classification of his creation as a utilitarian object, the lack of recognition of its artistic value. When Steichen spoke to the founder of the Whitney Museum about the complaint, she saw the possibility of setting an important precedent and made her lawyers available to him. The proceedings are an extraordinary document: they record the opinions of experts who must convince a jury that *Oiseau* is, or is not, a work of art. The lawyers of both parties challenge the witnesses with insidious questions that test the consistency of their conception of art. The starting point is the definition of an art object used by the American customs: until 1922 it had to be a *reproduction* of a natural model (such as a portrait of a person, a landscape, a still life), and

only later did they begin to grant other types of objects the privilege of art, provided that they were original, that they were not mass-produced, that they were attributable to known artists, and that they had no utilitarian purposes.

The interest of the trial against Brâncuși lies in the fact that the proposed definitions of art or artist do not simply serve to articulate a theoretical position, but are designed to convince a jury in a trial. We are outside the academic sphere; and yet the level of discussion is highly theoretical. We are not trying to ascertain *facts*, as befits a trial in which Brâncuși had stolen, or plagiarized, or cheated. We are witnessing an attempt to negotiate the limits of the concept of the art object. Modern art imposes a conceptual negotiation because its productions - *Oiseau* is an example of this - challenge the categories into which it is intended to fit them.

In the exchange that I have quoted before, according to the "witness", who is an expert, the sculpture in question is deemed art because it was produced by an artist; if an object with a completely identical shape had been produced by a person who is not an artist, it would not be art. This argumentative style is often found in philosophy: if you want to understand what the limits of a concept are, think of an object that falls under that concept, imagine a duplicate of the object that has all the characteristics of the original minus one, and see if the concept still applies. We will talk about it again.

Brâncuși won the case in November 1928. In the case of Judge Waite's judgement we can consider that the negotiation has a still hesitant outcome, at least if we think about what is accepted today as a work of art.

"In the meanwhile there has been developing a so-called new school of art, whose exponents attempt to portray abstract ideas rather than imitate natural objects. Whether or not we are in sympathy with these newer ideas and the schools which represent them, we think the facts of their existence and their influence upon the art worlds as recognized by the courts must be considered. The object now under consideration is shown to be for purely ornamental purposes, its use being the same as that of any piece of sculpture of the old masters. It is beautiful and

symmetrical in outline, and while some difficulty might be encountered in associating it with a bird, it is nevertheless pleasing to look at and highly ornamental. And as we hold under the evidence that it is the original production of a professional sculptor and is a fact a piece of sculpture and a work of art according to the authorities above referred to, we sustain the protest and find that it is entitled to free entry under paragraph 1704, supra. Let judgment be entered accordingly.”

It is art, it is agreed, but only because it has certain characteristics of things that we traditionally consider as art, it is a decorative object, it has a pleasant symmetry, it was produced by a person who is a professional sculptor. At the same time this redefinition, although still shy, unlocks life: you can start acting again, and you can do it with awareness of the notions used.

One might certainly think that the gist of this discussion is just that we have to accept the existence of cultural or terminological differences. What today is art, maybe tomorrow, in another culture, will no longer be art. In reality the problem is deeper. These differences have an impact on life. We can only act because we represent the world in a certain way. If circumstances forcefully propose to us objects that escape our categories, we must intervene on the categories, on our way of thinking.

1946: But is it *really* a family?

The second example concerns the philosophy of the person and of society. The family and its relations with the State are at the center of the discussions that between 1946 and 1947 preceded, in the Constituent Assembly, the final drafting of Article 29 of the Italian Constitution, which reads:

Art. 29. The Republic recognizes the rights of the family as a natural society based on marriage. Marriage is ordered on the moral and legal equality of the spouses, with the limits established by law to guarantee family unity.

It seems a simple article, but the negotiations that took place to arrive at this formulation were long and complex. I will spend some time on this negotiation because it is possible to leave the floor to those who intervened. As for the Brâncuși trial, the discussions have been put on record. And as in that case, the echo of the negotiation is still felt today in many people's everyday life.

Consider the background, which is very turbulent, of the drafting of the Constitution. There we find a lost war that has sanctioned, under the allied occupation, the end of the fascist dictatorship; a popular referendum that has decided the transition from monarchy to republic; the election, the first free election after the twenty years, of the representatives to the Constituent; the need to define a form of democratic government; and the fact that in this "fluid" situation many of the actors in the negotiations are the bearers of large worldviews - some of them representing a Catholic conception of the social order, others a socialist or communist vision, others of yet different philosophies of life and society. Italy was also very divided and polarized; the risk of civil war is always kept in mind.

The discussion on the family then occupies a central node in particular for representatives of the Catholic area. It is intended to oppose the family as a "natural society" on the one hand to a liberal conception seen as too individualistic, and on the other hand to a conception that is thought to allow the State to intervene too much in people's lives.

That the family was conceived by the Constituents of the Catholic area as a subsidiary society, a small state within the state, is clear from two recurrent arguments. One concerns the supremacy of the father, a notion to which intellectuals like Aldo Moro and Giorgio La Pira have difficulty renouncing. If a society is hierarchically ordered, and if the family is a society, the family will be hierarchically ordered; at the time it still is, placed as it is under the wing of the father-head of the family. So says La Pira who has in mind a very precise conception of the family, "*in which is always understood the concept of the father of the family primus inter pares*". The other argument warns against the aberrations of the Fascist Civil Code, which imposed the choices of the State in the education of offspring.

I want to give a background element again. Art (in this case theater) works on the side of institutional negotiation: the story of *Filumena Marturano (1946)* by Eduardo de Filippo sums up the perplexities of society in the face of the irrepressible complexity of the family and the lack of flexibility of the codes that frame it. Filumena, who was a prostitute, has lived for thirty years *with* her old client Mimi Soriano. She tries to trick him into marrying her, but she is unmasked and humiliated. She can only resort to the motion of affection. She reveals that she has three secret children and that they ignore that she is their mother; one of them is Don Mimi's own son. Fatherly pride snaps in Don Mimi, but he tries in vain to find out which of the three is his own son: Filumena does not want Mimi to privilege him at the expense of the other two. All that remains for Don Mimi is to agree to marry Filumena and take the three boys in the house as his own children. In the words of Filumena, sons are just sons, and they are all the same.

The story of Filumena summarizes the path to the conquest of the dignity of both the children born out of wedlock and the parents who generated them. Filumena negotiates a very difficult balance between knowledge and truth: *she hides the identity of Mimi's son* to prevent the father from disowning the other two children. This is a rational strategy: the conscious choice to ignore the truth makes possible an action that in the context is the only winner (all other solutions are losers for Filumena: to indulge in a *de facto* situation where she is without real rights; not to be recognized as a mother; to see the discord creep between her children; to relegate two of them to an unacceptable condition of subordination). It is to Mimi's credit that he has accepted this negotiated solution, which from his point of view is not very simple, but which still allows him to be a father to all intents and purposes.

If we feel the presence of a stumbling block in this negotiation and in the proposed solutions, it is because of the difficulty in tracing the perimeter of the family. In the society in which Filumena and Mimi live, some individuals are considered "illegitimate" children. Filumena is at first forced to the cruelest deception: she does not tell her children she is their mother; then she tries to marry Mimi with a stratagem; then again she is forced to silence Mimi's filiation in order to blackmail him. But if we sympathize with Filumena it is because we feel that it is the absolutely

narrow perimeter of the family to impose these actions. Renegotiating the family's perimeter allows people who are in Filumena's condition to avoid extreme positions like those she has to adopt instead. If Filumena's children were not considered second class people because they are illegitimate, she would not have to hide herself, imposing the *inhuman* renunciation to live next to them as a mother. If Mimi's open family were considered a family in its own right, Filumena would not be degraded to servitude. If there were not this asymmetry between man and woman in Mimi's open family, Filumena would not have to seek marriage at all costs, through humiliating subterfuge.

Other tricks are necessary today for many citizens to live under family legislation in many countries; in Italy this is precisely because of the legacy of Article 29 of the Constitution. Let's read it again. The family is defined as a "*natural society based on marriage*". One wonders, if it is "natural", in what sense is it *based* on a social and cultural act such as marriage?

From the minute minutes of the Constituent emerge the painful progress of the constitutional text until the discussion of article 29 (which results from the synthesis of two articles reworked over and over again). We cannot retrace all the steps here, so we will limit ourselves to highlighting some particularly eloquent and significant positions. What you will read in the next pages is an excerpt in which I often leave the floor to the protagonists; not a philological reconstruction, rather a *director's cut*.

On November 7, 1946, in the first Sub-Commission, Giorgio La Pira, a Catholic intellectual (he was later mayor of Florence during the years of reconstruction and worked for peace and international cooperation), intervenes:

"[President Tupini...] He discusses the second paragraph of the article proposed by the rapporteurs, formulated as follows: "The law governs the legal status of spouses, in order to ensure the unity of the family.

La Pira immediately proposes to amend the article so that it reads: "*The law governs the legal status of the spouses in order to ensure the indissolubility of marriage and the unity of the family.*

Should the indissolubility of marriage be enshrined in the Constitution? The proposal of La Pira is supported by a series of considerations delivered to the minutes of the Assembly:

"Regardless of the religious principle of the indissolubility of the sacrament, his proposal is based on the fact that indeed the most recent studies of Catholics and non-Catholics in the biological, physiological and sociological fields have increasingly demonstrated that the principle of indissolubility corresponds to the structure and aims that marriage strives to achieve. To this rational reason adds one of a legislative nature, in the sense that both current Russian legislation and many other modern Constitutions have moved towards the affirmation of the principle of the indissolubility of marriage. Therefore, for scientific, legislative and historical reasons, he believes that this principle should be affirmed in the Italian Constitution, if you really want to build a society in which the individualistic principle is no longer valid, and that of social responsibility holds instead. As much as it has been affirmed that there will be no mention of divorce neither in the Constitution, nor in the future legislation, it is of the opinion that it is necessary to give the legislator an indication that limits his will in this field. As a believer, then, he cannot keep silent the religious principle, according to which quos Deus conjunxit, homo non separet.

There is a desire to constitutionally bind the legislator. But what kind of argument is contained in these statements? Is referring to other Constitutions a legitimate move? Is it legitimate to refer to scientific studies without quoting them? On November 13, 1946, Giuseppe Dossetti, a Christian Democrat jurist, called into question the opinions of scientists and tried to shift the discussion from the domain of values to that of facts:

"The question must be posed in these terms: should marriage be indissoluble or not according to reasons of pure natural ethics? Contrary to the negative opinion of some, the Christian Democrats on this point answer in the affirmative with the comfort of a wide opinion of sociologists and scientists, who, based on experimental findings of psychology and biology, say that humanity tends more and more towards the indissolubility of the marriage bond. It is therefore necessary to

discuss the issue on this natural ethical level, putting aside all arguments concerning religion".

The request is not innocent. What empirical results are actually cited? Are they relevant to a discussion of principle? If, for example, it was discovered that a majority of the forming couples dissolve afterwards (if the law allows it), would Dossetti change his opinion on the principle of indissolubility?

As I said, the discussion about the family is part of a broader discussion about the nature and limits of the state. Dossetti himself continues:

"Just as norms that profoundly affect the political-economic-social structure of the State have been introduced into the Constitution, so must this norm that affects the most intimate substance of the Italian social and political structure. Challenging the importance of the problem of marriage, it comes to give it a negative solution, which pushes the family in that corner of low consideration and purely individualistic vision in which the liberal state had thrown it.

Very general principles are invoked here. The Christian Democrats had defended the idea of a minimal intervention of the State, in opposition to the totalitarian ideology of the Fascist State, which sneaked into all the folds of life, normalizing them. The words of Lodovico Benvenuti (former Christian Democrat resistant, he was the first Italian to lead the Council of Europe) in the discussion on the project on March 17, 1947 are eloquent and heartfelt:

"Let us not forget, ladies and gentlemen, Article 147 of the Fascist Civil Code, which said that the education and instruction of offspring must be in accordance with the national fascist sentiment: which meant that Italian parents, in order to comply with the law, had to educate their children to hate freedom and serve oppression. These are the aberrations to which legislation can arrive, when you forget that the family is a society of natural law".

It is therefore deemed important to give the family the status of a mini-State in the State to create a protected area of freedom from state interference.

The paternalism that transpires from these conceptions is not the prerogative of Christian Democrats alone; it underlies the declarations of left-wing exponents equally opposed to divorce. Lelio Basso, socialist, *"recalls that the majority of countries admit divorce, but declares to be against introducing divorce in Italy today, because he believes that the moral and social level of Italian life is not such as to admit this institution.* (November 13, 1946)

So far we can consider the negotiation as a skirmish, an exchange of opinions, a statement of positions of principle. Will an agreement be found? The positions seem very distant from each other. How to proceed? In the exchange between Palmiro Togliatti, the then secretary of the Communist Party, and Dossetti during the same session some meta-principles are stated, which should allow the negotiation not to run aground:

"Togliatti points out to Mr Dossetti that one of the reasons why the Communists insist that the principle of the indissolubility of marriage should not be placed in the Constitution, is precisely because in the arguments that are brought in favor of the introduction of this principle they see a proof that all this is done to give a certain ideological imprint to the Constitution. The Communists want the Constitution to be open to all ideological possibilities and not just one. [...]"

Dossetti states that it is not correct that the Christian Democrats want to affirm their ideology in the Constitution and notes that, since the different ideologies fail to converge, inevitably one of them will have to be sacrificed".

What is Togliatti trying to do? He states that the discussion can never result in deliberation as long as the parties do not try to look beyond their own horizon. The Constitution should provide the framework for resolving conflicts, and should not reflect a particular ideology or the

interests of one party. Togliatti had just before presented an agenda that seeks to disengage negotiations:

"The first Subcommittee, noting that nowhere has the proposal to modify the current legislation regarding the indissolubility of marriage been made, does not consider it appropriate to speak about this issue in the constitutional text".

Let's watch this episode. The agenda was rejected by 7 votes to 6, with two abstentions. Two abstenees will declare in a following session (November 15, 1946) that they would have voted in favor of the O.d.G. Togliatti. The search for consensus was moved to the vote - which in itself is a failure of the conceptual negotiation; and the vote was in this case hostage of the contingency, that is who was present at a certain meeting.

That the transition to voting is a failure of negotiation does not mean that negotiation is inherently preferable to voting. On the one hand it can simply happen that negotiations fail: people can decide to stick to their own ideas. On the other hand, voting is a way to avoid paralysis when people feel that their ideas are not negotiable. Voting does not produce consensus. A majority vote makes it possible to govern, but does not make the majority opinion shared.

Article 29 will eventually decree that the family is a *natural* society. What does this mean? Naturality is not a neutral notion, and the moral consequences of declaring a family natural are by no means to be taken for granted. Aldo Moro (then a very young Constituent) explains in what integral sense the family is "natural", as there are two possible meanings of the term.

"The family is a natural society. What does this expression mean? Excluding that here "natural" has a zoological or animalistic meaning, or hints of a purely factual link, this formula does not mean that the family is a society created outside of all rational and ethical constraints. It is not a fact, the family, but it is precisely a legal system and therefore here "natural" stands for "rational". (15/01/1947)

To this Lina Merlin, known for the 1958 law of the same name that will abolish closed houses and make prostitution illegal, and Mario Cevolotto respond with a meta-negotiation move: they argue that it would be preferable to *avoid definitions*. Cevolotto in particular says that

"He opposed it for two reasons: first of all because to say that the family is a natural society is to give a definition that, after all, is the only definition existing in the whole Constitution, and it would be a misnomer; secondly because the family, in his opinion, is not a natural society, but a society constituted according to the law of the State, which has its own ethical content. (15/01/1947)

In fact, he indicates that he does not accept the equivalence between "natural" and "rational" dear to Moro. The moment is difficult: Cevolotto recognizes the impasse of negotiation:

"Cevolotto considers it superfluous to ask a question about the dissolubility or indissolubility of marriage. Everyone has their own precise ideas and talking to convince each other would be absolutely absurd". (15/01/1947)

At this point a series of votes consolidates the text. It is proposed to repeal the second paragraph of the article, which establishes the indissolubility of marriage:

"The law governs their [spouses'] condition in order to ensure the indissolubility of marriage and the unity of the family.

But the proposal collects 25 votes in favor compared to 28 against. In the Draft Constitution elaborated by the Commission what will be Article 29 is presented in the form of two articles, 23 and 24:

Art. 23. The family is a natural society: the Republic recognizes its rights and assumes its protection for the fulfillment of its mission and for the moral solidity and prosperity of the nation. The Republic provides the family with the economic conditions necessary for its formation, defense and development, with special regard to large families.

Art. 24. Marriage is based on the moral and legal equality of the spouses. The law regulates its condition in order to guarantee the indissolubility of marriage and the unity of the family.

Dissatisfaction reigns. In the discussions that follow the Report to the project, the constituent Ottavio Mastrojanni of the Front of Any Man (Uomo Qualunque) states:

"Ladies and gentlemen, we are concerned by these statements which, I repeat, can be determined by very noble goals, an ethical concept of life, a religiousness and a spirituality that can also move us, but let us not forget that we do not write a book of philosophy or morals, we write the Constitution, which commits the future legislator. (04/03/1947)

We do not write a book on philosophy or morality, this is Mastrojanni's reproach; so much so that it seems to him that the discussions have turned into comparisons between different conceptions of the world. The risk, for Mastrojanni, is that we will end up normating too much.

"we could be faced with a totalitarian and intrusive State, which watches over the human being from its birth, watches over the family to determine whether it fulfills and satisfies those social, economic and moral needs that it imposes in coherence with those prevailing political orientations". (04/03/1947)

What is the move to make at this point? Some speakers try to compare and weigh up the *costs* of adherence to the principles by discussing the *consequences* that such adherence may have. If one says that the family is a natural society, what follows? Cevolotto intervenes on 6/3/1947:

"The family is a natural society and the Republic recognizes its rights. But then the Republic recognizes the rights of the family as a natural society, that is, of free union. (Protests at the center). How not? So much so that it is true that the consequences have been seen when talking about illegitimate children. We had proposed a formula that seemed to us to have a certain merit and that is: the law provides so that the consequences of a family state not in accordance with the law do not fall on the children.

There is no agreement on "natural". Vittorio Emanuele Orlando (Prime Minister during the First World War) on 10/3/1947 hones a conceptual analysis on the meaning of "natural". For example, is a city natural or artificial? It is certainly not *created* by law. Orlando is checking the validity of the concept. He points out the unresolved ambiguity of naturalness that is associated with the notion of family: if it is too wide, it ends up including families considered "illegitimate"; but if you try to define the legitimate family, if it is the law that decides it, the law can positively sanction those families that at that time were considered unacceptable. Already on October 30, 1946 Lelio Basso had stated that he feared that the definition of family in the terms of its claimed "purpose" could "*render unconstitutional even the fact that two spouses do not want to procreate; which would mean violating the citizen's field of fundamental freedoms*". A sharp criticism is made of the use of the adjective "natural", which suggests that the State recognizes as natural a type of family that is instead "the fruit of *historical evolution*".

Finally, how is the family organized? What is its perimeter? Among the many elements of discussion, it is asked (La Pira, Corsanego) to give pre-eminence to the father as head of the family; and the question of children born out of wedlock is discussed at length. The outcome will be Article 30 of the Constitution:

Art. 30. It is the duty and right of parents to maintain, instruct and educate their children, even if born out of wedlock. In cases of incapacity of the parents, the law ensures that their duties are fulfilled. The law guarantees to children born out of wedlock all legal and social protection, compatible with the rights of members of the legitimate family. The law dictates the rules and limits for the search for paternity.

Filumena Marturano could at this point believe that if not herself at least her children are protected.

I hope with this excerpt to have given an account of the intensity of a philosophical debate as it unfolds. The theme of this work is not the goodness or badness of the articles of the Italian Constitution that define the framework for relations between family and society. Above all, I thought it important to observe how the discussions that led to the final

article are a precipitate of great metaphysical and political options, of worldviews that need to find a point of encounter and balance, and that for this reason the negotiation is about the only subject that can be discussed, namely the concepts they use. Much time and energy is spent around words and their meanings. Many analyses try to highlight the consequences to be considered contradictory or unacceptable. Negotiation is again the search for consensus, but sometimes, as we have seen, it ends up in a vote. It is not very clear in what sense a definition can be submitted to a vote; and yet with the vote in some cases a blockade is prevented. The result of the negotiation is not a further metaphysical position, but a package of instructions on how to behave - if you are a legislator, an employer, a citizen thinking about your future - around the idea of family. As those who today want to start a family and do not recognize themselves in the conceptual warp woven by the Constituents, the consequences of what appears a purely conceptual negotiation can be enormous – they are felt decades later as pain, injustice, and loss of entitlement.

1593 and surroundings: Does the Earth *really* turn on itself?

We end our journey through the folds of society and science in search of conceptual negotiations - or, if the thesis in this book is convincing, of philosophy. The emergence of new scientific theories that show that they explain known facts in a new way, or that allow us to discover new facts, imposes drastic, sometimes brutal revisions of our conceptual schemes. Let us take a close look at one of these revisions, perhaps the most impressive of all; as in previous cases we try not to lose sight of the context in which the negotiations take place. The planetary system of Copernicus (formulated in the text of 1543, *On the Revolutions of the Heavenly Spheres*) hypothesizes that it is the Sun that is at the center of the universe and not, as it was until then common opinion, the Earth. This is a radical conceptual change: certainly in disagreement with the daily experience that sees the Sun and the stars running in the sky around an observer on Earth, but in the context of the astronomy of the time especially in disagreement with a very sophisticated mathematical model, dating back to Ptolemy, which describes with some accuracy the apparent

movements of the planets - even the strangest and apparently irregular ones - using an elegant kinematic expedient, the set of deferents and epicycles. To give an idea of the way the Ptolemaic system works, let's think about the fact that we see Venus always near the Sun, but sometimes to the East and sometimes to the West. Today, as post-Copernicans, we know that Venus performs its revolutions around the Sun on an internal orbit compared to that of the Earth, and this is what explains its apparent dance near the Sun. The Ptolemaic model, which prohibits revolutions around the Sun, postulates that the apparent movement of Venus is the result of two movements: the rotation of Venus on an epicycle or auxiliary orbit whose center in turn rotates around the Earth on a deferent or construction orbit. The center of the epicycle is in line between the Earth and the Sun; Venus itself orbits this epicycle; for this reason from Earth we would see it oscillating from one side of the Sun to the other.

Using the Copernican model we can make ambitious observational hypotheses based on the prediction of some phenomena incompatible with the Ptolemaic system. For example, where is the deferent that houses the center of the epicycle of Venus ever located? Is it larger or smaller than the orbit of the Sun? In the first case, from the Earth you will never see Venus completely darkened (Venus 'new' like the new Moon). In the second case, you will never see Venus completely illuminated (Venus 'full', the way the Moon is full). It is Galileo who discovered in 1609 that Venus has a *complete* set of phases, and that therefore neither of the two possibilities of position of the deferent is acceptable. Venus *must* rotate around the Sun; the Ptolemaic system does not foresee this hypothesis; the Ptolemaic system is false. This does not mean that the Copernican system is automatically true, since intermediate hypotheses are possible - an attempt to negotiate in extremis - like Tycho Brahe's: the Sun would rotate around the Earth, and all the other planets around the Sun. However, the attempts of partial rescue of geocentrism cannot prevent the refutation of the Ptolemaic system.

In fact, the scientific community quickly accepts the heliocentric system. But how to negotiate with Ptolemaic intuitions that are so powerful and do not seem easy to revise? After all, we continue to have the impression that the Sun "revolves" around the Earth; even today, even four hundred

years after Galileo's discovery and all we know about the cosmos. This tension must be tackled and resolved in a conceptual framework. Galileo's contemporaries were well aware of it. Kepler, the first to find a mathematical representation of the true orbital movements, has traveled in a very decisive way the impassable road of a reconciliation between common sense and the Copernican system. His surprising and extraordinary argument shows us how "Ptolemaic" intuitions are *contingent*, that is, they depend on the fact that we are on Earth, and that a small flight of imagination would be enough to radically question them. Let us take note of this idea, the fact that in philosophy imagination is king.

Kepler's conceptual negotiation was delivered in an utterly strange text. Kepler wrote a first, youthful version in 1593, well before the Galilean discoveries, as a dissertation during his astronomy studies in Tübingen under the direction of Michael Maestlin. The theme was: "*How would celestial phenomena appear to an observer placed on the Moon?*" Not published, the text undergoes several re-elaborations; walking around it incorporates a story of magic that gives it a dark oneiric character. The reference to the magical world is actually autobiographical - Kepler's mother had been involved in a witchcraft trial - but the main reason for Kepler's narrative choice seems to be the desire not to raise a fuss with an openly Copernican text. The story, quite opaque, tells of how lunar demons can travel between Earth and Moon on the shadow bridge created during an eclipse of the Sun. Their pupil is the witch Fiolxhilda, who wants to initiate her son Duracotus into the magical arts after exiling him from his native Thule for five long years in Denmark. Duracotus in turn faces the journey to the Moon during an eclipse, and survives the rarefied air by breathing through a damp sponge. Demons show him the Earth and explain to him the principles of lunar astronomy.

Here is the crucial passage of Kepler's negotiation: *why should the inhabitants of the Moon think that the Earth is still?* From the Moon (from what for us is the visible face) they see the Earth spinning, more than 29 times in a lunar day, measured from sunrise to sunset on the Moon. So much so - Kepler tells us - Lunar astronomers call it the Volva, the spinning top. Think of the effect that would make you see the Moon spinning on itself 29 times in 24 hours, more than a full circle per hour.

Isaac Asimov called the *Dream* one of the first science fiction writings, and I want to underwrite this statement. Science fiction texts allow us to explore imaginary situations in our minds without caring too much about the physical constraints that govern the events of this world. As we will see, science fiction is a rich source of inspiration for the conceptual negotiations of philosophy. Kepler's negotiation is as brutal and direct as the astronomical discoveries of the time: change your point of view, and your concepts will be dated, obsolete, contingent. The Earth spins! You only have to imagine yourself on the Moon to make it seem obvious. How did they not think about it before? *They had not thought about it enough.*

Chapter 3 First Lessons: Successes and Failures

I propose now to start a reflection on these examples. The first point to be addressed: these are not examples of the kind of philosophy found in philosophical texts. What are they about?

But is it *really* philosophy?

What are the *particular signs* that allow us to say that we are in the presence of philosophy, i.e. something different from the discipline or activity in which at first sight we are moving - art, law, astronomy? Why is the discussion about the family in the Constituent Assembly philosophical and not a matter of narrow legal relevance? There is a perhaps imperfect but simple and immediate way to understand the issue:

Philosophical questions about a certain discipline or activity are questions that the discipline would not be able to answer by its own means, and are questions that are answered by the same means as philosophical questions about other disciplines.

What does this mean? Let's take some questions that according to this way of seeing are *not* philosophical. For example: which of the three sons of Filumena Marturano is Don Mimi's son? How many planets does the Sun have? And let's go and see how they are answered. In the legal field there are procedures that allow to ascertain the filiation: certificates, statements, testimonies, confessions, circumstantial or direct evidence, today genetic tests. In astronomy there are techniques to collect data and make predictions - the observation of the sky, the calculation of masses necessary to explain the shape of an orbit, the study of the differences between two photographs taken at different times. But these procedures and techniques do not allow to answer the questions that I considered philosophical. There is no procedure to determine what *a* family is, although once you have determined it, you can define procedures to decide whether or not a certain person is part of a given family. It is useless to collect factual clues to help the Constituents. There is no observational technique to decide what *a* planet *is*, although once you have determined it you can develop techniques to hunt for planets (rather

than satellites or galaxies). It is useless to point the telescope on the sky to decide what a planet is.

Therefore, the first particular sign of philosophy: the questions that are not answered in the discipline that formulates them are philosophical.

Is it really a general phenomenon? An experiment in biology allows to understand if this bacterium belongs or does not belong to a certain species, but there is no experiment in biology that allows to decide what a species is. A calculation in mathematics allows to know the sum of $179+46$, but there are no calculations that tell us what a number is. A series of gestures and techniques allows you to paint a picture, but there is no gesture or technique that tells you what a work of art is.²

Second special sign, connected to the first:

The tools we use to answer philosophical questions in one discipline are the same tools we use to answer philosophical questions in another discipline. To decide what is a planet or a family we proceed in roughly the same way; we negotiate on the perimeter of the concepts of planet or family.

Third special sign:

The philosophical questions are however inextricably intertwined with the discipline that generates them.

This means two things. The first, which are questions of a certain *kind*, but do not have a *specifically philosophical content*. It is not that to speak of Life, Being or History one is more *philosophical* than to speak of planets or families. The second, that there are no autonomous philosophical questions. Philosophy, even if it doesn't always arrive at the last good one, is however set in motion on external solicitations.

² There may be disagreement on each of these points. Michel Foucault thinks that *Las Meninas* by Velázquez is a painting *about* representation. Would Velázquez have painted a sort of philosophical picture? That can be discussed. It does not go without saying that the painting, or the pictorial gesture that produced it, has anything philosophical in it, without accompanying words, without a reflection that gives a voice to questions about representation.

There is an elegant symmetry here. On the one hand, what makes a question philosophical, its being of a certain kind, is what allows it to be in the company of very different philosophical questions, and to be addressed with general techniques. On the other hand, the fact that philosophical questions do not have a specifically philosophical content makes each of them different from each other. We do not know what the philosophical questions of the future will be, although when we meet them we will know that they are philosophical questions. Professional philosophers who have dealt with aesthetics or moral philosophy will certainly find the discussions at the Brâncuși process or the embryonic Constituent not sufficiently articulated. But this does not in itself make them less philosophical. Moro and Merlin are not philosophers, but *act as philosophers* at certain moments in the activity of the Constituent. This must make us ponder and probably encourage us. It would seem that we have resources to be philosophers even if we are not philosophers by profession.

The three cases we talked about - the Brâncuși process, part of the Constituent Assembly's discussions on the family, Kepler's Dream - served to show how philosophy is hidden in the folds of life. Philosophy is widespread; amending Hamlet, I would say that there are more philosophically interesting things between heaven and earth than have passed through the minds of *professional* philosophers. It is precisely this widespread nature of conceptual problems that poses a challenge to philosophers; to the conceptual negotiator who is in each of us as well as to the professional philosopher.

Were the negotiations successful?

If philosophical work is a negotiating activity, it is legitimate to ask whether the negotiation was successful. Our three examples speak of different degrees of success. *Oiseau* is accepted among the works of art in the *law*, and the ruling represents an important precedent for how contemporary art objects circulate, are exchanged, are recognized - in the United States, of course, and at a given historical moment; but more generally in contemporary sensibility. It is not only a result circumscribed to the fact that customs offices will no longer be left alone to decide what is art and what is not. It is at the same time a request made to society as a

whole to find a point of equilibrium with artistic makings, to recognize that the artist has a space of autonomy not only with respect to the choice of her subjects and techniques, but with respect to the way he conceives her own makings.

The outcome of the constitutional discussion on the family seems to me much less satisfactory. The need, for one of the parties, to accept that a definitive definition of family is adopted creates a conceptual artifact, the ossification of a concept that should have remained fluid. One does not even have to dig too much to grasp the difficulty: there is, strictly speaking, a *contradiction in* considering the family as *natural and at the same time based on marriage*, that is, on a social contract. If it is natural, the social contract cannot be based on it; and if it is the contract that bases it, the family is not natural. The desire to find the family a political and social role has created this defining artifact, as pointed out by the Constituent Rubilli (National Democratic Union):

"It is a natural society! I do not know why it is indissoluble; all societies can be dissolved. You see that you have defined it in such a way as to establish a contradiction in the same law". (6.3.1947).

From this fact descend many problems. A contradiction, as well as being intellectually unsatisfactory, can paralyze the action ("when you reach the fork, you have to go left and right at the same time"). If, on the other hand, it is taken for granted that one has to read between the lines of the definition, if the term "natural" is deliberately ambiguous, the desire to create a definition is frustrated. It is difficult to blame those Constituents who would simply have wanted to remove the definition from the final text, based on meta-principles (or meta-negotiation principles) such as the one according to which the law should not provide definitions.³

³On April 15, 1947 Crispo will reaffirm that "*definitions are always to be avoided in laws*". On March 8, 1947 Gustavo Ghidini, socialist, will point out an inconsistency between the decision to define the family and the absence of a definition of the State: "*Why was it said that "the family is a natural society"? An equal definition does not apply to the State. The purpose is clear; and it is to draw a number of consequences that are reflected on the institution of school, marriage, the legal treatment of*

There is the other side of the coin: a possible fundamental ambiguity of the term "natural society", if on the one hand it can mitigate the contradiction nested in Article 29, on the other hand it leaves open the possibility of families different from those who had in mind the constituents and their contemporaries. Nothing is said about same-sex families, for example; but nothing is directly denied.

The judgment of the U.S. court and Article 29 of the Italian Constitution have, however, for better or for worse, propagated the results of the negotiation beyond the walls within which it took place. The conceptual negotiation was effective. Kepler's text, on the other hand, has had limited luck for contingent causes that are worth reflecting on. Published posthumously, it did not intervene at the right time, and its prudent and opaque wording was considered by its contemporaries more as an eccentric narration of a myth than as a profound epistemological reflection. It is not enough to write a science fiction text to contribute to philosophy; it is not enough to have an absolutely brilliant idea (the Earth seen from the Moon is a spinning top! So much for the Ptolemaic system!) - one must also operate strategically so that this idea will have an effect, take root in society.

Beyond these epidemiological considerations there is perhaps another lesson concerning the success or failure of a negotiation. Some negotiations are harder than others. Changing one's point of view, imagining to look at the Earth from the Moon, takes us momentarily beyond the limits of our concepts, that are imbued with geocentrism. But it may be a Pyrrhic victory: once the new and unprecedented point of view is abandoned, we fall back to Earth where the very architecture of our mind dictates a geocentric representation, makes us talk about a rising and setting Sun. It is a difficulty well known to those who try to explain the basic concepts of astronomy; a difficulty that is found in the teaching of many scientific disciplines. The mind is not plastic enough to modify some of the deepest representations of the physical world,

illegitimate children and so on. This sentence affirms a priority of the family towards the State; a priority that becomes prevalent and can in this way create an atmosphere of rivalry between the family and the State."

representations that are what they are because what we have inherited from the past of our species is what it is.

It is therefore to be expected that something will happen that many will not find satisfactory at all: negotiations must always start anew. This gives philosophy its sometimes inconclusive, sometimes disappointing aspect. Some authors have accepted that it is necessary to always rethink all philosophical problems from the beginning, on one's own, in first person. Now, philosophy is a practice that is needed in countless contexts and is presented under different names. But its results are not easily measurable, and in some cases they are not measurable at all. Some authors have drawn an extreme consequence from this difficulty, and have encouraged a purely therapeutic view of philosophy; the negotiation would not have the task of providing an effective solution, but would - if conducted correctly - serve to mitigate the sense of urgency that the conceptual problem poses to us.

Negotiation is a practice and its outcome is not a foregone conclusion. The alternative to open negotiation, which always starts again, is *debate*. Even the debate can be endless, but for very different reasons. The linguist, political activist and philosopher Noam Chomsky summarized the problem in this way:

"Debates are an utterly irrational institution, which shouldn't exist in a reasonable world. In a debate, the assumption is that each participant has a position, and must keep to this position whatever eventuates in the interchange. In a debate, it is an institutional impossibility (i.e., if it happened, it would no longer be a debate) for one person to say to the other: that's a good argument, I will have to change my views accordingly. But the latter option is the essence of any interchange among rational people. So calling it [the intellectual exchange that Chomsky had with the psychologist Jean Piaget] a debate is wrong to start with and contributes to ways of thinking and behaving that should be abandoned."

Negotiation seeks a solution, debate does not. It is not to be taken for granted that the former finds it, but at least it has the merit to look for it.

Chapter 4 *The space of negotiation*

The negotiations I presented in the previous chapters are philosophical even if they would not usually be described as such. However, philosophy is first of all visible in well-known institutional places: departments of philosophy, texts with the word 'philosophy' in the title, meetings of people who call themselves philosophers. How do philosophers by profession work, and what aspects of their activity are found in widespread philosophy?

To give an idea of the complexity of professional philosophical work, I want to show the considerable potential of a classic example. Although this is a much discussed case, I ask those who read to follow its details as the morals I intend to draw are broad. I immediately say that this example turns around a fantasy very far from the conceptual negotiations that introduced our discussion. If these latter were totally immersed in life, dictated by urgency, meant to change a practice, this one, instead, is completely abstract and at first sight⁴ practically useless. I repeat, this does not make it more *philosophical*.

Which is the *real* ship?

Here is a version of the story that introduces our problem. Theseus builds a ship, let's call it 'Argo' for convenience even if with a small mythological license⁵. The ship travels and Theseus repairs it continuously, putting aside, for his own reasons, the parts he replaces as he goes along. In the end he has replaced all the pieces; the ship with which he lands at the end of the voyage is composed of parts that are completely different from those that constituted it at the launch. At that point Theseus takes the old pieces and puts them back together exactly as they were at the beginning.

Watch out for this step! Theseus finds himself with *two* ships, one at the port, and one in the courtyard at his home.

⁴ At first glance only: life manages to be even more abstract than philosophy and there are many cases, in the legal field, modeled on this.

⁵ In the *Argonautics* of Apollonius from Rhodes the ship Argo was built by the carpenter Argo, and was piloted by Jason.

The ship at the port accompanied Theseus on his voyage but no longer contains a single piece of those who composed it at the launch. The ship in the yard is made of the pieces that were present at the launch but has been reassembled. Which ship is (identical to) the ship that was launched? In other words, if we proposed the following poll, would you vote for A or B? Think about it for a moment.

A: Argos is the ship that is now in port

B: Argo is the ship that is now in the backyard

Even if you have voted for one of the two possibilities, probably the other does not seem entirely implausible. This means that we respond to *two* intuitions that lead us in opposite directions. One can argue that the 'real' Argos is the one that has just landed, and one minute later think that it is instead the one in the court of the house; it is an effect that will remind some of that of the duck-rabbit, the figure that looks different depending on how you direct your attention on it; now it seems to me a rabbit, now a duck. What is worrying is that the two intuitions, both taken for good, flatly *contradict* a third one. If it is true that Argos is the ship at the port and it is true that Argo is the ship at home, for the transitivity of identity (the principle underlying reasoning such as: if John is the person who is now on the roof, and if the person who is now on the roof is the thief who slipped into my house yesterday, then John is the thief who slipped into my house yesterday) it turns out that

The ship at the port *is* the ship at home

But a *third* intuition, which seems to us at least as strong as the others, tells us that

The ship at the port *is not* the ship at home.

(As in the case of the rabbit duck: which we could not see at the same time as rabbit and as duck). There is therefore a problem, a nasty contradiction. It is a problem because it seems to us that the ship at the port cannot be, and at the same time cannot *not* be, the ship at home; we probably also have an intuition according to which:

Both answers A and B cannot be true.

Regardless of the answer you want to give to the *particular* question of the identity of Theseus' Ship, the response *strategies* are philosophically interesting, and outline great metaphysical conceptions or high-level negotiating options. I present them briefly - but I warn you right away, there are *many* of them.

(1) Those who accept that Argo is identical to the ship that is now in the courtyard have a *materialistic* conception of ships. In fact what counts is the identity of the matter, the identity of the component parts. To speak of materialism in a philosophical sense does not mean to say anything particularly abstruse or ideological, or to subscribe to a form of scientist reductionism. There are completely everyday and accepted practices that are imbued with the same materialistic conception. For example, conservative restoration and antiquarian practices. Having the faculty to choose, an antique dealer or a superintendent of Fine Arts will try to buy the ship that is in the backyard, and will not consider the ship at the port worthy of much attention. This is a very strong intuition and rooted in many human practices.

(2) Although the materialistic intuition is strong, it finds itself, however, with the further problem of establishing what guarantees the identity of the matter that had used to "ground" the identity of the ship. The materialist makes explicit her preference for the ship at home by saying that what matters is the fact that the matter of which Argo was composed is the *same* matter we find in the backyard. We notice then that the solutions of some identity problems presuppose the solution of *other* identity problems, for other types of entities. How can we say that it is exactly the *same matter*?

The problems for the materialist do not end there. All right, the identity of matter may well convince us that Argo is the ship at home, and not the one at the port. But we say this now that we see a *ship* in the backyard. Is the intuition that the identity of the ship depends on the identity of matter so strong that you can say that Argo was really *that* pile of planks before *Theseus* put them back together? Perhaps so - and indeed so should answer the hard-nosed materialist. But the hesitant materialist should ask herself what became of the ship when the planking was piled up in a cellar. Perhaps

ships have an intermittent existence? Or one could be tempted to go back through the history of the material, up to before the birth of Argo, look at the wood traceability label, see that it came, say, from some oak trees that have a name and address, and wonder if Argo already *existed in the oaks*. We may have a strong intuition that this is *not the case*, but how does the materialist live with this intuition, if it is *only* the matter that matters?

(3) Who instead accepts that Argo, the ship that had been launched, is the ship now in port upon return from the voyage, despite all its parts having been changed, has a *formal* or *hylomorphic* conception of ships. What matters is not the identity of the matter, which in fact is *completely different in the* case of the Argo and of the ship at the docks, but another principle, that of the identity of *form*, intended here in a very broad way to include the function of *the ship*, that is the fact that the ship was able to perform her tasks during the period under consideration. This, of course, is something that the planking that was gradually piled up at Theseus' house did not guarantee at all.

As in the pair of cases (1)-(2), here the problem of formulating an identity criterion in terms of another criterion arises; in this case we have the identity of function as a criterion to be made explicit. What causes an object to perform the same function continuously for a certain period of time?

We said that an interesting problem for the materialist concerns the existence of the ship Argo in the period when she had not been reassembled, when she was dismembered, that is, after Theseus had collected all the pieces and piled them up in the cellar. But there is something even more interesting, namely the problem of the ship's identity, assuming that this identity is guaranteed only by the identity of the matter, when this matter was half in the cellar and half in the ship that was still sailing.

The materialist has two ways to account for this situation:

(4) accept that objects can exist even if their parts are dispersed in space (this guarantees the *temporal* continuity of Argo); or

(5) accept that objects can exist even if they are intermittent in time (this prevents Argo from ceasing to exist when it is not well "compact", i.e. when it is not all in one piece).

Are these strange ideas? What is an object "dispersed in space"? And an "intermittent" one? A few examples from life or history help us, and this is the way philosophers sometimes proceed, recalling everyday or known situations, weaving narratives from the banal: your class of third grade is an entity dispersed in space - at certain times all students are all present in the classroom, but at others they are partly at home, partly in the library and partly in the street. Poland has been an intermittent entity: it has undergone several divisions by its neighbors, during which it ceased to exist, only to be reborn again.

(6) It is necessary to distinguish these positions of the materialist from a similar position, which has been defined 'mereological essentialism' and which says that $a=b$ if and only if a necessarily has *all* its parts in common with b and conversely. Mereological essentialism constitutes a "strong" solution, in the sense that it generates many counterintuitive consequences. For example, the destruction of a very small particle of Argo causes Argo to die and gives birth to a different ship (even the addition of a peg would decree the death of Argos and the birth of a new ship). In the story of Theseus, Argo would not survive the first replacement of the planking. That said, Argo could live for a very long time, until she starts to lose or acquire parts.

(7) It is further necessary to distinguish the non-materialist, functionalist theory from a theory of *spatio-temporal continuity*. According to this account, it is the ship at the port that is identical to Argo because one can find at least in principle a continuous path in space-time that leads from the one to the other (instead, as we have seen, space-time dispersion and discontinuity are not forbidden in the materialist conception, and indeed they constitute an almost obligatory feature).

Once again, if you go deeper, you find an identity criterion that is based on the identity of other entities. In the case in question for example everything goes back to the ability to trace the identity of the regions of space and of time intervals. If you can show that with a continuous transition in space and time from the ship at launch one eventually gets to the Argo (studying the history of the Argo and the ship now docked one discovers that they were in exactly the *same* places at the *same time*), then the ship at the port and the Argo are one and the same thing.

Let's pause. There is a problem of identity and survival of objects, and a range of proposals to choose from. The choice will highlight our more materialistic side, or the more antimaterialist one. But the interesting part has yet to begin. Let's explore a completely different level of negotiation. In fact, much more challenging solutions can be considered.

(8) For example, it can be accepted that the Argo is identical both to the ship at the port and to the ship at home, but that the latter are not identical. That is, we renounce here the transitivity of identity (the principle that if $a=b$ and $b=c$, then $a=c$); if we do not, we run into a contradiction, as we have seen.

(9) Along the lines of the previous solution, but with greater ambitions: one can accept both the materialistic and the hylomorphic solution, *and* accept the transitivity of identity as well! However, one must then decide not to accept the principle of non-contradiction. The ship in the port is identical to the one in the yard, *and* the ship in the port is not identical to the one in the yard!

(10) You can think to relativize the identity: the ship to the port is the *same vehicle as* the Argo, but it is a *different amount of matter*. The ship at home is the same amount of matter as Argo, but it is a different vehicle. However, this suggests that the question of absolute identity can never be asked.

To enlarge the picture further, we make a final effort of theoretical imagination. There are 'negative' answers to the question of the identity of Theseus' Ship:

(11) It can be assumed that the ship now docked *is* basically identical to the ship now at home. Here a slight reformulation of our ordinary concept of identity is required, but why do we think that this reformulation is more important than the one suggested, for example, by the mereological essentialist or by the materialist? The ship at the port and the one at home are exactly the same ship, and they *seem to us only* different ships. What is the harm? We have some conceptual resources to get away with the illusions of duplicity. I might have the impression that I have twin daughters, but then I realize that my daughter is looking at herself in the mirror; *one* can look as if it was *two*.

(12) One can think that there are from the beginning two (or perhaps many more) different ships, which at the beginning coincide spatially and temporally. In practice, the ship at the port and the ship at home are two very distinct ships (which is quite clear to us today that we see them both) but they would have been superimposed in space-time when Argo sailed. Little by little the replacements of ship parts have "made visible" the difference between the two ships.

(13) It can be denied that objects have a more than instantaneous existence. It seems that there is a ship that lasts for years and years, but in reality it is an illusion, a bit like in movies the illusory impression of movement is produced by the rapid succession of static images. This position is independent of mereological essentialism, and it is also a much stronger position: in the case of mereological essentialism, an object can exist for an indefinitely long time, provided that it neither loses nor acquires parts. If instead at every moment the ship is different, it will never be true that Argo (that is, the ship at the moment Theseus bought it, a long time ago) can be identical to the ship that is at the port now.

Thirteen solutions?

As strange as it may seem to the non-philosopher reader, the list above does not claim to be exhaustive. I must confess that I do not know exactly how many solutions to the Theseus' Ship problem have been offered; many of them are implicit in the answers to *other* philosophical problems. They will seem like abstruse answers to a bizarre problem. I don't deny this impression but as I said I want to draw inspiration from the example to look beyond. For the moment we just need to hold two points.

First, these different solutions try to find a negotiated balance between the intuitions that are evoked from time to time. What does this mean?

I claimed that the solutions are not all on the same level. Think about the very radical solution that says not to accept the principle of non-contradiction. This solution allows to save both materialistic and

hylomorphic intuitions. But at what price? What does it mean not to take into account the contradictions, not to consider them harmful to our mental life, to the way we talk to others and we want others to talk to us? How do we behave, for example, with a person who says "I wanted to take a drink from the refrigerator and I thought I had to open it, that's *why* I didn't open it"? Doesn't renouncing coherence mean abandoning a certain idea of ourselves and how we present ourselves to others? Giving up the principle of non-contradiction means giving it up forever, we would say. It is a demanding renunciation. While renouncing materialistic intuition seems to be of lesser importance - costly perhaps; but it does save our rationality.

So, second point, when we evaluate the answers to the Theseus' Ship puzzle we always keep in mind a background question: "At what cost?" How much does one or the other solution cost us? What sacrifices does it impose on us? From philosophers we have become strategists, chess players. Does the queen's sacrifice open a new possibility for us? And how do we evaluate if one option is more or less costly than another?

It is a dynamic inherent in all types of negotiations. We will talk about it in the next chapter.

Chapter 5 The necessary renunciation and the duty of imagination

The study of the renunciation strategy is the keystone of the discussion on the many answers to Theseus' problem; but it is also the central element of philosophical activity as a negotiating activity. Let us linger for a moment on the example of Theseus. There is something in our way of thinking about material objects and artifacts that does not seem to work: however we put it, we must resign ourselves to giving up some aspect of our way of representing the world. What do we want to give up? The idea that things cannot overlap in space? The principles of identity? Consistency? The idea that matter counts for the identity of objects? The idea that function counts? The idea that things last over time?

Costs and benefits

The first great moral of our discussion is therefore that in philosophy, when we engage in conceptual negotiation, at some point we will be faced with *an analysis of the costs and benefits of our choices*. In making our decision we will be inspired by some very general principles - negotiable, of course. What image of ourselves do we like to cultivate and offer to others? How are we mutilated by giving up one or the other way of representing the world? In what way is renunciation intellectually satisfactory?

The second moral: there are many assumptions and hypotheses *hidden* in a thought that also seems very banal. We should know what a ship is. Yet we do not really know; and what we seem to know is opaque. When we try to clarify it, we realize that thought hides contradictions. So: philosophical work requires that we make *explicit* what is implicit in our descriptions, images, theories and narrations of the world. If you do not make your thoughts explicit, you risk not seeing the contradictions or gaps that lurk in them. Maybe it is not right to make everything explicit, as we will see, but at least in the first instance you have to try to put your thoughts on paper.

Third moral. There is method in philosophical work. Philosophy identifies a position and tries to circumscribe it conceptually. The dilemma of the Ship of Theseus requires a position, at least at first sight. To reject the dilemma, to introduce alternatives, is to take a position anyway. Here too, not everything is explicit: our choices are made evident by certain aspects of the narrative. For example, the "antiquarian's intuition" gives a lot of sense to the materialist position, which is conceptually circumscribed by associating the identity of ships (of material objects in general) to that of their material parts.

Fourth moral. We are constantly looking for the consequences of our theoretical choices. It is not in fact clear that the cost or the benefit of an intuition be immediately evident. Maybe to me the antiquarian, materialistic intuition is fine, but if I find out that I have to accept "intermittent ships" flashing on the scene of existence, I can think twice. A certain "inspired intuitionism" in philosophy does not have much bite, partly because it is rarely at the center of the problem that the solution is seen, rather at its boundaries, where the examination of the consequences is pushed. It is the ramifications of a position that count, more than the principles that define it. The principles, often simple and attractive, catch our attention and hold it jealously, and if it seems good to us to stick to them is simply because we do not assess the consequences.

The philosopher John Campbell defined philosophy as thinking in slow motion. Thinking step by step dwelling on every single passage, weighing it, looking for the pros and cons for each statement, trying to eliminate the shadow areas of the implicit. Doing this can also have a value in itself; but for those who think that philosophy is a negotiating activity, the main value lies in the fact that in this way you can better test the consistency of a position you are negotiating on.

The duty of imagination: have we *really* thought of everything?

Fifth moral. To go in search of hidden assumptions so as to make them explicit is also and above all to do a work of *imagination*. The result of this work is a cartography of possibilities, and in this sense the philosopher is

armed with, or must develop, a sense of possibility. I quote a famous phrase by Musil:

"But if the sense of reality exists, and no one can doubt that its existence is justified, then there must also be something that we will call the sense of possibility. He who possesses it does not say, for example: here this or that has happened, it will happen, it must happen; but imagine: here such or such or such a thing could, or should happen; and if one declares to him that one thing is as it is, he thinks: well, probably it could also be different. So the sense of possibility could also be defined as the ability to think all that could be, and not to give more importance to what is, than to what is not".

The sense of possibility is an aspect of creative intellectual work, philosophical and not; it is shared by all intellectual professions, from mathematics to engineering to philosophy to jazz improvisation and, of course, literature. For how the human mind works, being creative means being able to generate a range of possibilities so that you can choose one or more of them as a solution to a problem, depending on the constraints you impose and the objectives you set yourself. Let us take the case of literature. The opening of the range of possibilities takes place in two stages. The first step is the creation of a story, of a plot. The writer chooses one possibility for the development of the story among the many that are offered at each narrative turn. Some characters are developed along the entire thread of the story; others will forever remain enclosed in the treasure chest of unrealized possibilities - we will never know the fate of countless protagonists and secondary characters (what happened to the merry wives of Windsor? Did they age happily?) But there is a second moment when the sense of possibility inherent in literary creativity invests us with all its energy. We are greedy devourers of plots: we consume stories, narratives of events that are not real but only possible: films, plays, novels, fairy tales are an essential ingredient of our mental life. Even documentary history, the history of historians is presented in a narrative form that fits this demand. And not only the stories that we invent and discard, but also those that others have made are important to us.

Some authors think that this request for stories solves an adaptive problem: they make us prepared people, keep us always on the alert, give us a ready answer to the many unexpected cases of life. I do gymnastics every morning

because maybe one day I'll have to ask my body to intervene - jump to avoid being run over, run to reach a child who has gotten into trouble. The consumption of stories would then be a kind of simulation. Airplane pilots practice in the simulator to deal automatically, almost without thinking about it, with emergencies that require complex and sequential responses. Sailors simulate the recovery of a person overboard because when it really happens you have to act without losing a moment. In a similar way the philosophers open conceptual spaces that are worth to attend in order not to be too unprepared in front of the continuous solicitations of science and life.

For example, having in mind the many philosophical options on personal identity reduces the sense of amazement, amplified by the media representation, in front of the new and at first sight strange possibilities opened by research in genetics, such as chimeras or clones. Or: having a non-reductionist and not purely biological conception of the family (not only, therefore, as a place dedicated to reproduction) allows us to look with greater serenity at the emergence of families different from those traditionally recognized. It is not said that one then *has to* recognize them; the negotiation can end negatively, but it would be a shame if it were blocked *only* for a lack of imagination.

Less ambitiously, the search for alternative possibilities could be a corrective, which philosophers have unintentionally discovered, to a very deep-rooted and well documented cognitive tendency, that of the selective search for confirmation of their opinions. Left to ourselves, we worry little about seeking counterevidence; it is more convenient and less expensive in the short term to surround ourselves with *yes men*. But in the long run the short-sightedness of choices can penalize us hard; initial mistakes are amplified; it is difficult to retrace one's steps. The philosophical research of remote alternatives helps us mitigate the propensity to short-sightedness.

Whatever the deep explanation of our profile of consumers of possibilities, being aware of alternative situations is a key element of any negotiation, conceptual or otherwise. Let's remember one of the rules of negotiation (not only philosophical): "Invent options that can lead to mutual benefits". And let's take up, making it our own, the invitation of Wittgenstein, who recommended not to follow a "one-sided diet" of examples.

The analogy with the literary invention is then less remote than it can seem at first sight. Like the inventors of imaginary situations the philosopher derives an indirect benefit from her activity, the reward of contemplation.

The hard necessity of the invention becomes pleasure. (Conversely, the quotation from Musil is not entirely innocent. Musil trained as a mathematician, philosopher and psychologist; he graduated in philosophy in 1908 with a thesis on the theories of physicist Ernst Mach under the direction of Carl Stumpf, philosopher and psychologist who was like Husserl a student of Brentano. *The man without qualities* embroiders on the philosophical theme of sensory impressions as the basis of knowledge and personal identity).

Sixth moral. If in order to fulfill his task as conceptual negotiator, the philosopher works with imagination, thinks in slow motion, explores alternatives, makes the implicit explicit, all this means that philosophy, more than a science, or a method for getting knowledge, is an art; as is negotiation in a more general sense. In the next chapter we will try to become familiar with this art.

The neutrality of philosophy

Finally: showing a map of the terrain, opening logical spaces, is after all a neutral activity, but in a sense that should be specified. It does not *force* us to choose one position or the other. It allows us to show the options on the carpet to those who dig into problem, such as free will or the nature of material objects, or knowledge, or the nature of the work of art, or of the family. But there is nothing in philosophical work as an art that ties us to *deliberating* on the positions we highlight. To say this - and here opens a chapter to which we will return, that of the role of logic in philosophy - means to say that in essence philosophy is an engine of *conditionalities*: "if this thesis is true, then this other thesis is true". (For example: "If you accept the materialist version of the ship, then you commit yourself to the existence of intermittent objects in time").

It is by no means certain that professional philosophers share the image of their work that I am giving. For some of them it is really important to be able to *defend* the idea that *only* the material ship is identical to Argo, that the future does not *really* exist, or that people are *really* free or, instead, exclusively determined by their nature and possible external circumstances. There is an old philosophical adage, for which the *modus ponens* of one philosopher is the *modus tollens* of another. ("No intermittent objects:

therefore materialism is false"; or: "materialism is true, therefore intermittent objects exist"). Many philosophers will find the version presented here bland or bloodless. Probably many non-philosophical intellectuals will share this impression.

In reality the position I have outlined (opening of the range of possibilities, imagination, methodical evaluation of the consequences, careful construction of conditionals, but optional taking a position for one or the other theory) does make some sanguine requests. In a negotiation, at a certain point we move on to the decision phase. You have explored the consequences and strengths; now you have to decide. You have in front of you the options: the Ship of Theseus is the one at the port, it is the one in the yard, it is both, it hasn't existed for a while now, we don't care about possible identity problems, etc. At a certain point you do *have to* decide; but it is not the philosophy that makes you decide for one or the other option, it is life.

Philosophy helps you reconcile with your decision, but the decision is yours, and at this point you should be aware that it will have countless *practical* consequences. It is you, judge, who will influence the way customs officers will *act* in front of an object that Brâncuși describes as a work of art; it is you, member of the Constituent Assembly, who will influence the way millions of people will *live* and *be seen by* their fellow citizens when they decide to live together and give birth, adopt, raise children, split, face a medical problem or grief. It is you, in charge of a business organization, who will decide that certain functions are redundant or unoccupied and will fire or hire new staff, create new professional profiles, consider others as obsolete. It is you, a statistician, who will decide to measure security by the number of police detentions, voluntarily or involuntarily determining behaviors of a certain type by law enforcement agencies. Finally, it is you, a person, who will decide to conduct your life in a certain way. The path that led you to that decision may well have been philosophical. But the decision is a practical act, not a philosophical one.

And yet offering alternatives in a negotiation that seems blind to them is already a deeply transgressive, far from bloodless act, in particular since negotiations do not take place in a silent and frictionless vacuum, governed only by the laws of a crystalline rationality. As mentioned above, we are all

victims of the confirmation bias: we have an intuition, we formulate a hypothesis; and at this point we not only look for the evidence in favor of our hypothesis, but we carefully select and emphasize the facts that seem to confirm it, keeping us away from that that could defeat it. We have tendencies that are even more difficult to counter: many of our arguments are sometimes pure and simple embroideries that "articulate" a pre-existing and tenacious intuition. In the moral field this is particularly evident: several experiments in social psychology show how the subjects asked to motivate a certain opinion (for example, on the illegality of incest) are unable to find a justification that goes beyond the simple repetition of the controversial opinion. Brought to the extreme consequences the work of the philosopher would be reduced to that of a simple ghost writer of a pre-packaged plot: he would be asked to put in good copy (to "articulate" or "format") pre-existing, non-negotiable intuitions: he would be asked to give up the search for arguments, and replace it with the illusion of the argument.

There is an alternative to the separation between philosophical background work and moment of decision; but it is heavily normative. The philosophical desire to think in an orderly way absorbs the decision, would like it to be a logical consequence of the reflection. "Given the circumstances, one cannot act otherwise". We see this normative way at work on a thousand occasions: certain things are not *really art*, it is logically necessary (or impossible) that there is a personal divinity and it is therefore *mandatory* (not) to believe in it or *absolutely* wrong (not) to believe in it, society *must* have a certain order because *otherwise* it would not even be a society, an adopted daughter is not *really* a daughter, women are not *really* rational, a certain way to start a family is *deviant*, animals do not have *real* thoughts.

The normative spirit also explains part of the doggedness with which some philosophers dedicate themselves to the criticism of the philosophical work of others. It can be argued that this doggedness is certainly beneficial for philosophy as a whole; it highlights the weaknesses (often unsuspected consequences) of a certain position. But in the norm it only re-proposes the theme of the division of academic philosophy, in currents, departments, schools. It is another subject.

Chapter 6 The Art of Philosophy

Those who work philosophically, whether they are academic philosophers or people who distance themselves from acting or working in their profession and address what they are doing philosophically (i.e. attentive to conceptual nuances), usually do so in an orderly manner. Wittgenstein has sketched an effective vignette: the work of the philosopher would consist in "marshalling reminders for a particular purpose". There is some truth in this, but there is certainly more.

There are various *philosophical techniques*, philosophical ways of working. If philosophy is a negotiation, it is an art. The way figurative artists can choose between drawing by stroke, applying color, or processing a digital image, philosophers have a number of tools at their disposal. This chapter gives an overview of some of the methods used by philosophers. It is always worth keeping in mind the purpose of this first lesson, which is to investigate the contribution of philosophy outside of academia. If here we are discussing some methods and examples from the academic repertoire, we do so with an eye to their possible application in other fields.

The preparation of the negotiation: at what height do we set the net?

You are playing tennis with a hostile opponent. You'd like to have a mental remote control that lowers the net when you shoot, and raises it up to two meters it is she who has the ball. But of course you can't - or at least not without her agreement: it would no longer be a tennis match. Daniel Dennett used this metaphor to criticize the double standard often in force in attacks on the theory of evolution by natural selection: critics rightly invoke the greatest methodological rigor when examining the data to support evolutionary theories, but they are not so strict with themselves when they propose their alternatives. Which means that there is no real comparison between theories, just as there is no real tennis match if one of you uses the mental remote control. One of the first useful moves in an intellectual exchange is actually a meta-negotiation, an agreement on how you try to reach an agreement. For example, I can decide to convince you using

quantitative data. If you do not agree on this method and you prefer that we discuss qualitative data, better to say it now; so I can look in the right direction too. If my method consists of quoting authoritative sources, you should also have the right to search for your authority.

In the preparation of the negotiation, of any negotiation, we must make gestures that show those in front of us how we think we are going to behave in order to facilitate the achievement of a result. So important is this need for facilitation that non-conceptual negotiation sometimes even requires a subtle use of hypocrisy. The annals of diplomacy abound in official declarations weighed with extreme care; it happens that we obtained an important result to our advantage, but in announcing it we must prevent the other side from losing face, and there is no shortage of chiseled phrases that belittle victory and embellish defeat. Sincerity is instead a distinctive feature of philosophical negotiation. The preliminary agreement on sincerity is taken for granted: what you say to me is said in good faith, and I must do everything in my power to make sense of your words. The principle of *charity* governs this phase of the negotiation. "Until proven otherwise, I will consider you sincere".

It's not just a matter of words; but sometimes words matter a lot

On goes the conversation; but the conceptual negotiation is not just a matter of words. We are not only agreeing on the use of the word 'art' or 'family' or the expressions 'spinning on its axis' or 'identity and survival as time goes by': we are negotiating the concepts of art or family or spin to allow those who have to use them (a customs officer, a judge, an astronomer, a philosopher) to make decisions in a considered way. If it were just a matter of words, the negotiations would end very quickly: "What you call *family* for me is simply a *de facto* relationship; you continue to call it *family* and I will continue to call it *de facto* relationship; we do understand each other". "All right, you called these things *planets* and I called them *stars*. That's why we didn't understand each other. From now on I will also call them planets". I don't deny that such transactions happen, but they are actually quite painless.

Verbal disputes can mask differences in substance; not realizing this can quickly take the discussion off topic. Our interlocutor can change the subject. "Well for me the double negation is not equivalent at all to an

affirmation" - "But then when we talk about negation, and logic, we do not talk about the same thing at all".

Then maybe words count too much; one should go and read the discussion page of the entry 'Macedonia' on Wikipedia, for example, to see what happens when each word is carefully weighed, edited, questioned, and when a person or social group claims some kind of power or jurisdiction over a word. One must also pay attention to words when they become too important. Born for pragmatic purposes, to fix ideas, stabilize communication, words end up giving the impression that there are always things behind them; or that a certain way of doing things cannot be eschewed. Here it is always necessary to be vigilant and often one must resist with all one's might; as these are the preliminary steps in a negotiation, they are steps on which the whole negotiation hinges. For example, to describe the position of my interlocutor I can use a term that in a not too veiled way betrays a fundamental disinterest or even contempt for what she thinks. I can *label* my interlocutor. To call 'atheist' or 'unbeliever' a person who does not have religious beliefs means to frame them, to force them to defend themselves. This does not mean that I automatically have to accept the term that my interlocutor proposes. By calling themselves *bright* (bright, brilliant: it's a term adopted by some American intellectuals), the person who doesn't have religious beliefs self-attribute a stature that can make the dialogue uncomfortable. Do negotiate on descriptions, then. Another example: An intellectual group can try to consolidate its vision by calling it the "standard version"; so did some American jurists and intellectuals in the face of the Second Amendment to the United States Constitution regulating the carrying of weapons - suggesting that the interpretation in favor of the freedom to move armed be taken for granted.

Another example. A social group can use a degrading description of another group, representing it as below humanity and opening the way to all forms of abuse and exploitation. Words divide. From an Italian national newspaper headlines: "Tragic Accident in Pistoia. The victim was 49 years old. Overwhelmed also an Albanian of 22 years and a man of 58": with the use of contrast, almost imperceptibly, a distinction is introduced between being Albanian and being a man.

In cases like these you have to resist (first by paying attention, and then maybe writing a letter to the newspapers). Resisting pays. To return to the discussions of the Constituent Assembly, thirteen of the Constituents presented on May 22, 1947 an amendment to Article 48 that in draft read "*All citizens of both sexes can access public offices in conditions of equality, in accordance with their aptitudes, according to rules established by law.* The Constituents request (and obtain) that the phrase "in accordance with their aptitudes", which surreptitiously introduces discrimination, be deleted. Maria Federici vigorously pleads the case:

"Since aptitudes are not tried except with work, excluding women from certain jobs would mean never trying their aptitude to perform them. [...] Many careers today are forbidden to women. For example, many inspection functions, many public contests are precluded to them, from those for entering high school to some for accessing the Fine Arts; and there is no reason for this. We have seen, moreover, that eligibility for public employment is a consequence of the legal equality recognized to all citizens towards the State".

If the above are examples that are on the edge of the negotiation, precede it, and make it possible, much more substantial are the attack strategies that call into question the evocative power of words. Wittgenstein warned against the risk of being misled by a noun and take for granted that it names an object, a thing; language would tend to reify. Many of his are dedicated to the way in which this sophism conditions the understanding of mental life; the elimination of the mind itself as a separate entity is the main objective of a process that has calls reification into cause. If we want an example less academic and closer to us in time, think about the way we talk about *virtual reality*, assuming that we are talking about a second world, or a parallel world, to which we would have access through our computer screens or the glasses of a simulator. The prudence would invite us to speak rather of a deceitful *representation* that lingers on illusion, and not of a *reality*; the too quick reification comes again put under accusation.

And yet, even if they have to be handled with care, words are the public form of our thoughts, and getting away with words is certainly showing that we have resources to think. Among the techniques commonly used in conceptual negotiations there is also the search in neighboring territories,

exploring the "word cloud", the semantic cloud that is around a word that seems important to us. But these are initial heuristics, which allow us to see where the heart of things is located, without really getting close to it. Philosophers typically think they can go deeper, they can directly tackle concepts.

Conceptual analysis

Traditionally, addressing concepts directly beyond words is the stated goal of *conceptual analysis*. Conceptual analysis is intended to highlight the fundamental elements of our ordinary representation of the world. Language is the common thread; analysis attempts to highlight the way a term is used within a linguistic community, and to do so it pursues the links between the different concepts used implicitly or explicitly by the speaker when using the term. For example: whoever carries out an analysis of *knowledge* would try to relate the way the term 'knowledge' is used to other terms, such as 'belief', 'truth', 'justification', and could say that knowledge is a particular type of belief, the belief that it is true and justified.

Talk of conceptual analysis indicates quite different philosophical activities, such as the philosophy of the ordinary language of an Austin and the descriptive metaphysics of a Strawson. Usually the philosophy of ordinary language is reproached for not being able to see the distinction between the essential and the accidental features of a concept. This kind of philosophy would be limited to collecting the idiosyncrasies of the use of a term within a linguistic community without exploring the intuitions of the speaker regarding the application of the term in less ordinary situations. What we normally say about *knowledge* may simply be of little significance. This is also why philosophers pay a lot of attention to mental experiments, which I will talk about in a moment, in order to escape from the idiosyncrasies of ordinary linguistic usage; and this is why they are not afraid of lexical invention, neologism and formalization, which also distance themselves from everyday language.

What then is a conceptual analysis, since we have to express it in words anyway? If doing conceptual analysis means to relate the use of a term, on the one hand, and on the other the beliefs and intuitions of the people who use it, understanding conceptual analysis means understanding its limits, distinguishing it from the *theoretical characterization* that allows to

circumscribe the extension of a term, that is the set of objects to which the term can be applied by isolating, if possible, the essential properties of the members of this set. The conceptual analysis of 'water' looks for the connections, in the mind of those who use the term 'water', with concepts such as *liquid*, *mineral*, *drinkable*, and so on. The theoretical characterization of 'water' says that water is everything that is H₂O.

Conceptual analysis is to theoretical characterization a bit like drawing is to photography. If we want to understand what has in mind a person who thinks that there are unicorns, it is useless to ask her to show us a photograph, since she cannot make it. A drawing or a painting helps us, even if it does not reflect reality, but only what the person we are questioning thinks. The study of the drawing tells us something about our interlocutor more than about unicorns: that is, it tells us what she thinks she can attribute to a unicorn.

Another difference between conceptual analysis and theoretical characterization concerns the limits, often perceived as too narrow, of application of ordinary concepts. Some mental experiments can reveal the limits of the intuitions of those who speak about the application of a term. These limits can be revealed either because the intuitions differ from one person to another, or because they are completely missing. In such a situation, a theoretical definition may result from a *stipulation* on the exact scope of the term. For example, this kind of stipulation allows the physicist to broaden the concept of sound to include inaudible mechanical vibrations, such as ultrasounds. Are ultrasounds *really* sounds? How would you answer this question? Well, it makes no sense to look for an answer because it has been *stipulated* that ultrasounds are a type of sound: take it or leave it. The advantages and disadvantages of this broadening of the concept of sound are to be weighed, as in all interventions of a conceptual nature. It is useful for us to work with an enlarged concept of sound because in this way apparently different phenomena are unified; even if we do not easily accept the idea that a sound can be something in principle not audible (we will talk about this example in chapter 11).

One last observation, of opportunity. Conceptual analysis is indispensable in cases where there are no alternatives. For example, in moral philosophy, some people might find it interesting to do experiments in which cruel

punishments are inflicted on children and see how parents react, but obviously common sense and ethical codes prevent this. This leaves ample room for conceptual analysis, which has the advantage of being *purely* conceptual.

Operational definitions

Scientists do not always have time for conceptual analysis, although we will see how science is often looking for conceptual clarification; they are wary of a tool that would seem more useful to describe the way we *represent* reality than reality *itself*. Scientific practice has adopted an autonomous instrument, which has developed greatly in the twentieth century, and has made a spectacular career with Einstein. It is operationalization, a notion made systematic by the physicist Percy Williams Bridgman, author of many texts on the philosophy of science, Nobel prize winner for physics in 1946. To operationalize a notion or a variable means to consider it defined according to the operations that are carried out to measure it. For example, in Bridgman's words, "the concept of length is fixed when the operations by which length is measured are fixed". This has as a consequence that there are different concepts of length, since the same procedures are not used to measure the size of the nucleus of an atom, the distance between Paris and New York and the distance between the Earth and Betelgeuse. (The reader may wonder if there is a problem with multiple concepts of length. I leave this as a small exercise of negotiation analysis: what consequences would we accept? Which would seem to us indigestible?)

Einstein, in fact, took part in a conceptual conversation about the nature of space and time. Pre-Einsteinian physics is based on the possibility to assert, for any two events in the universe, whether or not they are simultaneous. We all have probably an intuitive notion of simultaneity according to which the idea that something is happening at the same time in some remote part of the universe seems perfectly plausible: as things are happening now in the next room, things are happening now on the Sun (for example an electron is detached from a hydrogen atom) and things are happening now on a far away star. The notion of simultaneity is so fundamental that Leibniz had even thought to *define* space as the order of all simultaneous situations. Einstein asked himself the crucial question: how do we ascertain

simultaneity, to verify that two events are *truly simultaneous*? In the absence of an operational definition that allows us to say whether or not two events or situations are simultaneous, the concept of simultaneity is not only vague, it is unusable. It follows that the concept of time assuming simultaneity is unusable, and that the physical theories based on this concept are inadequate. Put in very direct terms, operationalizing time means saying that time is what a clock can measure. And operationalizing simultaneity means trying to understand how to make two clocks "talk" to each other when they are in different places. This is not the place to tell the story, but from this reflection was born the theory of Narrow Relativity.

Used by science, however, the operationalization is not philosophically neutral. Deciding which operational definition to prefer requires conceptual excavation work no matter what, since there are many possible options. We will see some examples in chapter 9.

Drawing distinctions

A typical reproach that the philosopher hears in the course of a discussion is that she has *omitted a distinction*. This means having used one term or concept ambiguously or instead of another term, whether the used term includes what should have been used or is closely related to what should have been used. To give a moderately technical and quite controversial example, in discussions about perception we often run the risk of confusing different concepts of *vision* - the so-called epistemic vision, on the one hand, which depends on what we know, and non-epistemic vision, which puts us in contact with an object in the scene in front of us without providing a "description" of this object. In order to see in a cognitive or epistemic way I have to field some concepts; but no particular concept has to be fielded when we see in a non cognitive way. One may have seen the President of the Republic without having seen *that* she was the President of the Republic. In front of Alan there was an imposing woman, Alan held out his hand and smiled at her; presumably he saw her. Now, the woman in question was the President of the Republic. So Alan certainly saw the President of the Republic (and in fact the episode is remembered by uncles and grandparents at every turn). The fact is that Alan is a year and a half old. And therefore he cannot have seen *that* what was in front of him was the President of the Republic, since because of his tender age he has none of the appropriate

concepts, he cannot know what a *president* or a *republic* is. Leaving out distinctions, however small, can lead to big mistakes; or at least to considerable philosophical divergences. If one describes the whole seeing as an epistemic, cognitive seeing, one draws a very challenging conception of the relationship between mind and world; according to which one must consider small children and animals as unable to see, or argue a priori that people from different cultures see the world in many different ways. Then perhaps one of these theses is true, but it is very likely that its truth is factual, and does not depend simply on not having made a conceptual distinction.

Other examples of distinctions considered as acquired by philosophical literature: the distinction between reading *de re* and reading *de dicto* of a sentence (Anni would like a pet: in the reading *de re*, Anni's thought concerns a precise dog, Medoro, and in that *de dicto* Anni's thought expresses a generic desire); and that between use and mention of a word (which is necessary to see a difference between 'the key word' and 'the 'key' word').

Examples and counter-examples

We get into the heart of the matter when we realize that the philosophical method feeds on examples and counter-examples. Professional philosophers spend a good share of their time looking for counter-examples to the theses of their opponents, of which they think that they bewitch themselves of an undeserved generality. Counter-examples are common currency in few other disciplines, with the notable exception of mathematics, where they are used for the same purpose: to produce a counterexample means to show that a given definition does not have the desired generality, or that a given mathematical property does not follow from another.

The best known case in philosophy is that of Edmund Gettier's counterexample to the definitions of knowledge (which presupposes that we move around a conception of philosophical practice as providing definitions, possibly denouncing it as unusable). This is the story; let's start with the more general part. Marco wants to know what time it is. The simplest thing is to look at the clock. The clock marks noon. And in fact it is noon. Looking at the clock, Marco gets the idea that it is noon. Given the

conditions, we would say that he *knows* it is noon. In point of fact: if it wasn't noon, but the clock was marking noon, we could not say that Marco knows it is noon: what the clock says is not enough. And if it was noon, but the clock did not mark noon, we could not say that Marco knows it is noon: it is not enough that it is noon. Starting from these reflections we think we can say what knowledge differs from simple opinion; it is a true opinion (it is actually noon and Marco thinks it is) and justified (Marco looked at the clock, which actually indicated noon).

Not so. There is a battery of *counter-examples* to the characterization of knowledge as a justified true opinion. In the case we discussed, the story takes the following form. Marco actually looked at the clock at noon, and it was noon, but the clock was stopped. Marco *happened* to look at the clock at noon. He got lucky! Can we say that *he knows* it is noon? He has a true and justified belief. If he had looked at the clock at any other time of the day, or at any time that he would consider sufficiently distant from noon, he would have formed a false opinion. If we think instead that Marco does not *know*, then what is knowledge? What *was missing* from the definition of knowledge? There are many possible avenues here; as in the case of Theseus' Ship, which illustrated a problem of metaphysics, so in the case of the problems of knowledge theory the options will have to be evaluated with the balance of costs and benefits.

Just to indicate an option and quickly see its ramifications: knowledge could be opinion that is true and justified through a *reliable* process; the clock of the counterexample was not reliable - that's why watching it did not generate knowledge in Marco. At this point we must understand what reliability is. One way to do this is to speak in terms of unrealized possibilities: *if* Marco had looked at the clock at 11 a.m., a false opinion would have been formed (the broken clock always marks noon, let's remember that); and if he had looked at it at 6 p.m., a false opinion would have been formed; and so on for almost all the *moments* when Marco could have looked at the clock. But what does it mean to talk about unrealized possibilities? The discussion quickly shifts to the theory of meaning and metaphysics. Solving the problem of knowledge means engaging on certain metaphysical and semantic options.

Here, however, we are talking about method, and in particular counter-examples. But where to look for the counter-examples? Rarely philosophers are satisfied with anecdotes or real life situations. They try rather to *imagine* situations in which this or that *could* happen. That is, they try to build a *mental experiment*. The next chapter is dedicated to mental experiments, in which we will see philosophical imagination at work.

Chapter 7 How do we build a mental experiment?

Mental experiments serve to give shape to our intuitions with the narrative of an imaginary situation. The practice of mental experiments is not limited to philosophy and has a respectable history in physics.

Galileo, Newton and Einstein, to name three cases, have announced their conceptions of space and time using imaginative mental experiments. Here we see how to build a *philosophical* mental experiment. The fundamental suggestion is to resort to "almost perfect" *duplications or symmetries* with respect to ordinary situations, where the element of difference exerts a certain "conceptual pressure" on the concept being studied. Duplications in mental experiments are plethora: I invite the reader who approaches philosophy but also the expert reader to explore the literature in search of examples. Evocative names will be striking: the teleportation, the Twin Earth, zombies, the inverted color spectrum, the swamp man, among many others.

Let's take a closer look at a mind experiment set in a science fiction *Star Trek* scenario. Giovanni enters the "teleportation machine" and in a version of the story that seems innocent he "finds himself" in a different place. The machine works like this: it acts by making a complete scan of Giovanni molecule by molecule; then it annihilates him, transmits the information of the scan at a distance, and recreates on their basis a molecule-by-molecule identical copy to Giovanni. The person who emerges resembles Giovanni in every way, and especially since all the brain connections have been restored as in the original, when questioned about his past he would respond with detailed descriptions of Giovanni's life and would say he remembers having entered a teleportation machine a few moments before. Question: Is the person Giovanni or not? Two options, what do you vote for?

A: The person who finds himself at the other end of the teleportation machine is Giovanni

B: The person at the other end of the teleportation machine resembles Giovanni in every possible way, but is someone else. Giovanni is dead.

What did you answer? In the absence of further elements, we may have the impression that it is Giovanni himself. An intuition is emerging: perfect qualitative similarity is more than enough to make us vote in favor of identity. Entering the teleportation machine may even seem convenient; if it were so easy to travel, we would immediately buy a ticket!

But *let's change the parameters of the situation a bit*, and imagine a slightly different scenario. (We must pay attention to this operation, the change of a small parameter, which is crucial to understand how mental experiments work). The machine jams! It actually recreates the perfect copy over there, but it "forgets" to destroy here. At this point in our scenario there are *two* individuals: Giovanni, who has not moved from here, and that one thing at the other end of the thread that - as in the previous story - looks like Giovanni, believes and says he is Giovanni, behaves like Giovanni. Probably our intuitions, still fluid in the first version of the story, now solidify, and we vote against identity: we deny that this second person is Giovanni. Probably they will solidify even more if we put ourselves in Giovanni's shoes and imagine the situation in the first person; for example, taking a breath of relief from the idea that the machine jammed and did not destroy us (we stayed here!). We conclude - and it is a metaphysical conclusion, on the *real* world - that teleportation *cannot exist* as we described it at first glance; the machine destroys who enters it and recreates at the other end of the thread a person as similar as you fancy to Giovanni but still different; it is another person; if the machine annihilates him, Giovanni dies forever, period. The idea of personal identity oscillates between the pole of similarity (and at the limit, of qualitative identity), and that of spatial, temporal and causal continuity; but under pressure it tends to stabilize on the side of continuity rather than on that of similarity. We have to witness the survival of Giovanni in the accident of the broken machine to realize his death when the machine works.

What would seem to be an abstruse philosophical problem, tied to the *fiction* that generates it, has unsuspected and immense social ramifications. From *Star Trek* we go back to life, to decision, for example when we want to measure ourselves with the problem of cloning. Many media discussions about cloning play very ambiguously with the intuition of similarity. "The time will come when we can all clone ourselves, and thus live longer, potentially forever." The intuition of similarity is so deep-rooted that it is

difficult to undo it. It is not even useful to try to undo it by showing two homozygous twins (natural clones of each other) and asking to recognize them as two *individuals*; in fact common sense treats “identical” twins in a completely idiosyncratic way. Parents sometimes dress homozygous twins in the same way down to the smallest detail, reinforcing cultural prejudice with visible and ostentatious signs that reinforce our bias in favor of similarity. But if the mental experiment convinces us, we have no reason to place absurd hopes or equally absurd fears in cloning; cloning creates an individual who looks a lot like you, but does not transfer you into the body of another individual; your clone does not give *you* a supplement of life or identity.

Are we *surprised* to have to accept that John dies, contrary to our first impression? Can mental experiments reveal surprising aspects of our intuitions? Then we have no direct and immediate control over our intuitions. A mental experiment such as that of teleportation can convince me that the principles of causation and space-time continuity dominate those of similarity in deciding whether or not an entity of a certain type will survive the machine, even if at first I have completely different intuitions. Typically teleportation is found acceptable, but you change your mind when you present the mental experiment of the jammed teleportation machine.

Broadening conceptual horizons

At the end of a mental experiment *we issue judgments*: "Giovanni dies; teleportation is not possible". The judgement on the "result" of a mental experiment, however, isn't the mechanical application of an algorithm; it is not like finding the result of a two-digit multiplication. The evaluation hinges on how our intuitions about the narrated situation, intuitions that the experiment has manipulated, are considered acceptable or not on the basis of criteria that are not easy to put on paper, such as the fact that they are consistent with other intuitions that we would not want to give up, or that appear perfectly convincing to us (even if we have no idea why they appear so convincing).

Mental experiments can therefore surprise us, stabilizing our intuitions; but they also have another function: they widen the conceptual space, that is

they show us that we *could have more conceptual resources than we thought*. And this can have its use.

Let's take a look at another classic example. It would seem that the notion of time and the notion of change are closely associated. If nothing changed, if everything remained unchanged, could we still say that time passes? Of course, we are ready to say that we could not *notice it*, but here we are asking for something even deeper, which concerns not our knowledge of things but their very nature. In a universe in which nothing would ever change (provided that in such a universe we can still use the word 'never!') would there be *time*? An ingenious mental experiment by Sydney Shoemaker tells of an imaginary situation in which there are only three planets, each of which can watch what happens on the other two. The planets are subjected to a metaphysical freeze, a bit like in the fairy tale of the Sleeping Beauty. This is how things go. The first world stops completely every two years; looking at it with a telescope, the inhabitants of the other two worlds see that for a whole year nothing happens, and that at the end of the freeze everything starts again where it was when it stopped. The second planet suffers a year's freeze every three years, and the third planet a year's freeze every five. When the inhabitants of one planet watch what happens to another planet during a freeze, they are in a condition where time flows for them; it is obvious to everyone that the freeze on a planet other than their own does not affect the passage of time on their own planet. So: everyone stops in turn, and during the pause time goes on as before. But what happens every two by three by five = thirty years? When the freeze periods overlap, *everyone* stands still for a year. Now, if we thought that standing still one lap *in turn* would not stop time, we have a reason to believe that not even standing *all* still one lap will stop time. So, and here is the judgment that closes the mental experiment, we have reason to think that time without change is at least a possibility.

The mental experiment purports to contribute to the metaphysics of time. We can discuss the details (if on one planet there is a freeze, how do photons reach the inhabitants of other planets?) But even if we do not completely agree with those who think that time can really *exist* without change, the experiment certainly reaches another goal: digging into the links between concepts we see that we have the resources to conceive of time *without* change. Perhaps we would not have said this at first glance, and even after a

first reflection it might have seemed to us that, no, time without change cannot exist. And instead this possibility is at least available in the guise of something we can conceive of.

Why do we need a mental experiment in conceptual negotiations? It is an integral part of conceptual analysis, as we have seen in the previous chapter; it allows us to test the consistency of our position, and by creating a narrative it allows us to get out of the boundaries of our position, which could risk the fate of all principled, usually not very negotiation-friendly.

From the point of view of a mature negotiation theory, the advantage is obvious. If you have more options at your disposal, you are more likely to find a negotiated agreement. Partly because you can more easily put yourself in your interlocutor's shoes; partly because you also offer her a larger choice. But here I would like to express a consideration about values. It seems to me that *the variety of options is a value in itself*. It is *better to live in a world where there are different opinions than in a monochrome world*. Biodiversity is preferable to monoculture. If we have to offer arguments in favor of diversity, we would probably focus on some instrumental aspect. As immunologists like to say, with one key you open a lock and that's it, but there are few locks that can resist those who have three million keys in their pockets. Accepting and seeking diversity does not exempt us from having to seek consensus in many cases; and it does not exempt us from negotiating. Just as it does not exempt us from always making ourselves available to changing our minds.

Mental experiments have a long history

One should not think that the use of mental experiments is the prerogative of contemporary philosophy alone. Without wanting to retrace its long history, I want to present some classic examples, which will help us understand the structure of mental experiments. Nietzsche asks us to imagine what meaning we would give to our actions - to every single action - if we discovered that every single event in the universe will return to happen exactly as it did in the time to which we belong:

"What, if some day or night a demon were to steal after you into your loneliest loneliness and say to you: 'This life as you now live it and have lived it, you will have to live once more and innumerable times more; and there will be nothing new in it, but every pain and every joy and every thought and sigh and everything unutterably small or great in your life will have to return to you, all in the same succession and sequence—even this spider and this moonlight between the trees, and even this moment and I myself. The eternal hourglass of existence is turned upside down again and again, and you with it, speck of dust!'"

"Would you not throw yourself down and gnash your teeth and curse the demon who spoke thus? Or have you once experienced a tremendous moment when you would have answered him: 'You are a god and never have I heard anything more divine.' If this thought gained possession of you, it would change you as you are or perhaps crush you. The question in each and every thing, 'Do you desire this once more and innumerable times more?' would lie upon your actions as the greatest weight. Or how well disposed would you have to become to yourself and to life?"

The image of the Eternal Return is extraordinary even if it requires a moment's reflection. For example, if everything returns exactly as it was, it also returns a condition in which we do not *know* that what happens is a repetition of what has already happened. Since there are no memories of a passage in a previous life, they will continue not to come back in every future passage. Actually, one could think that the possibility of eternal return does not make any difference; events repeat the same, but for me it is as if they were unique anyway. On the other hand it can be conceived as an invitation to bestow importance upon every single event of one's life in the moment one is living it. Nietzsche's thought experiment helps us to appreciate how much contingency dominates our decisions in an unsuspected way, in particular the decision to adhere to a certain moral profile.

A step back in time. Descartes tells the story of a piece of wax and invites us to make a thought experiment to understand the difference between essential qualities (non-sensible, grasped by reason) and non-essential qualities (sensible, grasped by the senses) of material objects. In his discussion Descartes starts from a methodological observation: we try to focus on a

concrete example, *not* to reason in *general* about physical bodies. The narration is simple and vivid: it is an exercise of *imagination*.

Let's consider those things that usually everyone thinks they understand in the most distinct way: that is the bodies, those we touch, those we see; certainly not the bodies in general - these general perceptions are in fact usually rather more confused - but one taken individually.

Take, for example, this piece of wax: it has just been extracted from the combs, it has not yet completely lost the taste of honey; it retains a trace of the scent of the flowers from which it was collected; its color, shape, size, are obvious; it is hard, it is cold, you can touch it easily, and if you hit it with your fingers, it will emit a sound; in short, it contains all those things that seem to be required for a body to be known in the most distinct way possible.

But here, as I speak, it is approached to the fire: the remnants of the flavor go away, the scent fades, the color changes, the shape disappears, the size increases, it becomes liquid, hot, you can hardly touch it, and now, if you hit it, it will no longer emit any sound.

Does the same piece of wax still remain? It is necessary to say yes; nobody denies it, nobody thinks differently. What was present in it that was known so distinctly?

Certainly none of those things that I caught with my senses; in fact, those that fell under the taste, or under the smell, or under the sight, or under the touch, or under the hearing, have now changed: the wax remains.

We find the imaginative process in the method of phenomenologists. Edmund Husserl coined a term for a philosophical procedure like Descartes'; he spoke of 'eidetic variation' or imaginative variation. If we look for the essential properties of a thing, let's imagine to take away one after the other the properties and see which subtractions make the concept implode. What can not be removed without imploding the concept is the skeleton, the essence. Husserl asks us to imagine a color without any spatial extension, a red that is not a red spot nor a red light, a red without place and without dimension. If we cannot do it, as Husserl believes, it means that it is in the essence of the color to be extended. Husserl thought that this would illuminate us about things themselves, inform us about the nature of color; less ambitiously, we might think that we have made a discovery about the concept of color. In both cases it is not a momentous discovery, and Husserl

uses it above all as an indication of the legitimacy of the method of eidetic variation.

Leibniz designs a mental experiment to show that the idea of the fastest motion of all would be contradictory, the Fastest Wheel experiment. Imagine that a wheel is spinning on its axis and a tangential speed is measured at its edge which is the maximum physically attainable. Well, now imagine a wheel spinning at the same angular speed but with a longer radius, or imagine a flag sticking out from the edge of the wheel. The tangential speed measured on the profile of this second wheel or at the tip of the flag is greater than the first; but didn't we say that the first was a maximum speed? So there would not be a maximum speed. As we know, contemporary physics dictates a limit to the speed of a physical object - which cannot be higher than that of light. Leibniz is wrong, but where? We could settle for a very modest but nevertheless interesting conclusion: Leibniz indicates that the limits of our intuitive concept of speed are too wide. This concept regulates the development of the Fastest Wheel mental experiment, which decrees that there cannot be a maximum speed. This is, in light of contemporary physics, an inadequate concept.

Nothing prevents us from thinking that Leibniz describes a world whose physical laws are different from ours: a world that makes true the concept of a speed higher than any assigned limit. And nothing prevents us from suspending judgment on the underlying physics to say that Leibniz is giving a non-physical, but mathematical (purely kinematic) characterization of the movement of a (abstract) body circular on its axis. In passing: if it is accepted that non-physical entities exist, they *can* have a speed greater than that of light. The cone of shadow caused by an object in front of a stack pointing towards the sky moves, at a sufficient distance from us, at speeds greater than the speed of light. No fear: the shadow cone is not a physical object. (What is it? A pseudo-object? I leave the discussion of this case to the reader).

If the Fastest Wheel thought experiment concerns the geometry of movement, it is located in a region bordering on mathematics. As we have seen, mathematics is close to philosophy because it is allowed to proceed methodologically by counter-examples. Mathematics is not far from philosophy even in its use of mental experiments and in its description of

cases and presentation of theories that are not necessarily realized in nature. Both philosophy and mathematics create descriptions in search of a world that will make them true. But here it is even more important to observe that in mathematics we study the behavior of a function by looking at its remarkable points or limit cases. Some functions can be considered degenerate cases of others. The circle is a degenerate ellipse; this means that it is *actually an* ellipse - the modification of a small parameter *is all that* separates them conceptually.

Reasoning in a parametric way

An important lesson of this overview is that when we perform a mental experiment we think in a parametric way. A bit like when we use the drop-down menu of a computer writing program: we can vary one parameter at a time (format:character:italic, or format:character:bold) *to see the effect* it does. If you want to create your own mind experiment, get used to finding small parameters to change.

We see the alteration of small parameters in Nietzsche's mental experiment (cyclical/linear events), in that of Descartes (changes in the state of matter) and in that of Leibniz (the variation of a simple measurement). In the example of time without change, local metaphysical freezes were created, one world at a time, before moving to global freeze. In the teleportation experiment only the jamming of the teleportation machine was modified. The counter-examples à la Gettier on the definition of knowledge proceed by small adjustments of the narrated situation (the clock is stopped, the clock is not stopped). The witness involved in Brâncuși's trial inserts a variation of a detail in the definition of an artistic object: if it is made by a craftsman, and not by an artist, it is no longer art.

We can now try to practice teaching small parametric changes. Let's refer to the example of the Theseus' Ship that we discussed in detail in chapter 4. Let's vary some parameters and see if our intuitions about the ship change. What if we do not replace the planking little by little, but all at once? The "formal" ship, the one that continues to sail, perhaps would no longer seem to us a good candidate for the survival of the initial ship. If I take a knife and replace in one blow blade and handle, do I really have the same knife?

The intervention on the parameter "time" (gradual change / change in one blow) affects our intuitions about the survival of the ship or the knife.

Or we reflect on the family trying to vary the "one-sided diet" of examples; the trick is still to vary the diet one ingredient at a time. We can comfortably take our cue from the "normal" family paradigm that is endorsed by traditional discourse and the media. We are confronted with a heterosexual couple with two children, perhaps the older male and the younger female (*le choix du roi*, as they say in France, the king's preference). Let's remove the children from the scene: this couple consciously wished not to have any; this other one could not have any; this other one lost them in an accident. Are they still *family*? Let's remove a partner from the scene: this child was raised by his single mother; we do not know who the father is; the father is dead; the father is gone. Add a partner: this woman, who did not give birth to children, now lives with a man who has one from a previous relationship. Are we always in the presence of a family? Let's bring the children into the picture, but let's put the biological generation aside: this couple has adopted two children. Let's reintroduce the generation, this time assisted: this woman had a child from a donor. Let's change the *gender* parameter: the couple is homosexual. Biological/non biological, natural/artificial filiation; tomorrow we will negotiate with the ghost of cloning (would my cloned "son" and I be a family?) but there is no need to bother the future. The events of Filumena Marturano and Mimì have a thousand variations, and these are all parametric, as from a drop-down menu. History and anthropology help us by offering other possibilities and therefore other parameters. In different cultures are invested with different values different situations. In many cultures there are forms of polygamy. In ancient Rome, the adopted son had a prominent position; in certain circumstances, an adoption made it possible to resolve disputes about succession. After the Second World War, Holocaust survivors found themselves without siblings, uncles and cousins; fake family reunions were created in which people without family ties met; the little ones had an illusion of a family network, they spoke to their peers calling them 'cousin', to adults calling them 'uncles'; over time these relationships have remained and still today the 'cousins' participate in the meetings of their respective, 'real' families, maintaining the role they would play if they were 'real' cousins.

Kepler's *Dream* varies the parameters of the situation we perceive. First of all, the point of view varies; let's transport ourselves with imagination to the Moon. We all know that the Moon always shows the same face to the Earth. What does this mean for a lunar inhabitant? That if she is on the visible face of the Moon, she will *always* see the Earth. Not only that: for an inhabitant of the visible face of the Moon, the Earth does not follow a cycle of sunrises and sunsets. Except for a few small oscillations, the Moon will always see it fixed in the sky, always at the same height on the horizon. But he will see it spin on itself. The mental experiment of flying to the Moon allows to separate the parameter of the apparent revolution in the sky from that of the rotation on its own axis. From the Earth the situation is exactly specular: the Moon seems to make a diurnal revolution around the Earth, and does not seem to rotate on itself; the parameters are inverted with respect to the Moon (of course the Moon spins on itself, but you have to think about it for a moment to realize it). I observe in passing that this mental experiment uses a strong dose of contingency: it happens (for reasons related to tidal forces) that the Moon is "locked" with a face always facing the Earth, and the Earth is not yet (but will be) slowed down to the point of being locked on the Moon. There is a kind of "epistemological luck" that affects the cost of making a certain discovery. Unlucky was Ptolemy who could not travel to the Moon; but then, he could have used imagination.

Chapter 8 Composing the tensions between worldviews

The philosophical reflection is born from conceptual tensions, we said. And we have observed how conceptual tensions are often exogenous. Social changes, in science, in art, in our lives, put us in front of cases that we had not thought of, or for which the mind is not equipped. Worlds that until then were only possible have become actual! New questions are pressing us from all sides. What is a foreigner if I can go to the antipodes in 24 hours and if my pension depends on the work of migrants? What is nature - once a seemingly inexhaustible reservoir, a buffer between human societies, now a measured, divided, counted, and threatened resource; what are we in such a nature? What are the material objects that we care about on a daily basis and that govern the conceptual architecture of the world we interact with, if we are to believe the science that postulates others, of a different kind? And who should we believe in?

However, there are also endogenous questions and tensions. For the pure pleasure of knowledge, or the desire to clarify our ideas, we can be induced to reflect on our concepts, and not infrequently we find them inadequate - for example, because they hide a contradiction. The example of the Theseus' Ship we discussed earlier is eloquent. It is not physics that tells us whether we should prefer the "material" ship or the "formal" ship - and therefore make us doubt our pre-reflexive hypotheses about reality. It is an entirely internal reflection that makes us doubtful. Part of us votes for the material ship, but another part votes for the formal ship. The two options are incompatible; and since we have no reason to think that the difficulty depends on the fact that we are thinking about *ships* - and in fact we could talk about the clock of Theseus, the house of Theseus, and so on - a contradiction lurks in the way we think about the most common objects. As we have seen, here are some reasons that push us to try to *correct* our conception of material objects. Our metaphysics, or our moral philosophy, or our epistemology, become *corrective*. Of course, it is not enough for us to point out the problem of a contradiction between our hypotheses to make us understand which of the contradictory hypotheses we must give up.

To this difficulty, add another one. Different *people* may have different insights on the same subject. When Strawson formulated his descriptive metaphysics program he talked about an

"massive central core of human thinking which has no history—or none recorded in histories of human thought; there are categories and concepts which, in their most fundamental character, change not at all. Obviously these are not the specialities of the most refined thinking. They are the commonplaces of the least refined thinking; and yet are the indispensable core of the conceptual equipment of the most sophisticated human beings."

Strawson's thesis is an empirical thesis. One may ask: is the central core *really* immutable, or is any kind of thought and intuition free from the risk of variability, historical and geographical? The fact that the core is central, i.e. it concerns fundamental elements of mental life (it concerns concepts such as that of an *object* or an *event*, which are certainly less ephemeral than concepts such as that of *aerobics* or a *gavotte*) does not in itself protect it from variability.

Researchers belonging to the experimental philosophy movement, who have worked mainly on normative issues (knowledge, justice, reference), have questioned the existence of a deep and immutable core of thought, detecting at least two types of variation in intuitions from one subject to another: variations due to cultural differences, and variations due to socio-economic differences. It is assumed that these independent variables should not have a significant effect on the result of a thought experiment, for example on the greater or lesser inclination to consider a given situation as a case of knowledge, and yet an effect is detected (for example, Western males are more easily convinced by Gettier's counterexample, see chapter 6). There is also a type of *intra-subjective* variability linked to the order in which mental experiments are presented: the same person can describe a certain potentially dubious situation as a case of knowledge if a case that is clearly not knowledge is previously presented to her. (The variability is within subjective but is however exogenous, in the sense that it is revealed by the experiment. The subjects do not have any awareness of this variability, while whoever reflects on the Theseus' Ship sooner or later clashes with the contradiction, it is just a matter of time).

There is no reason to think that this type of variability does not extend to non-normative subjects such as the metaphysical conceptual core described by Strawson. Faced with the variability, a problem arises again for the metaphysician who intends to make use of intuitions: which intuitions can she make use of, i.e. which group of intuitors can she refer to? To which does one belong? Frank Jackson writes:

"My intuitions reveal the folk conception inasmuch as I am reasonably entitled, as I usually am, to regard myself as typical".

But this risks to be hand-waving. If it makes sense to propose a group of reference subjects, on what basis is it chosen? If you choose the majority reference group, for example, what can make us exclude that a minority group does not have better insights? Experimental philosophers are typically hostile to insights and tend to give discouraging answers to all these questions. It could certainly be argued that thought experiments in ethics are more subject to intercultural variation than those in metaphysics. However, the problem of *internal* stability remains.

Critics of experimental philosophers have pointed out that differences in intuition regarding knowledge can be reinterpreted in terms of verbal or conceptual differences. For example, Easterners and Westerners react differently to Gettier's mental experiment. Where Westerners are no longer inclined to talk about knowledge, Easterners seem more open-minded. Well, in the experiment it is asked if the protagonist of a Gettier case 'knows' or 'does not know' a certain thing, given certain circumstances. The difference in the answers could be explained meta-negotially by saying that East and West refer to two different concepts of knowledge. If I have my notion of knowledge and you have yours, the differences in insights do not indicate any disagreement on my or your notion. I can try to understand your notion and see if my intuitions about it help me understand what you think knowledge.

The risk of this kind of response is simply of changing the subject; a risk that becomes extraordinarily costly for a certain kind of metaphysician, the one who sees philosophy as a quest for a theory of reality (or of a given part of reality). This type of metaphysician is not interested in a theory that explains what are the ingredients of reality-for-a-subject belonging to a

given group; and she is certainly not interested in stopping at Strawson's descriptive project. Those who deal with the nature of color are not interested in lining up, one after the other, a metaphysics of color for the visually impaired, one for monochrome colorblinds, and possibly a different one yet for tetrachromats (non-human, such as some birds). The risk of going off topic also hangs over the experimental philosophers, who often seem to fall back on an unambitious version of their project; taking away the negative contribution (the instability of intuitions), their constructive contribution, by explicit admission, is not to philosophy, but to psychology.

We could summarize by saying that experimental philosophy is not philosophy; it is rather psychology of thought. We will find out if people have different intuitions or not. Taken in the right way, experimental philosophy is then an indirect criticism of a certain way of doing philosophy, of philosophy's claim to be a science that seeks to discover how the world is made. The problem arises only for those who cradled that illusion. But whatever the fate of experimental philosophy, the problem of intuitive variability remains for philosophers.

There are therefore endogenous reasons, linked to pondered reflection, and exogenous reasons, linked to new knowledge, to try to correct a certain conception (in metaphysics, ethics, epistemology, aesthetics). Examples in both directions abound. No one seems to expect new empirical data to corroborate a Platonist conception of prime numbers, or to consider that a certain definition of road safety is incoherent; but no one thinks they can ignore empirical data when discussing problems of philosophy of biology or psychology; it is empirical data that often start the discussion.

Actions illuminate concepts when words do not succeed

Conceptual negotiations take place between people who speak and build narratives. These people have insights, and usually express them in words, and try to modify others' insights using words. What if words are not enough? Two cases are possible: there could really be ineffable content that cannot be expressed in words; or else using verbal negotiation would not turn the tables. How to proceed? Roger Pol-Droit suggests that in some cases an *action* could unlock thought and succeed where the word fails. Try to eat something you don't like, something you wouldn't normally eat if not out of good manners and reluctantly. It is a *strange* experience, very philosophical. It certainly makes you think about the meaning of eating for

pure pleasure, a reflection that maybe we could keep in mind when we make decisions about how to eat or try to understand what it means for other people not to have enough to eat. Or consider this other situation. For decades it has been possible, thanks to the work carried out by some associations, to go to dinner with blind or visually impaired people: in a completely dark room, to *understand the* nature of visual impairment. Sitting at the table with a blind person, you are assisted by a blind waiter. It may well be that a description is not enough to appreciate the complexity of an experience; an action takes the necessary step forward; in some cases doing, rather than reflecting, unlocks the conceptual impasse.

I wish I could talk about a category of "philosophical actions", but of course the fact that an action is philosophical or not is completely contextual. Eating something we do not like because we have no choice is different from eating it by choice. In the discussion of this book philosophical actions are not renunciations of *conceptual* negotiation, but ways to intervene in the negotiation. To repeat, not everything can be expressed in words; the absence of words is not the absence of concepts. If words cannot describe a concept, an action can perhaps succeed.

It is well known, however, that being convincing is not enough; persuasion is inoperative if it is not accompanied by measures that incite or act as a deterrent. People can be perfectly convinced that it is extremely dangerous to exceed the speed limits or not wear seat belts, and yet in the absence of an effective incentive they can continue to do all these things undeterred. In general, knowing what you are doing does not always help you do it, and awareness is not always necessary for action. Nor is it necessary for effective action. Because human rationality is limited, our long-term goals, or taking care of our rational image, can collide catastrophically with our current preferences and day-to-day decisions, subject as they are to a myriad of cognitive and cultural influences. But that's not why we have to renounce to ask ourselves questions, to evaluate the consequences of every action, decision, thought.

More on negotiation failure

You are negotiating conceptually; things are not going as you expected. At some point you also have to be able to change your mind. This means not only that you have to take the step - *accept the negotiating failure*, *decide to change your mind* – or resort to an action; it also means that it is useful for you to have a repertoire of alternatives, a plan B. Perhaps we are better equipped than we thought: in several examples that we have illustrated (the three worlds of Shoemaker in Chapter 7) we have seen a thought experiment that shows us that we have the conceptual resources to describe a situation that seems unfamiliar to us.

Failure is still a possibility at all levels. As we have seen in chapter 6, in the general theory of negotiation it is suggested to conduct a parallel or preliminary negotiation to agree on how the main negotiation will be conducted. The proposal applies directly to philosophical negotiations. What argumentative standards do we accept? Can we really criticize the theory of evolution on the basis of a very rigorous epistemology, and then lightheartedly issue a hypothesis such as the so-called "intelligent design" that does not even roughly specify how such a project would be implemented?

Now, meta-negotiation can fail just as any other negotiation. And yet you have to move forward. At this point Isaiah Berlin's lesson should illuminate our path. We must learn to *accept* that there may be points of view and values *different* from our own. Diversity can be *irreducible*. Accepting this fact, not seeking further mediation at all costs, not trying to impose one's point of view anyway, is a sign of maturity; and maturity, as is well known, is often very difficult to achieve.

Chapter 9 Where is Philosophy?

If philosophy is conceptual negotiation then it is *widespread*: you can find it everywhere and in particular where you would not expect to find it. The examples from which we started out showed some unexpected places - a legal discussion about art, a constitutional debate, a scientific revolution. In the next few pages I will focus on the presence of philosophy *in* science. I will not talk about the philosophy *of* science, but about the mixture of science and philosophy. It is a thorny subject given the tendency to oppose philosophy as a "humanistic" discipline to science. According to this tendency, it is at most acceptable for philosophy to deal with science when things are done, in hindsight, precisely as the philosophy of *science*, with an external look, without disturbing. I intend instead to argue that philosophy as conceptual negotiation is an integral part of scientific practice, even if it is not called by its name.

The cases of Brâncuși and Kepler's Dream that we discussed at the beginning of this Lesson were all *consequences of* social or scientific transformations. The case of the discussion in the Constituent Assembly, on the other hand, showed how philosophy is sometimes required *upstream*. It is a question of laying the *normative* basis for the work of legislators and it is important to put the stakes in the right place. "We do not want to accept that the perimeter of the family extends beyond this point; we cannot accept that it includes less than this". Even in scientific practice, some decisions must be taken *upstream*, with a conceptual negotiation, i.e. a philosophical reflection, which cannot be carried out with the means of the scientific discipline in question.

Let's start with two examples, one from the exact sciences and the other from the social sciences.

What is a planet really?

The Little Prince lived on a *planet* that "*was little bigger than a house*", but this does not surprise his interlocutor:

"I knew very well that, in addition to the great planets such as Earth, Jupiter, Mars, Venus to which one has given a name, there are still hundreds

of them that are sometimes so small that one has a hard time seeing them through a telescope. When an astronomer discovers one he does not give it a name, but only a number. He might call it, for example, 'the asteroid 3251'".

So: did the Little Prince live on a planet or on a more banal asteroid? It doesn't seem that common sense is reluctant to accept whatever solution proposed by astronomy experts; an uncertainty about the meaning of 'planet' and 'asteroid' doesn't make Saint-Exupéry's fable incomprehensible. But as soon as it is decided that words count, that there must be some reason to call something 'planet' and not 'asteroid', doubts begin to arise. As the philosophical debate on vagueness teaches, concepts have blurred boundaries, and attempts to make them more precise lead to unsatisfactory if not contradictory solutions. If you have half a million hairs you are not bald, if you have a thousand you are. Around fifty thousand we do not know well, and it is useless to decide an exact figure, because, says one argument, if you have fifty thousand hair one hair less can not be what makes you bald. If, however, one hair less doesn't make you bald, the mechanical repetition of the argument fifty thousand times makes every bald person hirsute. But here, it will be objected, the concepts at stake are the very imprecise ones derived from daily experience. With other concepts, less close to common sense, invested with scientific dignity, the accuracy of the limit becomes important. Sometimes a decision must be made. The legislator is often obliged to decree where common sense fluctuates or does not agree with science. The laws that regulate the limits are not always crystal clear; in some regulations, for example, they give rights to the embryo and the fetus (you can not sell or donate them), but not legal personality, which is acquired beyond the fundamental moral frontier of birth (there is no registration for the embryo and the fetus, who can not inherit assets or register property in their name). However, here too, the concepts at stake are halfway between science and experience, and are linked to life, to its uncertain progress, and to the thousands of practices that affect it.

Shouldn't scientific concepts closer to physics escape this inaccuracy? One thing is an embryo, another a planet. Is there no way to say once and for all if one thing is a planet or if you are not dealing with an asteroid? Size and shape play some role if you look for a definition. Something too small does not count as a planet; an approximation to a spheroid also seems necessary. The composition? Being quite different from each other did not put Jupiter and Earth in different categories. Less clear is whether it matters to us that

the body under examination gravitate or not around something we already call 'planet'. Galileo had no difficulty in calling Jupiter's satellites 'planets'; today they are not counted among the planets of the solar system, just as the Moon isn't.

But what is the point of this discussion? Do we not already know what a planet is and what an asteroid is? We knew it, or pretended to know it, until the risk of Pluto's "demotion" appeared. In the area of Pluto (Kuiper's belt) many other brothers or cousins of Pluto have been discovered; and in particular Eris, 2003UB313, which is bigger than Pluto, and that many would like to consider a planet in all respects (it also has a satellite); but also Haumea, 2003EL61 (an ovoid, with two satellites) and 2003FY9, both about three quarters the size of Pluto.

The history of concepts makes the path of conceptual definition bumpy. If you want to consider planet only a body with a diameter greater than 10000 km, the Earth would no longer be counted among the planets, a fact that is not easy to propose to a common sense that sometimes does not even digest the fact that the Earth moves. If 100 km in diameter were enough to make a celestial body a planet, we should promote the Moon to planet status. If we do not want to promote Eris to planet status, we may find ourselves having to demote Pluto. The mass of Pluto is much smaller than that of the Moon; here the context also has its effect; any body the size of Pluto on an orbit between the Sun and the Earth would be a planet for all intents and purposes. If instead Pluto had the shape of a large irregular potato typical of some asteroids, not even an 'internal' orbit would save it (probably) from demotion.

Taking a *vote* as the International Astronomical Union did in 2006 in Prague - decreeing the downgrading of Pluto - is not exactly what we would expect from a scientific discussion. The fact is that the question of the distinction between planets and asteroids is not scientific, but exquisitely philosophical. And the vote, as we have seen, is a way to unlock a conceptual negotiation. There is no experiment or space travel that can tell us if a thing is a planet or an asteroid; even if, as often happens, science puts us in front of discoveries that force us to enlarge and re-knit at least some threads of the conceptual network.

What is public safety really about?

The second example of philosophy *in* science comes from the social sciences. A social scientist tries to measure a phenomenon (crime, the distribution of new types of family). Actually, social scientists usually measure more phenomena to see if there are significant correlations between them. Is the employment rate of women related to literacy? Is crime inversely related to average wealth, or inequality? And so on. Now, measuring a social phenomenon such as crime or inequality is a complex activity. Statistical measures require considerable methodological and interpretive caution. But above all, they require an operationalization (Chapter 6) of the variables under discussion. The work of operationalization is a type of conceptual negotiation conducted upstream of the actual research. Suppose we want to compare the crime rate in different countries. How do we measure crime? Here is a list of proposals from a statistical manual for the social sciences:

"Count the number of criminal arrests from public records; calculating the proportion of the total population that is in jail; asking people in different countries whether they have committed crimes; counting the number of executions that take place in each country in a given year."

As the writer points out, the "process of definition is a major, if not *the* major, source of disagreement in social research". Each of these criteria has its own problems. Asking people if they have behaved dishonestly can lead to very imprecise measures, since it is not certain that the answers will be sincere; measuring the number of arrests can unintentionally operationalize other variables, such as the workings of law enforcement agencies; counting prisoners can measure the severity of a judicial system rather than the propensity to commit crime, and so on.

There are additional problems that depend on the fact that in different countries statistical offices measure crime differently. If in one country crime is measured by the percentage of prisoners in the population and in another by the number of arrests, the data may be incommensurable. Let's suppose that each country defines a "crime index" that ultimately boils down to a number. For Italy, let's say, it is 6, for the USA it is 9, and so on. Can we say that in Italy there is less crime than in the USA? No, as long as

we do not know in what way the various indicators are calculated in Italy and in the USA, or in what way the statisticians have conceptually negotiated the crime variable. A further work of conceptual negotiation is required, a work that resembles that of the *translator*. I observe in passing that here is revealed all the value of the work of historians, close collaborators of philosophers in conceptual negotiations that require an awareness of the steps taken (we will talk about it in chapter 12).

Even apparently simple measures such as population count in a census or inflation measurement require considerable conceptual preparation work. Who counts as a resident? How do we define the list of goods for measuring inflation? If the list changes, the data changes.

All this is part of the work of statisticians. But does it make sense to call it "philosophy"? It makes sense because it is not part of the statistical method itself and requires conceptual analysis. The normative component goes beyond empirical measurements - and as I have argued, it makes them possible. Just as you cannot decide what a planet is by going out to explore space, but you can start looking for planets when you have decided what a planet is, so you cannot decide what crime is simply by counting a part of the population or the number of manifestations of a certain phenomenon, but you can start counting count when you have decided what counts as a criminal person or as a criminal act.

Unifying theories

A very important conceptual negotiation in science is what precedes and accompanies theoretical unification. The history of science is studded with theoretical unification. A theory of combustion is part of a theory of breathing and of rust formation. Einstein unifies the notions of space and time and those of mass and energy. Newton unifies the fall of objects with the revolutions of the planets. To 'unify' does not mean 'to reduce'; unification is an operation that allows us to understand notions that seemed to be related or only weakly related in a wider theoretical framework, possibly showing that the phenomena in question are manifestations of something deeper. The Newtonian unification of the fall of objects with planetary movements is so broad and deep that it requires additional negotiation to assist understanding. It seems impossible to see as

phenomena of the same type the perceived fall of an apple and the movement of a planet, which just does not seem to fall. Newton entrusts his negotiation to a thought experiment of great elegance and vividness. Suppose you go to the top of a high mountain with a very powerful cannon (imagine that technology allows you to have a gun powerful at will). Now shoot horizontally, a weak shot. The bullet will fall some distance away from you. Always keeping the gun horizontal, fire a stronger shot that will launch the bullet much farther away. Further away, but the Earth is curved: the next cannonballs, fired with increasing force, will start to curve around before falling back to the ground. The last one will be fired so hard that it will make a complete turn and return towards you. Keep your heads down! Let it pass...where will it fall? Lower your head once more, there it is again! The cannonball has entered into orbit. An object in orbit around a planet *is nothing more than* an object that falls "towards" the planet without ever settling down (be careful, never say "never", the orbits are stable for a certain period of time, in the long run they may be disturbed and the orbiting bodies may end up on the planet or escape from orbit). You realize this if you take a ride on a spaceship orbiting the Earth: everything *falls*, you, the spaceship, the pencils, the glasses. But since you all fall down together, things seem to fly around you - as we have seen a thousand times in documentaries. It is not a "gravity-free" situation, as it is said improperly. If you notice in an elevator or in an airplane that things start flying around you, you should conclude that you are in free fall.

The experiment is elegant because the unification between planetary movements and the fall of bodies near the Earth takes place practically entirely within common sense; it is surprisingly intuitive.

Negotiation failure, once more

A successful mental experiment; a successful negotiation. Yet it is by no means granted that a negotiation in the scientific field be successful. Negotiations between different scientific theories may fail; negotiations between a scientific theory and common sense may fail. We have talked about the lack of success of some negotiations, such as the one on the notion of family within the Italian Constituent Assembly. An attempt to reopen negotiations on Pluto occurred in 2009, when the Illinois Senate, the birthplace of Clyde Tombaugh who discovered Pluto in 1930, decreed that they could not accept the resolution of the International Astronomical Union

and that at least when Pluto crosses the Illinois sky "he will be restored the full dignity of the planet" - whatever that means.

We have also seen that in some cases to unlock a negotiation requires an action, a gesture, a step outside the conversation. I would like to propose a potentially controversial thesis. The intervention of mathematics in scientific research is in fact an *external* gesture of this kind. Mathematics does not use "concepts" similar to those we use when we represent the world, and it does not make much sense to talk about "understanding" in mathematics in the same sense in which we say we understand that by increasing the number of passengers the boat risks sinking. To "understand" a vector means to know how to perform the vector calculation; to "understand" a geometric theorem means to know how to make a construction on the blackboard, drawing signs; to "understand" an integral means to know how to integrate. To "understand" quantum mechanics means to know how to solve certain equations, and to understand certain aspects of chemistry means to know how to calculate redox. We would not take seriously a person who tells us that she "understood" chemistry but does not know how to calculate a redox, or a person who says she "understood" the movement of the planets but does not know how to calculate a derivative. There are scientific theories for which the problem of a reconciliation with common sense does not arise simply because common sense does not have any adequate tool at its disposal.

In these cases there is therefore little point in negotiating in the way philosophy usually does (trying to broaden the conceptual field, the logical space of possibilities, in order to arrive on a ground of mutual understanding). Asking to climb for years on the scaffolding of a mathematical formalism is precisely to deny this possibility. It is a request for action; for moving to another terrain, where *doing* is a condition for *thinking*.

This is also to say that philosophy does not have an answer to all intellectual problems, and that science has response strategies that are unprecedented. Corollary: there is no point in juxtaposing philosophy and science to the way two *theories* are contrasted. They are different things, doing different things with different methods. The extraordinary dialogue between science and philosophy comes from their complementarity, not from a non-existent war on a disputed territory. From a certain point on, scientists do not invent new concepts, but strategies of action and

intervention. This is also, after all, the enormous transgressive power of science, which makes it unpopular with fearful philosophers, jealous prelates and politicians who see enormous slices of their power taken away.

Ancillary philosophy

There are then two essential aspects of the relationship between philosophy and science. They are actually two sides of the same coin: the ancillarity of philosophical questions and their contribution to the formulation of empirical hypotheses. Widespread philosophy is necessarily and by the same token an *ancillary* philosophy. It serves something else, it depends on something else. Philosophical questions acquire autonomy with time. Not only because in history philosophers were often not an autonomous category as we know it today, and the term 'philosopher' had a broader meaning in the past, often coinciding with that of 'scientist'. Often the most creative questions, those that dictated the lines of research and reflection, originated within non-philosophical disciplines, and were asked by people who were not philosophers or who were considered philosophers only later. The philosophy of mathematics originates from the work of mathematicians, as was the case for Dedekind, who at the end of the nineteenth century explicitly asked the question "What are numbers, and what should they be?", but also for Leibniz and Newton, mathematicians-philosophers whose work on infinitesimal calculus is imbued with reconceptualizations of the notions of number and of calculation.

At the birth of experimental psychology in the mid-nineteenth century many psychologists were philosophers by training and academic affiliation. Many psychological questions were born as general questions about the mind: about knowledge or will or perception. But in reality one could see much of the philosophy of the sixteenth and eighteenth centuries as an attempt to give shape and body to psychological research. Locke's *Essay Concerning Human Understanding*, Hume's *Treatise*, Thomas Reid's work, some of Descartes' research, Leibniz's *New Essays* present genuine theories about the functioning of the mind that on the one hand rationalize pre-theoretical intuitions about what happens when one perceives or remembers, and on the other hand formulate hypotheses on the architecture of the faculties (memory, intellect, perception, language, and the way they are connected to each other) that have largely inspired the birth of psychology as an empirical

science. Looking closer to us, most of Freud's work could be reconceptualized as an attempt to extend the categories of common sense psychology (desire, belief) to cover the psychological data that we do not get from direct and conscious introspection (such as dreams or missed acts).

What happens is therefore not a simple transfer from the questions formulated in an autonomous philosophical way to empirical shores. To ask if knowledge depends on perception or if there are no innate ideas is already asking a question that lies on the borderline between the methodology of psychology and the attempts to define knowledge, perception and ideas. The philosophical aspect of this question is in its being a meta-scientific question, to which psychology cannot answer directly, and where answering it creates the conditions that allow psychology to proceed in its investigations.

Chapter 10 Does philosophical knowledge exist?

If, instead, philosophy were just "armchair philosophy", performed without going to look "outside" in the great book of the world, what would we learn from it? Does a person who starts thinking philosophically about subject X (about love, society, quarks, the universe) learn something about X? There are some options to discuss.

The really weak option is that by reasoning the philosopher learns something about herself, maybe, and in any case nothing more than that. By not leaving the chair or the studio he does not even leave the fence of his mind. Philosophical reflection would simply become autobiography. A slightly stronger option is a precautionary one, but it is only practicable if one assumes a minimum of exposure to data that the armchair philosopher has to obtain outside her home. If I find that many of the things that come to mind about X depend on the way my brain or cognitive system is made, I will be right to consider these things with some caution. If, for example, I have reasons to think that certain color properties are explained by the way my visual system is made, I also have reasons to think that these properties are not completely or at all explained by the way the outside world is made, and this will encourage me not to be a realist about colors; colors would not exist.

Another possibility is compatible with the position defended in this book: by philosophizing you get a preliminary knowledge of X, i.e. you take steps to gain knowledge of X. For example, you implement a strategy to get to know X, a method. I have no difficulty in accepting this position, but it is worth the fact that when you get to know X, if you get to know it, this knowledge will not be "philosophical", but empirical.

The most ambitious here will compare once more the case of philosophical knowledge to that of mathematical knowledge. The reasons we have to think that to reflect (for example) on prime numbers we can obtain real knowledge about them (for example, we could discover that every even integer greater than 2 is the sum of two primes - this is Goldbach's conjecture, which has not been demonstrated to date) are also valid to argue

that to reflect on Theseus' Ship we obtain real knowledge about certain aspects of how the world of physical objects goes. The analogy between philosophy and mathematics is controversial - at least for those philosophers who think that mathematics is not a real part of the "outside world", and therefore has only a mental reality. If so, the day we learn, if we will ever learn it, that every even integer greater than 2 is the sum of two primes, we will not have left the mental sphere (and we will fall into the first option). On the other hand, those who think that mathematical knowledge is about objects outside the mental sphere are generally in the uncomfortable position to defend the idea that there are abstract objects. And *this* is generally not what those who think that philosophical knowledge informs us about the outside world intend to do. The fact is that if mathematics were a model for philosophy, it would be a very special model.

The enormous proliferation of counter-examples in philosophical literature suggests that much philosophical knowledge is *negative*: it closes possibilities, it shows that it is not licit to maintain certain beliefs, as we have seen in chapter 6. Gettier's mental experiment did not tell us what knowledge is, but showed what it is not. The teleportation experiment told us what individual survival *is not*. The great limiting results made possible by the use of formalism (Gödel's Theorems of Incompleteness, Arrow's Theorem that shows how it is not possible for a voting system to simultaneously satisfy a number of at first sight reasonable constraints such as the transitivity of preferences) are of this type. Philosophical ignorance is also ignorance of distinctions (the distinction between the use and mention of a term, between *de re* and *de dicto* phrases, between epistemic vision and simple vision). Negative knowledge is not at all despicable, let alone in a conceptual negotiation, since cutting off the limbs of thought saves us time and energy.

Finally, it can be argued that philosophical knowledge is knowledge of relations between concepts, of the production of the conditional engine: *if* Theseus' ship is that of the antique dealer, *then* it has an intermittent existence. *If* God is omniscient, *then* God is not immutable. But do the conditionals of this type speak of the world, inform us about reality beyond the philosopher's chair? If they do, it is in a very weak sense. Suppose you argue with a colleague; you both accept that it is true that *if* Theseus' Ship is the antiquarian's, *then* it has an intermittent existence. But now you think

that the Theseus' Ship is the antiquarian's one, and your colleague thinks that nothing has an intermittent existence. She therefore denies that the Theseus Ship is the antiquarian's; and you instead think that the Ship has an intermittent existence. Accepting a conditional leaves open the possibility of accepting her premise or denying her conclusion; disagreement is just around the corner.

It seems to me that all these options evade the issue. If they have not changed the subject, for example suggesting that any philosophical knowledge is at best a form of autobiography, they have answered more or less opaquely that there is no *positive* philosophical knowledge *in the* strong sense that is of interest to those who usually pose the problem. I would face the difficulty head-on accepting this conclusion directly. If philosophy opens possibilities, philosophical knowledge is knowledge of possibilities, but it is a particular and indirect knowledge about the world. Knowing that I could have been sent on a mission to Antarctica or that I could not be an iguana is certainly a form of knowledge of what I am. Knowing that the laws of physics could have been different or that there are different types of axiomatic systems for logic widens the options available, but if the problem is to choose an axiomatic system or an adequate physics theory the step towards knowledge is a further step. If then philosophy is an art, there is no philosophical knowledge in the sense that there is a knowledge of biological facts, or mathematics (understood as the extramental realm). The knowledge of the artist who creates or represents a world is not knowledge about *that world*; it is rather technical knowledge; a form of know-how rather than knowledge.

Is progress being made in philosophy?

Since philosophy is an art, there is not even real progress in philosophy, except in the form of technical refinement, and in the generation of counter-examples that allow us to avoid common mistakes or traps. We have learned that certain techniques have worked under certain circumstances, and we can hope that they will work under similar circumstances. Painters know that they can draw a line to signal the visible profile of an object, and that this will be more effective than a line drawn within the visible profile; that they can increase the vividness of a color by surrounding it with a complementary color, and so on. Philosophers know that there is a

difference between epistemology and ontology, a distinction between simple seeing simple and epistemic seeing; that one must be careful of the slippery slope, or of going off topic. They also know that knowledge is *not* justified true belief, and that an omniscient being cannot be immutable. It is no coincidence that the literature often recalls the negative results, complaining that the counter-examples have been forgotten, that the distinctions drawn once are constantly neglected. In this very limited sense there is a cumulative aspect of philosophy. And in this respect it can be useful to familiarize yourself with the long list of philosophical puzzles, or of thought experiments (you can find them on Wikipedia), for starters.

In the art of negotiating it is important to create alternative options, and here too progress can be measured: one negotiator will have a wider repertoire of possibilities than another; the catalogs of possibilities are cumulative, one can build upon the endeavors of others, paying attention, of course, to the perimeter of the original problem, the one for which a list of possibilities has begun to be drawn up; and bearing in mind that to extend this perimeter one must use the mechanism of analogy (we will talk about it in the next chapter).

Positive progress in philosophy is heterodirect: philosophy is subserving other practices and disciplines, and as they change, philosophical questions are renewed, others are born. Conversely, one can speak of progress in philosophy when it progresses by virtue of the philosophical contribution to the discipline which philosophy is serving. When, for example, new philosophical problems are discovered.

Chapter 11 How is philosophy taught?

This book was intended as a “first *lesson*”, so I do not evade the question of what it is to teach philosophy; and what can be done for those who find that current forms of teaching are not satisfactory.

The cue is autobiographical. I have been teaching philosophy for many decades in many different contexts: from the undergraduate university lecture to the advanced graduate seminar to teaching in departments and faculties other than my own; to the talk for the general public, which is a form of teaching, with its own particular pedagogy. For a long time I have been asking myself the question of a shared body of knowledge, of minimum requirements for those who learn. The problem arises from the fact that even at the level of MA or even PhD it is not at all unusual to have to spend a considerable part of one's time teaching things that seemed normal to consider acquired at that level.

But what are the essential prerequisites? What exactly is the problem? Let's look for a moment in someone else's house. Colleagues in math faculties expect third-year students to master differential calculus, vector calculus, matrix calculus and a lot of other things. You don't get a PhD or even a degree in mathematics if you don't know how to calculate an integral. What do colleagues in philosophy faculties expect from their second year student? What *should they expect*?

Do you need to know what Aristotle wrote? Must you know how to distinguish a valid from an invalid inference, or the *modus ponens* from the *modus tollens*? Must you know how to criticize an argument of Descartes or of Frege - assuming that it is not a matter of lese majesty? Must you know how to demonstrate the theorem of completeness? Must you know how to write like Horkheimer? At a certain point, in 2000, with Achille Varzi, of whom I have long been co-author, we began to reflect on the form that a manual of philosophy could have⁶ for the use of students in the last year of high school and the first year of college. Which canonical texts to refer to?

⁶ At the instigation of Anna Gialluca, this book is a belated and probably unsatisfactory response to that instigation.

Ten minutes of conversation with the late historian of philosophy Paolo Rossi cooled down any canonical ambitions. As a historian Rossi did not find sufficient elements to identify the canonical basis of philosophy. Rossi believed that there *is no* canon. After that conversation I don't think there *can* be either. At least, not a *robust* canon.

What *could* be a canon of philosophy? To understand it, it is worth observing the functioning of the disciplines in which a canon exists, in addition to mathematics I mentioned above. A chemistry teacher can for example organize her knowledge or that of her students from the periodic table of the elements. Once you learn that there are periodicities in the table, you can trace them back to the atomic orbital structure and the way in which the orbitals can be occupied in discrete steps; there is a learning path that must include quantum physics as an essential, not optional, element. If you study computer science, you must understand what a Turing machine is and learn how to deal with problems in an algorithmic way. If one studies modern history, one must learn documentary methods, and register a number of factual data on which there is a consensus by the community of historians, for example the fact that the Peace of Augsburg in 1555 established the principle *cuius regio eius religio*.

In mathematics there is a canonical order that with each new acquisition requires the skills of the previous step to be acquired. In physics-chemistry there is a factual basis that canonically controls the organization of knowledge. In computer science the (abstract) functioning of a computer dictates the canonical format of the writing of a program. In history the collection of data and the comparison between sources proceeds against the background of a canonical horizon dictated by the available and accepted chronology.

Nothing similar happens for philosophy. In philosophy there is no factual basis comparable to chemistry. The only factual basis that is around, in truth, is that provided by the history of philosophy. As we know, it is a list of what philosophers have said and written, in order of appearance. But learning all this is neither necessary nor sufficient; these facts do not constitute a canon of *philosophy*. Many excellent philosophers are very evidently unaware of a good part of the history of philosophy, just as many excellent mathematicians are unaware of a good part of the history of

mathematics. This ignorance may not make them particularly articulate people, but it does not necessarily affect the quality of their philosophy or mathematics.

In philosophy there is not even a canonical order of the acquisition and for this reason we sometimes resort to the historical order; the alphabetical order would be just as good. For example, it is not that you have to learn formal logic first and then everything else - your informal reasoning skills are quite sufficient to make you understand the structure of a philosophical argument and are not necessarily improved by learning a formal system. And even if there are disciplines that are considered the "hard core" of philosophy, it is not that you have to learn metaphysics first, then epistemology and only then aesthetics; any other order can be fine. There are some very good moral philosophers who have no intention of learning about ontology, and that's fine.

Having arrived so far we should not be particularly surprised by this state of affairs. That philosophy doesn't have a canon is linked to the fact that it is widespread and to the fact that it is an art. To see philosophy as *widespread*, that is to say, to see it at work within non-philosophical disciplines and practices, tends to locate philosophical problems close to these practices and disciplines, and thus to expand their number beyond any possible control. For this reason it is very interesting to welcome students who want to professionalize as philosophers *of* a certain discipline (philosophers of biology, or the law) and to whom it is quite natural to require a competence in *that* discipline (in biology, in the law) rather than a specifically philosophical competence. But for this very reason it is at the same time difficult to find common, canonical elements.

Seeing philosophy as an art - as I suggested in the preceding pages - is another way of keeping the canon project at bay. But - one will object - isn't it true that artistic disciplines have a canon? Yes; but it is not a *robust* canon in the sense in which it is, for example, that of physics-chemistry. To be a painter, perhaps you have to master drawing; and to be a violinist, it is better to practice with scales and arpeggios. But these demands are about *practical* skills, and as such these have many different entry points. You can be an *excellent* violinist even if your *repertoire* is only that of kletzmer music, you can't read music and you have no idea what a Paganini concert looks like,

and a great painter even if you have never used watercolors. In a way, this aspect is related to the fact that in philosophy one always starts over from the beginning (as discussed at the end of chapter 3). But above all to the fact that know-how is not cumulative; you have to keep practicing; you have to do the scales every day if you want to continue playing the piano.

There are indeed some things that some philosophers *would like to* erect as a canon, in the sense of a robust canon. It seems to me, however, that this is only an institutional phenomenon, which depends on the existence of (self-proclaimed) schools or currents of philosophy, and on the fact that flaunting a canon is simply a way of putting people in their place, distinguishing us from them. Philosophers who call themselves analytical probably do not find it easy to talk to a person who proves not to know Gettier's argument or the way Frege introduces the distinction between meaning and reference. Phenomenologists assume that one knows what eidetic reduction is. Continental philosophers would not find ignorance or superficial knowledge of Heidegger's works acceptable. Naturally this variety is in itself a *reductio* of the idea of the universal canon of philosophy; also because the philosophers of one current are generally perfectly happy to ignore the demands of canonization made by those of other currents, when they do not even claim such ignorance as a badge of belonging to their own.

Taking stock: More than a robust canon, philosophy needs practicing. Back comes the question from which we started. If philosophy is an art, how do we teach it?

The analogy

I have a proposal. The only really useful tool in the acquisition of philosophical practice is analogy. Learning to do philosophy moves through learning to see in a certain subject-matter some figures, patterns of problem setting or problem solving that we can hope to export to another area. The use of analogy actually has two aspects. On the one hand it is *generative*, i.e. it allows you to produce new arguments and new solutions from known arguments and solutions. On the other hand it is precautionary, *in the* sense that it can warn against *similar* difficulties encountered in the discussion of a given topic.

Let's discuss an example. Those who deal with the philosophy of perception are faced with the problem of the subjectivity of sensible qualities. The question is: are colors and sounds independent of the mind, or do they have an intrinsically mental nature? There is a fascinating Berkeley-inspired image that encompasses the problem. "Does the tree falling in the uninhabited forest make noise or not?" The image fascinates us because we can't help but place ourselves mentally in front of that tree and watch it fall into a ghostly silence, as if we had entered a silent film. Of course it is not important - from the point of view of conceptual negotiation - that we find a way to decide more or less quickly if the tree *really* makes or does not *really* make noise. Instead, it is important to draw up an ordered list of the reasons we can field for one or the other hypothesis. The answer you give, and the way you defend it, tells us something about what you think sounds are, about your metaphysics of sound. For example, if you completely identify sounds with sound waves - as those who study physical acoustics do - you will tell us that the tree makes noise even if nobody hears it. If you identify sounds with a mental element - as many experimental psychologists do - you will find it more natural to condemn the tree to silence.

We started with sounds. If at this point we are asked the problem of the subjectivity of colors, we can *reuse* what we think we have learned from the example of sounds. In general, all the reasons we considered convincing to say that the tree falling in the uninhabited forest makes (or does not make) noise are reasons that make us say, *mutatis mutandis*, that things have (or do not have) a color in an empty room. The questions we can ask to a subjective theory of sounds are translated into a subjective theory of colors. If sounds are subjective, how can I be sure that you feel the same thing as I do? The same goes for colors. If they are subjective, how do I know that when you tell me you are seeing red you are not actually seeing a color that I would call 'green'? *Analogy is a bridge between arguments*. The bridge works both ways. By reasoning on colors, we reset the parameters of the mental experiment. Does a flash of light in an empty and hermetically sealed room give color to things? Or do things have a color in the dark, in the complete absence of light? Let's cross the analog bridge again: do things give a sound in the void, in the absence of a medium that transmits acoustic information?

In the hands of a philosopher like Berkeley the analogy becomes extremely powerful, its use risky: all the reasons that make us say that colors do not exist if they are not perceived become reasons for us to say that even the *shapes* of objects do not exist if they are not perceived and are therefore as dependent on the mind as colors are. Why should shapes in the dark enjoy any privilege over colors? But if shapes become subjective qualities, how do we stop the slide towards idealism, towards the idea that all reality depends on the mind? Would things really not have a shape if there were no beings able to perceive shapes? The tree that falls in the forest not only doesn't make noise, but perhaps it doesn't even *exist if* we don't perceive it!

These considerations, which are part of the philosophy of perception, can at least in part be further transposed to moral philosophy and aesthetics. The discussion of the objectivity of colors and sounds is a powerful analogical basis for discussing the objectivity of values. If we think that the tree falling in the forest does not make noise - so if we espouse a subjectivist thesis about sounds - we can also think that this event is morally neutral in the absence of people who caused it, take it into account, use it to influence other people. A volcanic eruption may well destroy a city, but it is not in itself bad - it simply happens. It is only because there are people who cause a certain event that this event has value connotations. But if values are really subjective, how can they be shared? How can we know them? The analogy is at work: the subjective red is a red-for-me, the subjective unjust is an unjust-for-me. If I am not sure what you see when you tell me to see red, I may not be sure what you feel when you tell me to feel a feeling of injustice. The field widens. In what sense is number nine objective? We can at least begin to transpose the arguments for the subjectivity of sounds and colors to the field of mathematics. Could there be mathematical truths even if there is no one who does mathematics? Was Pythagoras' theorem true even when there were no mammals on Earth? Was it true before it was proved? And is Goldbach's conjecture true *today* even in the absence of its demonstration? The contemporary ramifications of the problem of the subjectivity of a certain type of property are vast; we can barely broach them here. It is enough for us to point out, when we teach, the possibility to practice in one area of philosophy and then move on to another area by leveraging the acquired practice. Analogy is the key to this transposition.

However, it is *only* a matter of analogy. I am not defending the thesis - very strong - according to which philosophical problems are general and independent from the specific subject that is being treated. It may be that we cannot extrapolate strategies from the case of colors to that of numbers. I am not even defending another very strong thesis, that is that philosophical problems are substantially always the same. The historical examples I have used (for example, Berkeley's argument) may suggest the opposite; but my aim is not to make Berkeley and contemporary philosophers perform in an improbable talk show outside of time and space, but to treasure Berkeley's strategy for pedagogical purposes. The sole topic of the conversation is how to teach philosophy.

One can well accept that analogy is a very weak form of scientific procedure; but even if it is a poor scientific heuristic, it remains a powerful tool of *conceptual evaluation*. In particular it serves in the negative to show that certain theories are not adequate. "This argument does not work here just as it did not work there". To remain in the field of the philosophy of perception: when I listen to a recording of Maria Callas is it *really* the voice of Callas that I hear? Perhaps we do not have enough intuitions to discuss the auditory case; can we turn to the vision for a loan? When I look at a photograph of Callas, is it really Callas I see or is it something else? The reasons I have to criticize the idea that I *really see* Callas in photography are the same as the reasons I have to criticize the idea that I directly hear Callas in the recording.

After all, the use of analogy has a value that some philosophers would consider as therapeutic. But we will talk about the therapeutic use of philosophy later.

Parameters: The scroll-down menu

In Chapter 7 we have reviewed the thought experiments discussed in this *Lesson* and we have seen how to create thought experiments is generally nothing more than resetting the values at some parameters. If I reset this and that, am I still talking about family, knowledge, sound, change, material object? Practicing mental experiments convinces us of the importance of

thinking in a parametric way. It seems to me that this is especially true for the transmission of philosophical art, for the pedagogy of philosophy.

To understand how many influences the change of a single parameter can have in a representation, look at one of those "upside down" maps of the world - where the south is at the top, for example. Even if the geographic features are easily recognizable, you get a strange impression (an effect of estrangement, which we'll talk about shortly), as if another planet was represented. For example, the immense proportion of water jumps to the eye, as the scarcity of landmass in the southern hemisphere.

Thought experiments serve for negotiation not only to generate counter-examples and to enlarge the conceptual space, the space of possibilities. As we have seen in Newton's case, they can also be used to make plausible things that at first sight do not seem plausible at all, and in this they are related to many real experiments, which seek a rhetoric of *showing*. Galileo proposed an experiment to show that sounds are *really* mechanical vibrations; scratching a wrinkled object faster and faster allows you to go from hearing individual events to hearing a sound with a defined pitch, which rises as the speed of scratching increases. Galileo tries to make perceptible, intuitable a factual truth that seems difficult to understand. That there is a pedagogical aspect in mental experiments is naturally part of the concept of philosophy as negotiation, and of its transmission.

The use of logic

There is much talk of the need to teach logic as a philosophical propaedeutics - and also as a propaedeutics for non-philosophical disciplines. Logic is a tool: it is used to evaluate the way we draw conclusions from some assumptions (if you accept this, then you *have to* accept that too: are you okay with it?), and it is used to control and regulate the negotiations (you have got that you have to accept this; but before you said that you accepted the opposite: are you still okay with that?) At the same time, logic, or the need to proceed logically, is only one of the

background assumptions, and as such is negotiable. Let's think back of the discussion on the Ship of Theseus: one of the options was to give up the principle of non-contradiction. How much would it cost us to accept the possibility of contradiction? The centrality of logic in conceptual schemes is due to the fact that a negotiated change to logic tends to spread rapidly in all other negotiations, while renegotiations of many other principles are generally much more local. Accepting that a ship can be colored and at the same time devoid of color automatically means being willing to accept that a cat can be and at the same time not be an animal, whereas discussing whether cats are conscious or not, and eventually deciding that they are, does not automatically make us lean towards saying that mice are.

In the conceptual negotiation the connections that can be established between concepts matter; for example you want to show that a certain thing, which you thought was of a certain type, is actually of a completely different type. "The mind is a physical entity, not an entity of non-physical nature". "The mind is not an entity, it is a property of an entity". Or you want to show that a certain type of entity cannot exist because the concept that describes it is contradictory. "If God was omniscient, he could not be immutable; since the world changes, divine knowledge must accord with the change". The connections between concepts are often inferential connections; philosophy produces conditional sentences. That is why it is considered important, in philosophical apprenticeship, to be able to keep under control the logical structure of the arguments you use. Learning to unmask fallacies has always been a central element of the philosopher's education. But it is almost always fallacies *embodied* in some area of knowledge. The simplest logical fallacies are not particularly interesting; the confusion between necessary and sufficient conditions, the fallacy of the conditional, do not require a huge intellectual investment to be healed, although it is true that they are quite recalcitrant. (An example: I know for sure that if it rains, Nina keeps the umbrella open. I see Nina with the umbrella open, can I deduce that it is raining? Many people tend to answer yes, but no: rain is a sufficient condition, but not necessary - Nina could have opened the umbrella for a thousand other reasons).

Philosophical fallacies are in general semantic, they do not concern the abstract form of the argument but its *content*. In logic we distinguish between valid and sound arguments. An argument is valid when the truth of

the premises makes necessary the truth of the conclusion. However, a valid argument could be unsound if one or more premises are not true - the conclusion could be false. If you think that the Sun orbits around the Earth, since it would make this orbit in about twenty-four hours you should conclude (given the distance of the two bodies) that it travels on the orbit at a significant fraction of the speed of light. The reasoning is irreproachable, but that the initial premise is wrong. Philosophical controversies are often linked to criticisms of the premises others hold, or to criticisms of the claim that from these premises a certain conclusion follows.

A specific (and widespread) fallacy is the undue inference from epistemology to ontology, from what we know or believe or can reasonably ascertain to what there is. For example, if I take off my glasses I seem to see objects with blurred boundaries. If glasses had never been invented, I would always see only objects with blurred boundaries; I would perhaps have a reasonable belief that the world around me is blurred. But it *does not follow* from this fact that there are objects with blurred boundaries, or that these are *really* the objects I see. The temptation to postulate them is strong for those who wish to defend an "indirect" theory of perception. Since physical objects are not blurred (reasonable assumption) and since I see blurred objects (perceptual data to explain), I postulate the existence of "intermediate" objects (sensory data, mental images) that are *blurred*, that as such are *different from physical objects*, and that explain my perception of objects with a blurred halo. Woody Allen provided an exquisite visualization of the fallacy in *Deconstructing Harry* (1997). Robin Williams, as Mel, an actor, is *blurry*. On set the technicians can't focus it, but they realize that the problem is not the camera optics, but Mel himself. *He* is the one who is out of focus.

Another type of logical ailment often diagnosed by philosophers in the arguments they want to criticize is the *slippery slope*. Once you are on the slippery slope, you risk not being able to stop, for logical reasons. For example, if you accept that possible worlds are separate entities, you risk having to accept too many things. If you think that an action must always be preceded by a deliberation you risk to assert that you can never make an action. The slippery slope sucks us without us noticing, the first steps are usually small increases compared to commonly accepted and firm beliefs.

But we can go all the way if we think it is worth exploring an extreme position, which will probably push us away from consensus.

There are educational systems that have placed great emphasis on the study of argumentation and the formal training in logic. Since the founding of its University, Norway has imposed philosophy as a filtering exam in the first year for all faculties. If you do not pass the exam after three attempts you can not move on. The text adopted was for some time a book by Jon Elster, Dagfinn Føllesdal and Lars Walløe, with the promising title of *Rational Argumentation*, in fact an introduction to the logic and philosophy of science. Føllesdal believes that it is useful to have a filter in general, since in a university system with many dropouts it is useful both for the university and for the students to realize the difficulties early on; he also believes in particular that the study of rational argumentation is suitable to act as a filter ("The exam requires some ability to follow an argument and to express oneself clearly enough, and I think that anyone who is not able to do so gains from not undertaking a long and expensive theoretical course of study; and should instead choose another education or profession"). However in this case logic has a *diagnostic* value more than propaedeutic.

As in all cases where it is thought that the study a certain subject matter is useful to certain others ("studying Latin helps develop reasoning skills") these discussions are quite sterile in the absence of data. It should be possible to study the results of two samples chosen at random among the students, divided between those who have studied logic or Latin and those who have not. But which results? The grades to other exams? The books published after ten years, or the average salary, or the answer to a test?

Elegance, love of empty spaces, and other special constraints

Among the things you would like to teach your philosopher students there is also a certain *style*. If one clings on the idea that philosophy is an art rather than a science, the demand seems entirely natural. Just as there are artistic styles, or styles of behavior in many human activities, from playing soccer to choosing words in a conversation, there will be philosophical styles. Styles that are articulated in differences in writing and argumentation, rhetoric and imaginative abilities, and also in the choice of themes.

The philosophers of the remote past have styles that are difficult for us to decipher, tied as they are to the vehicles of their writing: a Cartesian *Meditation* has a characteristic course, different from that of a letter from Leibniz and just as far from us to require extensive preliminary work of reconstruction and immersion in the social and literary context of the time. But even approaching the present time variety is not lacking. Husserl writes in a very different way from Heidegger and Adorno; the latter write in a very different way from Quine which is in turn very distant from Kripke. Strawson has one style, Russell another, Frege a third. There are philosophers who pile up definitions like Chisholm, others who prefer to flood us with brief flashes like Wittgenstein. There are baroque philosophers and others who prefer deserted spaces. There are systematic philosophers in search of a coherent philosophical position on the whole spectrum of philosophical problems recognized as important by their age, like Kant or Putnam; and mono-thematic philosophers like Galileo or Rawls. For some philosophers it is important to take the cue from what their colleagues, past or present, say; others want to lead the reader into a world apart. Several times attempts have been made to sort philosophers into cramped riverbeds based on stylistic traits - as when a sharp divide was drawn between analytic and continental philosophy - but the gray areas are too many and populated with figures that are too important (is Wittgenstein analytical? Is Brentano continental?), which of course set in motion appropriation attempts that in the end feel like usurpations.

If having a style is not a distinctive trait, it is perhaps a reasonable request; to say this means endorsing some desire to normate. We would hardly accept from our students that they write like Wittgenstein or like Husserl. We would hardly accept really obscure texts: nobody likes an obscure text, continental or analytical; nobody wants to do the exegesis of a student's work (even if Russell did it for Wittgenstein when he received the *Tractatus*). It is more difficult to teach elegance: but examples are not lacking.

Above all, it should be remembered that philosophical work, even if it floats over an immense and unexplored heritage of oral tradition, is today more than ever a production of written texts and an operation performed on the written text. Forgetting or, worse, neglecting this fact, in the teaching of

philosophy, seems to me a far greater fault than that of those who try to inculcate their own philosophical vision.

Richard Lewontin, scientist-philosopher, compared the style of presentation of philosophers and natural scientists in scientific talks; the latter try to make the facts speak, and therefore never read out a written text, unlike the former, for whom the order of the text, and the choice of words, are essential values. The veneration of the written text corresponds to a request that goes beyond writing, which, by its slow nature, allows to build a real map of thought, brings with it the portrait of an order. These qualities are also sought in orality, but it is legitimate to think that writing has a clear cognitive advantage here.

Thinking in slow motion. Are there philosophers who are deliberately obscure?

In all cases, and this is a requirement perfectly compatible with the conduct of a negotiation, it is important that you can always review the steps that have taken place - both written and oral. Philosophers will therefore try to teach you how to make the implicit explicit. To bring to the surface what can be hidden in the plot of thoughts - and that when hidden could block the search for a negotiated solution, for an understanding. They will ask, following John Campbell's recommendation, to think in slow motion. But slowing down is not enough; it is an operation that takes place in time, which is only one of the many dimensions of thought: at each frame we would like to freeze all the other dimensions, using a sort of metaphysical super-Moviola. When you get to this step, what are the consequences that you have not thought about? What are the premises on which you are basing yourself and that you didn't bother to formulate? Once you see all these elements in front of you, do you still recognize yourself in them? The methods of philosophy we discussed in chapters 6 and 7, conceptual analysis, trying to give definitions, creating mental experiments, are all contributions to the explanation of the hidden dimensions of a subject matter.

I must confess that I am a slow philosopher - I have always had a certain distrust of fast-paced talking colleagues. I have to be able to read in order to judge, and I have the impression that I don't really know what I want to say until I put it in writing. At the same time, I don't think there really are

philosophers celebrating *obscure thought*. Who are they, really? Let's discard the artifacts, the cases built as polemical targets by philosophers from opposite factions. Let's recognize instead that conceptual negotiations are not only definitions and arguments; clarity and distinction are not mandatory at all. Sometimes a certain amount of implicit is acceptable. Making the implicit explicit has its costs; and making the implicit explicit does not mean making it *completely explicit*. It may serve, for example, to maintain a certain latitude in concepts - central concepts such as *mind* or *life*, more marginal concepts such as *color* or *memory* - if only to allow different disciplines to communicate with each other, to recognize themselves at least partially in the concept, and, after all, to have a history. This does not contradict the request to think in slow-motion; not to mention the fact that a negotiation is not necessarily the panacea, since philosophy is not necessarily useful in *all* situations.

Estrangement

If philosophy is close to literature, literature will not be missed in the education of the philosopher. There are philosophers like Jon Elster or Isaiah Berlin who manage to draw from the immense patrimony of nuances of the soul delivered to the page written by the great authors of the past. And it is certainly a good thing in itself to read the classics of universal literature. Here, however, I have been asked to talk about how philosophy is taught, so you will find in this paragraph some perhaps unorthodox suggestions aimed at maximizing the philosophical usefulness of readings. I insist on methodology because I see an easy risk of being misunderstood. I'm not juxtaposing great classics and pop culture, I'm not inviting in a snobbish way to endorse the latter at the expense of the former. Reading the masterpieces contributes in a different way to the formation of the philosopher, it defines what is or was thought to be a person; the kind of works that I suggest to look at serve more to refine the art of making philosophy. In chapter 5 we have seen how philosophy feeds on exercises of imagination, and it is these that interest us closely. Imagination lives on narratives, on plots. It is not important that these are entrusted to the written word; what matters is that there is a sufficiently articulated and evocative plot - so even movies will do very well.

When Truman Burbank, the protagonist of *The Truman Show* (played by Jim Carrey) tries to escape from his city by sailing towards the horizon, he collides with a painted backdrop. At this point he realizes that his whole life was an immense fiction. Sometimes we have to visit the *limit*, the frontier of our world and our mental landscape to understand where and who we are. I have already talked about exploring the limit as an instrument of understanding. I am interested in another aspect, the effect of *estrangement that goes* along with the exploration of borderline cases. Estrangement is a common condition of the philosopher; if it is not, it should be cultivated consciously. There is a properly philosophical estrangement: we are bewildered by radical proposals to revise our conceptual schemes ("things are *really only* aggregates of atoms"; or, "things are *really only* collections of mental representations"). We are bewildered as we try to build the scaffolding of a mental experiment (teleportation, frozen worlds). We feel lost when we perform philosophical actions like eating things we don't like.

Estrangement is more generally a literary technique used where it is intended to associate literature with a pedagogical function. The playwright Bertold Brecht theorized and implemented it in several of his works. His is a different context, that of theatrical writing, which allows us to push even further the exploration of the contiguity of literature and philosophy. Some "gimmicks" of estrangement used in Brechtian theater concern the desire to distance oneself from traditional theater: a choir intervenes; the actors address the audience; they act without impersonating their character; a commentary is entrusted to a voice-over; they speak a bit in prose and a little in verse. With all these interventions one wants to soften if not deny the implicit target of the theater, to imitate a real situation; in fact one makes this target explicit and subjects it to a critical examination (or invites the spectator to submit it to this examination). Another expedient is the recourse to the sense of possibility, the principle that things "could have gone otherwise".

"What has been gained from this? What is gained is that the audience no longer sees the people on stage as completely unchangeable, uninfluenceable, helplessly at the mercy of their fate. They see: This person is so and so because the circumstances are so and so. And the conditions are so and so, because the person is so and so. But she is not only imaginable as she is, but also differently, as she might be, and also the conditions are

imaginable different than they are. Thus it is won that the spectator in the theater gets a new attitude. She now has the same attitude toward the images of the human world on stage that she has toward nature as a human being of this century. She is also received in the theater as the great agent of change, who is able to intervene in the processes of nature and in the social processes, who no longer accepts the world, but masters it. The theater no longer tries to get him drunk, to equip him with illusions, to make him forget the world, to reconcile him with his fate. The theater now presents the world to him for his access".

Again the estrangement. At the borders of reality

The estrangement is at the heart of some science fiction series. If the conditions in which we live were *very* different, what concepts would it be appropriate to arm ourselves with? The television series *The Twilight Zone* (a faded edge where you never really know which side you're on) could easily be used as an introduction to philosophy under the angle of estrangement. It is a very special kind of science fiction, let's say, using low special effects. We don't see realistic aliens with three trunks. Usually stories are set in a reassuring environment: American towns like those from an Edward Hopper painting.

I would like to write a guide to the philosophy of the *Twilight Zone* and other science fiction works. Some episodes embroider the power of Pygmalion and the very particular existence of fictitious characters, which extends to suggest the possibility of idealism, or rather a complete dependence of the world on the mind. In "And when the sky was opened", astronauts returning from a space flight exist only because people remember them; and little by little they fade with the fading of other people's memories. In "Perchance to dream" life turns out to be a moment-long dream. Philosophical surprise manifests itself when we realize that some things that are completely familiar to us are actually *something else*. This happened to Truman Burbank: other people know things about you that you do not know. Truman's metaphysical loneliness was dictated by an extreme asymmetry in knowledge. And the effect is all the greater when the narrative makes us understand that the deception is about ourselves. In "The Hitch-Hiker", you even discover you are dead (revisited by *The Sixth Sense*, with Bruce Willis); in "The After Hours", you discover you are a mannequin. In

"Third from the sun" the characters escape from their own planet and end up on an alien planet - but we discover that this planet is the Earth. In "I shot an arrow into the air" you think you're on an asteroid and instead you're on Earth, with a reverse alienation effect. In all these examples we find our old acquaintance, parametric variation.

One of the most interesting episodes is "Mirror Image". The situation is metaphysically distorted: your double has entered your world and tries to take your place. What do you *do*? People find your actions bizarre because they contradict what your double has just done without your knowledge; or, even worse, because they are absurdly redundant compared to your double's actions. You have to find out what she intends to do; and to do so you have to try not to annoy others, who develop incomprehensible expectations about you. There is an urgency for action, but also for rationalization. Who am *I*, if there is a double of mine around?

Time travel is a science fiction classic, and the plots often point to the difficulty of dealing with the displacement in a historical time that is not what we are used to. In "Walking distance" you visit the village of your childhood, but when you enter a time loop you are troubled by your past. In "The last flight", the situation is reversed: taking a trip into the future you discover that you have to return to the past to set the record straight, to erase a shameful desertion. Or you discover the way time goes by changes: "Long live Walter Jameson", if you are immortal you get bored (a compact shot of Karel Capek's *The Makropulos Affair*). If philosophers have long discussed the metaphysical aspects of time travel, its moral side has been less appreciated. What are the consequences for the action, the way estrangement is experienced by the characters? Writer Kurt Vonnegut in *Timequake* tells of a time reset that sets the clock ten years back; realizing that time is repeating itself, everyone lets go, disarming their will, like relying on an automatic pilot. In *The Groundhog Day* by Harold Ramis, every day begins again identical to the previous one and the only one who notices it is the protagonist. But how do our concepts change if the deep structure of the world changes? For example, if time repeats itself - a home grown version of Nietzsche's Eternal Return - and you are the only thing that changes. Is there responsibility? Is love possible? What do you do if the same day repeats over and over again and you are the only person who notices it? What do you *do*? Maybe you can take advantage of repetition,

since every day you learn something more about others who do not realize how different you are from them, becoming more and more powerful towards them; you have the right to make mistakes, to go by trial and error, and they do not. Or should you not instead try to improve yourself by accepting a destiny that Nietzsche had evoked with the powerful image of the Eternal Return? Even in this case the negotiation must render an action possible: "it takes time if you are trapped in Eternal Return". You must learn to orient itself in this meta-time, that has its own laws.

Is life stranger than literature?

Practicing alienation, looking at things as if they were something else, should be part of the philosopher's formative path. If the literary and cinematographic sources that can be consulted are countless, one should not neglect *reality*, a source of disorientation that is sometimes greater than imagination. One of the most overwhelming and disconcerting examples of conceptual negotiation - indeed, it is a whole battery of negotiations - is the tour *de force* of the neuropsychiatrist Oliver Sacks in *The Man who mistook his wife for a hat*. Published in 1985, it presents the reports of some neurological clinical cases that give an account of how brain impairments of various nature have produced in his patients the irreversible loss of mental capacities that we consider fundamental, to the point of judging them often constitutive of our humanity. There is the disembodied woman, who feels her body only when the breeze of a journey in a car touches her skin, and can control her body only by looking at the limb she intends to move; there is the one who has lost the ability to memorize and lives confined in a very short present, continuously rewritten with new information that erases the previous ones. There is the man who does not know how to recognize things even though he can describe their form in detail.

Sacks' accurate descriptions tries to make us relive the experience of these people; so maybe in the end we can understand them; we can look for a channel to communicate with them and find a way to help them. What does it mean to *really* live only in the present, in the few moments before the now? The man who can no longer memorize has not lost the memory of things past, which happened before the trauma that has maimed him so hard. He has been ill for thirty years now. If he looks in the mirror he expects to

see a young face. The old man who sees instead fills him with dismay and terror. And how does the man who mistakes his wife for a hat live? What does it *really mean* not being able to recognize the simplest things around us, while knowing how to grasp them and being able to describe their shape and color?

Sacks was a pioneer in the pharmacological treatment of patients with severe neurological problems. But his therapeutic project has mainly focused on the need to re-conceive mental illness in a global way, to invest all aspects of a patient's life. The literary narration of clinical cases that evokes with great vividness the lived world of patients with severe disabilities helps us, readers, enter the minds of people who are so far away as to appear true aliens. This knowledge, this effort of imagination is the first step to be able to make the correct gestures towards the patients. We must renegotiate our way of conceiving them - no longer as sick people, as handicapped people, as non-persons: but as human beings living in a different world and yet living in a *dignified* way. Discovering that our own mind, the thing that most belongs to us and that we most take for granted, can be alien to us, allows us to take a more open negotiating position.

I conclude this overview. If philosophy is an art and is widespread, teaching philosophy ultimately means teaching to see it in the folds of life. The tools of this teaching can only be many, varied, opportunistic. One can certainly educate sensitivity in the search for generative and cautious analogies, and one can draw on the immense patrimony of plots that allow one to practice negotiating from an alienated point of view. Obedience to a canon is instead subject to the partiality of canonical choices, it simply serves to keep us safe from variety. For some, of course, this is not a risk at all, but a comfortable goal.

Chapter 12 What is the history of philosophy for?

Just as there is a difference between the study of mathematics and the study of the history of mathematics, so there is a difference between the study of philosophy and the study of the history of philosophy. And yet most of the philosophy textbooks are actually history of Western philosophy textbooks, which draw a rough path, say, from the pre-Socratics to Wittgenstein (or just beyond). I have already pointed out that this choice has its own rationality, even beyond its all too obvious filiation from a construal of the history of philosophy that considers it guided by an internal order, an embodiment of large philosophical options in great historical figures. It is an instrumental rationality, made necessary by the need to overcome the absence of a philosophical canon. The history of philosophy surrogates this absence with the respect (or presumed such) of the factual canon: the succession in time of the figures that have been considered or that we intend today, retrospectively, to consider as philosophers.

It must be said right away that, like all canons, any example of the historical canon, any manual on the history of philosophy is imbued with normativity. Gottlob Frege, the father of contemporary logic and philosophy of language, does not appear in many manuals on the history of philosophy. On the other hand, many theologians appear. The geography of philosophy is very selective: it is difficult to learn much about Indian or Chinese philosophy from Western manuals. If we then accept the idea that philosophy is *widespread*, it is inevitable that innumerable philosophical micro-contributions that have marked the growth of art or science or society are just invisible.

And what is generally presented are not historical facts, but reconstructions. Philosophical philology is barely mentioned or completely absent. If we think about the type of sources available to the pre-Socratics (for example, there is no text of Thales) or the need to concentrate in a few paragraphs the forty thousand pages that Husserl left us, we get an idea of the enormous variety of methodological problems faced by historians of philosophy and the writers of textbooks. The rational reconstructions of the thought of other philosophers are already incursions outside the field of history. Rational

reconstructions force to look for "main theses" in order to "compare" them; a typical exercise for a PhD dissertation is the search for "parallels" (between Vico and Wittgenstein, between Heraclitus and Heidegger) or "anticipations" (in the absence of data supporting the hypothesis of an influence of Brentano on Wittgenstein, we can always try to show that Brentano anticipated Wittgenstein, without the latter's knowledge). The handbooks of the history of philosophy are actually a very particular kind of literature and they must be read, studied and evaluated as such. The facts that are strictly pertinent to the history of philosophy are very dry - for example, who wrote what text and when; who is Diderot's publisher and why; what letters by Russell are left in Frege's collection; inserting these facts into a narrative is not easy and the temptation is all the greater to make people talk not about the texts but about reconstructed messengers of spiritual worlds that are asked from time to time to be plausible, surprising or interesting, or maybe all three things at once.

But is there really no *internal* order in *the* history of philosophy? *After all*, Hegel can only come *after* Kant. So will say, probably, the defenders of a conception for which the spirit is realized in history. However, if there is a truth in the assertion that Hegel could only come after Kant, and if it is not just the trivial fact that Hegel read Kant and commented on him but not vice versa, this is not because of an internal link between Hegel and Kant, but because of an internal link between the development of society and science in Hegel's time compared to society and science in Kant's time. Hegel's problems are no longer, or not only, those of Kant.

I would say that there is, however, a deeper problem as well. In fact, it is not even clear that there can be a unitary history of philosophy precisely because of the enormous variety of things that today we could label as philosophical, even if we accept a less wide vision than the one defended in this text, which sees philosophy as a widespread and ancillary phenomenon, therefore exposed to the contingencies of changes that occur elsewhere. Other disciplines have a more linear history. The history of mathematics is certainly a history of techniques, symbolic systems, methods, progressive generalizations, problems that span centuries. And yet a common thread links in time the discovery of the possibility to add and the invention of group theory. Of course, something links Russell and Aristotle to each other, but perhaps this means that formal logic is actually more part of

mathematics than philosophy. But *what* is the history of philosophy a history *of*?

As it happens each time problems do not seem soluble from our limited perspective, we can try to enlarge them, to gain a different point of view, if possible higher or more general. What good is *history* in general, not just the history of philosophy? Let's get rid of hagiography and themed narratives, which are still an insidious temptation for anyone who gets their hands on the past, but let's not lose sight of them, because the work of the historian is often a work of *demystification* of the unlikely kinships and affinities of the day after. I willingly rely on a historian who dots the 'i's. Is it true that conservative social orders correspond to hieratic artistic forms and freer societies are instead harbingers of an eventful and naturalistic art (as Hauser's *Social History of Art* argues)? Is it true that with the scientific revolution we have passed "from the closed world to the infinite universe" (as Koyré wrote with a fortunate phrase)? Is Heidegger's philosophy intertwined with his convictions or even political actions (as Croce denounced)? Can philosophical positions really be classified according to the ethnicity of those who supported them? This last example seems artificial, but it is real: the historian and philosopher Max Wundt published in 1944, in at the end of the Nazi era, a book with photographs and portraits in which he tried to show correlations between somatic traits such as eye color and more or less idealistic tendencies of German philosophers. On themes like these the historians are the sentinels, the consciousness of humanity. It is important that societies train students in the historical method, and that they encourage vigilance against easy generalizations and mythological representations of past events.

Here, however, I have expanded the problem. In the philosophical field, and more specifically in the conception of philosophy as a form conceptual negotiation, I would say that philosophers must refer to historians for two main reasons, very different in character, but both exquisitely theoretical. On the one hand, the philosopher often needs to be aware of the steps taken to reach a certain position. In order to understand certain aspects of a philosophical position it makes a lot of sense to try to access the passages that in a certain context have made someone enunciate that position. In a non-philosophical negotiation if I want to understand why my counterpart does not want to give up a piece of land that does not seem to have any

commercial or strategic value, it is not useless to know that she reads every night a book written centuries ago in which it is said that that particular place is considered sacred. In this way of seeing things the historical excavation work is not an obligation; it has a pragmatic or heuristic value. And once history has been laid bare, there is the option of discounting it. If it is seen to depend on the historical context, a problem can be intractable, and then the context must be quarantined, ignored in order to allow the progress of the negotiation. Knowing where the historical obstacle is means knowing how to avoid it, if necessary. And on closer inspection the care of ancillary history and the search for historical truth is just as *widespread* as philosophy, outlining a path shared by many other disciplines. Demographers who study the evolution of a population need to understand how certain measurements were made in the past, what were the criteria of censuses, in order to compare them with today's measurements. The archaeoastronomers who study the historical series of eclipses (which incidentally allowed to discover that the Earth's rotation is slowing down) must extract numbers from works of fiction.

But this is not the only fundamental contribution of history to philosophical work. If on the one hand there is the track keeping of how one came to hold certain positions, on the other hand the history of philosophy allows one to contemplate other conceptual landscapes; in this sense it helps negotiation, as does philosophical imagination. It is no small thing to discover that in the past technology was different, ideas were different, priorities were different. Mind it, I am not diminishing the role of historical work; on the contrary, I am enhancing it. Understanding the present is also understanding that the past was profoundly different. In this sense the frequentation of history has a role similar to that of ethnology and anthropology; about the latter, anthropologist Maurice Bloch talks about a "mental health exercise". It is a very different sense, I think, from the way history is taught today: the past displayed to justify the present, the *genius loci* transformed into national and even regional mythologies. Anthropology and history should instead ally themselves to suggest that a different world is possible: and it is possible because it *was*, or because *it is* now beyond our short-sighted horizon. As Philippe Descola writes, ethnology "provides a tool to distance ourselves from a present that is too often thought of as eternal, suggesting, for example, the multiple paths that our future harbors in it".

What is wrong is to accept two principles simultaneously: that philosophical positions must be traced back to their historical and cultural contexts; and that there are eternal, timeless philosophical problems (the great philosophical problems of humanity). In this text the dilemma has a clear solution; there are no universal philosophical problems.

Chapter 13 The Philosophy of Philosophers

"You say that philosophy is the art of conceptual negotiation. But do all philosophers think so?" There are many other proposals about the nature of philosophy; philosophers and even non-philosophers like to say what they think philosophy is. Let's consider some of these proposals to see if they are somehow related to each other and whether presenting philosophy as an art of negotiation is in conflict or in harmony with them. We will not try to discuss *all of* them, but from the discussion of some of them we can outline a strategy.

"Philosophical questions are great questions".

According to a first conception, philosophy would distinguish itself from other human activities in that it deals with the great questions of existence, life, the universe. Questions like "What is the meaning of life?" would be *typically* philosophical questions. Now, you can give different answers, in various ways, to this question, as to many other questions. For example, there are biological theories, religious texts, hypotheses related to the theory of evolution, and even literary or poetic works that propose their own way of approaching the question of the meaning of life. But are there also *philosophical* answers to the question of the meaning of life? And if there are, how do they differ from the proposals of poetry, biology, or religion? Many other questions have received attention from very different human disciplines or practices. "Do we really exist? Do things exist around us? Are we sure we know what we know, and what makes us so sure? Where does my sphere of action end, where does the blind necessity of things begin? Do I really think or my thought is the running of a software that goes through my mind?" These are questions which are dealt with, in various ways, by disciplines such as psychology, physics, Artificial Intelligence, the law. It is also true that we know that these are questions dear to philosophers. But in what sense do these questions also or predominantly or exclusively have a philosophical side? Certainly not because they are difficult questions, or even because one feels that they will never be answered. There are difficult

and unanswered questions in mathematics, physics and psychology, but this does not make them philosophical questions. I would like to propose a small reversal of perspective. Instead of asking ourselves what makes us consider the questions listed above philosophical questions, let's ask ourselves what questions are *not* philosophical. The first answer is that the non-philosophical questions are factual questions, like whether there is still milk in the refrigerator, whether the Titanic sank in 1912 or 1913, whether the Sun gravitates around the Earth, or whether it is possible to square the circle (if the latter is a factual question). Second, we will observe that some questions considered as typically philosophical seem also completely factual: whether the mind is identical to the body, or whether life is not simply a dream, an illusion. It seems to me difficult to deny that the question whether life is a dream or not is factual. On the other hand, there is a philosophical aspect of factual questions about the nature of the universe or the meaning of life; in order to answer factual questions like these we need to clarify the concepts we use in formulating them - as we have seen in chapter 9; but this clarification work is not specific to the question at stake.

To summarize: many of the great questions considered as philosophical are ultimately factual questions, which will receive an answer - if they receive it at all - in a non-philosophical forum. Questions such as those about the meaning of life or the existence of God are factual. A philosopher can help to circumscribe them, to find meaning for them; but she cannot answer them more than anyone else can.

"Philosophical questions are timeless questions".

A second conception of philosophy is less committed but retains a very special status. There would be in philosophy "great timeless questions", on the nature of knowledge, of existence, on the relationship between mind and body, on the way language allows us to speak about the world. They are not the "great questions" like the one about the meaning of life, but they are specific questions, typically philosophical, that go through the ages and challenge us like the enigmas of the Sphinx. According to Colin McGinn it is difficult to invent new philosophical problems. My criticism is simple: from the fact that in every historical context typically philosophical questions can be identified, it does not follow that the questions are always

the same. There is no "mind-body question" that would be found in more or less similar forms in different historical periods.

Let's consider again the theme of the subjectivity of sensitive qualities - colors and sounds - which we briefly mentioned in Chapter 11. It seems to be an excellent candidate for the title of a universal and out-of-time philosophical problem. It is easy to read a "version" of it in Democritus: "*By convention sweet and by convention bitter, by convention hot, by convention cold, by convention color: in reality atoms and void*"; one would find "versions" of it in modern philosophy, and "re-elaborations" in contemporary philosophy. In reality it is more appropriate to consider it as a constellation of problems that partially overlap. At the dawn of modern science - between the sixteenth and the beginning of the seventeenth century - the main concern was to draw a line between different types of cognitive sources. If sensible qualities such as colors and sounds are irremediably subjective, then they do not have the dignity of other types of properties, more useful to knowledge. The example of Descartes' wax presented in Chapter 7 militates in favor of this interpretation. Sensible qualities are not necessary to understand what wax really is (Descartes suggests: it is an extended body, no matter if it is colored or not). Galileo's discussion goes in the same direction, when he argues that the sensible qualities "keep only their residence in the psychic body, so that, removed the animal, (they are) removed and annihilated". The philosophical problem of Galileo and his contemporaries is therefore: *if you want to know the world, do not worry about sensible qualities*. In the philosophy of our contemporary mind the problem is exactly inverted, that is, it is that of the uncertain citizenship of the sensible qualities in the scientific image. *How can you say you know the world, if when you describe it you do not find a place for sensible qualities?* As Frank Jackson summarized: wouldn't we say of a scientist who, by hypothesis, knew everything about colors and their perception - physics, chemistry, physiology - but had never seen them because we kept her in a black and white room all her life, that she would learn something new when she was shown a sample of red? Certainly the two problems are linked, but the contemporary problem of sensible qualities *is not* the modern problem and it is not even the ancient problem - if we can ever talk about a real problem in the latter case.

"Philosophy is a therapy"

If you do not believe in the existence of specifically philosophical problems, there are other possibilities. Wittgenstein defended a therapeutic conception of philosophy.

"For the clarity we are aiming at is indeed complete clarity. But this simply means that the philosophy problems should completely disappear. The real discovery is the one that makes me capable of stopping doing philosophy when I want to.--The one that gives philosophy peace, so that it is no longer tormented by questions which bring itself in question. ... There is not a philosophical method, though there are indeed methods, like different therapies."

The occurrence of philosophical headaches would always be symptomatic of something that does not work in the way we have described a certain situation; the diagnosis is for Wittgenstein some likely misuse of language (we have seen in chapter 6 an example of this, the reckless search for "substances for substantives"). The therapy consists in going to see case by case how poorly language has been used; this will soothe the torments of philosophers. If I search at all costs for an *object* that allows me to give meaning to the word 'thought', I risk embarking on a research program that is actually a dead end.

But must philosophical problems really disappear? Do we really have to stop philosophizing? It is certainly an option: the conceptual negotiation can end; one can decide to act and live instead of continuing to reflect. I would say, however, that Wittgenstein only goes halfway, and if he doesn't go the other half his opponents are right in accusing him of quietism; which would be a pity, since the half way we can go in his company is remarkable. Re-thought in a theory of philosophy as conceptual negotiation, Wittgenstein's proposal acquires a complete sense. For example, it makes it possible to locate the weak points of the negotiation due to the lack of agreement on how to use a term. At this point we can either stop, as Wittgenstein does, or we can decide to look for other possibilities. It must also be said that despite the often pessimistic connotations Wittgenstein's contribution has many constructive aspects; his map of mental phenomena and in particular of the uses of language to describe behavior informed by

thought and intentions has been for decades a mine in which philosophers and psychologists have dug.

"Philosophy, like science, is in search of truth".

For some philosophers philosophy is a science or resembles science not so much because it shares with science the need for methodological rigor but because it has as its objective the quest for truth. A metaphysician, for example, should aim at the discovery of ultimate truths about the world. These can be less high-faluting than those sought by those who see philosophy as devoted to big problems. Is the world *really* made of objects, or is it made of processes, or both, or neither, and instead of some other kind of whatnot? Is the mind *really* reducible to physical states of the brain? Is Theseus' ship *really* the one at the port? (Think about how many "really" questions you have encountered in this book.)

This position is at odds with that defended here, according to which philosophy does not directly seek the truth about the world, but explores the possibilities that allow us to reconceptualize the world in a useful way for various negotiating purposes. The ultimate truths about the world can sometimes be discovered through the philosophical approach to problems; but they will then be truths pertaining to empirical disciplines such as physics or psychology. If there are philosophical truths, they are of a different kind. We discussed this in chapter 10 when addressing philosophical knowledge: philosophical truths can at most be related to possibility and necessity; or to conditional formulations, or to negative theses. The search for truth about the world is circumscribed, helped by the formulation of assertions in conditional or negative form. But the pain of research is not avoided.

"Philosophical questions are conceptual questions".

There are philosophers who make less ambitious claims. For example, those analytical philosophers who claim a methodological and not contentual characterization of philosophy. There would be no exquisitely philosophical themes, but a philosophical way of dealing with this or that theme.

Philosophy would be essentially conceptual analysis, conducted with method or at least with rigor and honesty.

This position is perhaps too *unambitious*. The examples show us that the interesting sense of conceptual analysis is related to its use. To consider philosophy as limited to conceptual analysis is certainly possible, but beyond the intrinsic (and frankly limited) interest of drawing conceptual maps, we cannot see why to devote ourselves to this activity, which would lead to autobiography or, at best, contribute to psychology; we would only discover what someone thinks, or what everyone like that person thinks. Instead, it is the *uses* of conceptual analysis that make it worthwhile. In fact, the notion of conceptual negotiation reveals *what conceptual* analysis is for. As we have seen in Chapter 6, conceptual analysis is one of the ways in which a conceptual negotiation table is set. You can try to understand what I have in mind when I present my theory of unicorns to you, and this helps you formulate an alternative theory of close encounters with strange creatures in the forest and make me understand how your theory is possibly better than mine. I repeat: if philosophy were *only* conceptual analysis, one would not understand what to do with it. Conceptual analysis alone does not even provide the basis for a useful empirical study of concepts (because we could be under the grip of an introspective illusion). Talking about negotiation instead explains what the analysis is for. And at this point it is also good that the conceptual analysis is not very refined - for example, that it does not eventuate in a definition or in a characterization. What matters is that it is effective for negotiation.

"Philosophy offers ultimate justification"

The search for the *ultimate things* is another request often made to philosophers (it is independent from the search for ultimate truths about the world or from dealing with great questions). Philosophy would be a search for the *fundamentals*, the ultimate justifications to knowing and in the end also to acting. It should seek fundamental and axiomatic principles from which to draw all the nuances of life as logical consequences. For example, one could argue that society should be grounded on universal love, and as a result of this reject certain types of social organization. Or that the ultimate foundation of knowledge is perception, and therefore reject any kind of

knowledge that is not in some way traced or traceable in principle to perception.

Beyond the prudence that we should exercise on the basis of how much has been seen to happen every time in the history it has been tried to ground the life on last principles endowed of justifying character, we must be aware of the many difficulties for this conception in front of the non-trivial problem of understanding what people do and what they should do. You are convinced that you have found the ultimate justification for X. This justification risks being *misleading*. It also risks being *wrong*. It risks being *decorative*, a justification of the next day, and to limit itself to slavishly *formatting* a pre-packaged position, in fact justifying nothing anymore, and betraying the vocation to freedom of philosophical research.

In fact, people act under the control of impulses, or on the basis of *local justifications*; rarely on the basis of ultimate and theoretical justifications, and when they do so, they seem *strange* people, possessed, disconnected from the multiform fabric of life. I want to make a simple example. A recurring argument is that in the absence of a *source of* morality, individuals would not know how to decide in the appropriate way, they would be left to themselves - man would be at man's throat and society would vanish. But let's see. A child is about to drown. Paola jumps and saves him. Another child is about to drown. Joan jumps and saves her. We ask Paola and Joan why they jumped. Paola looks at us in amazement and says: "What else could I have done?" Joan tells us (variation of a small parameter in the mental experiment): "I did it because going to help others is imposed on me by the religion I follow". Which of the two is in moral deficit? Clearly Joan: how can she not know for herself that she must try to save children in danger? We find it disturbing that in order to perform a just and necessary action, Joan must invoke a *principle*. The example shows us that if the *only* difference is between the presence or absence of a moral authority, then invoking authority does not necessarily indicate a morally sound situation. In fact, it casts a dark light on the moral profile of all those who believe that such authority is indispensable. Not to speak, of course, of all the crimes committed by *invoking* the *irresistible* call of the "voice of conscience".

Is rejecting ultimate justifications re-enacting a *bloodless* vision of philosophy? I don't think so. It is rather to propose a vision that comes to

terms with reality, with the facts of human psychology. In the course of a negotiation (even with the voice of one's own conscience!) the objective that we should set ourselves is not so much the ultimate foundation as, more modestly, transparency and sharing.

"Philosophy is always philosophy *of*, but not everything is a theme for philosophy".

Although we recognize that philosophy has an ancillary role, that it is philosophy *of*, we can still want to have our say on what we consider it to be ancillary to. Not all subjects would be "promoted" to the rank of subjects for which there is a philosophy. As Peter Kivy points out, there is a philosophy of music and a philosophy of physics, but there does not seem to be a philosophy of baseball or sewerage. Why is that? According to Kivy what matters for there to be a philosophy *of* a certain practice or discipline is that this practice or discipline is central to our way of life. Music is an example of a practice that has become so central for us, and thus is 'eligible' for philosophy (which justifies for him the existence of a philosophy of music.)

But is it true? There is a philosophy of sport, after all. And in the books there is no philosophy of baroque art, art that is perhaps central, even if only for some of us. It seems to me that Kivy's idea is partly right, but it has to be reinterpreted in a contextual sense. If the sewers become important and vital, we can expect that some philosophical reflection, some conceptual negotiation will generate it. This is indeed what happened to John Snow, who studying the geographical distribution of cholera cases in Soho in 1854 noticed that they were related to the houses served by a certain water pump. (Be noted that the dominant theory at that time associated cholera to air quality). Snow related the concepts of space, time and disease allowing the reconceptualization of epidemics independently from the discovery of a precise cause of their occurrence. A small local negotiation, but with great effects, since it marked the birth of epidemiology.

In reality, the discussion hinges on the fact that philosophy is much more *widespread* than it appears in philosophy books. If you look in philosophy books you will not find a discussion of sewer philosophy. But I have no difficulty in imagining that not a few conceptual discussions take place where one has to negotiate on the passage of a sewerage pipe in a less

privileged context than in the West. The quantitative difference between the productions of philosophy of music and philosophy of sewerage is likely to reflect only the fact that sewers for the lucky ones like Kivy and me are no longer a central, everyday problem in life.

There is also the downside. Even very occasional and marginal episodes in a person's life can provoke philosophical reflections. It is not only a question of what sets the reflection in motion (the six hundred pages of Canetti's *Crowds and Power* originated - it seems - from attending a street demonstration, are the result of the work of almost forty years, and in any case concern a central element of life, the relationship with power and command). There are occasional encounters with non-core human activities that turn out to be full of philosophical ideas. Queuing, for example, can lead us to reflect on the sense of *waiting* (an exercise for the reader, the next time he or she happens to queue). To undergo a body massage reveals the sense of passivity, of being able to become a pure body. My body is not only a set of possibilities of action, but of passivity: it can be revealed by the gesture of others. Can I *learn* to be completely passive?

To demand that the "philosophy of" is legitimate only when the central themes of life are invested by reflection is to deprive oneself of many opportunities for philosophical encounters, and ultimately of many possibilities to see the world in a different light.

Does pure philosophy really not exist?

Let us get back to the thread of our more general discourse. To say that philosophy has an ancillary character means to say that philosophical questions have *always* been methodological or meta-disciplinary questions. What seem to us *today* to be typically philosophical questions - questions of relevance of an autonomous domain with respect to what is investigated by one or other empirical discipline - when reviewed in their historical *context* are questions that are not autonomous but linked to attempts to form empirical research programs, or to make effective action possible in an individual or social life that is constantly changing.

It is only in retrospect that, outside the context of their origin, these questions seem to us to be autonomous: questions such as the relationship

between mind and body, the existence of numbers, the existence of fictitious objects, are all in reality questions without philosophical autonomy. The strong version of my thesis is therefore that *all philosophical* questions are meta-disciplinary, that *none* is autonomous, and that for reasons to be investigated *some* of them seem autonomous today.

Rudolf Carnap introduced a distinction between external and internal problems to a scientific theory or system of representation. For example, an internal problem in arithmetic is whether there is an even integer that is not the sum of two prime numbers; an external problem is whether there are numbers, nothing less. According to Carnap, internal questions are without philosophical import. The external ones, philosophical, are instead meaningless, in the sense that the theory (in this case arithmetic) does not have the means to answer them, and any decisions are taken at a higher level where different theories, coupled with have different ontologies, are compared.

Something of this idea could be generalized to all aspects of human activity. A painter can deal with the problem of the choice of colors, it is an internal problem; but he can question himself about the meaning of making art, and this is an external problem. There is a meta-theoretical component that goes along with the work done in each theory or activity. If one had to find a meaning to the expression "pure philosophy", one would have to find an acceptable synonym of "meta-theory of meta-theories". Perhaps it is better to give up on this; it remains that if philosophy is essentially made of meta-theoretical questions, and "pure" philosophy tells us how to deal with philosophical questions, that is meta-theoretical questions, we must resign ourselves to this piling of levels. Which is not so terrible, after all; the pile of 'meta-' levels is quite common. There are machines that build machines. There are computer programs that are used to write programs. In art catalogs there are photographs of paintings and some of them represent further paintings. The Constitution is a law that allows you to write laws.

In 1982 the philosopher Peter Suber invented Nomic, a game made popular by Douglas Hofstadter's *Scientific American* column (and I must admit that it was one of the most interesting readings of my junior years as a philosopher). Actually it was a meta-game, whose moves consisted in modifying the rules of the game, following unchangeable meta-rules. An

unchangeable rule reads: "A player always has the option to forfeit the game rather than continue to play or incur a game penalty. No penalty worse than losing, in the judgement of the player to incur it, may be imposed". An unchangeable rule is: "Players shall alternate in clockwise order, taking one whole turn apiece. Turns may not be skipped or passed, and parts of turns may not be omitted. All players begin with zero points." Players can change this and other modifiable rules (for example, they can decide that real money is used and not points, or that the loser is sent into exile). The unchangeable rules allow you to "frame" the changes, for example, so as not to distort the nature of the Nomic game. And we know that the line between game and non-game is blurred, that is, it is easy to cross it without realizing it. Is poker *just* a game? You cannot leave the table without honoring your debt. The law is on your side - gambling is normally forbidden - but maybe your "creditors" don't think so.

"Pure" philosophy is to philosophy what the unchangeable rules of Nomic are to the changeable rules. The unchangeable rules determine how to change the modifiable rules. We have seen that factual questions do not exist in a vacuum. There are no factual questions that can be answered outside of a theoretical framework, however minimal, that gives meaning to the question and allows to identify a strategy for answering. This is evident for problems like that of the squaring of the circle, completely incomprehensible to those who do not master the theoretical concepts of circle and rational number. But even questions that seem less imbued with theory such whether there is milk in the refrigerator or the date of the accident of the Titanic can receive an answer only if we assume the mastery of some instruments of investigation and perceptual or historical confirmation. Note that the theories in question are not necessarily explicit or known in all their articulation to those who possess them. They may be implicit theories, tacit theories, about how things work. Factual questions are linked to the existence of theories. And the formulation of a theory requires that attention be paid to meta-theoretical questions.

Finally, one aspect that I would like to emphasize of the proposal made in this book is that the distinction between philosophical and non-philosophical coincides (often) with another distinction, that between meta-theoretical and theoretical. Theories allow the formulation of factual questions; meta-theories make the construction of theories possible. The negotiation climbs

one level higher. You meet philosophy every time you meet a meta-theoretical question. A consequence of this reflection is that philosophical theories are *small* - precisely because they are meta-theories.

This does not make them any less important. The fact that philosophy is ancillary, that it owes the setting of its agenda to other disciplines or practices, does not mean that it is just an embellishment of the results of these disciplines or practices. It is not just a way of putting into a conceptually neat formulation what others have produced - as the neopositivists thought. It is instead like the water and the air in which science, art, and ultimately life itself move and breathe when they do not want to act blindly.

Chapter 14 At the end of the day

With this book I tried to obtain two results. First, I hope to have succeeded in encouraging philosophers to deal with problems that are not only, or not typically academic. Secondly, I have tried to encourage those who, outside the philosophical academy, deal with conceptual problems, to see themselves as full-fledged philosophers, at least sometimes, and thus encourage them to embrace those practices and techniques that professional philosophers have refined over the centuries by tackling a thousand different problems. In both cases I think we can go in search of *unexplored margins* for philosophical work.

I could enlist other desiderata. To historians of philosophy, for example, I'd love to ask to reconsider (or conceptually renegotiate) the perimeter of their research, starting from the fact that philosophical practice is completely permeable, and indeed permeated by other practices. We need history, plenty of it; a critical and attentive look at the past, at what has been done, is at the same time a critical look at what we are doing. Historical research in a certain sense acts like imagination, showing possibilities different from those that the present offers us.

I presented a *theory* of philosophy. The interest of a theory is to try to account for a large number of phenomena that may seem to be poorly related to each other, and to make predictions about the occurrence of other phenomena. The theory I defended says that philosophy is an activity of negotiation, an *art* more than a form of knowledge. Philosophy - the philosophical fieldwork, not its falsely canonical and somewhat caricatured version found in textbooks - is essentially conceptual negotiation, i.e. the construction of scaffolding - definitions, narrations, mental experiments, images, parables - that allow the conversation between different points of view on the world, between different ways of acting. It immediately follows

that philosophy is much more widespread than is usually recognized. In particular, it is found as a non-optional component of science: some essential questions in science cannot be answered using "internal" scientific methods. To determine what a planet is, it is not necessary to go and explore space; even if once you have determined what a planet is, it is empirical research, a measurement, that decides whether Pluto is a planet or not. And one finds philosophy as a non-optional component in life whenever conceptual tensions block decision and action, as the examples of the drafting of a Constitution and the Brâncuși trial have shown.

The strength of the idea of philosophy as an art of conceptual negotiation can be measured by the number of phenomena it can explain. As we have seen, the consequences of the negotiation concept of philosophy are many and very articulated. For example, although philosophy is often necessary, it is not enough to unblock a negotiation; it is therefore not a panacea. This fact follows from the observation that it is not always sufficient to negotiate. Sometimes it is necessary to cut Gordian knots; to move to life, or to science, or to art.

Moreover, philosophy offers above all possibilities, and the choice between these is not its prerogative. In fact, from the negotiating nature of philosophy follows an essential predilection for the neutrality of a philosophy that aims above all to enlarge the perspective; combined with an instrumental predilection, not an end in itself, for digging into concepts. Along with some methodological recommendations: the use of thought experiments that is regulated by small parametric variations; an analysis of costs and benefits that must always guide the search for solutions. Another important consequence is that we can explain why there is no canon of philosophy: this fact is a consequence of the negotiation concept, and of the widespread, diffuse character of philosophy. This further means that the natural way to learn how to do philosophy essentially requires that you cultivate the ability to see similarities between apparently different topics and problems. Another consequence: many problems typically considered as philosophical are actually problems of a different nature, oftentimes factual: the "big questions", such as the one about the meaning of life or the origin of the world, are empirical questions (when they are meaningful questions, but we did not let ourselves be seduced by the Wittgensteinian forced choice

between talking about things with empirical content or keeping silent: conceptual negotiation is not silence, and it is not just factual).

A certain philosophical tolerance is also completely automatic in the negotiating concept: Heidegger negotiates conceptually (when he does so, for example in his profound discussions on *care*) even if he does so with his own means that are not necessarily shared by a philosopher who prefers to refer to Frege; and conversely. If certain aspects of Heidegger's or Frege's mode of negotiation are unacceptable to us or not easily shareable, this probably depends on contextual factors. Reality is complex, people are complex, and there is no reason to deprive yourself of interpretive tools.

Thinking of philosophy as negotiation means that we should consider as philosophy things that are typically not considered as such; and that some things that are typically considered philosophy are not, in point of fact, philosophy - but this is only normal, it is the privilege of hypotheses when they are a little adventurous, and hopefully interesting; hypotheses that make us see reality in a new way.

I have taken up the idea of the philosopher as a person who thinks in slow motion, slowing thought down to the still frame. Philosophy is therefore not a subject-matter, and if it is a discipline it is in the sense that it helps disciplining thought, that is to make explicit what is often left implicit. It is an art. A strange art, which constantly makes demands for transparency and intellectual rigor, whenever this is possible.

I suggested that a philosophical component exists in every human activity, theoretical or practical, in every type of work and profession; it manifests itself in the moment in which one moves from action according to a procedure to reflection on the why and how of this action and procedure. But then, is philosophy always someone else's assistant - of the sciences, of art, of history? Is it always philosophy *of*? Is it always Minerva's owl that takes flight post-hoc, "on the making of twilight", as Hegel used to say? Of course, philosophy is always in front of the *given*. But *life* is always in front of the given. And this does not detract from the fact that philosophy can fly high, look far away – not be passive in front of the datum. On the contrary, it is *vital* that philosophy tries to look far away; it is by doing so that it enriches the space of negotiation. Defending an ancillary, not pure,

conception of philosophy does not mean diminishing philosophical work. Philosophy, conceptual reflection, is the lifeblood of the sciences, art, life. I am therefore opposed to a certain shyness and reluctance of the philosopher. I do not mean that the philosopher should at all costs occupy the public scene, let alone the media space; but I think that she can and should intervene as a philosopher in many contexts precisely because, as I hope to have shown, her work is useful. If you prefer, this book is a defense of intellectualism, of the need to get to the bottom of even the simplest things, because even the simplest things are the tip of an iceberg of immense size and complexity, and if you want to negotiate only with the emerged part you risk not going much far.

There is no shortage of work in progress, of open problems, present and future. Some of them are easily predictable; others are not even imaginable today; for still others I'm allowed some bets. New technologies break into life; not everyone's - and this is already a problem - but of many. In the perspective of a total traceability of information it will be necessary to reflect on the *relationship between secrecy and transparency*. Does transparency make society fairer or is it just a means of control? Does secrecy protect individuals or does it allow those who do not want to comply with the rules to conduct illicit traffics in a place shielded from prying eyes? What point of balance do we want to achieve? Again, the *medicalisation* of society: the mapping of the human genome and non-invasive neuroimaging techniques open up enormous possibilities for the early diagnosis of genetic diseases and behavior disorders. This turns people into potential patients from the moment of diagnosis, even if the problem will manifest itself much later in their lives: how far should knowledge go? The *new frontiers of epistemology*: the collection of an impressive number of observational data and measurements creates the basis for wide-ranging investigations that seek wildly unusual correlations between phenomena. This type of research is not guided by any theoretical hypothesis, it is not inspired by any intuition: what knowledge can we obtain? The *rights of minorities* in a world where majorities consolidate and tend to establish real economic, cultural and social monopoly situations. The *dialogue between bureaucracy and democracy*, exemplified by the extraordinary success of an institution such as the European Union, and by the impasse in which the states that compose it often find themselves. The *announced end of the book*, of the two hundred-page monograph, for market reasons: and the

consequent disappearance of a format of intellectual elaboration that, although contingent, has marked the cultural evolution of the last four hundred years. How will we manage with new types of philosophical writing, more fragmented, more rapid? And other themes: the beginning and the end of life, education for who and how, epistemological controversies on the theory of evolution, wars fought by robots, the moral obligation to donate to promote the welfare of distant people, the challenge of GMOs, distributed epistemology exemplified by the discussions on climate change, neuromania, the work of art in the age of mass creativity, being a foreigner in a world where mobility is an economic demand and a living condition, electronic voting and the loosening of social control over the mechanisms of participation, the loss of time horizons in a society of access and no longer of possession, the care of the place where one lives, biodiversity. And it is only a small list - a lot of work awaits us.

That philosophy is intertwined with life, that contemplation is also at the service of praxis, reminds us that we cannot avoid to act: we must be part of the society in which we live, be in the position to say no when circumstances require it. In order get there, it is very important to learn to look far away, focus on remote targets. If there is something that I would like to keep from this lesson, it is having communicated the sense that we can *always* look far away. Perhaps the world in which we live does not convince us; then it must be seen as one possibility among many. It is *always* worth thinking about unrealized possibilities, going further, experimenting.

Acknowledgments

(The Italian version of the book was written in 2010.) This book is the result of many and then many interventions, readings, lectures, and above all discussions. I have taught philosophy in very different contexts, from university and PhD students, to high school students, I have lectured for the general public, to philosophers and non-philosophers: to geographers, psychologists, computer scientists, astronomers, art historians, architects, designers, business executives, people's houses, members of non-profit foundations, political activists, cultural events audience and I certainly forget some of them. It almost isn't worth mentioning that in all these contexts I learned more than I tried to teach. One thing I did not say in the text is that the idea of philosophy is often associated with solitary work. That's is true: an immense loneliness accompanies intellectual work in general; but it is not completely true. Since more than half of my publications are the result of collaborations, I want to thank here all my co-authors, first of all Achille Varzi, and then Jérôme Dokic, Maurizio Giri, the late Vittorio Giotto, Barry Smith, Beatrice Biagini, Elena Pasquinelli, Alessandro Pignocchi, Nivedita Gangopadhyay, Marco Bertamini, Gino Roncaglia, Gianfranco Soldati, Giuliano Torrenco, Gloria Origgi, Valeria Giardino, Judith Simon, Magda Stanová, Alexis Ouspensky, Chiara Somajni; and then again Yasmina Jraissati and Dario Taraborelli; finally my many teachers, from Professor Manzoni of the Alessi High School in Perugia, to the late Giovanni Piana, Andrea Bonomi, Kevin Mulligan, Roberta de Monticelli, to the late Paolo Bozzi. Uninterrupted dialogues with Marco Panza, Paolo Legrenzi, Maurizio Ferraris and Diego Marconi make them unconscious virtual co-authors. The work of recent years has been done at the Institut Nicod in Paris, the intellectual house where I have the great fortune to work, and then University of Turin, the IUAV in Venice and Columbia University in New York. Ermanno Bencivenga has encouraged me several times to write down a theory of philosophy. The first versions of the manuscript were commented by colleagues and scrupulous interlocutors: Achille Varzi, Diego Marconi, Valeria Giardino, Mario De Caro, Francesco Fagioli, Maurizio Giri, Giuliano Torrenco, Beatrice Biagini, Paolo Rossi, Elena Pasquinelli, who helped me in a thousand ways to improve it. As is customary, I free them from the responsibility of all the shortcomings that remain. Marco Vigevani and Anna Gialluca have been assiduous and patient sources of encouragement. Beatrice, Nina and Anni (and now Lise): daily inspiration, joy, motivation to understand, imagine, do.

I have two very special thanks. More than ten years ago, on a wonderful Indian summer in Buffalo, I took a walk around campus with Newton Garver. Let me say a few words about this philosopher who has an important personal history behind him. A great pacifist and advocate of non-violence, fervent Quaker, he spent a year in prison in 1948 for objecting to U.S. military service. In 1964 he did not want to sign the certificate of "anti-communism", one of the last remnants of McCarthyism, at the time a sine qua non condition for employment in many universities. His university threatened to fire him; he and a group of

colleagues sued; they lost their case; the case went up to the Supreme Court that rejected the judgment with a "landmark opinion". From the angry reactions of the dissenting minority we understand the importance of the Supreme Court decision. In fact, many of the academic freedoms in the United States depend on that ruling. During our walk Newton Garver told me at length about his extra-academic activities as a social worker in New York State prisons, where he went a couple of times a week to teach alternatives to violence (he was already in his seventies at the time). For this difficult job, he used a text that so impressed him that he adopted it in class, *Getting to Yes*, the Harvard Negotiation Project textbook. For a long time I had thought that philosophy should be explored outside of academic contexts, but I did not imagine to find such an enlightening non-philosophical work.

The other special thanks goes to Paolo Rossi; for me a late encounter, a master missed for geographical reasons. My intellectual debt to him is immense and I can only repay it with the expression of immense admiration.

Notes, readings and visions

(*The original Italian was written in 2010, and I could not rewrite the book to take into account the lively current discussion on conceptual engineering, that is clearly related to the central topic of the book, conceptual negotiation. So references are not much up to date.*) In order to write this book I have kept in mind all the philosophy readings I have done; but here I will mention only those that are more directly related to the text. As I said this work is not an introduction to philosophy, or a summary of philosophical positions. The following list of references should therefore not be taken for a bibliography (or filmography) to approach philosophy. For the classics, of which there are many editions, only summary references are given.

1. The philosopher is a conceptual negotiator

Non negotiation at large, the Harvard Negotiation Project: Fisher, R., Ury, W.L., Patton, B., 1981, 1991, *Getting to YES: Negotiating Agreement Without Giving In*. London: Penguin.

2. Philosophy at work

On Brâncuși: *Brancusi v. United States*, a historic trial, Paris, Adam Biro, 1995. Stéphanie Giry, An Odd Bird. *Legal Affairs*, September/October 2002. The minutes of the Italian Constituent Assembly are available on the website of the Archives of the Chamber of Deputies (<http://archivio.camera.it/archivio>).

De Filippo, E., 1946, *Filumena Marturano*, in *Teatro (Volume two) - Cantata dei giorni dispari (Tomo primo)*, Milan: Mondadori 2005, 487-646. A film (1951) directed and interpreted by Eduardo De Filippo was taken from the play.

What is a species? Casetta, E., 2009, E., 2009, *La sfida delle chimere. Realismo, pluralismo e convenzionalismo in filosofia della biologia*. Milan: Mimesis.

The use of duplications to understand if a certain object is artistic or not: Danto, A., 1981, *The Transfiguration of the Commonplace*. Harvard University Press.

3. First Lessons: successes and failures

Did Velázquez paint a philosophical picture? Foucault, M., 1966, *Les mots et les choses*, Paris: Gallimard.

More things between heaven and earth...: W. Shakespeare, *Hamlet*, Act I, Scene V.

Always rethink philosophical problems from scratch: Strawson, P. 1959, *Individuals*. London: Methuen.

4. The space of negotiation

The Ship of Theseus: Plutarch, *Theseus*. Hobbes, T., *De Corpore*, 2, 11, 7. The literature on the identity of material objects is boundless but can be easily reconstructed with a short online search using keywords such as "identity of material objects", "Ship of theseus". For an introduction, Wasserman, R., 2009, "Material Constitution", in Edward N. Zalta, ed., *The Stanford Encyclopedia of Philosophy (Spring 2009 Edition)*.

The problem of Theseus' Ship is much less abstract than its philosophical popularity suggests. In 1995 a Californian court blamed Mr. Boyd Coddington for a scam called "Theseus' Ship". Boyd Coddington was an icon of American car culture known as "Hot Rods". A Hot Rod (Hot Roadster) is a car that is handcrafted, either to make it faster (by changing the aerodynamics, lightening it, and enhancing the engine), or to change its design and decorative elements. Coddington's models, with evocative names such as 'CadZZilla', have become popular in the industry (it's easy to imagine their breadth: races, contests, merchandising). Bono, the U2 singer,

was one of Coddington's customers. The problem stems from the notion of "rigged car": to what extent is it a modified old car, or an entirely new car? The legal case brought together popular culture and the academy; the philosophical legislator wore the role of the conceptual negotiator. Coddington was convicted because the number of cars apt for modification thinned; it was difficult to convince the court that those shiny models were not entirely new. See Casati, R. Teseo on the Hot Rod, *Il Sole 24 Ore*, May 3, 2009.

Poland was divided among its neighbors several times in the late 1700s. One may wonder if it was *really* the same Poland the entity that existed before the division and the one that was found after the reunion.

It is difficult to invent new philosophical problems: McGinn, C., 2002, An Ardent Fallibilist, *New York Review of Books*, 49, 11, June 27.

To be a stranger: Schutz, A., *The Stranger: An Essay in Social Psychology*, *American Journal of Sociology*, vol. 49, no. 6 (1944): 499-507.

On debates: Chomsky's quote is contained in Piattelli-Palmarini's article, M., 1994, Ever since language and learning: afterthoughts on the Piaget-Chomsky debate, *Cognition*, 50, 315-346.

5. The necessary renunciation and the duty of imagination

The philosopher thinks in slow motion: Campbell, J., *intervention in the photographic book* Pyke, S., 1995, *Philosophers*. London: Zelda Cheatle Press.

The sense of possibility: R. Musil, 1930/1943, *Der Mann ohne Eigenschaften*.

Creativity: Johnson-Laird, P.N., 2005, The shape of problems, in Girotto, V., and Johnson-Laird, P.N., ed., *The Shape of Reason: Essays in Honour of Paolo Legrenzi*. New York: Psychology Press, 3-26.

We are avid consumers of stories: Schelling, T., The Mind as a Consuming Organ, *American Economics Review*, 1984, 74/2, 1-11.

Philosophy is simulation of situations in which we might one day find ourselves: Bencivenga, E., 1988, *Tre dialoghi*. Turin: Bollati Boringhieri.

The ethical problems of reproduction: Bacchini, F. 2006, *Persone potenziali e libertà*. Baldini Castoldi Dalai.

Avoid a one-sided diet of examples: Wittgenstein, L., *Philosophical Investigations*, § 593.

It is also possible to take a nuanced approach to the choice between a philosophy that merely offers possibilities and one that requires one to stand resolutely for one or the other possibility. In some cases we would like to be more "committed" than in others; intuition or reasoning guide us in one direction. Just state it.

Moral judgments are only decorations from pre-packaged insights: Haidt, J., 2001, The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*, 108, 814-834, which started an extensive literature.

6. The art of philosophy

Assembling memories: Wittgenstein, L., *Philosophical Investigations*, § 127.

The double standard in the discussion of evolution: Dennett, D., 2005, *Darwin's Dangerous Idea*. New York: Simon and Schuster.

What lurks in a name: <http://en.wikipedia.org/wiki/Macedonia>; http://en.wikipedia.org/wiki/Macedonia_naming_dispute. You should look not only at the entries, but at the editorial "discussions" in the background.

Oppose the way things are named: *Corriere della Sera*, March 16, 2010. Wills, G., 1995, To Keep and Bear Arms, *The New York Review of Books*, Volume 42, Number 14, September 21. Insults and dehumanization of one's opponent: Pinker, Steven, 2002, *The Blank Slate: The Modern Denial of*

Human Nature, Penguin Putnam. Atheists and *bright*: see Wikipedia entry "Brights movement".

Substances for substantives: Wittgenstein, L., 1958, *Blue Book*, p. 1; 1990, *Observations on the philosophy of psychology*.

The illusion of virtual reality: Pasquinelli, E., 2011, *Toute ressemblance ne saurait être que fortuite*. Paris: Vrin.

Ordinary language analysis: Austin, J.L., 1962, *How to do Things with Words: The William James Lectures delivered at Harvard University in 1955*. Oxford: Clarendon. Conceptual analysis and descriptive metaphysics: Strawson, P.F., 1992, *Analysis and metaphysics*. Oxford: Oxford University Press. Conceptual analysis, definition and theoretical characterization: Neander, K., 1991, Functions as Selected Effects: The Conceptual Analyst's Defense. *Philosophy of Science* 58 (2):168-184, in particular § 2.

Operational definitions: Bridgman, P.W., 1927, *The Logic of Modern Physics*. Beaufort Books.

Einstein and simultaneity: Galison, P.W., 2003, *Einstein's Clocks, Poincare's Maps: Empires of Time*. W. Norton & Company.

Simple vs epistemic seeing: Dretske, F., 1969, *Seeing and Knowing*, Chicago: The University of Chicago Press.

Examples and *counterexamples* in mathematics: Steen, L.A., Seebach Jr., A.J., 1978, *Counterexamples in Topology*. New York: Springer Verlag.

Gettier's counterexample: Gettier, E., 1963, Is Justified True Belief Knowledge? *Analysis* 23: 121-123. See the rich discussion by Nozick, R., 1981, *Philosophical Explanations*, Harvard University Press.

7. How do we build a mental experiment?

A list of thought experiments in philosophy can be found under "Thought Experiments" on Wikipedia. See also Sorensen, R., 1999, *Thought Experiments*. Oxford: Oxford University Press. Can mental experiments be

eliminated? Gendler, T. 1998, Galileo and the indispensability of Thought experiments, *The British Journal for the Philosophy of Science*, 49, 3, 397-424. Mental experiments distract from the study of real cases: Wilkes, K. V., 1994, *Real People*. Oxford: Oxford University Press.

Teleportation: Parfit, D., 1984, *Reasons and Persons*. Oxford University Press.

The mental experiment of metaphysical freeze: Shoemaker, S., Time Without Change. *The Journal of Philosophy*, 66:12, 363-381.

The road from *conceivability* to *possibility* is not so immediate; see the essays in Gendler, T., Hawthorne, J., 2002, eds., *Conceivability and Possibility*. Oxford: Oxford University Press.

Descartes and the wax example: *Metaphysical Meditations*, 30, 5 (1641) , quote from the 1911 edition of *The Philosophical Works of Descartes*, translated by Elizabeth S. Haldane, Cambridge University Press. Husserl on eidetic variation: *Erfahrung un Urteil*, § 87. Leibniz and the fastest wheel: *Meditations on Knowledge, Truth and Ideas* (1684). Nietzsche and the eternal return: *The Gay Science* (1881), § 341. The theme is taken up again in *Thus Spoke Zarathustra* (1885). Nietzsche is a source of interesting mental experiments and I want to mention one in particular, described in the Second of his *Unintended Meditations* (1874). What would the life of a person (or a community) who does not forget anything? A certain degree of oblivion, suggests Nietzsche, is necessary to action. Literature and psychology converge on the image of the impossibility of oblivion.

"A knife without a blade, for which the handle is missing". A celebrated example, loved by Freud and Wittgenstein, taken from a letter to Heyne by physicist and writer Hans Georg Lichtenberg (1742-1799).

Families, adoptions, twins: Lewontin, R., 1997, The Confusion over Cloning, *The New York review of Books*, October 23.

8. Composing the tensions between worldviews

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The moral significance of birth: Bermúdez, J.L. 1996: The Moral Significance of Birth, *Ethics* 106 (2): 378-403.

An action unlocks the negotiations: Roger-Pol Droit, 2001, *101 expériences de philosophie quotidienne*. Paris : Odile Jacob.

The irreducibility of points of view: Berlin, I., 1990, *The Crooked Timber of Humanity*, John Murray.

9. Where is philosophy?

On vagueness: Varzi, A.C., 2008, Vaghezza e Ontologia, in *Storia dell'ontologia*, edited by Maurizio Ferraris, Milan: Bompiani, 672-698.

Planets and asteroids: de Saint-Exupéry, A., 1943, *The Little Prince*. The resolutions on Pluto: IAU 2006 General Assembly: Result of the IAU Resolution votes. RESOLUTION B5: Definition of a Planet in the Solar System; RESOLUTION B6: Pluto.

Illinois does not give up and keeps Pluto among the planets: Illinois General Assembly, Senate Resolution SR0046 of 2/26/2009. It should be noted that one of the reasons given to restore dignity to Pluto is that Tombaugh is "so far the only Illinoisan and also the only American to have discovered a planet," a remarkable petition of principle. I also note that an interesting amendment in the negotiations of the Astronomical Union had planned to distinguish between "historical" planets and others, for the sole purpose of saving Pluto.

Pluto's discovery in 1930 took place confronting pairs of celestial photographs taken a few days apart. They were looked at in a special device that made them slide quickly one after the other; in those conditions the human visual system is able to notice small changes. It took Clyde Tombaugh a year to notice the interesting difference. Pluto had already been photographed in 1915, but nobody noticed it then.

Scientific negotiations and operationalizations in the social sciences: Argyrous, G., 1996. *Statistics for Social Research*. Melbourne: McMillan.

Newton's gun: Newton, I., 1728, *A Treatise of the System of the World*. pp. 4-7 of the 1731 edition.

Dedekind, J.W.R., 1888, *What are numbers and what should they be?*

Freud extends folk psychology: Hopkins, J., 1991, The interpretation of dreams. In Neu., J., ed., *The Cambridge Companion to Freud*. Cambridge: Cambridge University Press, 86-135.

10. Does philosophical knowledge exist?

Jackson, F., 1998. *From metaphysics to Ethics*. Oxford: Oxford University Press. Williamson, T., 2008, *The philosophy of philosophy*. Oxford: Wiley-Blackwell.

A cautionary position: Goldman, A., 1989, Metaphysics, Mind, and Mental Science, *Philosophical Topics*; reprinted in Goldman, A., *Liaisons*, Cambridge, Mass.: MIT Press, 1992, 35-48.

11. How is philosophy taught?

Rossi, P., *La filosofia*, Torino: Utet, 1995: a view of the philosophy of the twentieth century, and on the irreducible variety of the latter.

Sounds, primary qualities and secondary qualities: Casati, R., Dokic, J., *Sounds*. Stanford Encyclopedia of Philosophy, www.plato.stanford.edu.

Berkeley's argument that all qualities would be subjective: Berkeley, G., 1710, *Treatise on the Principles of Human Nature, Part I*.

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Logic too is negotiable: Quine, W.v.O, 1951, Two dogmas of empiricism. *The Philosophical Review* 60: 20-43.

The logical propaedeutics: Elster, J., Føllesdal, D., Walloe, L., 1988, *Rationale Argumentation. Berlin*: De Gruyter. The phrase cited in the text is from a personal communication by D. Føllesdal.

A truly blurred actor: Allen, W. 1997. *Deconstructing Harry*. An excavation in the confusion between ontology and epistemology: Varzi, A.C., 2010, *Il mondo messo a fuoco*. Bari: Laterza.

Is obscurity of expression a value? Sperber, D., 2007, The Guru Effect, *Magyar Psychologists Szemle* 62 (Hungarian Psychological Review), 1, 127-138.

Narratives that run through our lives: Schapp, W., 1953, *In Geschichten Verstrickt*. Hamburg: Verlag Richard Meiner.

The limits of the world you believe you live in: Weir, P., 1998, *The Truman Show*. To add a small autobiographical note: part of the research I have conducted in recent years has been on borderline cases of material reality: entities such as shadows, holes, sounds, events, which although not immaterial (as dreams and numbers could be) are nevertheless borderline

cases of material reality. Understanding these entities as variations on a theme allows us to make hypotheses about the structure of our ideas about material reality.

The theater of estrangement: Bertolt Brecht: *Über das experimentelle Theater 1939*, in: *Gesammelte Werke*, Bd. 15., Frankfurt/M.

The *Twilight Zone* episodes mentioned in the text: A. Ganzer, 1960, *The Hitch-Hiker*. Heyes, D., 1960, *The After Hours*. Leader, T., 1960, *Long Live Walter Jameson*. Florey, R., 1959, *Perchance to Dream*. Heyes, D., 1959, *And When the Sky Was Opened*. Claxton, W., 1960, *The Last Flight*. Stevens, R., 1959, *Walking Distance*. Brahm, J., 1960, *Mirror Image*. Post, T., 1960, *A World of Difference*. Bare, R. L., 1960, *Third from the Sun*. Rosenberg, S., 1960, *I Shot an Arrow Into the Air*. Many of these episodes were written by Rod Sterling, who directed the series. The *Twilight Zone* "bible" is Zicree, M.S., 1980, *The Twilight Zone Companion*. New York: Bantam Books. Other examples of the *Twilight Zone* among the many that deserve looking at: in *A world of his own* (R. Neson, 196), the dictaphone contains the characters' lives; in *A world of difference* (T. Post, 1960) the protagonist discovers he is a fictitious character. In *The sixteen millimeter shrine* (M. Leisen, 1959), the actress who does not accept to grow old obsessively views the films of her youth until she "enters" into it (revisited in Woody Allen's *The Purple Rose of Cairo*, 1985). Films dealing with similar themes: Night, M., 2006, *The sixth sense*. Forster, M., 2006, *Stranger than fiction*.

The Makropulos Affair (1922) of Capek was set into music by Leoš Janáček and performed for the first time in 1926. Commenting on the plot, philosopher Bernard Williams stated in a very questionable way that the demand for immortality is not acceptable: Bernard Williams, *The Makropulos case: Reflections on the Tedium of Immortality*, *Problems of the Self*, Cambridge: Cambridge University Press, 1973. Many of us think that Williams manifested here lack of imagination, as Thomas Nagel said: Nagel, T., 1979. "Death," in Nagel, T., *Mortal Questions*, Cambridge: Cambridge University Press.

Time travel: Torrenco, G., 2010, *Guida filosofica ai viaggi nel tempo*. Bari: Laterza. Vonnegut, K., 1997, *Timequake*. And a cult film: Ramis, H., 1993.

The groundhog day. On which: Casati, R., 2009, La tragedia dell'eterno ritorno. In Massarenti, A., edited by, *Stramaleddetamente logico*. Bari: Laterza.

Sacks and the need to imagine the spiritual universes of mental illness: O. Sacks, *The man who mistook his wife for a hat*. The genre of the clinical story had remarkable results before Sacks - Freud to name but one. The closest text by theme and richness of description is A. Lurjia, 1968, *The Mind of a Mnemonist*, New York: Basic Books. The contacts with literature are many: J.L. Borges, 1942, *Funes the Memorious*.

12. What is the history of philosophy for?

In philosophy, disorientation is just around the corner; and sometimes it is accompanied by a curious feeling of familiarity. Those who attend a philosophy congress in India may feel both out of place and at home. In a discussion of philosophy of language (not Indian philosophy, but philosophy of contemporary language) at some point Sanskrit texts by ancient authors such as Pāṇini (4th century before the vulgar era) are mentioned. All of a sudden we realize the strange and provincial custom of providing quotations in Greek and German in western conferences. (Where the quotation is useless for the progress of the text).

Philology: M. Untersteiner, *Problemi di filologia filosofica*, edited by L. Sichirolo and M. Venturi Ferriolo, Milan: Cisalpino, 1979.

Fabricated history and its demystification: Hauser, A., 1971, *Social History of Art*. A critical review by Gombrich E.H., 1963, *Social History of Art*, in *Meditations on a Hobby Horse*.

Other demystifications: Koyré, A., 1957, *From the closed world to the infinite universe*. Criticized by Rossi, P., 2002, *I filosofi e le macchine 1400-1470*. Milan: Feltrinelli.

Croce's view about Heidegger: Croce, B. 1933, Un filosofo e un teologo, in *Conversazioni Critiche*, Serie Quinta, Bari: Laterza, 1939, pp. 362 ff.

Racist philosophy: Wundt, M., 1944, *Die Wurzeln der deutschen Philosophie in Stamm und Rasse*, Berlin: Junker and Dünnhaupt, 1944.

Primary and secondary qualities in history: for Democritus, see Sextus Empiricus, *Against the Mathematicians*, VII, 135; Pre-Socratics, fragment B9. Galileo, G., *The Assayer* (1623). Secondary qualities in science: Burt, E.A., 1924, *The Metaphysical Foundations of Modern Physical Science. A Historical and Critical Essay*. London: Kegan Paul, Trench, Trübner.

Jackson, F., 1986, What Mary didn't know. *Journal of Philosophy*, 291-295.

Ethnology as a representation of the possibilities inherent in the present: Descola, P., 1993, *The Spears of Twilight*. New Press, 1998.

13. The philosophy of philosophers

Philosophy as therapy: Wittgenstein, L., *Philosophical investigations*, § 133.

Philosophy of: P. Kivy, *Philosophy of Music*, Oxford University Press, p. 7.

The *Philosophy of Sport* has its own association (IAPS) and a magazine (the *Journal of the Philosophy of Sport*). On baseball, Gould, S.J. 1993, Baseball: Joys and lamentations. *New York review of Books*, Vol. 40, n. 1. (Exercise: Think of a conceptual negotiation in soccer, the transition from a system that attributes two points to victory and one to tie to one that attributes three points to victory and one to tie. Make an evaluation of the consequences).

On queueing: Schwartz, B., 1975, *Queueing and Waiting: Studies in the Social Organization of Access and Delay*. Chicago: University of Chicago Press.

The immense literature on fictitious objects today is dedicated above all to issues such as the existential status of fictitious characters. Originally, it had a different kind of inspiration. Alexius Meinong wanted to give meaning to substantial parts of mathematics - the logical assumptions, the use of ideal geometric figures, the statements of probability - for which no object or state of affairs appears to exist to serve as a reference.

Internal/external questions: Carnap, R., Empiricism, Semantics, and Ontology, *Revue Internationale de Philosophie*, Vol. 4 (1950), pp. 20-40.

On Nomic: Hofstadter, D. Nomic: A Game That Explores the Reflexivity of Law, *Scientific American*, 246, 6 (June 1982) 16-28.

Episodes that create philosophical reflections: Canetti, E., 1960, *Crowds and Power*.

14. At the end of the day

Transparency and secrecy - see the documentary by Galison, R., Moss, R., 2008, *Secrecy*.

Early medicalisation: Jacob, F., 1998, *Of Flies, Mice, and Men*. Harvard University Press, pp. 99 ff.:

"Until now, a person became 'sick' only when symptoms appeared. People would go to the doctor complaining of a few aches and pains. Which the availability of the data on the genome, future illnesses or the risk of illnesses will be revealed. People will become patients before their time. Their condition, their future will be discussed in medical terms, even though they feel fine and will remain in good health for years... Today, risk is measured by abstract numbers that barely have any effect on a person's perception of himself. In future, we will know how the same risk is recorded in chemical terms, in a person's genome, as in indelible part of himself... Potentially sick people who hold positions of power will be closely monitored."

Brute force epistemology: Anderson, C., 2008, The End of Theory: The Data Deluge Makes the Scientific Method Obsolete. *Wired*, 16:07.

Bureaucracy vs. democracy: Ferraris, M., Morena, L., edited by, 2009, *Europe!* - monographic issue of *The Monist*, 92, 2.

The fascination of neuroimages: Legrenzi, P., Umiltà, C., 2009/2011, *Neuromania*. Oxford university Press.

Donating: Singer, P., 2009, *The life you can save*. New York: Random House.

Newton Garver and academic freedom: Keyishian et al v. Board of Regents of the University of the State of New York et al. No. 105 SUPREME COURT OF THE UNITED STATES 385 U.S. 589 Argued November 17, 1966 Decided January 23, 1967.

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