Beyond the world, i.e. beyond the collection of finite things, there is some one being who rules, not only as the soul is the ruler in me (or, to put it better, as the self is the ruler in my body), but also in a much higher way. For the one being who rules the universe doesn’t just •govern the world but also •builds or makes it. He is above the world and outside it, so to speak, and therefore he is the ultimate reason for things. •That follows because

•he is the only extramundane thing, i.e. the only thing that exists out of the world; and •nothing in the world could be the ultimate reason for things.

I now explain that second premise•. We can’t find in any individual thing, or even in the entire collection and series of things, a sufficient reason why they exist. Suppose that a book on the elements of geometry has always existed, each copy made from an earlier one, •with no first copy•. We can explain any given copy of the book in terms of the previous book from which it was copied; but this will never lead us to a complete explanation, no matter how far back we go in the series of books. For we can always ask:

•Why have there always been such books?
•Why were these books written?
•Why were they written in the way they were?

The different states of the world are like that series of books: each state is in a way copied from the preceding state—though here •the ‘copying’ isn’t an exact transcription, but happens• in accordance with certain laws of change. And so, •with the world as with the books•, however far back we might go into earlier and earlier states we’ll never find in them a complete explanation for •why there is any world at all, and •why the world is as it is.
It’s not that in the backward search we’ll reach a first state of the world, with no earlier one to explain it. So far as that is concerned, you are welcome to imagine that the world has always existed. But you are assuming only a succession of states, and no reason for the world can be found in any one of them (or in any set of them, however large); so obviously the reason for the world must be found elsewhere.

That means: out of the world, i.e. out of the totality of finite things, and so in something infinite and eternal. For even if eternal things don’t yield causes, they give reasons. For a thing that lasts through time without changing, the reason is the nature or essence of the thing itself; and in a series of changing things (if we imagine that it goes back for ever) the reason is the superior strength of certain inclinations, as we shall soon see. (These reasons only incline; they don’t necessitate with absolute or metaphysical necessity so that the contrary implies a contradiction.) From this it appears that even if we assume the past eternity of the world, we can’t escape the ultimate and out-of-the-world reason for things, namely God.

[In Leibniz’s time, ‘physical’ and its Latin and French equivalents did not mean ‘bodily’ or ‘pertaining to matter’, but much more generally ‘pertaining to what actually contingently goes on in the real world’.] The reasons for the world, therefore, lie hidden in something outside the world, something different from the chain of states or series of things that jointly constitute the world. And so we must move from

- physical or hypothetical necessity, which determines the later things in the world from the earlier

...something that is absolutely or metaphysically necessary, for which a reason can’t be given.

For the present world is not absolutely or metaphysically necessary, but only physically or hypothetically necessary.

That is, given that the world is thus and so at one time, it follows that such and such events will occur later; and it is the ‘given’ in this that makes it hypothetical. Therefore, since the ultimate ground must lie in something metaphysically necessary, and since the reason for an existing thing must come from something that actually exists, it follows that there must exist some one metaphysically necessary entity. It has to be different from the plurality of things, i.e. from the world, which we have shown not to be metaphysically necessary. What is it for a thing to be metaphysically necessary? It is for the thing’s essence to include existence.

Now, to understand a little more clearly how temporal, contingent, or physical truths arise from eternal, essential or metaphysical ones, we must start by acknowledging this:

Because something rather than nothing exists, there is a certain urge for existence—a claim to existence, so to speak—in possible things or in possibility or essence itself. In short, essence in and of itself strains towards existence.

And it follows from this that each possible, that is, each thing that expresses essence or possible reality, strains towards existence; and these strainings are strong in proportion to the amount of essence or reality that the straining possibility contains. Or we could say: according to the amount of perfection it contains, for perfection is just the amount of essence. [Leibniz writes that the possibilities strain for existence pari jure = ‘with equal right’. He presumably means that all the strainings are governed by a single law or principle, the one aligning strength with amount of reality or perfection. The phrase occurs twice more, and will be left untranslated.]

This makes it obvious that of the infinite combinations of possibilities and possible series, the one that exists is the one through which the most essence or possibility is brought into existence. A good rule to follow in practical affairs is:
always aim to get the most out of the least, that is, try for the maximum effect at the minimum cost, so to speak.

For example, in building on a particular plot of ground (the ‘cost’), construct the most pleasing building you can, with the rooms as numerous as the site can take and as elegant as possible. Applying this to our present context: given the temporal and spatial extent of the world—in short, its capacity or receptivity—fit into that as great a variety of kinds of thing as possible.

A different and perhaps better analogy is provided by certain games, in which all the places on the board are supposed to be filled in accordance with certain rules; towards the end of such a game a player may find that he has to use some trick if he is to fill certain places that he wants to fill. If he succeeds in filling them, but only by resorting special measures, he has achieved a maximal result but not with minimal means. In contrast with this, there is a certain procedure through which he can most easily fill the board, thus getting the same result but with minimal ‘cost’. Other examples of the power of ‘minimal cost’: if we are told ‘Draw a triangle’, with no other directions, we will draw an equilateral triangle; if we are told ‘Go from the lecture hall to the library’, without being told what route to take, we will choose the easiest or the shortest route. Similarly, given that existence is to prevail over nonexistence, i.e. something is to exist rather than nothing, i.e. something is to pass from possibility to actuality, with nothing further than this being laid down, it follows that there would be as much as there possibly can be, given the capacity of time and space (that is, the capacity of the order of possible existence). In short, it is just like tiles arranged so as to get down as many as possible in a given area.

From this we can now understand in a wonderful way how the very origination of things involves a certain divine mathematics or metaphysical mechanism, and how the ‘maximum’ of which I have spoken is determined. The case is like that in geometry, where the right angle is distinguished from all other angles; or like the case of a liquid placed in something of a different kind—specifically, held by something solid but flexible, like a rubber balloon—which forms itself into a sphere, the most capacious shape; or—the best analogy—like the situation in common mechanics where the struggling of many heavy bodies with one another finally generates the motion yielding the greatest descent over-all. For just as all possibles strain pari jure for existence in proportion to how much reality they contain, so too all heavy things strain pari jure to descend in proportion to how heavy they are; and just as the latter case yields the motion that contains as much descent of heavy things as is possible, the former case gives rise to a world in which the greatest number of possibles is produced.

So now we have physical necessity derived from metaphysical necessity. For even if the world isn't metaphysically necessary, in the sense that its contrary implies a contradiction or a logical absurdity, it is physically necessary or determined, in the sense that its contrary implies imperfection or moral absurdity. And just as the source of what essences there are is possibility, so the source of what exists is perfection or degree of essence (through which the greatest number of things are compossible). This also makes it obvious how God, the author of the world, can be free even though everything happens determinately. It's because he acts from a principle of wisdom or perfection, which doesn't make it necessary for him to act as he does but makes it certain that he will act in that way. It is only
out of ignorance that one is in a state of indifference in which one might go this way and might go that; the wiser someone is, the more settled it is that he will do what is most perfect.

Someone may object:

You compare a certain determining metaphysical mechanism with the physical mechanism of heavy bodies; it's a neat-looking comparison, but it doesn't work. The trouble is that the effortful heavy bodies really exist, whereas possibilities or essences before anything exists—or rather outside of existence—are imaginary or fictional, so it's no use looking to them for a reason for existence.

I reply that those essences are not fictitious, nor are the eternal truths that involve them. On the contrary, they exist in a certain realm (so to speak) of ideas, namely, in God who is the source of every essence and of the existence of everything else. That there seem to be grounds for what I am saying here is shown by the sheer fact that the actual series of things exists. The argument goes as follows:

- The reason why anything exists can't be found in the actual series of things,
- The reason why anything exists must be sought in metaphysical necessities or in eternal truths, because there is nowhere else it can be found.

But

- Existing things can't derive from anything but existing things,
- Eternal truths must be existing things,

and they have their existence in a certain absolute or metaphysically necessary subject, i.e. in God, through whom things that would otherwise be imaginary are realized, to use a barbaric but graphic expression. And indeed we discover that everything in the world takes place in accordance with laws that are eternally true, laws that are not merely geometrical, that is, in accordance with material necessities, but also metaphysical, that is, in accordance with formal reasons.

This is true not only in very general terms, in the reason I have given why the world exists rather than not, and why it exists this way rather than some other way (which has to be sought in the straining of possibles towards existence), but also down at the level of particular events. In these we see how wonderfully the metaphysical laws of cause, power and action take their place in the whole of nature, and we see that these metaphysical laws prevail over the purely geometrical laws of matter. As I found to my great surprise in explaining the laws of motion, this is so true that I finally had to abandon the physics I had defended in my youth, when I was more of a materialist, as I have explained at greater length elsewhere. [Leibniz describes that physics as 'the law of the geometrical composition of conatus'. That last word—literally meaning 'trying' or 'striving'—is a technical term of his, standing for an element in any physical force (see his 'Essay on Dynamics' section 2). The 'geometrical' approach to it came from Descartes's doctrine that there is nothing to matter except its extension, meaning that its only real properties are geometrical ones.]

So there we have it: the rock-bottom reason for the reality of both essences and existences lies in one thing, which must be greater than the world, be higher than the world, and have existed before the world did; since it is what brings it about not only that the things that make up the world have existence, but also that possibilities have their own reality. It is because of this thing that there
are *humans*, and •there is *humanity*, with this considered as an essence, a possibility, a possible-way-of-being. Moreover, it has to be a *single* source, because of how all these possibilities are interconnected. It is obvious also that things *continuously* flow from this source: they have been *and still are being* produced by it. Why? Because •if we attend only to the world as a going concern, it is not clear why one state of the world should lead to *this* subsequent state rather than to *that* one, •and so for a full explanation we have to look outside the world. We also see how it can be •that God acts not only physically but freely, •that he provides not only the efficient cause of things but the final cause, and •that he is the reason not only for the greatness or power in the mechanism of the universe as now constituted but also for the goodness or wisdom in constituting it. [An ‘efficient cause’ is just what you and I would call a *cause* with no adjective; a ‘final cause’ is an end, aim, or purpose.]

Someone might object: ‘You are here confusing •moral perfection or goodness with •metaphysical perfection or greatness. I agree that the ultimate cause of things must have •the latter, but I don’t agree about •the former.’ I reply what I have said implies not only that the world is •physically (or, if you prefer, metaphysically) most perfect, i.e. the series of things that has been produced is the one that brings the greatest amount of reality into existence, but also that the world is •morally most perfect, because moral perfection is really physical perfection with respect to minds. [See the note on ‘physical’ in the first column on page 2.] It follows from this that the world is not only •the most admirable machine but also—considered as made up of minds—•the best republic, the one through which minds derive the greatest possible happiness and joy (which is what their physical perfection consists in).

Someone may object:

Don’t we experience quite the opposite in the world? For the worst often happens to the best: not only innocent animals but also humans are injured and killed, even tortured. In the end, the world appears to be some sort of confused chaos rather than something ordered by supreme wisdom—especially if one takes note of how humans behave!

I agree that that’s how it appears at first glance, but a deeper look at things supports the contrary view. From the very considerations that I brought forward it is obvious *a priori* that all things, even minds, are of the highest perfection possible.

Anyway, it is—as lawyers say—unjust to make a judgment before examining the entire law. We have only the memory that history gives us of a few thousand years; what a small portion *that* is of the eternity that extends without measure! Yet on the basis of such meagre experience we rashly make judgments about the immense and the eternal, like people born and raised...in subterranean salt-mines, people who think there is no light in the world but the dim light of their torches, which is scarcely bright enough to guide their steps! Look at a lovely picture, then cover it up except for one small part. That part will look like a jumble of colours, showing no skill and giving no delight; and the more closely we examine it the *more* it will look that way. But when the covering is removed and you see the whole surface from a suitable distance, you will grasp that what looked like accidental splotches on the canvas had been made with great skill by the artist. And what the eyes discover in a painting, the ears discover in music. The most distinguished composers often mix dissonances with smooth harmonies in order to *disturb* the listener—to *disturb* him, as it were—so that he...
will be momentarily anxious about what is to happen, and will feel all the more pleasure when order is restored. There are also many examples of this outside painting and music. We delight in small dangers or bad experiences just because when we have come through them they let us feel or show our power or happiness. Again, we delight in the spectacle of rope walkers or sword dancers just because they can incite fear in us; and we ourselves laughingly half toss children, as if we are about to throw them away. . . . On that same principle, if we always ate sweet things they would become insipid; we need also sharp, acidic, and even bitter tastes mixed in with the rest to stimulate our palate. Someone who hasn’t tasted bitter things doesn’t deserve sweet things, and indeed won’t appreciate them! This is a law of delight: Pleasure doesn’t come from uniformity, which creates disgust and makes us numb rather than happy.

When I spoke of a part that can be disordered without detracting from the harmony of the whole, don’t take me to have meant that such parts don’t make sense in themselves. And don’t take me to have meant that it would be sufficient for the world as a whole to be perfect of its kind, even if the human race were miserable, no attention was paid to justice in the universe, and no care was taken for us, as certain persons of poor judgment—such as Spinoza—believe. It should be realized that, just as in the best constituted republic, care is taken that each individual gets what is good for him as far as possible, so the universe wouldn’t perfect unless individuals were taken into account as far as is consistent with the universal harmony. There couldn’t be a better standard in this matter than the law of justice, which lays down that everyone is to participate in the perfection of the universe, and to have personal happiness, in proportion to his own virtue and to the extent that his will has contributed to the common good. This vindicates the charity and love of God, which constitutes the entire force and power of the Christian religion, in the judgment of wise theologians. The fact that minds are specially catered for in the universe shouldn’t cause surprise, given certain facts about them. Minds are produced in the exact image of God. They relate to him not only as machines relate to their maker (as other things do), but also as citizens to their prince. They are going to last as long as the universe itself does. They express the whole universe in a certain way, concentrating it in themselves, so that they might be called ‘whole parts’. [That last point reflects Leibniz’s doctrine, not expounded here, that the whole truth about the universe—past, present and future—could in principle be read off from the state of any one substance at any moment.]

We must also accept that misfortunes, especially when they come to good people, only lead to the greater good of the sufferers. This is not only a theological truth concerning people, but is true in the natural world as well—e.g. a seed flung to the ground must undergo hardships before it bears fruit. Over-all one can say that short-term afflictions are long-term benefits, because they are short paths to greater perfection. . . . This is what you might call stepping back in order to leap forward with greater force. These considerations should be regarded not merely as pleasing and consoling but also as utterly true. The two go together, because I think, nothing in the universe is truer than happiness, and nothing is happier or sweeter than truth.

[The words ‘cultivation’ and ‘cultivate’ will be used in a slightly wider sense than is now customary; in some places ‘development’ might read better. But Leibniz uses the same noun and cognate verb in each place, and the translation keeps that in sight.] In addition to the beauties and perfections of the totality of God’s works, we must also recognize a certain constant and unbounded progress in the universe as a whole, so that it always proceeds to greater cultivation, just as a large part of our earth is now
cultivated, and more and more of it will become so. Certain things regress to their original wild state and others are destroyed and buried, but we should understand this in the same way as the afflictions that I discussed a little earlier: this destruction and burying leads to the achievement of something better, so that we make a profit from the loss, in a sense.

You may object: ‘If this were so, the world should have become Paradise long ago!’ I have a quick answer to that. Many substances have already reached great perfection; but because of the infinite divisibility of the continuum, there are always parts asleep in the depths of things, yet to be roused and advanced to greater and better things, advanced to greater cultivation, in short. Thus, progress never comes to an end. [When Leibniz writes of ‘parts asleep in the depths of things’ he reflects his doctrine—not expounded here—that everything in the natural world is made of organisms, each of which is made of still smaller organisms, each of which is... and so on ad infinitum.]