

The Notion of Value
William Forster Lloyd
(1833)

In my last lecture, I treated, in the first place, of the subject of utility, and afterwards proceeded to consider the sense in which Adam Smith applied the term value, while inquiring respecting the real measure of exchangeable value. I then endeavoured to show, that he could not generally mean by it the power of purchasing other goods which the possession of any object conveys -- a meaning, which involves necessarily a comparison, and therefore a relation, of different objects, while the context seemed to refer to something positive and absolute -- to something, which could be understood as belonging to a single object, taken by itself and without reference to other subjects. From an examination of some particular passages, I collected that, in those passages at least, he was using the term in the sense of the real importance of an object to the person possessing it, and that he made the importance to depend on the difficulty of attainment. I now proceed to the further consideration of the view of the subject.

A question has been sometimes agitated respecting the possibility of a general glut of commodities, or, in other words, of universal over-production. A glut of commodities of any one species is on all hands admitted to be not only a possible but frequent occurrence. So likewise, but in a decreasing degree of probability and frequency, of two, three, four, or more species. All, therefore, that is denied is the probability of its extending at once to the majority of commodities, and the possibility of its being universal. I mention this question, not with the view of entering on the full consideration of it at present, but only because it will be useful to my purpose to draw attention to some of the arguments advanced by those who maintain the negative side. A general glut of commodities is, they say, the same thing as a general superabundance of wealth, and would indicate the full satisfaction of all human wants; but that there is, in fact, no assignable limit to the desires of mankind; for when one inconvenience is removed, others present themselves, which before had never been thought of; and thus the passion for wealth expands with the gratification of existing wants, and, if not absolutely infinite, may at least be termed indefinite; being capable of extending itself far beyond any bounds, to which the most enthusiastic imagination can believe that the power of human production will ever reach. Now, though it may be reasonably urged, that these arguments do not bear immediately upon the main question respecting a glut of commodities, which is concerned rather with the remuneration of the producers than with the disposition to consumption, yet no one can doubt the general truth of the propositions themselves. Nobody, for example, can maintain that, were the aggregate incomes of all persons in the country to be increased tenfold, they would find any difficulty in disposing of them. *Nec Croesi fortuna unquam nec Persica regis Sufficiens animo* -- (Juvenal) is an apt quotation which I have met with in relation to this subject, and contains a truth acknowledged by philosophy and confirmed by the experience of mankind. But whether these arguments be applicable or not to the question of a glut, they would not, I think, be even true in themselves, if the objects which can gratify human wants were limited in the number of their kinds.

It is only the multiplication of the kinds of wants which renders the passion for wealth unlimited. The wants of savages, for example, are confined to a few of the most necessary articles, such as food and clothing, and even of these they have not a sufficiency. Supposing, however, for a moment, that the catalogue of their wants could remain invariable, it is not

difficult to conceive the means, by which their existing wants might be fully gratified. They might be fed to satiety, and clothed to satiety, and thus, (all new wants being excluded by the hypothesis,) the final sum of their wealth would be reached, and all further production would be useless. The same would be true of more civilized societies, were their wants in like manner limited to any determinate number. If no books of any other description had ever been wanted than such as existed at the time when printing was invented, this art might soon have multiplied copies to a degree fully adequate to the supply of all. The same is true of every other particular commodity; and thus, it is the infinite variety of wants, and of the kinds of commodities necessary to their gratification, which alone renders the passion for wealth indefinite and insatiable. In the case of each species infima, as logicians call it, the desire is limited. It is now time to point out in what manner these observations bear upon the question which is directly before us. We have come to the conclusion, that an increase of quantity will at length exhaust, or satisfy to the utmost, the demand for any specific object of desire.

Having reached this point, let us now inquire, what happens, with respect to value, at the time when the demand or want is thus fully satisfied? It will be found that, in the case of every commodity, its value vanishes at the very instant of satisfaction. Take, for example, water. Water is valueless, or nearly so, except under some special circumstances, by reason of its abundance. Every person has at his command more than is sufficient for every purpose to which he can wish to apply it. He has, therefore, no reason for being sparing in its use. If any remains after satisfying the present occasion, he has no cause for hoarding it, or for making a property of it, or debarring others from the use of it. I mention these particulars, because, where they are present, they are sure indications of value, and, according to their intensity, so is the intensity of the value. We are sparing in the use of a valuable object, because we can thus make it last the longer, and we wish to make it last the longer because, when spent and consumed, it cannot easily be replaced. We hoard it, we appropriate it, we debar others from the use of it, for the same reason. In the reasons, therefore, which exist for preserving and for retaining the possession of an object, its value essentially consists. It has with great propriety been defined to mean the esteem in which an object is held. But to make the definition complete and easily intelligible, some further explanation may perhaps be necessary.

Let us suppose the case of an hungry man having one ounce, and only one ounce of food at his command. To him, the ounce is obviously of very great importance. Suppose him now to have two ounces. These are still of great importance; but the importance of the second is not equal to that of the single ounce. In other words, he would not suffer so much from parting with one of his two ounces, retaining one for himself, as he would suffer, when he had only one ounce, by parting with that one, and so retaining none. The importance of a third ounce is still less than that of the second; so likewise of a fourth, until at length, in the continual increase of the number of ounces, we come to a point, when, "through that infallible specific, eating," the appetite is entirely or nearly lost, and when, with reset to a single ounce, it is a matter of indifference whether it is parted with or retained. Thus while he is scantily supplied with food, he holds a given portion of it in great esteem - in other words, he sets a great value on it; when he supply is increased, he esteem for a given quantity is lessened, or, in other words, he sets a less value on it.

Hence the appetite for food may be compared to a spring, a watch-spring for example, which, when fully compressed, or wound up, has the greatest tendency to expansion. By degrees, as it becomes more and more actually expanded, its tendency to fly out is diminished, until at length it ceases altogether. The case is the same with respect to all other commodities. There may be a certain amount of convenience in having a timepiece in every room of a house; still the convenience of the first, that is, the importance of having one, is probably greater than that of all the rest put together. So, a person who has one house may wish to have a second, but still the want of the second is not equal to that of the first. Each different kind, therefore, of human wants may like that of food, be compared to a spring; and, in the comparison, the different wants, according to their several differences, will be represented by spring of different degrees of strength.

For example, the wants which food can satisfy will be represented by a spring of great power. So also those to supply which water is required. For representing the wants of clothing and fuel, which are articles not so indispensably necessary to human existence, spring of an inferior degree of power may suffice. Passing on to the artificial wants, we may represent them according to their intensities, by lesser spring of various degrees of strength. Let us enter a little more minutely into this comparison. We can imagine a spring of such strength that a weight of many tons shall be required in order that its elasticity may be fully and entirely confined. Yet when some play has been allowed to it, a less force shall be sufficient to retain it in its new position. And as it approaches the limit of its power of expansion, the force even of the hair-spring of a watch shall be sufficient to keep it in its place.

There are, therefore, two ways in which the same two springs may be compared. We may compare them absolutely, as when we say that the main-spring of a watch is stronger than the hair-spring; or, on the other hand, we may compare their expansive forces under some stated modification of their actual conditions; as, in the instance of a watch which is nearly down and on the point of stopping, we may say that the main-spring has scarcely more strength, that is, in its actual state of expansion, has scarcely any greater tendency to expand itself further than the hair-spring has, when it is most contracted. I direct your attention to these two modes of comparing the same two spring, because I think they may serve to illustrate the difference between utility and value.

We estimate the utilities of objects by the importance of the wants they are capable of supplying, considered absolutely; in the same manner as when we say that the main-spring of a watch is stronger than the hairspring. As the main-spring remains equally strong whether the watch be wound up or unwound, so a difference in the degree in which any want is supplied makes no difference in the utility of the object which can supply it. Water is no more useful in a ship at sea, where it is scarce, than on land, where it is plentiful. The utility of corn is the same after an abundant harvest as in time of famine. But the wants, on which value depends, are analogous to the tendencies of spring, which are already in part extended, to extend themselves further. They vary with every variation in the quantity of commodities, and in the consequent variation of the degree in which the absolute want is satisfied, as the

expansive tendency of a spring varies with every variation of the degree of its actual expansion. According to the mode of considering the force of a spring, the force of the main-spring of a watch may, as I have already mentioned, be less than that of the hair-spring; and, according to the analogous mode of considering wants, the want of the most useful may be less than that of the least useful articles. Water is more wanted by a man almost dying with thirst, than by another who has quenched his thirst, and desires only to wash himself. It is on want, thus estimated, that value depends. It is not the same thing as the want, but it is proportional to it, and arises out of it. The gratification derivable from the use of an object must be taken to be equal to the want of it, thus estimated; and the value, properly speaking, is the feeling of affection or esteem for the object, arising from a sense of the loss of the gratification contingent on the loss of the object. In its ultimate sense, then, the term undoubtedly signifies a feeling of the mind, which shows itself always at the margin of separation between the satisfied and unsatisfied wants. One point, amongst others, in which it differs from utility, is, that it attaches only to an object in possession, while, with respect to the idea of utility, possession is a matter of indifference. I think that the distinction which I have pointed out between the ways in which the forces of any two spring may be compared, will be found, if considered with attention, to throw great light on the difference between utility and value, to mark their respective limits, and to show clearly the point of contact, where the one idea is apt to pass into the other, and where the danger of confusion is mostly to be apprehended. It must, however, be borne in mind, that the analog subsists, only between the two ways in which the forces may be compared, and those in which human wants may be compared; and not immediately, between the two ways in which the forces may be compared, and the relation which subsists between the ideas of utility and value.

The contemplation of the analog will serve to explain the two different ways of considering human wants, and these being understood, it is then easy to pass on to the ideas of utility and value, which are connected with the different wants, and naturally arise out of them. I intimated just now that there was danger of confusion. If, to a man who has already half a dozen coats, you should offer to give another, he might probably reply that he would have no use for it. Here, however, he would speak, not of the abstract utility of the coat, but of its special utility to him under the circumstance of the want of coats being already so far supplied. This, though not quite the same thing as value, approaches very near to it. The coat would be of no use to him; therefore, were he to have it, it would not be valuable in his estimation. He would have no reason for retaining the possession of it, or, were he to lose it, to regret the loss. But this is very different from the utility of the coat in the general sense of utility, and ought not to be confounded with it.

Perhaps the following may be a good rule for distinguishing between utility and value; and, if it is borne in mind, there will, I think, be little danger of confounding the two ideas. To obtain the idea of the utility of an object, imagine what would happen, what inconvenience would arise, from the loss, not of that object alone, but of the whole species to which that object belong. Thus, to obtain the idea of the utility of water, imagine the predicament we should be in, were we deprived, not of a pailful which may chance to be before our eyes, and may stand destined to some particular use, but of the whole element of water. But value, as I have

already mentioned, attaches to an object in possession, which, consequently, cannot be unlimited in quantity. To obtain, therefore, the idea of value, imagine yourselves deprived, not, as before, of the whole of the species, but only of the fission of a certain definite quantity. Take again, for example, the instance of the pail of water, and suppose it to be overturned. Its value would then be estimable, either by the inconvenience which would be felt, supposing the particular want which it was intended to supply to remain unsatisfied, or by the trouble of going to the well again, whichever might be least. I may here remark that, though in the course of this lecture I have spoken of water as valueless, and it is the example commonly adduced of a very useful article quite destitute of value, yet this is only to be understood of exchangeable value. Water in possession has almost always some value. But the value, under ordinary circumstances, is small, and not equal to the trouble of an exchange. And on this account water rarely becomes the subject of exchange.

I have here been incidentally led to the mention of exchanges. But it is to be observed that, throughout the explanation, upon which I have hitherto been engaged, of the nature of value, there has been no need for one word about exchanges. As I have explained the idea, it consists in the real importance of an object to the person who possesses it -- a definition, which may be collected from a passage of Adam Smith, as I mentioned in my last lecture. And objects may be of real importance to the person who possesses them, as much in the case of an isolated individual, such as Robinson Crusoe, as in the case of a society, such as exists in England, and in all other countries with which we are acquainted. The commercial intercourse, however, to which we are accustomed, and in which the idea of value is commonly more or less blended with that of an exchange, has been so long established, that it requires some effort of the imagination to form a distinct idea of value by itself, disengaged, on the one hand; from value in exchange, and, on the other, from the mere notion of utility. It would be difficult to collect the necessary illustrations from the facts and occurrences with which we are familiar; and cases purely hypothetical are less interesting and less instructive. I have been looking into Robinson Crusoe for examples of value, but have not found any thing so much to the point as I could have wished. Still the complete separation of the idea appears to me to be so necessary a preliminary, in order to a clear conception of the nature of value in exchange, and of the causes which determine it, that I think it not improper to read to you the following passages, which are the best that I have been able to find. I presume you to be all acquainted with the life and adventures of Robinson Crusoe. It will be remembered that in shaking out an old bag which he wanted for some purpose, he unconsciously sowed a few grains of barley and rice, which had chanced to remain in the crevices of the bag. After mentioning that these took root, sprung up, and ripened, the narrative proceeds thus: "I carefully saved the ears of the corn, you may be sure, in their season, which was about the end of June; and laying up every corn, I resolved to sow them all again; hoping in time to have some quantity sufficient to supply me with bread; but it was not till the fourth year that I could allow myself the least grain of this corn to eat, and even then sparingly, as I shall show afterwards in its order." In all this, he showed the sense, not merely of utility, but also of the value of his corn. I proceed, however to another passage.

"After I had been in my cave for some time, and found no more shocks of the earthquake to follow, I began to be somewhat more composed. And now, to support my spirits, which indeed wanted it very much, I went to my little store, and took a small sup of rum, which, however, I did then and always very sparingly, knowing I could have no more when that was gone." His rum was valuable. Now let us see what he says about his ink. "A little after this, my ink beginning to fail me, I contented myself to use it more sparingly; and to note down only the most remarkable events of my life, without continuing a daily memorandum of other things." Again: "The next thing to my ink being wasted, was that of my bread -- I mean the biscuit, which I had brought out of the ship: this I had husbanded to the last degree, allowing myself but one cake of bread a day for above a year; and yet I was quite without bread for nearly a year before I got any corn of my own." In another passage he mentions finding on the sea-shore an infinite variety of fowls, on which he observes, "I could have shot as many as I pleased, but was very sparing of my powder and shot." I will not stop to remark farther on these passages, than that all this caution in the consumption of the different articles which he had saved from the ship, indicated a sense of their value, properly so called.

That which has no value cannot be consumed to waste, and wherever there is the fear of wasting there is value. It is justly observed by Locke, that in a man-of-war silver may not be of equal value to gunpowder. Yet, were the silver and the gunpowder on board, both of them public property, there would be no exchanges, and consequently no exchangeable value. And, in the same sense in which the gunpowder might be more valuable than the silver, we can understand how in a siege or sea voyage water can be valuable, though, being public property, it cannot become the subject of an exchange. In general, in order to find instances of value existing without exchanges, we have only to exclude the commerce of a plurality of properties. In every exchange there is a transfer of property. In the case, therefore, of a solitary individual, such as Robinson Crusoe, there can be no exchange, because then there would be nobody with whom to exchange. Again, in a country in which the division of labour is unestablished, and in which each man combines in his own person a variety of employments, and procures and prepares for his family whatever articles they consume, it is plain that barter and sale, and consequently value in exchange, would be unknown. Still these articles would be valuable -- the possession of them would be of importance to the person possessing them, though they would not be exchangeable. So likewise in a society having an internal community of goods and no external trade, there could be no exchangeable value, because of the absence of plurality of properties.

We may imagine such a society to supply itself more or less plentifully with the luxuries, comforts, and necessaries of life. But these, though not exchangeable, yet should they be produced in a degree insufficient for the full supply of every want, would not be destitute of value. Adam Smith remarks, that man is the only animal which makes exchanges. "Nobody," he says, "ever saw one dog make a fair and deliberate exchange of one bone for another, with another dog." "Nobody" he continues, "ever saw one animal, by its gestures and natural cries, signify to another, 'This is mine, that yours; I am willing to give you the for that.'" But we may observe, that dogs have a sense of value, though not of exchangeable value. Though nobody has ever seen two dogs making an exchange, yet a dog has been often seen to hide a

bone. The dog does this from a sense of its value, properly so called. He does not do it merely from a sense of utility, or, in other words, because he likes a bone, but because he knows that a bone is a good thing which is not always to be had when wanted. In order that two dogs should make an exchange then, besides a sense of value, and besides also other circumstances which I shall hereafter explain, it would be necessary that they should understand and mutually acknowledge the rights of property. But to the degree of citation dog have not yet attained. The nearest approach to it that I know of is in Constantinople, where the dog act the part of scavengers, and, it is said, have their regular beats, like beggars in London, no individual dog ever presuming to trespass beyond his own territory. Some few examples of value, in which the idea of an exchange is not concerned, might perhaps be taken from common life. We can well conceive an article made expressly for the use of an individual, and to him actually both useful and valuable, when to every other human being it would be absolutely useless, and when it would, therefore, be altogether destitute of value in exchange. Extreme cases, however, such as this, where the whole of the value is altogether personal, are certainly rare. But cases in which a great part, though not the whole, of the value is lost in the exchange, are frequent. The value, to the person for whom it is made, of a coat made to order, cannot be estimated by what others would give for it. The same may be said of a seal marked with the crest and initials of its owner. Its value to the person to whom it belong is increased by its being marked. But all this increment of value, would be lost in an exchange. The same operation, which renders the commodity of more value in the estimation of its owner, is calculated to render it less valuable in the estimation of all other persons, and therefore of less value in exchange.

Such then is the notion of absolute as distinguished from comparative or exchangeable value. It signifies the real importance of an object to the person who possesses it, and in this sense it is surely easy to be understood, how an object can be said to vary in value without any reference to other objects express or implied. We can understand how, in a time of famine, corn per se may be said to be more valuable than in a time of plenty; and how, if labour becomes more effective, so that commodities of all kinds shall be produced in a degree of abundance greater in proportion to the wants of mankind, all sorts of commodities, though exchangeable in the same proportions as before for each other, could be said to have become less valuable. In this sense of value, it may be remarked that, to a poor man, the same thing are more valuable than to a rich man; and this sense, it may be further remarked, agrees with the use of the term in common discourse.

The following, for example, is a passage I lately met with in an argument on the inequality of pecuniary punishments. "No one would be absurd enough to maintain, that a guinea has the same value, and, therefore, would become an equal forfeiture to two persons, the one having a thousand and the other only ten of these." And a little further on: "Now the possession of personal liberty is equally dear, equally valuable to all, and the abridgment of it would, therefore, be equally felt by all; and this reflection naturally points to imprisonment as the substitute for punishment by fine." It may be said, and to a certain degree perhaps with truth, that this notion of value, independent of an exchange, is very vague and undefined. But it is not more so than the idea of utility, which nobody pretends to refer to the mere relation of

objects to each other. It would indeed be difficult to discover any accurate test, by which to measure either the absolute utility of a single object, or the exact ratio of the comparative utilities of different objects.

Still it does not follow, that the notion of utility has no foundation in the nature of thing. It does not follow, that because a thing is incapable of measurement, therefore it has no real existence. The existence of heat was no less undeniable before thermometers were invented, than at present. So neither does it follow, that because the idea of the value of an object, singly considered, is difficult to be grasped, therefore it can have no independent existence. Mr Malthus asks very pertinently, whether in a country where there is nothing but deer, a deer could be said to be without value, because there would be no other object with which to compare it, when a man would walk fifty miles in order to obtain one. Two questions, among others, have been agitated respecting value; the one, whether any object can have intrinsic value, the other, whether it can have absolute value. It is of this latter question that I have been treating, and I have been endeavouring to determine it in the affirmative, that is, to show that an object can have value of its own, independently of all comparison with the values of other thing.

The question about intrinsic value is different from this, though, as both intrinsic and absolute are opposed to relative, the two are apt to be confounded. I have maintained, that an object can have absolute value, but it is impossible to maintain, that it can have intrinsic value in the full sense of the expression. Intrinsic value means value inherent in the object itself, which must necessary remain the same while the object remains the same, and could be changed only by a change in the internal constitution and nature of the object. Nothing, however, can be called valuable without reference to somebody to whom it is valuable; and, hence, according to the variations in the wants of the individuals to whom we refer, the same commodity, though retaining the same intrinsic qualities, is variable in value. The term value, therefore, does not express a quality inherent in a commodity. It expresses, as I stated before, a feeling of the mind, and is variable with the variations of the external circumstances which can influence that feeling, without any variation of the intrinsic qualities of the commodity which is the object of it. It is one thing to maintain, that an object may have value independently of all reference to the values of other objects; it is quite another thing to maintain that it can have value in itself, independently of all reference to mankind. And I repeat, that it is the former proposition, and not the latter, that I have been maintaining.

To illustrate the absolute nature of value, I compared it with utility, observing, that the one was as much absolute as the other, and that the objections arising from the indefinite character of absolute value were equally applicable to utility, the idea of which was quite as indefinite and as little capable of mensuration as that of absolute value. To this point of similarity we may add the negative one, that the utility of an object is not intrinsic any more than the value. Utility, like value, is predicated of an object with a reference to the wants of mankind. Blankets are useful in England, but they are not useful, or at least not equally useful, in a hot climate. Ice is useful in summer, useless in winter. Still, the intrinsic qualities of blankets, and the intrinsic qualities of ice, are at all times, and in all places, the same.

Besides explaining the meaning of the term value, I had intended, in this lecture, to have also considered the question of the measure of value, and to have examined the grounds on which sometimes labour, and sometimes corn, have been assumed to be nearly invariable in their real value, and to be on that account fitted for measuring the varying values of other commodities. I find, however, that I shall not to-day have time for entering on these questions; I shall therefore conclude with setting before you once more the doctrine against which I have been contending, together with an illustration of it, which appears to me to be a very fortunate one, though it has been used several times by the supporters of that doctrine. "We can understand," they say, "what is meant by the value of cottons; viz. the quantity of other goods for which a given quantity of cotton will exchange. We can understand in what manner cottons may rise or fall in value; viz. when a given quantity of cottons comes to exchange for a greater or less quantity of other commodities than before; but what is meant by the value of the whole produce, or how the whole produce of the land, or labour of a country, or of the world, can be said to rise or fall in value, is a problem of which we must leave to wiser heads than our own to discover the solution. Value is a relative term: if it is not this, it is nothing: if any one talks about absolute value, or any other kind of value than exchangeable value, we know not what he means." This is from the Westminster Review. Again: M. Say observes, that "the valuation of an object is nothing more or less than the affirmation, that it is in a certain degree of comparative estimation with some other specified object." I quote the from M. Say, because it seems to be referred to in the following passage from an anonymous writer, containing the illustration to which I before alluded. "All value is relative, as M. Say observes; and as we should more easily bear in mind, if the word 'exchangeable,' or 'in exchange,' which in this sense it always implies, were always uttered and expressed.

Now, all motion is relative: for by motion we merely mean, an alteration in the distance or interval between two things. But we have been accustomed, to save time, to use the word motion absolutely. When the distance between a ship and the whole mass of the country from which it set out, is altered, we say absolutely, the ship moves; and if we were asked, whether the country moves too, should generally answer, 'no, it is at rest'; that is, because the ship is small compared to the country. Yet the same country, perhaps, at the same time, alters its distance with regard to the heavenly bodies, and is itself said, when considered in that point of view, to move; the heavenly bodies being now said to remain at rest: but we still mean, that the distance between these bodies and our earth, or that particular part of it, is altered, and that they are more or larger than it. Yet from this way of speaking, from this habit of saying, for shortness, that the ship or the earth moved absolutely, in order to express that a relative motion or change of distance took place between them and some other things, philosophers long maintained that motion was inherent, and that if there were but one thing in the universe, it might yet move: that the earth, for instance, might be said to move absolutely, though the heavenly bodies were annihilated; and if they were reminded that motion was relative, they would then assert, that the earth in such case would move relatively to the parts of space; that is, by the very definition of space, relatively to nothing at all. 'There is nothing,' as Mr. Malthus observes in the Essay on Population 'which has given occasion to such a host of

errors as the confusion between relative and positive." Now all this appears to me to be a blunder arising from confounding the evidence of a fact with the fact itself.

Value, it is here said, is no more absolute than motion is absolute. But I maintain that some motion is absolute. I deny that, by motion, we merely mean an alteration in the relative position of two things. I maintain, that it is true what philosophers long ago maintained, that if there were but one body in the universe, it might yet move; and that the earth might be said to move absolutely, though the heavenly bodies were annihilated. The only difficulty would relate to the evidence of the fact. Yet, under certain circumstances, the proof would not be desperate. When we observe the daily change in the relative positions of the sun and earth, we know at once that one of them has moved. But there still remains the difficulty of determining which of the two it is that has moved. We solve this difficulty, and ascertain that the earth has actually revolved on its axel, by the phenomena of the centrifugal force; and though, in the absence of the sun and the heavenly bodies, it would probably never occur to us to inquire respecting the earth's motion, yet, if we should take it into our heads to inquire about it, the same resource would remain to us. Then, as now, we should account for the diminution of gravity as we pass from the pole to the equator, by the supposition of a centrifugal force opposed to gravity, and arising from rotation. We should thus ascertain the absolute motion of the earth, notwithstanding the absence of any other body to which it could be referred. As it is not true that all motion is relative, so, I must maintain, it is not true that all value is relative.