

Natural Theology  
or  
Evidences of the Existence and Attributes of the Deity  
collected from the appearances of nature

William Paley

1802

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[Brackets] enclose editorial explanations. Small ·dots· enclose material that has been added, but can be read as though it were part of the original text. Occasional •bullets, and also indenting of passages that are not quotations, are meant as aids to grasping the structure of a sentence or a thought. In other texts on the website from which this one comes, four-point ellipses . . . . are used to indicate the omission of brief passages; in the present text such omissions are not noted, as there are too many of them. Paley was in many ways an excellent stylist, but he was enormously prolix, mostly through repetitions, which have been stripped out. Long omissions are reported between brackets in normal-sized type. —Paley provides dozens of references to works of anatomy, natural history, theology etc., which are omitted from the present version. —The division into numbered chapters is Paley's; some of the chapter-titles are not; and the division into unnumbered sections is not.

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## Glossary

**affect:** As used in one paragraph on pages 75–76 this means ‘be drawn to, have something like a desire for’. Paley seems to use it as the verb cognate with the noun ‘appetency’.

**appetency:** A propensity or tendency to go after something. Broader in meaning than ‘desire’ or ‘appetite’, but sufficiently related to them for Paley to say on page 76 that the term can’t be transferred from animals to plants.

**art:** Paley mainly uses this to refer to human skill, until page 44, after which the skill in question is sometimes God’s or (the same thing, for Paley) nature’s.

**artificial:** Made with skill. Quite often, the skill is God’s.

**artist:** A human being who uses skill in making something. A watch-maker is an ‘artist’ even if there is nothing ‘artistic’, in our sense, about the watch. Similarly ‘artificer’.

**brute:** sub-human animal, not necessarily ‘brutal’ or ‘brutish’ (as we would say).

**contrivance:** One of Paley’s favourite words, it is equivalent to ‘design’.

**curious:** Paley’s meaning for this seems to be somewhere in the region of three of the OED’s senses for it: ‘exquisite, excellent, fine’, ‘interesting, noteworthy’, ‘deserving or arousing curiosity; strange, queer’.

**elements:** Paley uses this term mainly to refer to the traditional four: earth, air, fire, water. In chapter 21 (‘Elements’), however, earth drops out; and both there and in chapter 17 light is included, as ‘this new, this singular element’.

**evil:** bad. In early modern times it did not have as strenuous a meaning as it does today. Especially when used as a noun: ‘the origin of evil’ means ‘the explanation of why there is anything bad in the universe’; a toothache would count as an evil.

**faculty:** Capacity, ability.

**final cause:** Goal, end aimed at, purpose. Paley uses the phrase quite often, but, oddly, not before page 37.

**imperfection:** When Paley speaks of the imperfection of some part of our knowledge (e.g. of chemistry) he means its incompleteness, its not yet being finished. Especially in chapter 7. In ‘the evils of imperfection’ (pages 88–89) the word means something more like what we mean by it today.

**industry:** work.

**instrument:** When on page 10 and elsewhere Paley insists that certain biological items are ‘instruments’, he means that they don’t design anything; they are like the chisel, not the carpenter.

**office:** In Paley’s day, a thing’s ‘office’ was its role or function in some scheme of things. Similarly for the ‘office’ of a person.

**original:** An original feature of an organism is one that it had from the outset, not something it acquired later.

**principle:** Paley sometimes uses this word in a now-obsolete sense in which it means ‘source’, ‘cause’, ‘driver’, ‘energizer’, or the like. The phrase ‘principle of order’, which he mocks on pages 2 and 14, means ‘something bringing it about that there is order in the world’.

**probation:** Testing someone’s character, especially with a view to his fitness for the after-life.

**second causes:** intermediate causes, between God (the first cause) and whatever effects we are interested in.

**station:** Social standing, rank.

**subservient:** Serving as a means to an end (OED). Similarly ‘subservience’.

### 23. The personhood of the Deity

Contrivance, if established, appears to me to prove everything we want to prove. Among other things, it proves the personhood of the Deity. This distinguishes God from what is sometimes called 'nature', sometimes called 'a principle', terms that seem to be intended by those who use them philosophically, to admit an *efficacy* but to deny a *personal* agent. Now, contriving and designing can only be done by a person. These capacities constitute personhood, for they imply consciousness and thought. They require that which can perceive an end or purpose as well as the power of providing means and directing them to their end. They require a centre in which perceptions unite, and from which volitions flow; and that is *mind*. The acts of a mind prove the existence of a mind, and whatever a mind resides in is a person. We have no authority to limit the properties of mind to any particular bodily form or to any particular spatial limitation. In created nature, animated beings have a great variety of bodily shapes; and each has a certain portion of space within which perception and volition are exerted. This portion may be enlarged to an indefinite extent—may take in *the universe*—and imagining it like that may provide us with as good a notion as we can have of the immensity of the divine Nature, i.e. of a Being infinite in essence as well as in power; yet nevertheless a person.

'No man has seen God at any time.' And this, I believe, makes the great difficulty. Now, it is a difficulty chiefly arising from our not duly estimating the state of our faculties. The Deity, it is true, is not the object of any of our senses, but think about what limited capacities animal senses are. Many animals seem to have only one sense, or perhaps two at the most—touch and taste. Ought such an animal to conclude against the existence of odours,

sounds, and colours? [He then goes through a series of suppositions of animals with more senses, remarking that each •might look down on those that have less but •ought not to think that anything it can't sense doesn't exist. The series ends with five senses:] This fifth sense makes the animal what the human animal is; but to infer that there are no more senses, or that the five take in all existence, is just as unwarrantable for a human being as it would be for any of the different species that had fewer than five senses.

The conclusion of the one-sense animal stands on the same authority as the •unwarrantable• conclusion of the five-sense animal. There may be senses other than those we have. There may be senses suited to the perception of the powers, properties, and substance of spirits. These may belong to higher orders of rational agents, for there is no reason to suppose that we are the highest.

The great energies of nature are known to us only by their effects. The substances that produce them are as much concealed from our senses as the divine essence itself. Gravitation, though

- constantly present,
- constantly exerting its influence,
- everywhere around us, near us and within us,
- diffused throughout all space, and
- penetrating the texture of all bodies we are acquainted with,

depends either on •a fluid which, though both powerful and universal in its operation, is no object of sense to us, or on •some other kind of substance or action from which we receive no distinguishable impressions. Is it to be wondered at, then, that it should be somewhat like that with the divine nature?

We are certain of this, however: whatever the Deity is, neither the visible universe nor any part of it can be He.

'The universe' itself is merely a collective name: its parts are all that are real, or that are things. Now inert matter is out of the question; and organised substances include marks of contrivance. But whatever includes marks of contrivance—whatever in its constitution indicates *design*—necessarily points to something beyond itself, to some other being, to a designer prior to and distinct from itself. No animal, for instance, can have contrived its own limbs and senses, causing the design with which they were constructed. That supposition involves all the absurdity of self-creation, i.e. of acting without existing. Nothing can be God that is indebted for any of its properties to contrivance by a wisdom and a will outside itself. The essential distinguishing property of the Deity, which removes his nature from that of all things we see, is what is sometimes called 'self-sufficiency' or 'self-comprehension', namely: **not having in his nature anything that requires the activity of another prior being.** This yields the answer to a question that has sometimes been asked, namely: Since something or other must have existed from eternity, why may not the present universe be that something? The contrivance perceived in the universe proves that to be impossible. Nothing contrived can strictly be eternal, because the contriver must have existed before the contrivance.

Wherever we see marks of contrivance, we are led for its cause to an intelligent author. And this transition of the understanding is based on uniform experience. We see intelligence constantly contriving; that is, we see intelligence constantly producing effects marked and distinguished by certain general properties such as relation to an end, and relation of parts to one another and to a common purpose. Where we are witnesses to things' actual formation, we see nothing except intelligence producing effects so marked and distinguished. Equipped with this experience, we view the

productions of nature. We see them to be marked and distinguished in the same way; we want to account for their origin; our experience suggests a cause perfectly adequate for this; no experience—no single instance or example—can be offered in favour of any other. So we ought to settle for this cause; it is the one that the common sense of mankind has in fact settled, because it agrees with the undeviating course of mankind's experience, which is the foundation of all our knowledge. The reasoning is the same as that by which we infer that ancient appearances were effects of volcanoes or floods, namely that they resemble the effects that fire and water produce before our eyes, and we have never known these effects to result from anything else.

The force of the reasoning is, however, sometimes sunk by our taking up with mere names. I have already noticed [see page 2] the misapplication of the term 'law', and the mistake concerning the idea that term expresses in physics whenever such idea is made to take the place of power, and still more of an intelligent power, and thus taken to be the cause of any thing or property that exists. This is what we are secretly apt to do when we speak of organised bodies such as plants or animals as owing their production, their form, their growth, their qualities, their beauty, their use, to any laws of nature; and when we treat that as the final answer to our inquiries concerning them. I repeat that it is a perversion of language to assign any law as the operative cause of anything. A law presupposes an agent, for it is only the mode according to which an agent proceeds; it implies a power, for it is the order according to which that power acts. Without this agent and this power, the 'law' does nothing, is nothing.

What I have said about 'law' also holds for 'mechanism'. Mechanism is not itself power. Without power mechanism can do nothing. [He develops this at length: the 'mere wheels' of a watch don't explain its action; for that there has to

be a spring driving it. Similarly, a hand-mill must have a hand driving it. Summing up:] It is the same in nature. In the works of nature we trace mechanism, and this alone proves contrivance. But living, active, moving, productive nature proves also the exercise of a power at the centre—for wherever the power resides may be called ‘the centre’.

This also applies to the intervention and disposition of what are called ‘second causes’ [see Glossary]. Whether this disposition is mechanism depends on whether we can trace it by our senses and means of examination. Now, where the order of second causes is mechanical, what I have said about mechanism strictly applies to it. But it always *would* be mechanism—e.g. natural chemistry would be mechanism—if our senses were acute enough to detect it. So neither mechanism in the works of nature nor the intervention of so-called ‘second causes’ (really the same thing) removes the necessity for an agent distinct from both.

If it is said that in tracing these causes we find general properties of matter that have nothing in them indicating intelligence, I answer that nevertheless the managing of these properties—pointing and directing them to the uses we see made of them—demands intelligence in the highest degree. For example, suppose that animal secretions worked in a way that such-and-such substances always work in, with no intellect involved; still, choosing these substances and disposing them in the right places must be an act of intelligence. What harm would be done if there were a single transposition of the secretory organs, a single mistake in arranging the glands that compose them!

There may be many second causes, and many sequences of second causes one behind another, between what we observe of nature and the Deity; but there must be intelligence somewhere; there must be more in nature than what we see, the unseen things must include an intelligent,

designing author. The philosopher [here = ‘scientist’] beholds with astonishment the production of things around him. Unconscious particles of matter go their places and put themselves in an order so as to become collectively plants or animals, i.e. organised bodies, with parts bearing strict and evident relation to one another and to the utility of the whole; and it should seem that these particles could not move in any way other than how they do, for they show not the smallest sign of choice, liberty, or discretion. Perhaps intelligent beings guide these motions in each case; or perhaps they result from sequences of mechanical dispositions set up by an intelligent appointment and kept in action by a power at the centre. Either way, there must be intelligence.

### Generation as a ‘principle’ in nature

The minds of most men are fond of what they call a ‘principle’, and of the *appearance* of simplicity that it provides in accounting for phenomena. Yet the only thing that is simple in such a principle is the name, which covers a diversified, multifarious, or progressive operation that is distinguishable into parts and thus is not simple at all. One of these principles is the power of organised bodies to produce bodies like themselves. Give a philosopher this and he can run with it. But he does not reflect what this mode of production—this ‘principle’ if that’s what he chooses to call it—requires; what an apparatus of instruments, some of them strictly mechanical, is necessary for its success; what a sequence it includes of operations and changes, one related to another, one ministering to another, all advancing by intermediate (and frequently perceptible) steps to their final result! Because all this complicated action is wrapped up in a single term, ‘generation’, we are to set it down as an elementary principle, and to suppose that when we

have brought the things we see under this principle we have sufficiently explained their origin, with no need for a designing, intelligent Creator. In fact, generation is not a principle but a process. We might as well call spinning and weaving 'principles' and then, claiming to explain the texture of cloths, the fabric of muslins and calicoes etc. in terms of them, claim to dispense with intention, thought and contrivance on the part of the artist—indeed, to dispense with the need for any artist at all, whether in the manufacturing of the article or in the fabrication of the machinery by which the manufacture was carried on. And, after all, in what sense is it true that animals produce their like? [He gives details of counterexamples: butterfly/caterpillar, frog/tadpole, beetle/worm, fly/maggot.]

The appeal to 'generation' as a principle in nature that fully explains the existence of organised bodies is confuted, in my judgment, not only by every mark of contrivance discoverable in those bodies for which it gives us no contriver, but also by the further consideration that generated things have a clear relation to things that are not generated. If it were merely one part of a generated body bearing a relation to another part of the same body, or one generated body bearing a relation to another generated body, it might be contended that all this correspondence was attributable to generation, the common origin from which these substances proceeded. But what are we to say about correspondences between generated things and things that are not generated? Can it be doubted that animals' lungs have a relation to the air as a permanently elastic fluid? If generation produced the animal, it did not produce the air; yet their properties correspond. The eye is made for light, and light for the eye. The eye would be of no use without light, and light perhaps of little without eyes; yet one is produced by generation and the other is not. Similarly with ears and air-waves.

If it be said that the world itself is generated, I answer that I do not understand. If the proposition uses 'generated' to mean something like what it means when applied to plants or animals, the proposition is certainly without proof and (I think) comes as near to absurdity as any proposition can do that does not include a contradiction in its terms.

We know a cause (intelligence) adequate to the appearances we wish to account for; we have this cause continually producing similar appearances; yet we are invited to reject this and resort to suppositions that don't have a single fact for their support and aren't confirmed by any analogy we are acquainted with. If we inquired into the motives of men's opinions—I mean their motives, not their arguments—I would almost suspect that the situation is this:

The proof of a Deity drawn from the constitution of nature is not only widely accepted, but accepted by people with little education (which may be because of the proof's force, and thus be its highest recommendation); and befriending it seems almost childish. For these reasons, minds that are habitually in search of invention and originality are irresistibly inclined to strike off into other solutions and other expositions.

The truth is that many minds dislike nothing that can be offered to them as much as they dislike the flatness of being content with common reasons; and—what is most to be lamented—minds conscious of superiority are the most liable to this attitude.

The positions I am discussing have one thing in common: they all try to dispense with the necessity in nature of a particular, personal intelligence, i.e. with the role of an intending, contriving mind in the structure and formation of the organised constitutions the world contains. They all want to resolve productions simply into unconscious energies like attraction, magnetism, electricity, etc.

In this, the old system of atheism and the new agree. And I doubt whether the new schemes are in any way different from the old except in having changed the terms of the nomenclature. I could never see the difference between the antiquated system of atoms and Buffon's organic molecules. This philosopher, having used a single stroke of a comet to •make a planet by knocking off a piece of melted glass from the sun, and •set the planet in motion around its own axis and around the sun, finds his next difficulty to be how to bring plants and animals onto it. To solve this difficulty, we are to suppose the universe to be replenished with particles that have no organisation or senses of their own but are endowed with life and also with a tendency to marshal themselves into organised forms. The concourse of these particles, by virtue of this tendency, but without intelligence, will, or direction (for I do not find that any of these qualities are ascribed to them), has produced the living forms that we now see.

### **Internal moulds**

Of the conjectures that philosophers hazard on these subjects, few have more to say for themselves than challenging you to show that they are absolutely impossible. In the present example ·of Buffon's theory· there seemed to be a positive objection to the whole scheme on the very face of it, namely that according to this theory new combinations ought to be perpetually taking place, new plants and animals—or organised bodies that were neither—ought to be starting up before our eyes every day. For this, however, our philosopher has an answer. While so many forms of plants and animals are already in existence, and consequently so many of his 'internal moulds' are available, the organic particles run into these moulds and are employed in bringing substance to

them for their growth as well as for their propagation. In this way things keep on their former course. But, says the same philosopher, if any general loss or destruction of the present constitution of organised bodies were to take place, the particles would run into different combinations and make up for the loss with new species of organisms.

Is there any history to support this notion? Is any destruction known to have been so repaired? any desert thus re-peopled?

So far as I remember, the only natural appearance our author mentions in support of his hypothesis is the formation of worms in the intestines of animals. He ascribes this to the coalition of superabundant organic particles, floating about in the first passages, which have combined into these simple animal forms because of the lack of internal moulds into which they might be received. [Paley brushes this off as mere unsupported speculation, concluding:] It is seldom difficult to suggest methods by which the eggs or spawn or still-invisible rudiments of these vermin may have obtained a passage into the cavities where they are found. Add to this that their constancy to their species—which I believe is as regular in these as in the other species of worms—decides the question against our philosopher, if indeed any question remained on the subject.

Lastly, these wonder-working instruments, these 'internal moulds', what are they after all? One short sentence of Buffon's work exhibits his scheme as follows:

'When this nutritious and prolific matter that is diffused throughout all nature passes through the internal mould of an animal or vegetable and finds a proper matrix or receptacle, it gives rise to an animal or vegetable of the same species.'

Does any reader attach a meaning to the phrase 'internal mould' in this sentence? It might be said that, though we

have little notion of an internal mould, we have not much more of a designing mind. But the very opposite of this assertion is the truth. When we speak of an ‘artificer’ or an ‘architect’, we talk of something comprehensible to our understanding and familiar to our experience. We use only terms whose meaning are grounded in our consciousness and observation; whereas names like ‘internal mould’ arouse no idea—merely convey a sound to the ear.

### **Appetencies**

Another system that has recently been brought forward, and with much ingenuity, is that of appetencies [see Glossary]. The theory goes like this [to the end of this paragraph]: Pieces of soft, ductile matter, being endued with propensities or appetencies for particular actions, would by continual endeavours through a long series of generations work themselves gradually into suitable forms; and eventually acquire, perhaps by obscure and almost imperceptible improvements, an organisation fitted to the action their respective propensities led them to exert. A piece of animated matter endued with a propensity to fly, though ever so shapeless, would in a course of ages—if not in a million of years perhaps in a hundred million years (for our theorists, having eternity at their disposal, are never sparing in time)—acquire wings. The same tendency to locomotion in an animated lump that happened to be surrounded by water would end in the production of fins; in a living substance, confined to the solid earth it would put out legs and feet or break the body into ringlets and end up crawling on the ground.

I am unwilling to call this theory ‘atheistic’ for two reasons. **(a)** So far as I understand it, the original propensities and the countless varieties of them are attributed by the theory to the commands of an intelligent and designing Creator. **(b)** The

theory presupposes the faculty [see Glossary] in living bodies of producing other bodies organised like themselves, and seems to attribute it to the same cause, or at least does not try to explain it in any other way. But the theory agrees with atheistic systems in one important respect, namely that it does away final causes [see Glossary] in the formation of plants and animals, in the structure and use of their parts. Instead of the parts of a plant or animal, or the particular structure of the parts, having been intended for the action or the use to which we see them applied, this theory holds they have themselves grown out of that action, sprung from that use. So it dispenses with the necessity in each particular case of an intelligent, designing mind to contrive and determine the forms of organised bodies. Give our philosopher these appetencies; give him a portion of living matter (a nerve, or the clipping of a nerve) to work on; give his incipient or progressive forms the power to propagate their like; and, if he is to be believed, he could replenish the world with all the vegetable and animal productions we at present see in it.

This scheme is open to the same objection as other conjectures of a similar tendency, namely a total lack of evidence. No changes like those the theory requires have ever been observed.

All the changes in Ovid’s *Metamorphoses* could have been effected by these appetencies, if the theory were true; yet not an example—not even the claim of an example—is offered of a single change being known to have taken place. Nor is the order of generation obedient to the principle on which this theory is built. The nipples of the male have not vanished through disuse; nor have centuries of circumcision shortened the foreskins of Jews [Paley puts this last clause in Latin, giving it what Gibbon called ‘the decent obscurity of a learned language’]. It has been said that the process of alteration is too slow to be perceived; that it has been carried on through

immeasurable tracts of time; and that the present state of things is the result of a gradation of which no human record can trace the steps. It is easy to say this, but it doesn't alter the fact that the hypothesis remains destitute of evidence.

The analogies that have been alleged, are of the following kind. [Paley cites three. The camel's hump, the featherless state of the legs of wading birds, and the pelican's pouch. He emphasises the third] because it is drawn from an active habit, whereas the other two were from passive habits. The description naturalists give of the pelican's pouch is as follows:

'From the lower edges of the under-chap hangs a bag, reaching from the whole length of the bill to the neck, which is said to be capable of containing fifteen quarts of water. The bird can wrinkle this bag up into the hollow of the under-chap. When the bag is empty it is not seen; but when the bird has fished with success, it fills the bag and then it returns to digest its burden at leisure. The bird preys on large fishes and hides them by dozens in its pouch.'

Now, this extraordinary conformation is nothing more, say our philosophers, than the result of habit—a habit perpetuated through a long series of generations. The pelican soon found the convenience of storing the remainder of its prey in its mouth when its appetite was glutted. The fulness produced by this attempt, inevitably stretched the skin between the under-chaps, as being the most yielding part of the mouth. Every distension increased the cavity. The original bird and many generations succeeding it might find it hard to make the pouch serve this purpose; but future pelicans, entering on life with a pouch of considerable capacity derived from their progenitors, would more easily speed its advance to perfection by frequently pressing down the sac with the weight of fish that it could now contain.

[Paley attacks all three examples, maintaining that each is 'open to great objections'. He presents these briefly, and then continues:] But the need to controvert the instances themselves is lessened by the fact that it is a straining of analogy beyond all limits of reason and credibility to assert that birds, beasts and fish—with all their variety and complexity of organisation—have been brought into their forms and sorted into their various kinds and natures by the same process as might seem to serve for the gradual generation of a camel's hump or a pelican's pouch.

When applied to the works of nature generally, this theory is contradicted by many of the phenomena, and totally inadequate to others. The ligaments by which the tendons are tied down at the angles of the joints could not possibly be formed by the motion or exercise of the tendons themselves, by any appetency arousing these parts into action, or by any tendency arising therefrom. The tendency is all the other way; the effort is in constant opposition to them. Length of time does not help the case; rather the reverse. Again, the valves in the blood-vessels could never be formed in the way our theorist proposes. The blood when flowing naturally has no tendency to form them; and when it is obstructed or flowing backwards it has the opposite tendency.

The origin of animals' senses seems to me altogether incapable of being explained in the way this theory proposes. Including under the word 'sense' the organ and the perception, we have no account of either. How will our philosopher get at vision, or make an eye? How should the blind animal affect [see Glossary] sight, of which blind animals have neither conception nor desire? And if it did affect it, by what operation of its will—what *endeavour to see*—could it determine the fluids of its body in such a way as to start the formation of an eye? And if the eye was formed, would the perception follow? The same for the other senses. And this

objection holds its force, ascribe what you will to the hand of time, to the power of habit, to changes too slow to be observed by man. Concede what you like to all this, none of it will help you. No laws, no course of events, no powers of nature that prevail at present nor anything like them could *start* a new sense; and it is pointless to inquire about the progress of something that could never begin.

Finally, what do these appetencies mean when applied to plants? I cannot give a signification to the term that can be transferred from animals to plants or is common to both. Yet the organisation found in plants is as successful as what animals have. A solution is wanted for each.

On the whole, after all the schemes and struggles of a reluctant philosophy, the necessary resort is to a Deity. The marks of design are too strong to be overcome. Design must have had a designer. That designer must have been a person. That person is GOD.

## 24. The natural attributes of the Deity

It is an immense conclusion, that there is a GOD, a perceiving, intelligent, designing Being at the head of creation, and from whose will it proceeded. The attributes of such a Being must be adequate to the magnitude, extent and multiplicity of his operations, which are not only vast beyond comparison with those performed by any other power, but—so far as respects our conceptions of them—infinite, because they are unlimited on all sides.

Yet the contemplation of such an exalted nature, however securely we arrive at the proof of its existence, overwhelms our faculties; the mind feels its powers sink under the subject; and one result of this is that from *•*painful abstraction the thoughts seek relief in *•*sensible images. From

this comes the ancient and almost universal propensity to idolatrous substitutions. They are the resources of a struggling imagination. False religions usually go along with this natural propensity; true religions, or ones derived from true religions, resist it.

One of the advantages of the revelations that we acknowledge is that while they reject idolatry with its many pernicious accompaniments, they introduce the Deity to human thought under an idea that is more personal, more determinate, more within the reach of humans than the theology of nature can provide. They do this by representing him exclusively in terms of his relation to ourselves; and, for the most part, in terms of some precise character resulting from that relation, or from the history of his providences. This suits the scope of our intellects much better than the universality that enters into the idea of God as deduced from the views of nature. So when these representations are well founded in point of authority (for all depends on that), they provide a condescension to the state of our faculties—a coming down to the level of what we can manage—which those who have reflected most on the subject will be the first to acknowledge to be both needed and valuable.

Nevertheless, if we are careful to imitate the documents of our religion by confining our explanations to what concerns ourselves, and do not aim for more precision in our ideas than the subject allows of, the various terms that are used to denote the Deity's attributes may be made, even in natural religion, to carry a sense consistent with truth and reason, and not surpassing our comprehension. The terms in question are: omnipotence, omniscience, omnipresence, eternity, self-existence, necessary existence, spirituality.

'Omnipotence' and 'omniscience' are superlatives, expressing our conception of these attributes in the strongest and most elevated terms that language supplies—infinite power,

infinite knowledge. We ascribe power to the Deity under the label '**omnipotence**', the strict and correct conclusion being that a power which could create such a world as this must be incomparably greater than any we experience in ourselves, than any we observe in other visible agents; greater also than any we can want, for our individual protection and preservation, in the Being on whom we depend. It is also a power to which we are not authorised by our observation or knowledge to assign any limits of space or duration.

Similar remarks apply to the term '**omniscience**'—infinite knowledge or infinite wisdom. Strictly speaking, knowledge is different from wisdom, because wisdom always supposes action, and action directed by it. With respect to knowledge, the Creator must know intimately the constitution and properties of the things he created; which seems to imply that he also has a foreknowledge of their action on one another, and of their changes that result from sequences of physical and necessary causes. His omniscience regarding things that are present to him is deducible from his nature as an intelligent being joined with the extent, or rather the universality, of his operations. Where he acts, he is; and where he is, he perceives. The wisdom of the Deity, as testified in the works of creation, surpasses all the ideas of wisdom we have drawn from the highest intellectual operations of the highest class of intelligent beings we are acquainted with; and (the main point for us) whatever its extent it must be sufficient for conducting the order of things under which we live. This is enough. It matters very little what terms we use to express our notion—or rather our admiration—of this attribute. Terms (like 'infinite') that piety and linguistic usage have made habitual to us may be as proper as any other. The degree of knowledge and power required for the formation of created nature is not distinguishable by us from infinite.

The divine '**omnipresence**' stands in natural theology on the following foundation. In every place in the universe that we are acquainted with we perceive the exertion of a power, which we believe to proceed mediately or immediately from the Deity. In what part of space do we not discover attraction? In what regions do we not find light? In what accessible place on our globe do we not meet with gravity, magnetism, electricity, together with the properties and powers of organisms? Indeed, what corner of space is there in which we can examine something that does not indicate contrivance and design? This view of the world around us may give us the thought that *the laws of nature* prevail everywhere, that they are uniform and universal. But effects are produced by power, not by laws. A law cannot implement itself. A law refers us to an agent. Now, an agency so general that we cannot point to any place where no effect of its continued energy is found may—in popular language at least, and perhaps almost in philosophical strictness—be called 'universal'; and the person or Being in whom that power resides or from whom it is derived may—with nearly as much propriety—be said to be 'omnipresent'. He who upholds all things by his power may be said to be present everywhere.

'**Eternity**' is a negative idea clothed with a positive name. It supposes the present existence of what it is applied to, and denies a beginning or an end of that existence. As applied to the Deity, it has not been disputed by those who acknowledge a Deity at all. Most assuredly there never was a time when nothing existed, because that condition must have continued: nothing could rise up out of it, nothing could ever have existed since, nothing could exist now. In strictness, however, we have no concern with duration prior to that of the visible world. So all we need to know is that necessarily the contriver existed before the contrivance.

'**Self-existence**' is another negative idea, namely the negation of a preceding cause, progenitor, maker, author, creator.

'**Necessary existence**' means demonstrable existence.

'**Spirituality**' expresses an idea that is partly negative and partly positive. The negative part consists in the exclusion of some of the known properties of matter, especially solidity, inertia, and gravitation. The positive part comprises perception, thought, will, power and *action*. That last term refers to the origination of motion, which is perhaps the quality that contains the essential superiority of spirit over matter, 'which cannot move unless it is moved, and cannot but move when impelled by another' (to quote Bishop Wilkins). I see no difficulty in applying to the Deity both parts of this idea.

## 25. The unity of the Deity

What shows the Deity's unity is the uniformity of plan observable in the universe. The universe itself is a system, each part relating to other parts by •dependence or •connection through some common law of motion or •the presence of some common substance. Philosophers demonstrate that *one* principle of gravitation causes a stone to drop towards the earth and the moon to wheel round it, and that *one* law of attraction carries all the different planets around the sun. There are also other points of agreement among the planets that may be regarded as marks of the identity—the oneness—of their origin and of their intelligent author. In all are found the convenience and stability derived from gravitation. They all experience vicissitudes of days and nights, and changes of season. They all—at least Jupiter, Mars and Venus—have the same advantages from their atmosphere as we have. In all the planets the axes of rotation are permanent. Nothing is more probable than that the

same attracting influence, acting according to the same rule, reaches to the fixed stars; but if this is only *probable*, it is *certain* that the same element of light does. The light from a fixed star affects our eyes in the same way, is refracted and reflected according to the same laws, as the light of a candle. The velocity of the fixed stars' light is the same as the velocity of the sun's, reflected from the satellites of Jupiter. The heat of the sun is of exactly the same kind as the heat of a coal fire.

In our own globe, the case is clearer. [He lists some of the samenesses, and sums up:] We never encounter modes of existence that are so totally different as to indicate that we have come into the province of a different Creator or under the direction of a different will. *One* atmosphere invests all parts of the globe, *one* sun illuminates, *one* moon exerts its specific attraction on all parts. If there is variety in natural effects—e.g. in the tides of different seas—that variety results from the same cause acting under different circumstances. In many cases this is proved; in all it is probable.

The inspection and comparison of living forms adds countless examples to this argument. The structure of all large terrestrial animals is very much alike; their senses nearly the same; their natural functions and passions nearly the same; their viscera nearly the same in substance, shape and office; the great circulating fluid is the same, for I don't think any difference has been discovered in the properties of blood, whatever animal it be drawn from. The skeletons of the larger terrestrial animals show particular varieties, but still under a great general affinity. The resemblance between quadrupeds and birds is somewhat less, yet sufficiently evident. They are all alike in five respects for every one in which they differ.

In fish the points of comparison become fewer, but we never lose sight of our analogy. [He gives examples, and

mentions whales as connecting ‘the provinces of water and earth’.]

Insects and shell-fish appear to me to differ from other classes of animals the most widely of any. Yet even here, along with beside many points of particular resemblance, there is a general relation of a peculiar kind. It is the relation of inversion, the law of contrariety: whereas in other animals the bones the muscles are attached to lie within the body, in insects and shell-fish they lie outside it. [He gives details.] All of which (under wonderful varieties, indeed, and adaptations of form) points to an imitation, a remembrance, a carrying on, of *one* plan.

These observations are equally applicable to plants, but I don’t think I need to pursue that. It is a very striking circumstance, and alone sufficient to prove everything I am contending for here, that in this part of organised nature the sexual system is continued.

However, it is certain that the whole argument for the divine unity shows only a unity of *counsel*, and not a unity of *action*. I have to acknowledge that I have no arguments to exclude the ministry of subordinate agents. If there are any such, they act under a presiding and a controlling will; because they act according to certain *general* restrictions, by certain *common* rules, and apparently on a *general* plan. Still, it may be that such agents—and different ranks, classes and degrees of them—are employed.

## 26. The goodness of the Deity

The proof of divine goodness rests on two propositions, each capable of being made out by observations drawn from the appearances of nature.

**(1) In a vast plurality of instances in which contrivance is perceived, the design of the contrivance is beneficial.**

**(2) The Deity has added *pleasure* to animal sensations, beyond what was necessary for any other purpose, or when the purpose could have been achieved through pain.**

[Paley now defends (1) at length. He will start to address (2) on page 86.]

No productions of nature display contrivance so clearly as the parts of animals, and I believe that the parts of animals all have a real subservience to the use of the animal—and nearly always one that we know and understand. When the multitude of animals is considered, the number of parts in each, their shape and fitness, the faculties depending on them, the variety of species, the complexity of structure, the frequent success and felicity of the result, we cannot reflect without the profoundest adoration on the character of the Being from whom all these things have come. We cannot help acknowledging what an exertion of *benevolence* creation was—a benevolence so minute in its care, so vast in its scope!

When I appeal to animals’ parts and faculties, and to their limbs and senses in particular, I think I am taking the proper route to the conclusion I want to establish. I do not say that the insensible parts of nature are made solely for the sensitive parts; but I do say that the only way we can consider the benevolence of the Deity is in relation to sensitive beings. Without this relation, ‘benevolent’ has no meaning. Dead matter is nothing. So the limbs and senses of animals—although they constitute only a small portion of the material creation—are all we have to attend to in thinking about the disposition of nature’s author, since they alone are instruments of perception. It is in these that we are to seek his character. It is by these that we are to prove that the world was made with a benevolent design.

### **'It is a happy world, after all'**

Nor is the design abortive. It is a happy world after all. The air, the earth, the water, teem with delighted existence. In a spring noon or a summer evening, wherever I look I see myriads of happy beings. Swarms of newborn flies are trying their pinions in the air. Their sportive motions, their wanton mazes, their gratuitous activity, their continual change of place without use or purpose, tell us of their joy and the exultation they feel in their recently discovered faculties. Probably the whole winged insect tribe are equally intent on their proper employments, and perhaps equally gratified by the offices [see Glossary] the Author of their nature has assigned to them. Other species are running about with an alacrity in their motions that bears every mark of pleasure. Large patches of ground are sometimes half covered with these brisk and sprightly natures. If we look to what the waters produce, shoals of baby fish frequent the margins of rivers, lakes, and the sea. These are so happy that they don't know what to do with themselves.

It seems to me that the young of all animals get pleasure simply from the exercise of their limbs and bodily faculties, without reference to any end to be attained. A child, without knowing anything of the use of language, is highly delighted with being able to speak, and with its first successful attempts to walk, or rather to run (which precedes walking). It is delighted with speaking, while having nothing to say; and with walking, while not knowing where to go.

### **How happiness is distributed**

But it is not for youth alone that the great Parent of creation has provided. Happiness is found with the purring cat as much as with the playful kitten; in the armchair of dozing

age, as well as in the sprightliness of the dance or the animation of the hunt. The place of

- novelty,
- acuteness of sensation,
- hope, and
- ardour of pursuit

is taken by the perception of ease, which is to a considerable degree an equivalent for them all. This is precisely the difference between the young and the old. The young are happy only when enjoying pleasure; the old are happy when free from pain. And this state of affairs fits with the degrees of animal power that they respectively possess. The vigour of youth was to be stimulated to action by impatience of rest; while quietness and repose become positive gratifications to the incompetence of age. In one important respect the advantage is with the old. A state of ease is usually more attainable than a state of pleasure, so a constitution that can enjoy ease is preferable to one that can taste only pleasure. This same perception of ease oftentimes makes old age a condition of great comfort, especially when riding at its anchor after a busy or tempestuous life.

What is seen in different stages of the same life is still more exemplified in the lives of different animals. Animal enjoyments are infinitely diversified. The modes of life to which the organisation of different animals respectively determines them are not only varied but of opposite kinds. Animals of prey live much alone; animals of a milder constitution live in society; yet each is happy.

You may say that the instances I have cited, of vivacity or repose or of apparent enjoyment derived from either, are just selected favourable instances. I answer that **(a)** they are instances that comprise large provinces of sensitive existence; that every case I have described is the case of millions; and that **(b)** throughout the whole of life, as it is

diffused in nature and as far as we are acquainted with it, the plurality and preponderance of sensations is in favour of happiness by a vast excess. In our own species, where the assertion may be more questionable than in any other, the predominance of good over evil [see Glossary]—e.g. of health and ease over pain and distress—is shown by our reaction to calamities. What inquiries the sickness of our friends produces! What conversation their misfortunes! This shows that the common course of things is in favour of happiness: that happiness is the rule, misery the exception. If the order were reversed, our attention would be called to examples of health and competence instead of disease and want.

One great cause of our unawareness of the Creator's goodness is the very extensiveness of his bounty. We do not greatly prize anything that we share with the general run of our species. When we hear of 'blessings', we immediately think of successes, prosperous fortunes, honours, riches, preferments, i.e. of *superiorities over others* that we happen to have or to be in pursuit of. The common benefits of our nature entirely escape us. Yet these are the great things. They constitute what most properly ought to be accounted blessings of Providence. Nightly rest and daily bread, and the ordinary use of our limbs and senses and understandings, are incomparably greater gifts than any other. But because almost everyone we encounter has them, we leave them out of our list of blessings. They raise no feelings, they move no gratitude. In this our judgment is perverted by our selfishness. A blessing ought in truth to be more satisfactory, or at least the bounty of the donor more conspicuous, by its very diffusion, commonness, cheapness; by its forming the happiness of most of our species as well as of ourselves. Even when we do not have it, we ought to be thankful that others do. But we have a different way of thinking. We see nothing but what has distinction to recommend it. This

necessarily—and most unjustly—contracts our views of the Creator's beneficence within a narrow compass. The scope of the divine benignity is perceived in things that are so common as to be no distinction.

### **Pain and privations**

But pain and privations exist, in numerous instances, and to a degree that would be very great if they were compared with anything but the mass of animal enjoyment. In judging my proposition **(1)** on page 79 in terms of the mixed state of things that these exceptions involve, two rules are necessary. Both of them are, I think, just and fair. **(i)** We should give weight only to effects that are accompanied by proofs of intention. **(ii)** When we cannot resolve all appearances into benevolence of design, we should make the few give place to many, the little to the great, basing our judgment on a large and decided preponderance if there is one.

Allow me to insert here what I have said on this subject in my *Moral Philosophy*.

·EXCERPT FROM PALEY'S 'MORAL PHILOSOPHY'·

When God created the human species, either he wished their happiness, or he wished their misery, or he was indifferent and unconcerned about either.

If he had wished our misery, he might have made sure of his purpose by forming our senses to be so many sores and pains to us, as they are now instruments of gratification and enjoyment; or by placing us amidst objects so ill-suited to our perceptions as to have continually offended us, instead of ministering to our refreshment and delight. He might, for example, have made everything we tasted bitter; everything we saw, loathsome; everything we touched, a sting; every smell, a stench; and every sound, a discord.

If he had not cared about our happiness or our misery, no *design* will have been at work and we must attribute to sheer good luck •the capacity of our senses to receive pleasure and •the supply of external objects fitted to produce it. But either of these is too much to be attributed to luck; so nothing remains but the first supposition, that when God created the human species he wished their happiness, and for that purpose made for them the provision that he has made.

The same argument may be proposed in different terms, as follows. Contrivance proves design, and the predominant tendency of the contrivance indicates the disposition of the designer. The world abounds with contrivances, and all the ones we are acquainted with are directed to beneficial purposes. Evil, no doubt, exists; but so far as we can see it is never the object of contrivance. Teeth are contrived to eat, not to ache; their aching now and then is incidental to the contrivance, perhaps inseparable from it. If you insist, call it a *defect in the contrivance*; but it is not the *object of it*. This distinction deserves to be attended to. In describing farming implements you would hardly say that the sickle is made to cut the reaper's hand, though it often does that, because of its construction and the way it is used. But if you had occasion to describe instruments of torture or execution, you would say that this engine is to stretch the sinews, this to dislocate the joints, this to break the bones; this to scorch the soles of the feet. Here, pain and misery are the very objects of the contrivance. Now, nothing like this occurs in the works of nature. We never discover a sequence contrived to bring about an evil purpose.

·END OF EXCERPT FROM 'MORAL PHILOSOPHY'·

The two cases that seem to me to look most like exceptions to the thesis of divine benevolence are those of •venomous animals, and of •animals preying on one another. These

properties of animals must, I think, be regarded as designed; because in all cases of the first and in most cases of the second there is a distinct organisation provided for producing them. So we cannot avoid the difficulty by saying that the effect was not intended. The only question open to us is whether it is ultimately evil [see Glossary]. From the confessed and felt imperfection [see Glossary] of our knowledge, we ought to presume that there may be consequences of this economy that are hidden from us; from the benevolence that pervades the general designs of nature, we ought also to presume, that if these consequences could enter into our calculation they would turn the balance on the favourable side. Both these I contend to be reasonable presumptions. They would not be reasonable if these two cases were the only ones nature presented to our observation; but they are reasonable because the cases in question are combined with a multitude of other intentions, all of the same author and all directed to ends of undisputed utility.

I now offer what vindications of this economy that I can find, to lessen the difficulty.

### **Venomous bites and stings**

**(a)** Considering just the animal itself, the faculty complained of is good, because it is conducive in all cases to the defence of the animal, in some cases to the subduing of its prey, and in some (probably) to killing the prey before sending it to the predator's stomach.

**(b)** You may say that this provision, when it comes to the bites that are deadly even to human bodies and to those of large quadrupeds, is greatly overdone; that it might have served its purpose yet been much less deleterious than it is. Well, I believe there are very few cases of bites producing death in large animals (of stings I think there are none).

The Abbé Fontana found that it required the action of five exasperated vipers to kill a dog of a moderate size, but that for the killing of a mouse or frog a single bite was sufficient; which agrees with the use I assign to the faculty. The Abbé seemed to hold that even the bite of the rattlesnake would not *usually* be mortal.

**(c)** It has been pointed out that while only a few species of serpents have the venomous property, the property guards the whole tribe. The most innocuous snake is avoided with as much care as a viper. The terror with which large animals regard this class of reptiles is its protection; and this terror is based on the formidable revenge that a small proportion of them are capable of taking. Linnaeus describes 218 species of serpents, of which only 32 are poisonous.

**(d)** It seems to me that animal constitutions are provided not only for each element but for each state of the elements, i.e. for every climate and every temperature; and that part of the trouble complained of arises from animals occupying situations on the earth that do not belong to them and were never intended for their habitation. This is especially true of the human animal. Driven by consequences of the folly and wickedness of mankind, multitudes of species have sought a refuge among burning sands, while countries blessed with hospitable skies and fertile soils remain almost without a human tenant. We invade the territories of wild beasts and venomous reptiles, and then complain that we are infested by their bites and stings! Adanson writes: 'The African deserts are entirely barren, except where they produce serpents, and in such quantities that some extensive plains are almost entirely covered with them.' These are the natures appropriated to the situation. Let them enjoy their existence; let them have their territory. Even if man's numbers increase a hundred-fold, there will be surface enough left for him where he can live exempt from these annoyances.

### Animal predation

The second case, namely animals devouring one another, needs much more thought. To judge whether this can be deemed an evil, even so far as we understand its consequences (which probably isn't very far), the following reflections are worth attending to. [They run until page 86.]

**(a)** Immortality on this earth is out of the question. Without death there could be no generation, no sexes, no parental relation, i.e. as things are constituted, no animal happiness. The particular duration of life assigned to different animals can form no part of the objection. While that duration remains finite, the question can always be raised as to why it is not longer. The natural age of different animals varies from one day to 100 years. No account can be given of this.

So, taking the life-spans of different animals as a given, the question is: What method of taking life away is the best for the animal itself?

According to the established order of nature—which we must suppose to prevail, or we cannot reason at all on this subject—the three methods by which life is usually ended are **a** acute diseases, **b** decay, and **c** violence. The simple and natural life of brutes [see Glossary] is not often visited by **a** acute illnesses, nor would it be an improvement for them if it were. Think, then, about the condition of suffering and misery a brute animal is placed in when it is left to perish by **b** decay. In its wild and natural state it does everything for itself; so when its strength, or speed, or limbs, or senses fail it, the animal is delivered over to absolute famine or to the protracted wretchedness of a life slowly wasted by the scarcity of food. Do you want to alter the present system of **c** pursuit and prey so as to see the world filled with drooping, superannuated, half-starved, helpless, and unhelped animals?

(b) The predatory system is a spring of motion and activity on both sides. The pursuit of its prey forms the employment, and appears to constitute the pleasure, of a considerable part of the animal creation. Using the means of defence, flight, or precaution forms the business of another part. And even of this latter tribe—the prey—we have no reason to suppose that their happiness is much damaged by their fears. Their danger exists continually, and sometimes they seem to be aware of it sufficiently to provide against it in the best way they can; but it is only when the attack is actually made on them that they appear to suffer from it. Contemplating the insecurity of their condition with anxiety and dread would require a degree of reflection which (happily for themselves) they do not possess. Despite the number of its dangers and its enemies, the hare is as playful an animal as any other.

(c) To do justice to the question, the system of animal destruction ought to be considered in connection with another property of animal nature, namely *superfecundity*. They are countervailing qualities. My task, then, will be [A] to point out the advantages gained by the powers in nature of a superabundant multiplication; and [B] to show that these advantages are reasons for setting up the system of animal hostilities that I am trying to account for.

### The advantages of large numbers

[A] In almost all cases nature produces its supplies with profusion. In one season a single cod-fish spawns more eggs than there are people in England; and I could list a thousand other instances of prolific generation which, though not equal to this, would still make the point. This has two advantages: •it tends to keep the world always full, and •it allows the proportion between different species of animals to be varied as different purposes require or as different

situations provide space and food for them. Where this vast fecundity meets with a vacancy fitted to receive the species, there it operates with its whole effect, pouring in its numbers and filling the gap. We complain of the 'exorbitant' multiplication of some troublesome insects, not reflecting that large portions of nature might be left void without it. Immense tracts of forest in North America would be nearly lost to sensitive existence (solitude and death-like silence) if it were not for gnats (animation, activity, enjoyment, a world that is busy, happy, and peopled). Again, hosts of mice are reckoned among the plagues of north-eastern Europe, whereas vast plains in Siberia would be lifeless without them. The Caspian deserts are converted by their presence into crowded warrens. Between the Volga and the Yaik the ground is in many places covered with little hills, raised by the earth cast out in forming the burrows. Do we envy these blissful abodes so much that we pronounce the fecundity by which they are supplied with inhabitants to be an evil, a subject of complaint and not of praise?

This fruitfulness also allows the proportion between the species of animals to be differently modified, as different purposes of utility may require. When the forests of America come to be cleared and the swamps drained, our gnats will give place to other inhabitants. If the population of Europe should spread to the north and the east, the mice will retire before the farmer and the shepherd, and yield their place to herds and flocks. As for the human species: it may be a part of the scheme of Providence that the earth should be inhabited by a shifting—or perhaps circulating—population, an economy that may have the following advantages. When old countries become exceedingly corrupt, simpler modes of life, purer morals and better institutions may rise up in new countries, where fresh soils reward the cultivator with more plentiful crops. In this way different portions of the globe

come into use successively as the residence of man; and in his absence entertain other guests which fill the chasm by their sudden multiplication. The fecundity of domesticated animals means that we can always control their numbers, having as many of a species as we please or as we can support.

### Controlling large numbers

[B] But then this superfecundity, though very useful and important in some circumstances, exceeds the ordinary capacity of nature to receive or support its progeny. All superabundance must come with destruction or else destroy itself. There may be no species of terrestrial animals that would not overrun the earth if it were permitted to multiply in perfect safety; or species of fish that would not fill the ocean if it were left to its natural increase without disturbance or restraint. So the effects of such prolific faculties have to be curtailed. In conjunction with other checks and limits, all serving the same purpose, are the thinnings that take place among animals by their action on one another. In some instances *we* directly experience the use of these hostilities: one species of insects rids us of another species or reduces its numbers; a third species may keep the second within limits; and birds or lizards are a defence against the inordinate increase by which even the third might infest us. In other instances—more numerous and possibly more important—this disposition of things may be necessary and useful to certain other species. It may even prevent the loss of certain species from the universe, a misfortune that seems to be carefully guarded against. There may be the appearance of failure in some of the details of Nature's works, in its great purposes there never are. Its species never fail. The original provision for continuing the replenishment of the

world has proved itself effectual through a long succession of ages.

The system of destruction among animals is related to the system of fecundity as parts of a single compensatory scheme [see chapter 16]. In each species, the fecundity is proportional to the smallness of the animal, to the weakness and shortness of its natural term of life, and to the dangers and enemies it is surrounded by. An elephant produces only one calf; a butterfly lays six hundred eggs. Birds of prey seldom produce more than two eggs; sparrows and ducks frequently sit on a dozen. In the rivers we meet with a thousand minnows for one pike; in the sea, a million of herrings for a single shark. Compensation obtains throughout. Defencelessness and devastation are repaired by fecundity.

I have dwelt at length on these considerations because the system of animals devouring one another is the main if not the only instance in the Deity's works where questions can be raised about the utility of an economy that is stamped by marks of design. The case of venomous animals is much less weighty than the case of predation, and, in some degree is also included under it. In both cases there are probably many reasons that we do not know about.

Of the two propositions announced on page 79, my first was the one I have been defending up to here, namely that **(1) in a vast plurality of instances in which contrivance is perceived, the design of the contrivance is beneficial.** The second proposition is that **(2) the Deity has added *pleasure to animal sensations, beyond what was necessary for any other purpose, or when the purpose could have been achieved through pain.***

This second proposition may be thus explained. The capacities which are necessary (according to the established course of nature) to support or preserve an animal, however obviously they may result from an organisation contrived for

that purpose, must be seen as an act of the will that decreed the existence of the animal itself; because *these* capacities had to be given if the animal was to exist at all—and this is true whether the creation came from a benevolent or a malevolent being. So animal properties of this kind do not strictly prove the goodness of God. They may prove the existence of the Deity; they may prove a high degree of power and intelligence; but they do not prove his goodness, because they would have to have been present in any creation that was capable of continuance, and such a creation could have been produced by a being whose views rested on misery.

### Gratuitous pleasures

But one class of properties can be said to be added through an intention expressly directed to happiness—an intention to give a happy existence, not merely the general intention to provide the means of existence. I am talking about capacities for pleasure in cases where they do not contribute to the conservation of the individual or of the species, or what they contribute could have been secured instead by the operation of pain. The provision of these capacities shows a design additional to the design of giving existence.

A single instance will make all this clear. Assuming the necessity of food for the support of animal life, the animal must be provided with organs fitted for procuring, receiving and digesting its food. It may be also necessary that the animal be impelled by its sensations to use its organs. But the pain of hunger would do all this; why add pleasure to the act of eating, sweetness and tastiness to food? Why a new and appropriate sense for the perception of the pleasure? Why should the juice of a peach applied to the palate affect the part so differently from what it does when rubbed on the palm of the hand? So far as I can see, this is a constitution

that can be explained only through the pure benevolence of the Creator. Eating is necessary; but the pleasure that comes with it is not necessary; and this pleasure depends not only on our having the sense of taste, which is different from every other, but on a particular state of the organ it resides in. This felicitous adaptation of the organ to the object will be admitted by anyone who has ever experienced the vitiation of taste that frequently occurs in fevers, when every taste is irregular, everything tastes bad.

You may think that the gratifications of the palate are a trivial example. I do not agree. They provide a share of enjoyment to man, but to brutes they are of very great importance, I believe. A horse at liberty passes a great part of its waking hours in eating. To the ox, the sheep, the deer and other ruminating animals the pleasure is doubled. Their whole time almost is divided between browsing on their pasture and chewing their cud. Whatever the pleasure is, it is spread over a large portion of their existence. If there are animals such as the lupus fish—which swallows its prey whole and immediately, without taking any time to draw out or enjoy the taste in the mouth—isn't it probable that their seat of taste is in the stomach? or at least that a sense of pleasure of some kind accompanies the slow dissolution of the food in that receptacle? If this conjecture is right, they are more than repaid for the lack of palate, because the feast lasts as long as the digestion.

I need not spend time insisting on the comparative importance of the sense of taste, for my point holds equally for at least three of the other senses. The necessary purposes of hearing might have been satisfied without harmony, of smell without fragrance, of vision without beauty. Now, if the Deity had not cared about our happiness or misery, we must regard •the capacity of our senses to receive pleasure and •the supply of external objects fitted to arouse it, to *good luck*.

These are *two* felicities, both necessary but different from one another: the sense being formed, the objects applied to it might not have suited it; and the objects being fixed, the sense might not have agreed with them. There must be an explanation for the *fit* between them, and there are just three possible explanations. **a** The sense was made by its original constitution to suit the object. **b** The object was made by its original constitution to suit the sense. **c** The sense is so constituted that it can—universally, or within certain limits—make any object pleasant through habit and familiarity. Each of these three would show a studious benevolence on the part of the Author of nature. If the pleasures we get from any of our senses depend on **a b** an original congruity between the sense and the properties perceived by it, we know by experience how much the pleasure could be spoiled by changes in the qualities of the objects that surround us, and almost as much by changes in the intensity of our perception of those qualities. This matter of intensity is no arbitrary thing; to preserve the congruity I am speaking of, there has to be an exact or nearly exact correspondence with the strength of the impression. The dullness of the senses forms the complaint of old age. Persons in fevers and (I believe) in most maniacal cases experience great torment from the abnormal acuteness of their senses. An increased sensibility induces a state of disease and suffering as much as an impaired one does.

The doctrine of a specific congruity between animal senses and their objects is strongly favoured by what we see of insects in their choice of food. [He gives examples.]

But if we accept **c** the third hypothesis, and even carry it so far as to ascribe to habit *everything* I am now talking about—

as in certain species, the human species most particularly, there is reason to ascribe *something* to habit

—we have then before us an ·acquired· animal capacity that is perhaps just as admirable as the *native* congruities that the other scheme adopts. It cannot be shown to result from any fixed necessity in nature that what is frequently applied to the senses should inevitably become agreeable to them. If that is how things stand, this is a perfection in these senses, provided by the Author of their structure.

However we regard the senses, they seem to be specific gifts ministering to preservation and also to pleasure. But what we usually call ‘the senses’ are probably far from being the only vehicles of enjoyment. We have many very agreeable internal sensations that can hardly be referred to any of the five senses. Some physiologists have held that all secretion is pleasurable, and that the general satisfaction we derive from life itself (when we are in good health) results from our secretions going on well within us. If this is true, what reason can be assigned for it except the will of the Creator? *Why is anything a pleasure?* is a reasonable question, and the only answer I know says that it was *decided* that this should be so.

We cannot explain our pleasures in terms of the simple and original perception. Even when physical sensations are involved, we can seldom account for them in the secondary and complicated shapes in which they count as ‘diversions’. I have never met a sportsman who could tell me what the sport consisted in, stating the principle [see Glossary] that drives it. I myself have been a great follower of fishing, and in its cheerful solitude have passed some of the happiest hours of a sufficiently happy life; but I still cannot trace out the source of the pleasure it provides me with.

The exclamation *quantum in rebus inane!* [= “How much trivial stuff there is in the world!”], whether applied to our amusements or to our graver pursuits (to which indeed it sometimes equally applies), is always an unjust complaint. If trifles

engage, and if trifles make us happy, the right way to respond to this is to reflect on nature's tendency to provide gratification and enjoyment, i.e. on the goodness of its Author towards his sensitive creation.

Rational natures also exhibit qualities that help to confirm the truth of what I am saying. The level of understanding found in mankind is usually much greater than what is needed for mere preservation. The pleasure of choosing for oneself and pursuing the object of one's choice seems to be an original source of enjoyment. The pleasures received from great, beautiful things—whether new or copied—are to some extent not only added but *unmixed* gratifications, having no pains to balance them. [He adds a paragraph about the pleasures of ownership; and then sums up with a reminder of his two propositions announced on page 79, concluding:] While these propositions can be maintained, we are entitled to ascribe benevolence to the Deity; and what is benevolence at all must in him be infinite benevolence, because of the infinite—i.e. incalculably great—number of objects on which it is exercised.

### The origin of evil

For the origin of evil [see Glossary] no universal solution has been discovered—I mean no solution that covers all cases of complaint. **[A]** The most comprehensive solution is the one based on the consideration of general rules. I don't think it will be hard to get us to admit that

- (i)** important advantages may accrue to the universe from the order of nature proceeding according to general laws;
- (ii)** general laws, however well set and constituted, often thwart and cross one another;
- (iii)** particular inconveniences will often arise from these

thwartings and crossings;

- (iv)** our observation shows us that some degree of these inconveniences takes place in the works of nature.

These points may be allowed; and it may also be asserted that the general laws that we know are directed to beneficial ends. On the other hand, we do not know many of these laws, or we cannot trace them in their branches and in their operation; so that they cannot be important to us as measures by which to regulate our conduct. The conservation of them may be important in other respects, or to other beings, but we are uninformed of their value or use; and consequently uninformed about when and how far they could be suspended or redirected by a presiding and benevolent will without incurring greater evils than those that would be avoided. The consideration of general laws, therefore, though it closely concerns the question of the origin of evil, depends on knowledge that we do not possess; so it serves to account for the obscurity of the subject rather than to provide us with clear answers to our difficulties. However, while we assent to the propositions **(i)**–**(iv)** as principles, whatever uncertainty we may find in the application, we lay a ground for believing that cases of apparent evil for which we can suggest no particular reason are governed by reasons that are more general, lie deeper in the order of second causes [see Glossary], and are therefore removed to a greater distance from us.

**[B]** The so-called doctrine of 'evils of imperfection' [see Glossary] is briefly as follows. It is probable that creation is better replenished by sensitive beings of different sorts than by sensitive beings all of one sort. It is also probable that it may be better replenished by •different orders of beings rising one above another in gradation than by •beings possessed of equal degrees of perfection. Now, a gradation of such beings implies a gradation of imperfections. No class can justly complain of the imperfections belonging to its place in the

scale unless it were entitled to complain against there being any scale of being appointed in nature; and there appear to be reasons of wisdom and goodness for there being such an appointment. Similarly, finiteness in inanimate subjects can never be a just subject of complaint, because if it were ever so it would be always so; we can never reasonably demand that things should be larger or more, when the same demand could be made whatever the quantity or number was.

It seems to me that the sense of mankind has accepted these reasons to the extent that we seldom complain of evils of this kind when we clearly perceive them to be such. What I have to add, therefore, is that we ought not to complain of some other evils that can be vindicated in the same way as confessed evils of imperfection. We never complain that the globe of our earth is too small, nor would we even if it were much smaller. But what is the difference for us between •a smaller globe and •part of the actual globe being uninhabitable? The inhabitants of an island may murmur at the sterility of some parts of it, against its rocks, or sands, or swamps; but no-one thinks he is entitled to murmur simply because the island is not large than it is. Yet these are the same griefs.

**[A]** and **[B]** are the two metaphysical answers that have been given to this great question. They are not the worse for being metaphysical, provided they are founded (which I think they are) on right reasoning. But they are of a nature too wide to be brought under our survey, and it is often difficult to apply them in the detail; so our speculations are perhaps better employed when confined within a narrower circle.

The observations that follow are of this more limited but more determinate kind.

The main thing to be said about bodily pain, no doubt, is something I have already said and dwelt on, namely that it is seldom the object of contrivance; and that when it is

so, the contrivance rests ultimately in good. [Paley puts this in quotation marks, but it does not come verbatim from anything he has said in this work. He is probably referring to page 82.]

I would add to this that annexing pain to the means of destruction is a *salutary* provision, because it teaches vigilance and caution; it warns of danger and arouses the endeavours that may be needed for preservation. The evil consequence that sometimes arises from the lack of the timely warning that pain gives is known to the inhabitants of cold countries by the example of frost-bitten limbs. Patients who have lost toes and fingers in this way have told me that they were totally unaware of anything wrong at the time, until they discovered, through the application of warmth, the fatal injury some of their extremities had suffered. This shows the use of pain, and shows that we need such a monitor.

Also, pain itself is not without its alleviations. It may be violent and frequent, but it is seldom both violent and long-continued, and its pauses and intermissions become positive pleasures. It can shed over intervals of ease a satisfaction that I think few enjoyments exceed. A man resting from a fit of the stone or gout has for a while feelings that undisturbed health cannot impart. They may be dearly bought, but still they are to be set against the price. Whether they *are* dearly bought depends on the duration and urgency of the pain. I think that a man may well be a gainer by suffering a moderate interruption of bodily ease for a couple of hours out of the 24. •Remissions of pain call forth from the sufferer stronger expressions of satisfaction and of gratitude towards both the author and the instruments of their relief than are aroused by advantages of any other kind; and •the spirits of sick men do not sink in proportion to the acuteness of their suffering, but rather appear to be roused and supported by the high degree of comfort they derive

from its stopping or even lessening, whenever that occurs—a comfort their enjoyment of which spreads a degree of mental contentment over the whole mixed state of sensations that disease has placed them in.

In connection with bodily pain may be considered bodily disease, whether painful or not. Few diseases are fatal. I have before me the account of a dispensary in my neighbourhood, which states six years' experience as follows:

Admitted	6,420
Cured	5,476
Dead	234

And I suppose other similar institutions would have much the same statistics. In all these cases some disorder must have been felt, or the patients would not have applied for a remedy; yet we see how large a proportion of the maladies yielded to proper treatment or (more probably) ceased of their own accord. We owe these frequent recoveries, and (where recovery does not take place) this patience of the human constitution under many of the illnesses that come to it, to two benefactions of our nature. **(i)** The human constitution works within certain limits, permits a certain latitude within which health may be preserved with only slight lessenings. Different

- quantities of food,
- degrees of exercise,
- portions of sleep,
- states of the atmosphere

are compatible with good health. Similarly with the body's secretions and excretions and many of its internal functions, and probably with the state of most of its internal organs. They may vary considerably not only without destroying life but without causing any high degree of inconvenience. **(ii)** We are still more indebted to our nature's constant endeavour to restore itself, when disordered, to its regular course.

For example, the body's fluids seem able to filter out and expel any noxious substance that gets mixed in with them.

### Death

The great use of fatal diseases is to reconcile us to death. The horror of death proves the value of life. But a disease can lessen or even extinguish this horror, which it does in a wonderful way and often by a mild and imperceptible gradation. Every man who has been seriously ill is surprised with the change between •how he views death when he is on a sick-bed and •the heart-sinking dismay with which he viewed it when in health. The sensations of a man led to execution are nothing like the calm expiring of a patient at the close of his disease. To the latter, death is only the last of a long sequence of changes, in the course of which he may experience no shocks or sudden transitions.

Death itself is so connected with the whole order of our animal world—as a mode of removal and of succession—that almost everything in that world would have to be changed to be able to do without it. It may seem impossible to separate the fear of death from the enjoyment of life, or to prevent rational natures from feeling that fear. Brutes are largely freed from anxiety on this account by the inferiority of their faculties; or rather they seem to be armed with the fear of death just enough to adopt means of preservation, and no further. But would a human being want to purchase this immunity at the cost of the mental powers that enable him to look to the future?

Death implies separation; and the loss of those whom we love must necessarily—so far as we can conceive—be accompanied by pain. For the brute creation, nature seems to have stepped in with some secret provision for their relief when their attachments are broken •by death•. In their

instincts towards their offspring and their offsprings' towards them, I have often been surprised to observe how ardently they love and how soon they forget. So the stubbornness of human sorrow (on which time at length lays its softening hand) is probably connected somehow with the qualities of our rational or moral nature. One thing however is clear:

having affections, the sources of so many virtues and so many joys, although they are exposed to the incidents of life as well as the interruptions of mortality

is better than

being reduced by the lack of them to a state of selfishness, apathy, and quietism.

Of other external evils (still confining ourselves to what are called physical or natural evils), many come within the scope of the following observation. The great principle [see Glossary] of human satisfaction is *engagement*. The late Mr Tucker was right to place so much emphasis in his works on the distinction between pleasures in which we are passive and pleasures in which we are active. And I think that every attentive observer of human life will agree with Mr Tucker that, however satisfactory the sensations in which we are passive may sometimes be, it is not these but the active pleasures that constitute satisfaction, supplying the regular stream of moderate and miscellaneous enjoyments in which happiness—as distinguished from voluptuousness—consists. So the very material of contented existence is *rational occupation*; and there would be no place for this if the things we engage with were a absolutely impracticable to our endeavours or b too obedient to our uses. The proper abode of free, rational, and active natures—the one fittest to stimulate and exercise their faculties—is a world provided with advantages on one side and beset with difficulties, wants, and inconveniences on the other. The very refractoriness of

the objects we have to deal with contributes to this purpose. A world in which nothing depended on ourselves (however it might have suited an imaginary race of beings) would not have suited mankind. Their skill, prudence, industry; their various arts, and their best attainments, from the application of which they draw if not their highest their most permanent gratifications would be insignificant if things were moulded by our volitions or of their own accord conformed themselves to our views and wishes. Now, this refractoriness is the seed of all physical evil arising from things external to us.

### Civil evils

Civil evils—the evils of civil life—are much more easily disposed of than physical evils, because they are of much less magnitude and also because they result, by a kind of necessity, from the constitution of our nature and from a part of it that no-one would wish to see altered. The case is as follows. Mankind will in every country breed up—i.e. engage in population-increase—to a certain point of distress. That point may be different in different countries or ages, according to the established patterns of life in each; but there must always be such a point, and the species will always breed up to it.

[In preparation for the next paragraph: in a geometrical series ('progression') there is some number  $n > 1$  such that each item in the series = the preceding number **multiplied** by  $n$ . An arithmetical series grows only by **addition**.]

The order of generation proceeds by something like a geometrical progression, whereas the increase of provision—even under the most advantageous circumstances—can only have the form of an arithmetic series. It follows that the population will always overtake the provision, will pass beyond the line of plenty, and will continue to increase until checked

by the difficulty of getting enough to live on. Such difficulty, along with its accompanying circumstances, must therefore be found in every old country; and these circumstances constitute what we call 'poverty', which inevitably imposes labour, servitude, restraint.

It seems impossible to have a country whose inhabitants are all in easy circumstances. For suppose that we did: then there would be such marrying among them as would in a few years change the state of affairs entirely, increasing the consumption of things that supplied the natural or habitual wants of the country, and creating so much scarcity that most of the inhabitants could not procure such things without great labour or could procure only the most easily produced of them. That is in fact the condition of the mass of the community in all countries, a condition that seems to be an inevitable result of the provision that is made in the human constitution for the survival and growth of the species.

But it need not dishearten any endeavours for the public service to know that population naturally treads on the heels of improvement. If the condition of a people is improved, either •the average happiness will be increased or •more people will share in it, or—what is most likely to happen—•both effects will take place together. There may be limits fixed by nature to both, but they are limits not yet reached or even approached in any country of the world.

And when we speak of 'limits' we are talking only about providing for *animal* wants. There are sources, means, auxiliaries and augmentations of human happiness that can be spread around without restriction of numbers, as capable of being possessed by a thousand persons as of being possessed by one. Examples are those that

- flow from a mild (contrasted with a tyrannical) government, whether civil or domestic;

- arise from religion;
- grow out of a sense of security;
- depend on habits of virtue, sobriety, moderation and order; or
- are found in the possession of well-directed tastes and desires, compared with the dominion of tormenting, pernicious, contradictory, unsatisfied and unsatisfiable passions.

The distinctions of civil life are apt enough to be regarded as evils by those who sit *under* them, but in my opinion there is very little reason for this.

In the first place, the advantages that the higher conditions of life are supposed to confer are tiny compared with the advantages bestowed by nature. The gifts of nature always surpass the gifts of fortune. How much better activity is than mere onlooking; beauty than dress; appetite, digestion and tranquil bowels than all the outputs of costly and far-fetched cookery!

Nature has a strong tendency to equalisation. Habit, the instrument of nature, is a great leveller because the familiarity it induces takes off the edge of our pleasures and of our sufferings. Indulgences that are habitual keep us in ease, and cannot do much more than that. So that, with respect to the gratifications the senses are capable of, the difference ·in gratification· is by no means proportional to the apparatus ·for getting it·. Indeed, to the extent that superfluity generates fastidiousness, the difference is on the wrong side.

It is not necessary to contend that the advantages derived from wealth are nonexistent (under appropriate regulations they are considerable), but that they are not greater than they ought to be. Money is the sweetener of human toil; the substitute for coercion; the reconciler of labour with liberty. It is, moreover, the stimulant of enterprise in all projects and

undertakings, as well as of diligence in the most beneficial arts and employments. If affluence contributed nothing to happiness, or nothing beyond the mere supply of necessaries, and this secret came to be discovered, we would risk losing a great part of the uses that this important medium now brings us. The tranquillity of social life would be put in peril by the lack of a motive to attach men to their private concerns; and the satisfaction all men get from success in their respective occupations—which collectively constitutes the great mass of human comfort—would be abolished.

With respect to station [see Glossary] as distinct from riches—whether it confers authority over others or only involves honours that apply solely to sentiment and imagination—the truth is that what is gained by rising through the ranks of life is not more than enough to draw forth the exertions of those who are engaged pursuits that lead to advancement and that in general ought to be encouraged. Distinctions of this sort are matters of competition much more than of enjoyment, and that competition is what makes them useful. It has rightly been said that the public is served not by what the Lord Mayor feels in his coach but by what is felt by the apprentice who gazes at him.

As we approach the summits of human greatness, the comparison of good and evil with respect to personal comfort becomes still more problematical, even allowing to ambition all its pleasures. The poet asks ‘What is grandeur, what is power?’ The philosopher answers ‘Constraint and plague, *et in maxima quaque fortuna minimum licere*’ [Cicero, ‘and in the highest fortune there is the least liberty’]. One very common error misleads the opinion of mankind on this head, namely that authority is always pleasant, submission always painful. In the general course of human affairs the exact opposite of this is nearer to the truth. Command is anxiety, obedience ease.

Artificial distinctions sometimes promote real equality. Whether they are hereditary, or are the homage paid to office, or the respect attached by public opinion to particular professions, they serve to *confront* the distinction that arises from property and is most overbearing where there is no other to set against it. It is of the nature of property to be irregularly distributed and to run into large masses. Public laws should be constructed so as to favour its diffusion as much as they can. But all that can be done by laws—consistently with the degree of control of his property that ought to be left to the subject—will not be enough to counteract this tendency. So there must always be the difference between rich and poor; and this difference will be the more grinding when no claim is allowed to be set up against it.

So that the evils (if that is what we must call them) that arise either from the necessary subordinations of civil life, or from the distinctions that have naturally though not necessarily grown up in most societies, so long as they are not accompanied by privileges injurious or oppressive to the rest of the community, can be endured even by the most depressed ranks with very little prejudice to their comfort.

The harms that mankind cause to one another, by

- their private wickednesses and cruelties,
- tyrannical exercises of power,
- rebellions against just authority,
- wars,
- national jealousies and competitions operating to the destruction of third countries, or
- other instances of misconduct either in individuals or societies,

are all to be attributed to the character of man as a free agent. Free agency in its very essence contains liability to abuse. But if you deprive man of his free agency you subvert his nature. You may have order and regularity from

him, as you may from the tides or the trade-winds, but you put an end to his moral character, to virtue, to merit, to accountableness, indeed to the use of reason. To which I should add that even the bad qualities of mankind have an origin in their good ones. Human passions are either necessary to human welfare, or capable of being made (and in most cases are in fact made) conducive to mankind's happiness. These passions are strong and general, and perhaps would not answer their purpose unless they were so. But when particular circumstances need to be respected, **strength** and **generality** when left to themselves become **excess** and **misdirection**; and these appear to be the source of the vices of mankind, which are no doubt the causes of much misery. This account, while it shows us the principle [see Glossary] of vice, at the same time shows us the province of reason and of self-government; it shows the need for every support that can be procured to either from the aids of religion; and shows all this without attributing any native, gratuitous malignity in the human constitution. Mr Hume in his posthumous *Dialogues Concerning Natural Religion* asserts that idleness or aversion to labour (which he says lies at the root of a considerable part of the evils mankind suffer) is simply and merely bad. But how does he distinguish idleness from the love of ease? Is he sure that the love of ease in individuals is not the chief foundation of social tranquillity? In every community, I think, there is a large class of its members whose idleness is the best quality about them, being the corrective of other bad ones. If it were possible to ensure that every instance of industry was rightly directed, we could never have too much of it. But this is not possible if men are to be free. And without this, nothing would be so dangerous as an incessant, universal, indefatigable activity. In the civil world as well as in the material world, it is inertia that keeps things in their places.

### Why is there an appearance of chance?

Natural theology has always been pressed with the question: Why, under the government of a supreme and benevolent Will, should the world contain as much appearance of *chance* as it does?

The question in its whole compass lies beyond our reach; but as with the origin of evil there are plenty of answers that seem to have considerable weight in particular cases, and also to cover a considerable number of cases.

(1) There must be chance in the midst of design; by which I mean that events that are not designed necessarily arise from the pursuit of events that are designed.

One man travelling to York meets another man travelling to London. Their meeting is by chance, is accidental, though the journeys that produced the meeting were both undertaken with design and from deliberation. The meeting, though accidental, was nevertheless hypothetically necessary (which is the only sort of necessity that is intelligible); for if each journey was conducted in exactly the way it was in fact conducted, the meeting *could not* be avoided. So its being by chance does not lessen the necessity in it. Again, the meeting might be most unfortunate even if the errand on which each man set out on his journey was utterly innocent or even praiseworthy.

(2) The appearance of chance will always be proportional to the ignorance of the observer.

The cast of a die follows the laws of motion as regularly as does the running of a watch; yet, because we can trace the operation of those laws through the works and movements of the watch, and cannot trace them in the shaking and throwing of the die (though the laws are the same, and prevail equally in both cases), we call the turning up of the number of the die 'chance', and the pointing of the

watch-hand ‘machinery’, ‘order’, or some name that excludes chance. It is the same in events that depend on the will of a free and rational agent. The verdict of a jury, the sentence of a judge, the resolution of an assembly, the issue of a contested election, will look more or less like chance, might be more or less the subject of a wager, according as we were less or more acquainted with the reasons that influenced the deliberation. The difference lies in the information of the observer, not in the thing itself, which in all those cases proceeds from intelligence, mind, counsel, design.

Apply this line of thought to the operations of the Deity and it is easy to foresee how fruitful it must prove in dealing with difficulties and seeming confusion. We have only to think of the Deity to perceive what variety of objects, what distance of time, what extent of space and action, his counsels may and indeed *must* cover. Is it any wonder that we should know such a small part of the purposes of such a mind as this? We ought to keep in mind the fact that the amount of apparent chance in the world is proportional to the inadequacy of our information.

**(3)** In a great variety of cases it seems better that events happen by chance (or, more properly speaking, with the appearance of chance) than according to any observable rule whatever. This is quite often the case even in human arrangements. Each person’s place and precedency in a public meeting may be determined by lot. Work and labour may be settled by lot. ‘*Operumque laborem partibus equabat justis, aut sorte trahebat*’ [‘Work was divided equally, or assigned by lot’ (Virgil).] Military service and rank may be settled by lot. The distribution of provisions may be made by lot (as in a sailors’ mess) and in some cases so may the distribution of favours. In all these cases, it seems to be agreed that leaving events to chance has advantages superior to any that could arise from regulation. In all these cases also, though events

rise up in the way of chance it is by appointment that they do so. [That sentence comes verbatim from the original.]

In other events—ones that are independent of human will—there seem to be still stronger reasons for regarding uncertainty as preferable to rule. For example, it seems to be expedient that the period of human life should be uncertain. If mortality followed any fixed rule, that would give to those who were at a distance from death a security that would lead to the greatest disorders; and give to those who were close to it a horror like what a condemned prisoner feels on the night before his execution. But for time of death be uncertain, the young must sometimes die as well as the old. Also, if deaths were never sudden, people in good health would be too confident of life. The strong and active, who most need to be warned and checked, would live without apprehension or restraint. On the other hand, if sudden deaths were very frequent, the constant sense of jeopardy would interfere too much with the level of ease and enjoyment intended for us, and would make human life too precarious for the business and interests that belong to it. So the manner in which death is made to occur conduces to the purposes of admonition, without overthrowing the necessary stability of human affairs.

Because disease is the forerunner of death, there is the same reason for its attacks coming on us under the appearance of chance as there is for uncertainty in the time of death itself.

The seasons are a mixture of regularity and chance. [He devotes a paragraph to explaining why this is a good thing.]

Again, there are strong intelligible reasons why there should exist in human society great disparity of wealth and station; [see Glossary] not only as these are *acquired* in different degrees but from the start of life. For example: to meet the various demands of civil life there ought to be

among the citizens a diversity of education that requires an original [see Glossary] diversity of circumstances. Since this sort of disparity that ought to take place from the beginning of life must be previous to the merit or demerit of the persons on whom it falls, can it be better disposed of than by chance? Parentage is that sort of chance; yet it is the commanding circumstance that generally fixes each man's place in civil life, along with everything relating to its distinctions. It may be the result of a beneficial rule that

the father's fortunes or honours devolve on the son; and, it seems, of a still more necessary rule that the low or laborious condition of the parent be communicated to his family;

but from the point of view of the successor himself it is the drawing of a ticket in a lottery. So inequalities of fortune (at least the greatest part of them, namely those that we have from birth and depend on our birth) can be left to chance, without any just cause for questioning the government of a supreme Disposer of events.

As for *acquired* civil advantages: it may be that they too ought in a considerable degree to be at the mercy of chance. Some people would like all the virtuous to be rich, or at least removed from the evils of poverty; presumably they do not notice that this would result in all the poor being wicked. How such a society could be kept in subjection to government has not been shown; for the poor—those who make their living by constant manual labour—must still form the mass of the community. If there were too few of them, the necessary labour of life could not be carried on, the work would not be done that the wants of mankind in a state of civilisation (and still more in a state of refinement) require to be done.

The demands of social life seem to call not only for an original diversity of external circumstances but for a mixture

of different faculties, tastes, and tempers; and it is apparently expedient that these be promiscuously scattered among the different classes of society; so can the distribution of them be better made than by chance?

The opposites of apparent chance are **a** constancy and **b** perceptible interposition ·by God·; every degree of *secret* direction is consistent with apparent chance. Now, we have seen in some cases the inapplicability of **a** constancy, i.e. of fixed and known rules, and inconveniences that we do not see might attend their application in other cases.

As for **b** perceptible interposition: if Providence kept intervening in ways that were certainly distinguishable, that would be simply a situation where miracles were frequent and common. It is hard to judge what state this would throw us into. It is enough to say that it would be a total and radical change, which would deeply affect or perhaps subvert the whole conduct of human affairs. I can readily believe that such a state, with other circumstances being adapted to it, might be better than our present one. It may be the state of other beings; it may be ours hereafter. But the question we are now facing is: how far would it be consistent with our condition, supposing it in other respects to remain as it is? And there seem to be weighty reasons for answering 'Not very far'. For instance, so long as bodily labour continues for so many reasons to be necessary for the bulk of mankind, any dependence on supernatural aid might dislodge the motives that promote exertion or relax the habits that engender patient industry, thereby introducing negligence, inactivity and disorder into the most useful occupations of human life and thus worsening the condition of human life itself.

As moral agents we would experience a still greater alteration. I shall say more about this in the next section.

The Deity has the power to wind and turn as he pleases the causal chains that issue from himself, interposing to

alter or intercept effects that would have taken place without such interposition. And it may very well be that he *does* do so, but that his over-all plans for us have led him to be secret about this. It is at any rate evident that a broad and full province remains for the exercise of Providence without its being naturally perceptible by us. You may say:

The doctrine of divine Providence, because of the ambiguity [here = 'unclearly'] under which its exertions present themselves, can have no practical influence on our conduct; however firmly we believe that there is a Providence, we must prepare, provide and act as if there were none.

I answer that this is admitted. And I say further that preparing and providing in this way is consistent with the most perfect assurance of the reality of a Providence; and that it is, probably, one advantage of the present state of our information that our provisions and preparations are not disturbed by it. You may then ask:

Of what use then is the doctrine, if it neither alters our measures nor regulates our conduct?

I answer again that it is of the greatest use, but that it is a doctrine of sentiment and piety, not (immediately at least) of action or conduct; that it applies to the consolation of men's minds, to their devotions, to arousing gratitude, supporting patience, keeping alive and strengthening every motive for trying to please our Maker; and that these are great uses.

### **Human life as a state of probation**

[This section can be seen as a falling under the topic of the appearance of chance. It starts with a somewhat obscure repetition of the thesis that •the appearance of chance is consistent with •our being in the hands of a designing Creator, with one striking addition: 'It is undoubtedly true

that •they may be reconcilable, though we cannot reconcile them.' Then Paley gets to the topic of the section:] The mind that contemplates the works of nature and sees in them so much counsel, intention and benevolence. can hardly turn its view to the condition of our own species without trying to suggest to itself some purpose, some design, for which the state we are placed in is fitted. I contend that the most probable supposition is that it is a state of moral probation [see Glossary], and that many things in it fit this hypothesis and fit no other. It is not a state of •unmixed happiness, or of •designed misery, or of •retribution. It fits none of these suppositions. It accords much better with the idea of its being

a condition calculated for the production, exercise and improvement of moral qualities, with a view to a future state, in which these produced, exercised and improved qualities may in a new and more favouring constitution of things receive their reward or become their own reward.

If it be said that this introduces a religious rather than a philosophical consideration, I answer that the word 'religion' ought not to form an objection if it turns out to be the case that the more religious our views are the more probable they are. The degree of beneficence, benevolent intention and power exercised in the construction of sensitive beings tells strongly in favour not only of a creative care but of a *continuing* care, i.e. of a ruling Providence. The degree of chance that appears to prevail in the world has to be reconciled with this hypothesis. Now, it is one thing to maintain the doctrine of Providence *along with* that of a future state, and another thing *without* it. In my opinion the two doctrines must stand or fall together. On other principles more of this apparent chance may be accounted for than is generally supposed, but a future state makes

all the difference; if it can be shown that the appearance of disorder is consistent with—or even in some respects promotes—the uses of life as a preparatory state, then so far as this hypothesis of a future state can be accepted, the ground of the difficulty is done away.

•ACTIVE VIRTUES•

In the wide scale of human condition, it may be that all of its manifold diversities are relevant to the design here suggested. Virtue is infinitely various. There is no situation in which a rational being is placed—from that of the best-instructed Christian down to the condition of the roughest barbarian—that does not provide room for moral agency, for acquiring, exercising and displaying good and bad voluntary qualities. Health and sickness, enjoyment and suffering, riches and poverty, knowledge and ignorance, power and subjection, liberty and bondage, civilisation and barbarity, all have their offices and duties, all serve for the formation of character; for when we speak of a ‘state of trial’, it must be remembered that characters are not only •tried, proved or detected by circumstances, but are also •generated and formed by them. The best dispositions may exist under the most depressed and afflicted fortunes. A West Indian slave who amidst his wrongs retains his benevolence is someone whom I for my part regard as among the foremost of human candidates for the rewards of virtue. The kind master of such a slave—i.e. one who, in the exercise of an inordinate authority, somewhat postpones his own interest to his slave’s comfort—is likewise a meritorious character; but still he is inferior to his slave. But all I am contending for is that these two destinies, opposite as they may be in every other respect, are both equally *trials*. This applies to every other condition, to the whole range of the scale, right down to its lowest extremity. Savages appear to us all alike; but it is because of

the distance from which we view savage life that we do not perceive differences of character in it. I am sure that good and bad moral qualities are called into action as much in these inartificial [here = ‘simple, relatively primitive’] societies as they are in polished life, and that they exist in the former in as great a variety as they do in the latter. At least it is certain that the good and ill treatment each individual meets with •in such a simple society• depends more on the choice and voluntary conduct of those around him than it does or ought to do under regular civil institutions and the coercion of public laws. And up at the other end of the scale—the part occupied by people enjoying the benefits of learning, together with the lights of revelation—there also the advantage is all along probationary. The revelation of Christianity is not only a blessing but a trial.

If it is true that our ultimate or most permanent happiness will depend not on the temporary condition into which we are cast but on our behaviour in it, then the way various external circumstances are distributed among the individuals of the human species is a much more fit subject for chance than we usually take it to be. Rousseau writes: ‘This life being a state of probation, it is immaterial what kind of trials we experience in it, provided they produce their effects.’ Of two agents who stand indifferent to [Paley’s phrase] the moral Governor of the universe, one may be exercised by riches, the other by poverty. The treatment of these two may appear to be very opposite, but in truth it is the same: different as their conditions are in many way, in one important respect there is no difference, namely that their conditions are alike *trials*; both have their duties and temptations, as arduous and dangerous in one case as in the other; so that if the final award follows the character, the original distribution of the circumstances under which that character is formed can be defended on principles not only

of justice but of equality. So why should not mankind draw lots for their condition? They take the portion of faculties and opportunities that happen to have been given to them, but the outcome is governed by something that depends on themselves, namely their application of what they have received. No rule was followed—none was necessary—in dividing the talents; in rewarding the use of them the rule of the most correct justice was followed.

I have said that the appearance of casualness that attends the occurrences and events of life not only does not interfere with its uses as a state of probation but actually promotes them.

·PASSIVE VIRTUES·

Passive virtues—of all virtues the severest and most sublime, and perhaps of all virtues the most acceptable to the Deity—would obviously be excluded from a constitution in which happiness and misery regularly followed virtue and vice.

- Patience and composure under distress, affliction, and pain;
- steadfast keeping up of our confidence in God, and of our reliance on his final goodness, at a time when everything is adverse and discouraging; and
- a cordial desire for the happiness of others, even when we are deprived of our own;

these dispositions, which perhaps constitute the perfection of our moral nature, would not have found their proper office and object in a state of avowed retribution, in which endurance of evil would only be submission to punishment.

Again: one man's sufferings may be another man's trial. The family of a sick parent is a school of filial piety. The charities of domestic life and indeed all the social virtues are called out by distress. But if misery is to be the proper object of mitigation or of the benevolence that tries to relieve,

it must be really or apparently *casual*. It is only on such sufferings that benevolence can operate. For if the only evils in the world were punishments, properly and intelligibly such, benevolence would only stand in the way of justice. Relative virtue presupposes not only the existence of evils but that evils at least appear to be misfortunes, i.e. the effects of apparent chance. So it may be in the furtherance of the scheme of probation that the evils of life are made to present themselves in that guise.

I have already observed [see page 97] that when we let in religious considerations we often let in light on the difficulties of nature. So in the fact now to be accounted for, the degree of happiness that we usually enjoy in this life may be better suited to a state of trial and probation than a higher degree would be. The truth is that we are too much delighted with the world rather than too little. Imperfect, broken, and precarious as our pleasures are, they are more than sufficient to attach us to the eager pursuit of them. A regard to a future state can hardly be kept up as things are. If we were designed therefore to be influenced by that regard, might not a more indulgent system—a higher, or more uninterrupted state of gratification—have interfered with that design?

## 27. Conclusion

Whenever the mind feels itself in danger of being confounded by variety, it is sure to rely on a few strong points or perhaps on a single instance. If we observe in any argument that hardly two minds fix on the same instance, the diversity of choice shows the strength of the argument, because it shows the number and competition of the examples. There is no subject in which it is so usual to dwell on select or single

topics, because there is no subject whose latitude is so great, as that of *natural history applied to the proof of an intelligent Creator*. For my part, I take my stand on human anatomy. [He lists some of his examples.] The reader's memory will go back to these instances, as they are set forth in their places; there is not one that I do not think decisive; not one that is not strictly mechanical; nor have I read or heard of any solution of these appearances that in the smallest degree shakes the conclusion I build on them.

·WHAT IS THE POINT OF ALL THIS?·

Of most of those who read arguments to prove the existence of a God, it will be said that they come out where they went in, that they were never ignorant of this great truth, never doubted it; which raises the question: 'What is gained by researches from which no new opinion is learned and on the subject of which no proofs were needed?' I answer that investigation always provides two things in favour of even the most generally acknowledged doctrines (supposing them to be true), namely **stability** and **impression**. Occasions will arise that test the firmness of our most habitual opinions; and on these occasions it is enormously useful to feel our foundation, to find a support in •argument for what we had accepted on •authority.

And what is gained by research in the *stability* of our conclusion is also gained from it in *impression*. Physicians say that taking a medicine is very different from getting it into the constitution. Something like that holds for those great moral propositions that ought to form the directing principles of human conduct. It is one thing to assent to a proposition of this sort; a very different thing to have properly imbibed its influence. Here are two things that I believe to be true. **(a)** Almost every man has a particular train of thought that his mind glides into when it is at

leisure from the impressions and ideas that occasionally arouse it. **(b)** This train of thought, more than anything else, determines the character. So it is of the utmost importance that this property of our constitution be well regulated. Now, what draws mental exercise into any particular channel is

- frequent or continued meditation on a subject,
- placing a subject in different points of view,
- induction of particulars,
- variety of examples,
- applying principles to the solution of phenomena, and
- dwelling on proofs and consequences.

It is by these means, at least, that we have any power over our thought. Now, I think it is safe to say that that if one train of thinking is more desirable than another, it is the one that looks at the phenomena of nature with a constant reference to a supreme intelligent Author. To make this the ruling, habitual sentiment of our minds is to lay the foundation for everything religious. When we have done that, the world becomes a temple and life itself one continued act of adoration. Whereas formerly God was seldom in our thoughts, we can now scarcely look on anything without perceiving its relation to him. We now have something very different from a mere assent to a verbal proposition about the existence of the Deity. This difference can more especially be perceived in the degree of admiration and awe with which the Divinity is regarded when represented to the understanding by its [i.e. the understanding's] own remarks, its own reflections, and its own reasonings, compared with what is aroused by anything said by others. [He sketches the conclusions of the opening chapters, concluding:] Therefore one mind has planned—or at least prescribed a general plan for—all these productions. One Being has been concerned in all.

Under this stupendous Being we live. Our happiness, our existence, is in his hands. All we expect must come from him.

Nor ought we to feel our situation insecure. In every portion of nature that we can see, we find attention bestowed on even the minutest arts. We have no reason to fear our being forgotten, overlooked, or neglected.

·NATURAL THEOLOGY AND REVELATION·

Proving the existence and character of the Deity facilitates the belief of the fundamental articles of revelation. It is a step to have it proved that there must be something in the world more than what we see. It is a further step to know that, among the invisible things of nature there must be an intelligent mind that is concerned in its production, order, and support. These points being assured to us by natural theology, we may well leave to revelation •the disclosure of many details that our researches cannot reach, respecting either the nature of this Being as the original cause of all things or his character and designs as a moral governor; and also •the more full confirmation of other important details that we are not entirely certain about, though they do not lie altogether beyond our reasonings and our probabilities. The true theist will be the first to listen to any credible communication of divine knowledge. Nothing he has learned from natural theology will lessen his desire for further instruction, or his disposition to receive it humbly and gratefully. He wishes for light; he rejoices in light. His inward veneration of this great Being will incline him to attend with the utmost seriousness not only to •all that can be discovered concerning him by researches into nature but to •all that is taught by a revelation that gives reasonable proof of having come from him.

·THE RESURRECTION OF THE HUMAN DEAD·

But of all the articles of revealed religion the one that gets the most help from the previous belief in a Deity •based on natural theology• is the all-important one of the resurrection

of the human dead. The thing might appear hopeless if we did not see a power at work adequate to the effect, a power guided by an intelligent will and penetrating the inmost recesses of all substance. I am far from justifying the opinion of those who 'thought it a thing incredible that God should raise the dead'; but I admit that it is necessary first to be persuaded that there is a God to do so. This being thoroughly settled in our minds, there seems to be nothing in this process (concealed as we confess it to be) that needs to shock our belief. They who hold that the acts of the human mind depend on organisation, that the mind itself indeed *consists in* organisation, are supposed to find a greater difficulty than others do in admitting a transition by death to a new state of sentient existence, because the old organisation is apparently dissolved. But I do not see that even these people need to apprehend that resurrection is impossible; indeed, even on their hypothesis resurrection is comparable with some other operations that we know with certainty that the Deity is carrying on. [After talking about how plants and animals generate their offspring, with all the offspring's qualities being determined by an inconceivably small material particle, Paley continues:] And this particle owes its constitution to a prior body; yet its organisation, though formed within and through and by a preceding organisation, is not corrupted by its corruption, or destroyed by its dissolution. On the contrary, it is sometimes extricated and developed by those very causes. Now, an economy that nature has adopted to transfer an organisation from one individual to another may have something analogous to it when the purpose is to transmit an organisation from one state of being to another state; and those who base thought on organisation may get from this analogy some help with their difficulties. Anything that transmits a similarity of organisation will serve their purpose, because even according to their own theory it may

be the vehicle of consciousness, which carries identity and individuality along with it through all changes of form or of visible qualities. [He speaks of other transformations in nature, and concludes:] This analogy shows that the Deity can mould and fashion the parts of material nature so as to fulfil any purpose he is pleased to appoint.

•IMMATERIAL SUBSTANCES•

Those who attribute the operations of mind to a substance totally and essentially different from matter—

and these operations, though affected by material causes, are certainly far removed from any properties of matter that we are acquainted with

—adopt what may be sounder reasoning and a better philosophy; and *they* do not need help from the considerations I have been presenting, or at least to the same degree •as those who base mind on organisation•. But some persons cannot shake off an adherence to the analogies that the corporeal world is continually suggesting to their thoughts; and they will be helped by every consideration that manifests the extent of the intelligent power acting in nature, the fruitfulness of its resources, the variety, aptness and success

of its means; most especially by every consideration that tends to show that in the translation of a conscious existence there is not—even in their own way of regarding it—anything greatly beyond or totally unlike what takes place in the small parts of the order of nature that are accessible to our observation.

If there are any who think that the narrowness and feebleness of the human faculties in our present state hardly fit with the high destinies the expectations of religion point out to us, I would only ask them whether anyone who saw a child two hours after its birth could suppose that it would ever come to understand fluxions!

On the whole: in everything regarding this awe-inspiring—but, as we trust, glorious—change, we have a wise and powerful Being on whom to rely for the choice and appointment of means adequate to the performance of any plan his goodness or his justice may have formed for the moral and accountable part of his terrestrial creation. That great office rests with him. Let it be our office to hope and to prepare, under a firm and settled persuasion that •living and dying we are his, that •life is passed in his constant presence, that •death resigns us to his merciful disposal.

THE END