

(Book VII)

Next, I said, compare the effect of education and of the lack of it on our nature to an experience like this: Imagine human beings living in an underground, cave-like dwelling, with an entrance a long way up, which is both open to the light and as wide as the cave itself. They've been there since childhood, fixed in the same place, with their necks and legs fettered able to see only in front of them, because their bonds prevent them from turning their heads around. Light is provided by a fire burning far above and behind them. Also behind them, but on higher ground, there is a path stretching between them and the fire. Imagine that along this path a low wall has been built, like the screen in front of puppeteers above which they show their puppets.

I'm imagining it.

Then also imagine that there are people along the wall, carrying all kinds of artifacts that project above it—statues of people and other animals, made out of stone, wood, and very material. And, as you'd expect, some of the carriers are talking, and some are silent.

It's a strange image you're describing, and strange prisoners.

They're like us. Do you suppose, first of all, that these prisoners see anything of themselves and one another besides the shadows that the fire casts on the wall in front of them?

How could they, if they have to keep their heads motionless throughout life?

What about the things being carried along the wall? Isn't the same true of them?

Of course.

And if they could talk to one another, don't you think they'd suppose that the names they used applied to the things they see passing before them?

They'd have to.

And what if their prison also had an echo from the wall facing them? Don't you think they'd believe that the shadows passing in front of them were talking whenever one of the carriers passing along the wall was doing so?

I certainly do.

Then the prisoners would in every way believe that the truth is nothing other than the shadows of those artifacts.

They must surely believe that.

Clitor2-3(ng a)4(long t)-3(he)4(wa)4(lonc)4(t ng a)4s(6(he)- Om[Th(of)-6a not)-2(hing ot)-3(he)14(r tha7(1)-11b2 O a)4(sts)6)ITJ4(9)4(1l)6 3a(themseET(y)3

And if someone compelled him to look at the light itself, wouldn't his eyes hurt, and wouldn't he turn around and flee towards the things he's able to see, believing that they're really clearer than the ones he's being shown?

He would.

And if someone dragged him away from there by force, up the rough, steep path, and didn't let him go until he had dragged him into the sunlight, wouldn't he be pained and irritated at being treated that way? And when came into the light, with the sun filling his eyes, wouldn't he be unable to see a single one of the things now said to be true?

He would be unable to see them, at least at first.

I suppose, then, that he'd need time to get adjusted before he could see things in the world above. At first, he'd see shadows most easily, then images of men and other things in water, then the things themselves. Of these, he'd be able to study the things in the sky and the sky itself more easily at night, looking at the light of the stars and the moon, than during the day, looking at the sun and the light of the sun.

Of course.

Finally, I suppose, he'd be able to see the sun, not images of it in water or some alien place, but the sun itself, in its own place, and be able to study it.

Necessarily so.

And at this point he would infer and conclude that the sun provides the seasons and the years, governs everything in the visible world, and is in some way the cause of all the things that he used to see.

It's clear that would be his next step.

What about when he reminds himself of his first dwelling place, his fellow prisoners, and what passed for wisdom there? Don't you think that he'd count himself happy for the change and pity the others?

Certainly.

And if there had been any honors, praises, or prizes among them for the one who was sharpest at identifying the shadows as they passed by and who best remembered which usually came earlier, which later, and which simultaneously, and who could thus best divine the future, do you think that our man would desire these rewards or envy those among the prisoners who were honored and held power? Instead, wouldn't he feel, with Homer, that he'd much prefer to "work the earth as a serf to another, one without possessions," and go through any sufferings, rather than share their opinions and live as they do?

I suppose he would rather suffer anything than live like that.

Consider this too. If this man went down into the cave again and sat down in his same seat, wouldn't his eyes—coming suddenly out of the sun like that—be filled with darkness?

They certainly would.

And before his eyes had recovered—and the adjustment would not be quick—while his vision was still dim, if he had to compete again with the perpetual prisoners in recognizing the shadows, wouldn't he invite ridicule? Wouldn't it be said of him that he'd returned from his upward journey with his eyesight ruined and that it isn't worthwhile even to try to travel upward? And, as for anyone who tried to free them and lead them upward, if they could somehow get their hands on him, wouldn't they kill him?

They certainly would.

This whole image, Glaucon, must be fitted together with what we said before. The visible realm should be likened to the prison dwelling, and the light of the fire inside it to the power of the sun. And if you interpret the upward journey and the study of things above as the upward journey of the soul to the intelligible realm, you'll grasp what I hope to convey, since that is what you wanted to hear about. Whether it's true or not, only the god knows. But this is how I see it: In the knowable realm, the form of the good is the last thing to be seen, and it is reached only with difficulty. Once one has seen it, however, one must conclude that it is the cause of all that is correct and beautiful in anything, that it produces both light and its source in the visible realm, and that in the intelligible realm it controls and provides truth and understanding, so that anyone who is to act sensibly in private or public must see it.

I have the same thought, at least as far as I'm able.

Come, then, share with me this thought also: It isn't surprising that the ones who get to this point are unwilling to occupy themselves with human affairs and that their souls are always pressing upwards, eager to spend their time above, for, after all, this is surely what we'd expect, if indeed things fit the image I described before.

It is.

What about what happens when someone turns from divine study to the evils of human life? Do you think it's surprising, since his sight is still dim, and he hasn't yet become accustomed to the darkness around him, that he behaves awkwardly and appears completely ridiculous if he's compelled, either in the courts or elsewhere, to contend about the shadows of justice or the statues of which they are the shadows and to dispute about the way these things are understood by people who have never seen justice itself?

That's not surprising at all.

No, it isn't. But anyone with any understanding would remember that the eyes may be confused in two ways and from two causes, namely, when they've come from the light into the darkness and when they've come from the darkness into the light. Realizing that the same applies to the soul, when someone sees a soul disturbed and unable to see something, he won't laugh mindlessly, but he'll take into consideration whether it has come from a brighter life and is dimmed through not having yet become accustomed to the dark or whether it has come from greater ignorance into greater light and is dazzled by the increased brilliance. Then he'll declare the first soul happy in its experience and life, and he'll pity the latter—

Charles Darwin
On Natural Selection

Penguin Books

2005 NY, NY

Struggle for Existence

Nothing is easier than to admit in words the truth of the universal struggle for life, or more difficult -

there can be no a

for it allows them rapidly to increase in number. But the real importance of a large number of eggs or seeds is to make up for much destruction at some period of life; and this period in the great majority of cases is an early one. If an animal can in any way protect its own eggs or young, a small number may be produced, and yet the average stock be fully kept up; but if many eggs or young are dest

distinct species, which subsist on the same kind of food. Even when climate, for instance extreme cold, acts directly, it will be the least vigorous, or those which have got least food through the advancing winter, which will suffer most. When we travel from south to north, or from a damp region to a dry, we invariably see some species gradually getting rarer and rarer, and finally disappearing; and the change of climate being conspicuous, we are tempted to attribute the whole effect to its direct action. But this is a very false view: we forget that each species, even where it most abounds, is constantly suffering enormous destruction at some period of its life, from enemies or from competitors for the same place and food; and if these enemies or competitors be in the least degree favored by any slight change of climate, they will increase in numbers, and, as each area is already fully stocked with inhabitants, the other species will decrease. When we travel southward and see a species decreasing in numbers, we may feel sure that the cause lies quite as much in other species being favored, as in this one being hurt. So it is when we travel northward, but in a somewhat lesser degree, for the number of species of all kinds, and therefore of competitors, decreases northwards; hence in going northward, or in ascending a mountain, we far oftener meet with stunted forms, due to the *directly* injurious action of climate, than we do in proceeding southwards or in descending a mountain. When we reach the Arctic regions, or snow-capped summits, or absolute deserts, the struggle for life is almost exclusively with the elements.

That climate acts in main part indirectly by favoring other species, we may clearly see in the prodigious number of plants in our gardens which can perfectly well endure--our climate, but which never become naturalized, for they cannot compete with our native plants, nor resist destruction by our native animals.

When a species, owing to highly favorable circumstances, increases inordinately in numbers in a small tract, epidemics - at least, this seems generally to occur with our game animals - often ensue: and here we have a limiting check independent of the struggle for life. But even some of these so-called epidemics appear to be due to parasitic worms, which have from some cause, possibly in part through facility of difrf T 8p(1)-4(t)(y)G9 (y)11((r)-3(o(s))TETt)-4(TBT1 01 593.2653.55 Tm(t)-4(o 17(al

changed, but twelve species of plants (not counting grasses and carices) flourished in the plantations, which could not be found on the heath. The effect on the insects must have been still greater, for six insectivorous birds were very common in the plantations, which were not to be seen on the heath; and the heath was frequented by two or three distinct insectivorous birds. Here we see how potent has been the effect of the introduction of a single tree, nothing whatever else having been done, with the exception that the land had been enclosed, so that cattle could not enter. But how important an element enclosure is, I plainly saw near Farnham, in Surrey. Here there are extensive heaths, with a few clumps of old Scotch firs on the distant hill-tops: within the last ten years large spaces have been enclosed, and self-sown firs are now springing up in multitudes, so close together that all cannot live. When I ascertained that these young trees had not been sown or planted, I was so much surprised at their numbers that I went to several points of view, whence I could examine hundreds of acres of the unenclosed heath, and literally I could not see a single Scotch fir, except the old planted clumps. But on looking closely between the stems of the heath, I found a multitude of seedlings and little trees, which had been perpetually browsed down by the cattle. In one square yard, at a point some hundred yards distant from one of the old clumps, I counted thirty-two little trees; and one of them, judging from the rings of growth, had during twenty-six years tried to raise its head above the stems of the heath, and had failed. No wonder that, as soon as the land was enclosed, it became thickly clothed with vigorously growing young firs. Yet the heath was so extremely barren and so extensive that no one would ever have imagined that cattle would have so closely and effectually searched it for food.

Here we see that cattle absolutely determine the existence of the Scotch fir; but in several parts of the world insects determine the existence of cattle. Perhaps Paraguay offers the most curious instance of this; for here neither cattle nor horses nor dogs have ever run wild, though the

depends in a great degree on the number of field-mice, which destroy their combs and nests; and Mr. H. Newman, who has long attended to the habits of humble-bees, believes that more than two thirds of them are thus destroyed all over England., Now the number of mice is largely dependent, as everyone knows, on the number of cats; and Mr. Newman says, 'Near villages and small towns I have found the nests of humble-bees more numerous than elsewhere, which I attribute to the number of cats that destroy the mice. Hence it is quite credible that the presence of a feline animal in large numbers in a district might determine, through the intervention first of mice and then of bees, the frequency of certain flowers in that district!

In the case of every species, many different checks, acting at different periods of life, and during different seasons or years, probably come into play; some check or some few being generally the most potent, but all concurring in determining the average number or even the existence of the species. In some cases it can be shown that widely different checks act on the same species in different districts. When we look at the plants and bushes clothing an entangled bank, we are tempted to attribute their proportional numbers and kinds to what we call chance. But how false a view is this! Everyone has heard that when an American forest is cut down, a very different vegetation springs up; but it has been observed that the trees now growing on the ancient Indian mounds, in the Southern United States, display the

