This is a voiceover script compiled by Adrianne Wortzel for the video "archipelago.ch" by Adrianne Wortzel and Daniel Bisig, produced during Wortzel's Swiss Artists-In-Labs, University of Zurich, residency.

It consists of the text from Charles Darwin, Chapter 17: The Galapagos, of the Voyage of the Beagle, with embellishment from the Wortzel and exeerpts from research texts by AILab researchers as follows:

Fumiya Iida - quadruped
Miriam Fend and Simon Bovet - amouse
Marc Ziegler - fish

archipelago.ch

## INTRO

26 seconds
0.09-0.33

The archipelago is, in itself, a little world within. A satellite which at one time had spokes to a continent whence it has derived a few stray colonists, and has received the general character of its indigenous productions. Although, within the archipelago, the difference is that its islands somehow appear to encourage each emigrated morphology to emerge into something more than it was whence it came.

## ST. SIMIR ISLAND

2. 21 seconds

1:19-1:40
Of terrestrial mammals there is only one, which must be considered as indigenous, namely a mouse of genus Archipelago-gensis species Mus, or Amouse. And this is confined, as far as I could ascertain, to St. Simir Island, the most easterly island of the group.
3. 17 seconds

1:45-2:02
Its lineage is reminiscent of a division of the family of mice characteristic of the Continent in an early stage of its development, and I can hardly doubt that this mouse is a variety evolved via the new and peculiar climate, food, and soil to which it has been subjected.
4. 29 seconds

4:33-5:02
The Amouse here is of particular interest because of the evolution of certain attributes of its whiskers, which, in other species I have seen, tend to function as little more than accessories. Their whiskers extend from 3 to 4 inches, are white in color, regardless of age, and are quite robust. I cannot say for sure, but both on observation and instinct, it seems that there is something formulaic but yet flexible and dynamic about its whisker array.
5. 29 seconds

## 5:41-6:10

There is no way to prove that the whiskers were assigned different functions as to reaction, interpretation, or recovery, but it almost seems that the whiskers have a relationship to each other, and a method of communicating their experience and analysis. The permutations of the reactions seem inclusive of identifying the material they have come into contact with. That is, the Amouse seems capable of a process of recognition, if it has had prior contact with the material.

## FUMIYA ISLAND

6.7 seconds

7:40-7:47
We doubled the southwest extremity of Fumiya Island and were nearly becalmed.

## 7. 19 seconds

7:54-8:13
The island was covered with immense deluges of black naked lava, which have flowed over the rims of the great crater cauldrons like pitch over the rim of a pot in which it has been boiled, or have burst forth from smaller orifices on the flanks, and, in their descent, they have spread over the entire island.
8. 23 seconds

8:27-8:50
I will now turn to an order of mammal which gives the most striking character to the zoology of these islands. The species are numerous and the numbers of individuals for each species are extraordinary, considering that they are confined only to this island. I am referring to a number of creatures I think belong to the genus Cynocephalus.
9. 33 seconds

8:55-9:28

Examining both the present day animals and the fossils found on the southward flank of the craters, one can really trace evolutionary history. The larger specimens existing today are an anomaly. In reality, through history, the stature of the creatures has generally gone from huge and dinosaur-like to tiny and mouselike. It is evident that there are actually many levels of the evolutionary selection process ongoing here.

### 10.32 seconds

9:37-10:09
It seems that individuals in ancient generations were created out of one homogenous substance with a skellettal structure that was hard and almost metallic in nature, while the materials constituting subsequent generations became extremely diverse in each specimen. The separate parts of the creature became smaller and smaller, enabling the size of the animals to diminish down through the generations from the point in time where, I believe, they emerged as marine life out of the surrounding seas.

## 11. 34. Seconds

10:28-11:02
Observing these dogs, it would seem they are a minimalist quadrupedic model of rapid locomotion inspired by some sort of biomechanical paradigm. Albeit, this sounds artificial and reminiscent of something man made, but this is the only way I can explain how the animal forms its idiosyncratic system of rapid and robustlegged locomotion. From my observations, I concluded that the locomotion is induced by spring-like properties in the muscles of the animal, by weight distribution, and by body dimensions.

## 12. 20 Seconds

## 11:34-11:54

Based on anatomical study, we found, with respect to the number of passive joints, dimensions of limbs, weight, and properties, and locations of muscles, that
the creature has evolved from a compromise between nature and a machine-like architecture to accommodate its body structure.

## 13. 14 Seconds

11:58-12:12
Upon dissection and analysis, it was discovered that the skeleton contains twenty-eight passive joints, each of which has one passive rotational degree of freedom, with each joint capable of small translational displacement as well.

## 14. 1:06 Seconds

12:24-13:30
The dogs, when thirsty, are obliged to travel from one end of the island to the other, as there is a strange system of alternating currents in the rivers of this island. Hence broad and well-beaten paths branch off in every direction from the wells down to the seacoast. When I landed at Fumiya Island I could not imagine what animal traveled so methodically along such well-chosen tracks. Near the springs, it was a curious spectacle to behold these creatures; one set eagerly traveling onwards with outstretched necks, and another set returning after having drunk their fill. When one of them arrives at a spring, quite regardless of any spectator, he buries his head in the water above his eyes and greedily swallows great mouthfuls at the rate of about ten in a minute.

The animal stays three or four days in the neighborhood of the water and then returns to the lower country, but they differ respecting the frequency of these visits. The animal probably regulates them according to the nature of the food on which it has lived.

## MARCUS COVE

## 15. 16 Seconds

In the evening we anchored in Marcus Cove. The next day, the water being unusually smooth, I waded over the outer flat of dead rock as far as the living mounds of coral where the swell of the open sea breaks.

## 16. 39 seconds

14:54-15:33
In some of the gullies and hollows, there were beautiful red and other brightly colored fishes. Over the course of a day, I could see that there were more than one of them, but I never once witnessed a cluster in schools, but always only one at a time in each pool. It is excusable to grow enthusiastic over the infinite numbers of organic beings with which our planet teems, yet I must confess I think those naturalists who have described marine beauties with seeming intelligence have indulged in rather exuberant and excessive language.

### 17.21 seconds

## 15:43-16:04

Their armature seemed to be constructed of oddly shaped bones, mostly flattened rectangular scales, and they did not appear to exhibit any cartilaginous properties, nor do they seem to have any fat external to the bones. The expression, skin and bones, would apply admirably to these creatures.

## 18. 18 seconds

## 16:25-16:48

In the midsection of the species, or the tail in some cases, there is a broad membrane, which appears sometimes to act as a ventilator in causing the current of water to flow over the dorsal branchiae, forcing a muscular contraction, which is not externally visible.
19. 13 seconds

16:57-17:10

These fishes, with their flabby skin, possess the singular capability of folding almost in half to reduce their size. This phenomenon is a feeble attempt, I assume, to become more invisible to predators.

### 20.14 seconds

17:58-18:12
These fish are propelled through the water via the oscillation of their exoskeleton; the direction, speed, and duration dependent upon the configuration of their tail or fins, and the lack of, or preponderance of, currents in the water.
21. 25 seconds

## 18:49-19:14

They appear to have no vision, nor any sense as to which of their parts would be more vulnerable than others. They also seemingly at times have energy issues, as if the stimulation for an acting oscillation was wavering. This causes them to lag behind the demands of oscillation in an apparent struggle to catch up with, not their breath, but their motion.
22. 54 seconds

19:22-20:16
Oscillation was the only thing these creatures had in common with each other. As hard and as long as I looked, I could never see two that matched in any significant way. Rather, each had a markedly different configuration and, upon analysis, the remarkable conclusion I would draw is that no two of these creatures are alike, whether in the same generation or down through the generations. This would mean that their genetic makeup not only has combinatorial and hierarchical rules, but also generates more variability within the limited constraints of oscillatory development than any other species known on Earth. From this and other indications I can deduce that these species of marine life are most likely the only vestiges of the primordial marine creatures that spawned all of Earth's life on land.

## 23. 21 seconds

20:42-21:03
Although common in the pools of water left by the retiring tide, these animals were not easily caught. By means of their oscillations they could drag their bodies into very narrow crevices and, when thus fixed, it required great force to remove them.

## 24. 49 seconds

21:30-22:19
Although they have intense coloration, it is in stasis. These animals, unlike others I have seen in this archipelago, do not escape detection by the chameleon-like power of changing their color. I have seen this phenomenon in other creatures, where they appear to vary their tints according to the nature of the ground on which they pass. There, the colors entirely disappear and appear again by turns in cloudy areas passing through on the body, varying in tint between a hyacinth red and a chestnut brown, and continually passing over the body. These clouds, or blushes as they may be called, are said to be produced by the alternate expansion and contraction of minute vesicles containing variously colored fluids.

## 25. 36 seconds

22:37-23:13
I was much amused by the various arts to escape detection used by one individual, which seemed fully aware that I was watching it. Remaining for a time motionless, it would then stealthily advance an inch or two, like a cat after a mouse, sometimes changing its direction as a ploy. It thus proceeded, until, having gained a deeper part, it darted away leaving in its wake a dusty train of debris to hide the hole in which it had crawled.

