

A  
**DISCOURSE**  
ON THE  
**REVOLUTIONS OF THE SURFACE**  
OF  
**THE GLOBE,**  
AND THE  
CHANGES THEREBY PRODUCED IN THE ANIMAL  
KINGDOM.

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**BY BARON G. CUVIER,**  
COMMANDER OF THE LEGION OF HONOUR AND OF THE ORDER OF THE  
CROWN OF WURTEMBERG, MEMBER OF THE FRENCH ACADEMY,  
&c. &c. &c.

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**Translated from the French,**  
WITH ILLUSTRATIONS AND A GLOSSARY.

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gorous scrutiny, be known by each fragment of each of its parts.

Every organized being forms a whole, a unique, and perfect system, the parts of which mutually correspond, and concur in the same definitive action by a reciprocal reaction. None of these parts can change without the whole changing; and consequently each of them, separately considered, points out and marks all the others.

Thus, as I have before remarked, if the intestines of an animal are so organized as only to digest flesh, and that fresh, it follows that its jaws must be constructed to devour a prey, its claws to seize and tear it, its teeth to cut and divide it, the whole structure of its organs of motion such as to pursue and catch it, its perceptive organs to discern it at a distance; nature must even have placed in its brain the necessary instinct, to know how to conceal itself and lay snares for its victims. Such will be the general conditions of the carnivorous kingdom; every animal of this species will infallibly unite these qualities; for its race could not exist without them. But under these general conditions there are particular ones, relative to the size, species, and haunts of the prey, for which each animal is inclined; and each of these particular conditions result from modifications of the detail in the formations which they derive from the general conditions; thus, not only the class, but the order, the genus, and even the species, are detected in the formation of each part.

For, that the jaw may be enabled to seize, it must have a certain shaped prominence for the articulation, a certain relation between the position of the resisting power and that of the strength employed