

plates of cartilage. They are bone within, and cartilage without, just as others are bone without and cartilage within.

But how apply all this to the Geology of the Old Red Sandstone? Very directly. The ichthyolites of this ancient formation hold, as has been said, an intermediate place, unoccupied among present existences, between the two series, and in some respects resemble the osseous, and in some the cartilaginous tribes. The fact reminds one of Dr. Johnson's shrewd objection to the theory embraced by Soame Jenyns in his *Free Inquiry*, and which was the theory also of Pope and Bolingbroke. The metaphysician held, with the poet and his friend, that there exists a vast and finely graduated chain of being from Infinity to nonentity — from God to nothing; and that to strike out a single link would be to mar the perfection of the whole.\* The moralist demonstrated, on the contrary, that this chain, in the very nature of things must be incomplete at both ends — that between that which

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- \* "See, through this air, this ocean, and this earth,  
 All matter quick, and bursting into birth :  
 Above, how high progressive life may go !  
 Around, how wide ! how deep extend below !  
 Vast chain of being ! which from God began —  
 Nature's ethereal, human angel, man,  
 Beast, bird, fish, insect — what no eye can see,  
 No glass can reach ; from Infinite to thee —  
 From thee to nothing. On superior powers  
 Were we to press, inferior might on ours ;  
 Or in the full creation leave a void,  
 Where, one step broken, the great scale's destroyed :  
 From Nature's chain, whatever link you strike,  
 Tenth, or ten thousandth, breaks the chain alike."

*Essay on Man.*