

Contents

1	What this text is about	4
2	The themes of S202 in historical perspective	6
2.1	Fifty years ago	6
2.2	A hundred years ago	7
2.3	Two hundred years ago	9
2.4	What has this Section been about?	11
3	The nature of biological explanation	11
3.1	'Within level' explanations	12
3.2	'Top-down' explanations	12
3.3	'Bottom-up' explanations	13
3.4	Developmental explanations	15
3.5	Evolutionary and genetic explanations	15
3.6	Summary: the relationship between different types of explanations	16
4	How biology develops and grows	16
5	The history of biological thought	20
5.1	The mechanization of biology	20
5.2	Classification	22
5.3	Structure under the microscope	23
5.4	Mechanists, vitalists and spontaneous generation	24
5.5	The triumph of mechanism	24
5.6	Enzymes and energetics	25
5.7	Developmental mechanics	26
5.8	The alternatives to adaptationism: structuralist biology	27
6	Conclusion	30
	References	31
	Other books that you may find relevant	32