

Adaptation Encyclopedia Article

Adaptation

The following sections of this BookRags Literature Study Guide is offprint from Gale's For Students Series: Presenting Analysis, Context, and Criticism on Commonly Studied Works: Introduction, Author Biography, Plot Summary, Characters, Themes, Style, Historical Context, Critical Overview, Criticism and Critical Essays, Media Adaptations, Topics for Further Study, Compare & Contrast, What Do I Read Next?, For Further Study, and Sources.

(c)1998-2002; (c)2002 by Gale. Gale is an imprint of The Gale Group, Inc., a division of Thomson Learning, Inc. Gale and Design and Thomson Learning are trademarks used herein under license.

The following sections, if they exist, are offprint from Beacham's Encyclopedia of Popular Fiction: "Social Concerns", "Thematic Overview", "Techniques", "Literary Precedents", "Key Questions", "Related Titles", "Adaptations", "Related Web Sites". (c)1994-2005, by Walton Beacham.

The following sections, if they exist, are offprint from Beacham's Guide to Literature for Young Adults: "About the Author", "Overview", "Setting", "Literary Qualities", "Social Sensitivity", "Topics for Discussion", "Ideas for Reports and Papers". (c)1994-2005, by Walton Beacham.

All other sections in this Literature Study Guide are owned and copyrighted by BookRags, Inc.

Contents

Adaptation Encyclopedia Article.....	1
Contents.....	2
Adaptation.....	3

Adaptation

Adaptation describes the process whereby an organism adapts to, or learns to survive in, its environment. The process is crucial to natural selection, enabling those organisms or species best suited to a particular environment to survive. Ethologists, scientists who study the behavior of animals in their natural habitats from an evolutionary perspective, document adaptive behavior.

Adaptation occurs in individual organisms as well as in species. Sensory adaptation consists of physical changes in sense organs in response to the presence or cessation of stimuli. Examples include the adjustment by pupils of the eyes when moving from bright light into a darkened room, or the way in which the sense of touch becomes accustomed to the sensation of cold after an initial plunge into water. Once a steady level of stimulation (such as light, sound, or odor) is established, the organism's sensors adjust, and no longer respond actively to it. However, any abrupt changes in stimulus require further adaptation.

The adrenalin-produced reactions to environmental dangers, including rapid breathing, increased heart rate, and sweating, are collectively referred to as the "fight or flight" response. These reactions are considered a form of adaptation. The ability to learn new responses, as in classical and operant conditioning, is another form of adaptation.

The process of adaptation begins in infancy. Infants become more efficient as they nurse and with each year acquire behavior that will enable them to succeed. In the preschool years, the child learns to function or adapt to his environment by emulating and imitating the behavior of others. These adaptive behavior skills are vital to a child's successful development.