

Learning

Learning: A change in behavior, resulting from experience (page 222). There are three basic types of learning covered in this chapter.

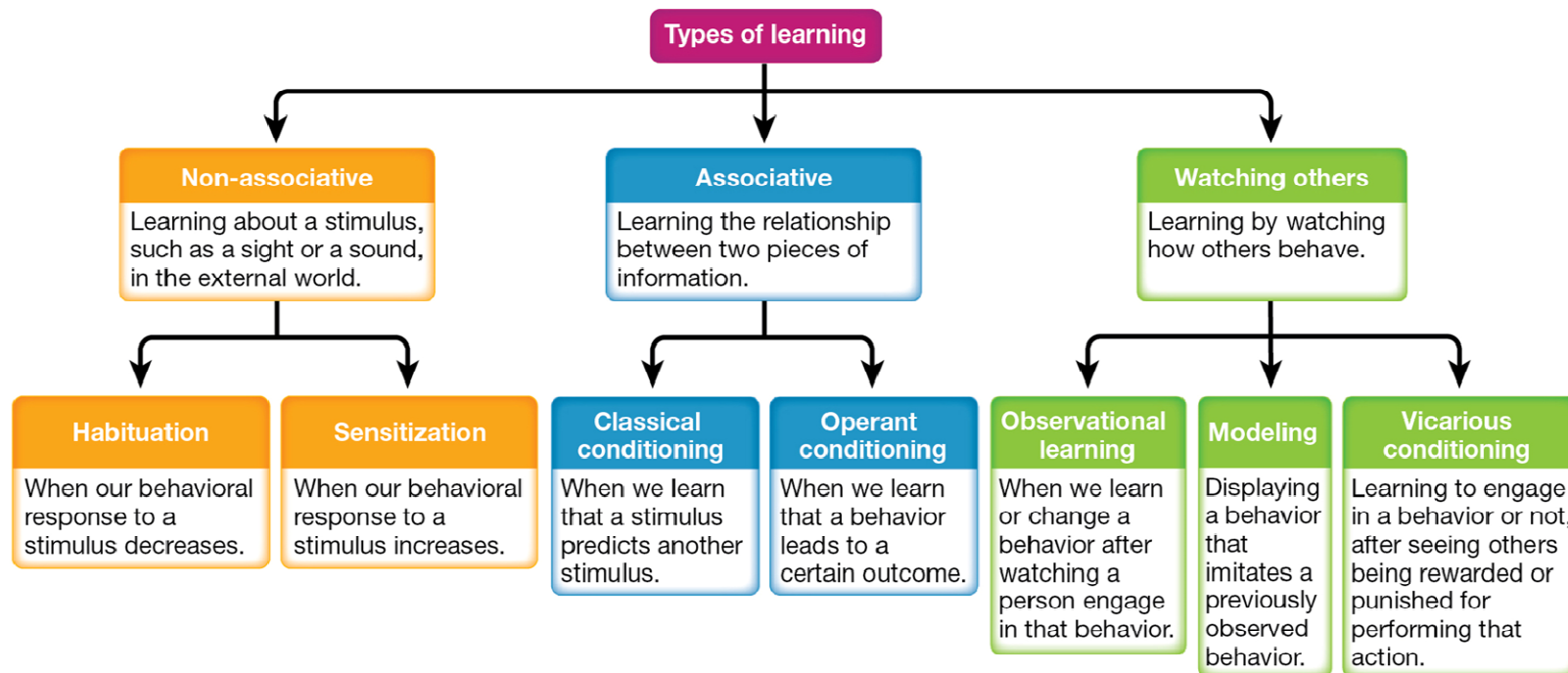


FIGURE 6.2

Learning

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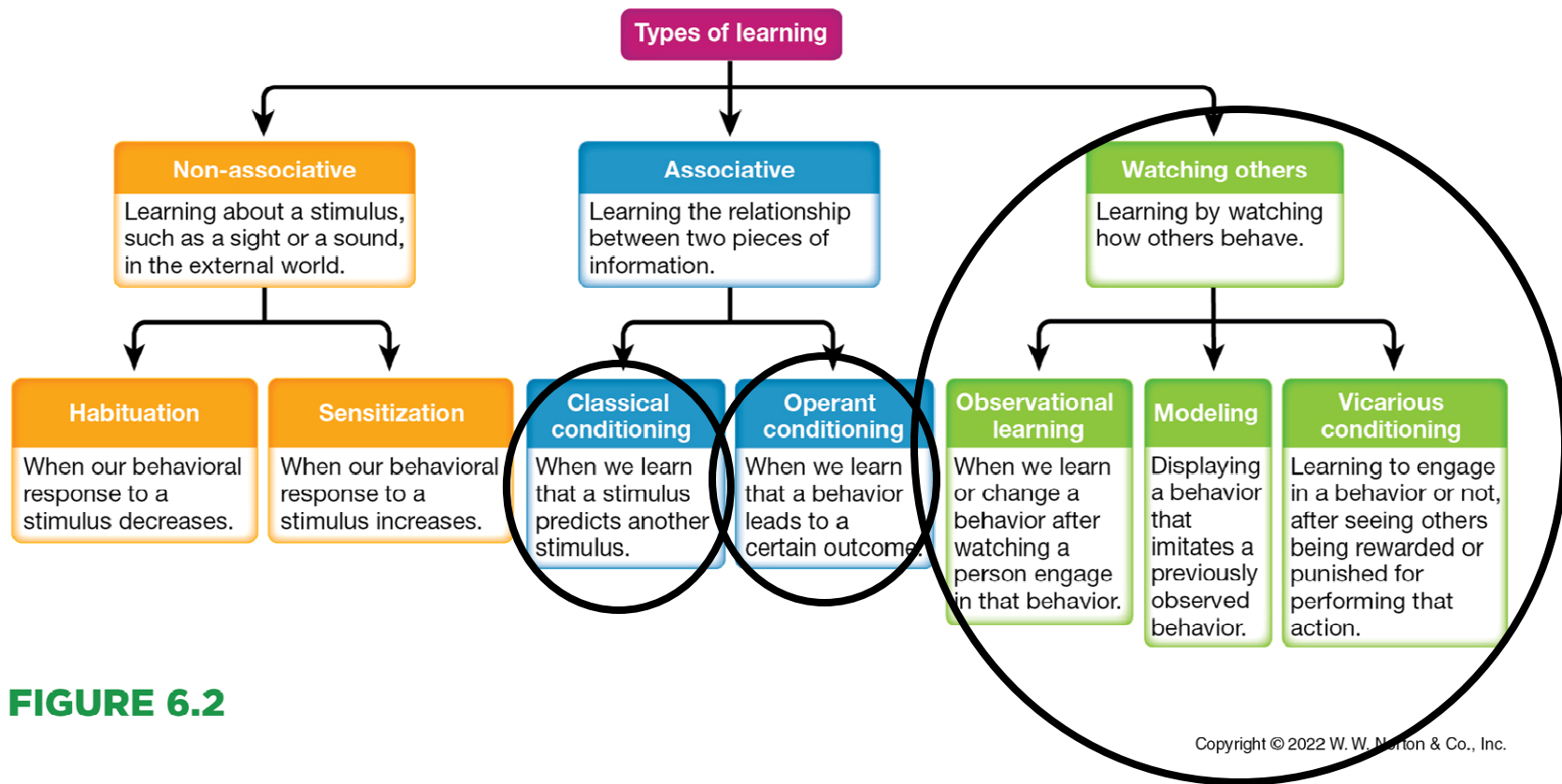


FIGURE 6.2

Learning

Classical Conditioning	Operant Conditioning	Watching Others
<p>A type of learned response in which a neutral object comes to elicit a response when it is associated with a stimulus that already produces a response.</p> <p>Classical conditioning occurs with involuntary behaviors.</p>	<p>A learning process in which an action's consequence determines how likely an action is to be performed in the future.</p> <p>Operant conditioning occurs with voluntary behaviors.</p>	<p>Learning by watching others. (observational learning, modeling, vicarious learning)</p>
<p>THE METHODS OF PSYCHOLOGY Pavlov's Classical Conditioning</p> <p>Hypothesis: A dog can learn that a neutral stimulus predicts food.</p> <p>Research Method</p> <ol style="list-style-type: none"> 1. The dog salivates to the unconditioned stimulus (food). 2. The dog salivates to the neutral stimulus (bell) after it is paired with the unconditioned stimulus (food). 3. The dog salivates to the conditioned stimulus (bell) after conditioning. 4. The dog salivates to the conditioned stimulus (bell) after conditioning. <p>Results: After conditioning, the dog salivates to the bell (conditioned response).</p> <p>Conclusion: The dog can learn to associate the stimulus with the response and learn.</p> <p>Question: In this example, what is the unconditioned stimulus, and why is it considered unconditioned?</p> <p><small>Source: Figure 1.7, 2022. South-Western Publishing, Inc. An imprint of Cengage Learning. All rights reserved. This material is protected by copyright. No part of this material may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without prior written permission from the publisher. This material is provided for personal use only. All other rights reserved. Copyright © 2022 W. W. Norton & Co., Inc.</small></p>	<p>FIGURE 6.15</p> <p><small>Nina Leen/The LIFE Picture Collection via Getty Images Copyright © 2022 W. W. Norton & Co., Inc.</small></p>	<p>FIGURE 6.26</p> <p><small>Albert Bandura, Dept. of Psychology, Stanford University Copyright © 2022 W. W. Norton & Co., Inc.</small></p>

Learning

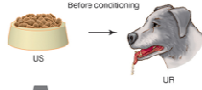

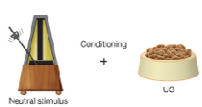
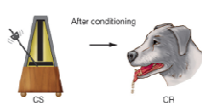
Learning: A change in behavior, resulting from experience (page 222). There are three basic types of learning covered in this chapter.

Classical Conditioning (Pavlovian Conditioning): A type of learned response in which a neutral object comes to elicit a response when it is associated with a stimulus that already produces a response (page 226).

THE METHODS OF PSYCHOLOGY Pavlov's Classical Conditioning

Hypothesis A dog can learn that a metronome predicts food.

Research Method

- 1** Food (unconditioned stimulus) causes the dog to salivate (unconditioned response).

- 2** The clicking metronome (neutral stimulus) does not cause the dog to salivate.

- 3** During conditioning trials, the clicking metronome is presented to a dog just before the food.

- 4** During critical trials, the clicking metronome (conditioned stimulus) is presented without the food, and the dog salivates (conditioned response).


Results After conditioning, if the metronome causes the dog to salivate (conditioned response).

Conclusion The dog was conditioned to learn the association between the metronome and food.

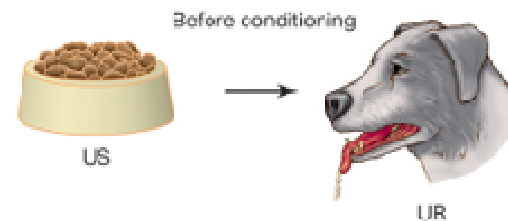
Question In this example, what is the unconditioned stimulus, and why is it considered unconditioned?

Source: Pavlov, I. P. (1927). Conditioned reflexes: An investigation of the physiological activity of the cerebral cortex. Translated and edited by G. V. Anrep. Oxford University Press, Humphrey Milford.

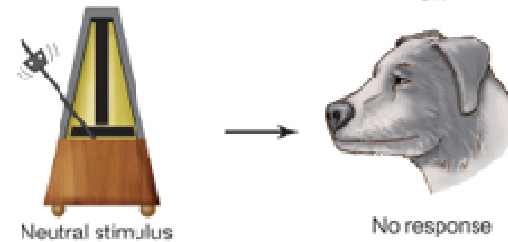
The Basics of Classical Conditioning

Pavlov and the Dogs:

Food (**unconditioned stimulus**) causes the dog to salivate (**unconditioned response**).



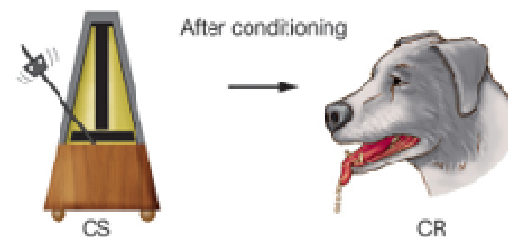
The clicking metronome (**neutral stimulus**) does not cause the dog to salivate.



During conditioning trials, the clicking metronome is presented to a dog just before the food.



During critical trials, the clicking metronome (**conditioned stimulus**) is presented without the food, and the dog salivates (**conditioned response**).



When using the vocabulary of classical conditioning, replace it with language that you are familiar with to help you learn the new vocabulary.

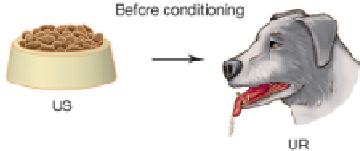
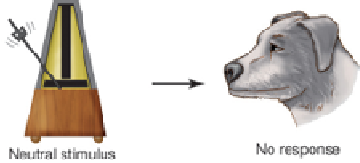
For example,

Conditioned = learned

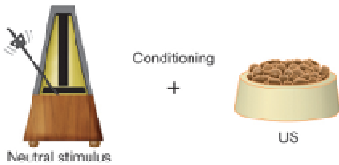
Stimulus = cause

Response = effect


Before Conditioning:

	"examples"	Terminology
 <p>Before conditioning</p> <p>US → UR</p>	Food → salivating	Unconditioned stimulus (US) Unconditioned response (UR) US (food) → UR (salivating) (sometimes written as UCS → UCR)
 <p>Neutral stimulus → No response</p>	Ticking metronome → no response	Neutral stimulus (NS) NS (metronome) → no response

During Conditioning:

	"examples"	Terminology
 <p>Conditioning</p> <p>Neutral stimulus + US</p>	Metronome + food → salivating	NS (metronome) + US (food) → UR (salivating)

After Conditioning:

	"examples"	Terminology
 <p>After conditioning</p> <p>CS → CR</p>	metronome → salivating	Conditioned stimulus (CS) Conditioned response (CR) CS → CR CS (metronome) → CR (salivating)

