

PSI 428

Attentional Processes

Automaticity, Effort and Control

Learning Objectives

- How automaticity is related with theories of attention?

What is automaticity?

Controlled Processes

- Require attention
- Intentional (planned)
- Controllable
- Slow and serial
- Conscious

Automatic Processes

- Not require attention
- Unintentional
- Obligatory
- Fast and parallel
- Unconscious

What is automaticity?

- How does serial vs. parallel information processing theories of perception explain automatic and controlled processes?

What is automaticity?

- How does early vs. late selection theories explain automatic and controlled processes?

What is automaticity?

- How does exogenous and endogenous cuing of attention are related with automatic and controlled processes?

What is automaticity?

- How does operational bottleneck theory of attention explain automatic and controlled processes?

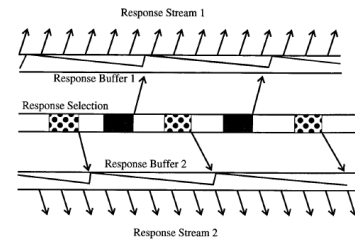


Figure 8.1
How central switching may produce two apparently continuous and independent response streams (stream 1 and stream 2). With time proceeding from left to right, response selection for the two tasks actually occurs asynchronously (alternating gray and polka-dot regions). Each response selection fills up a first-in-first-out response buffer for a given task; meanwhile, responses are rapidly and continuously emitted from each buffer.

What is automaticity?

- The notion of automaticity is intrinsically related with alternative theories of attention.

Other Issues Related with Automaticity

- Do controlled and automatic processes that carry out the same task co-exist at the same time?
- Is transition from controlled to automatic processes sudden or smooth?
- Do various features of automaticity all emerge at the same time?