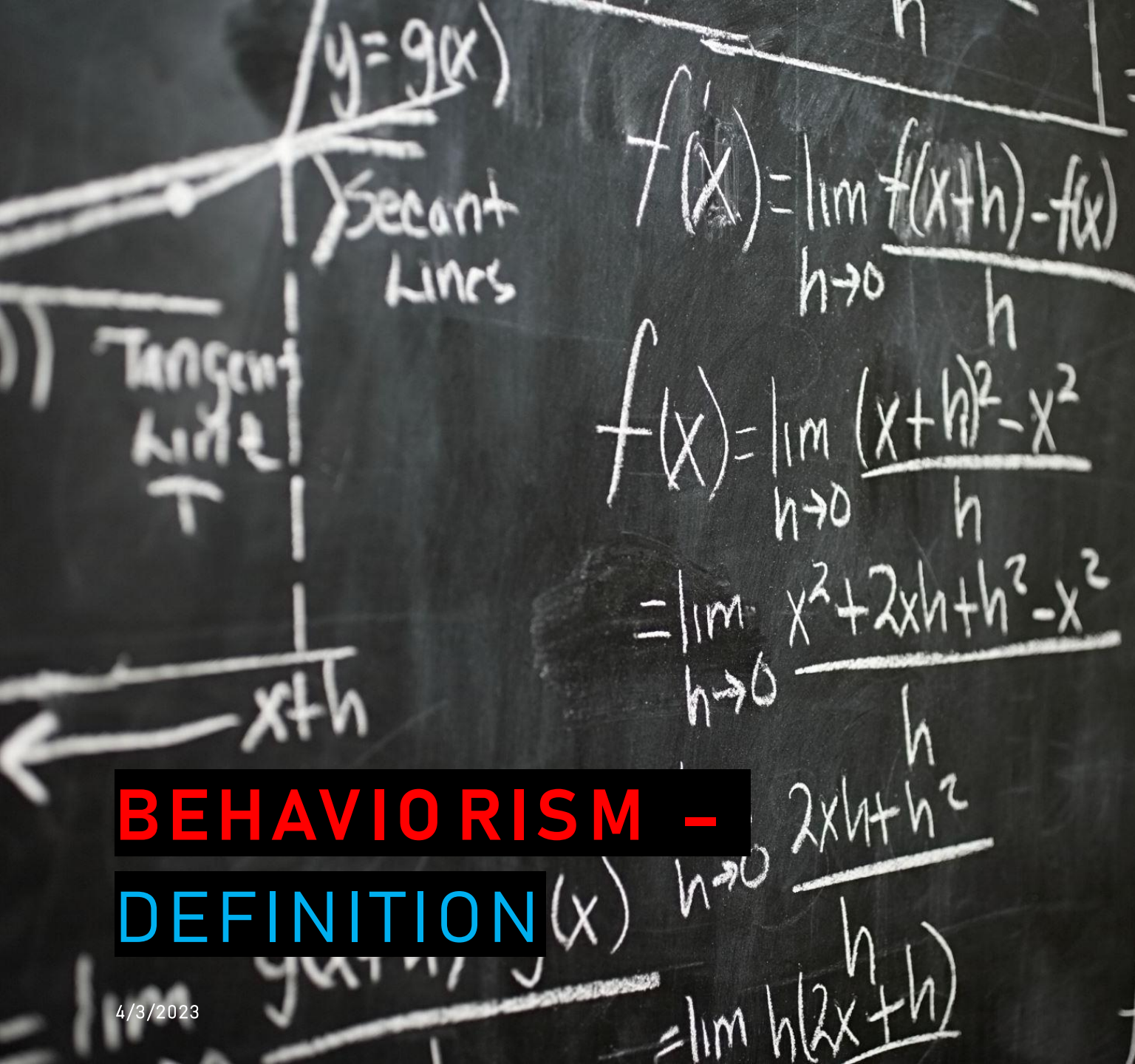# THEORY OF
LEARNING

Nia English

OMDE 601

April 2023

BEHAVIORISM – DEFINITION

- "Learning is a change in behavior caused by external stimuli in the environment" (Ally, 2008, p. 19)

- The theory focuses on a quantitative measure of the learner's learning process (Bates, 2019)

- Instructor's role is to control the learning environment

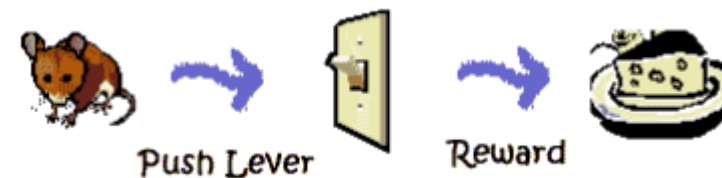# BEHAVIORISM – THEORISTS

JOHN B. WATSON

- "Human behavior resulted from specific stimuli that elicited certain responses"

- "Human development should be based on observation of overt behavior"

(Zhou and Brown, 2017, pp. 6-7)

- Built upon Ivan Pavlov's Classical conditioning
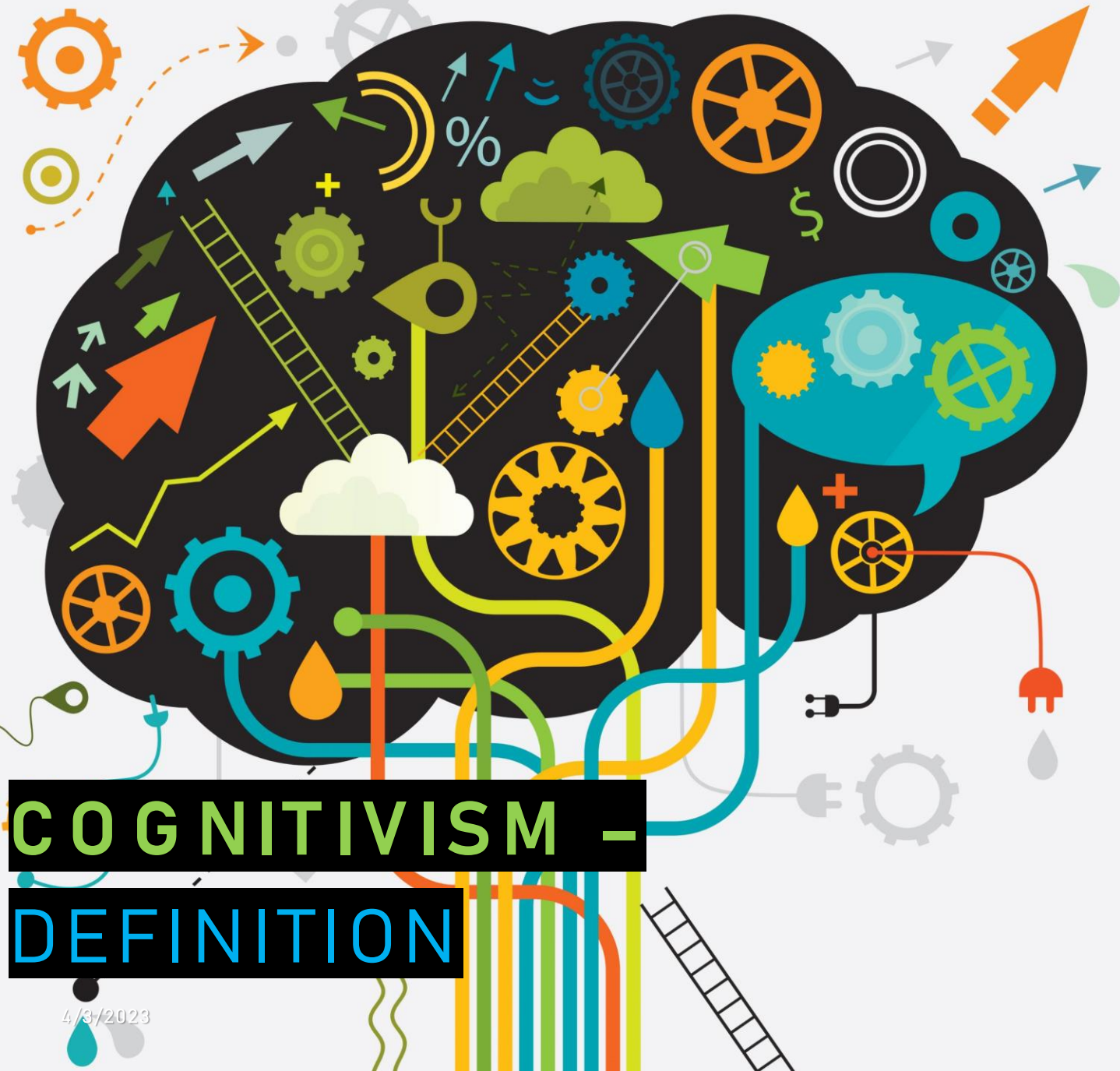
B.F. SKINNER

Operant conditioning

Push Lever   Reward

BEHAVIORISM – TEACHING/LEARNING

- Reinforce the reward and punishment

- Contract

- Consequences

- Provide feedback for correction purposes

- Multiple-choice tests

- Measurable learning objectives

- Computer-assisted instruction (Bates, 2019)

- Well-structured content and in sequence (Ally, 2008)

COGNITIVISM – DEFINITION

- Learning is "an internal process that involves memory, thinking, reflection, abstraction, motivation, and metacognition" (Ally, 2008, p. 21).

- Learners are the center of learning.

- Instructor's role is a subject matter expert

COGNITIVISM – THEORISTS

JOHN PIAGET

Social Cognitive Learning Theory – Four Stages of Development:

- Sensorimotor

- Preoperational Stage

- Concrete Operational Stage

- Formal Operational Stage (Zhou and Brown, 2017)

ALBERT BANDURA

Social Learning Theory – Observational Learning:

- "Behavior, personal factors, and environmental factors are all equal and interlocking of each other" (Bandura, 1973, qtd by Zhou and Brown, 2017, p. 20)

- Human agency

COGNITIVISM – TEACHING/LEARNING

- Incorporate individual learner's learning style

- Information is provided in increments due to a limited memory capacity

- Well-designed and visually pleasing materials to entice connection between information in the memory

- Encourage real-life cases

- Encourage learners to use their metacognitive skills (Ally, 2008)

- Discovery Learning

- Hands-on Experiences (Zhou and Brown, 2017)

- Learning is a construction of knowledge "by assimilating information, relating it to our existing knowledge, and cognitively processing it (Bates, 2019, para. 3)

- Learners and social interaction are active agents of learning

- Motivation is key to successful learning

- Foundation of Online Collaborative Learning (OCL) and Community of Practice (CoP)

- Instructor's role is as a facilitator

CONSTRUCTIVISM – DEFINITION

CONSTRUCTIVISM – THEORISTS

JOHN DEWEY

- Education & Democracy

- Experimental Learning

- Social Learning

- Inquiry-based Learning

- Self-directed Learning (Teach Taught, 2019)

LEV VYGOTSKY

- Sociocultural Theory

- Imitation

- Guided Learning

- Collaborative Learning (Verywell Mind, 2002)

CONSTRUCTIVISM – THEORISTS
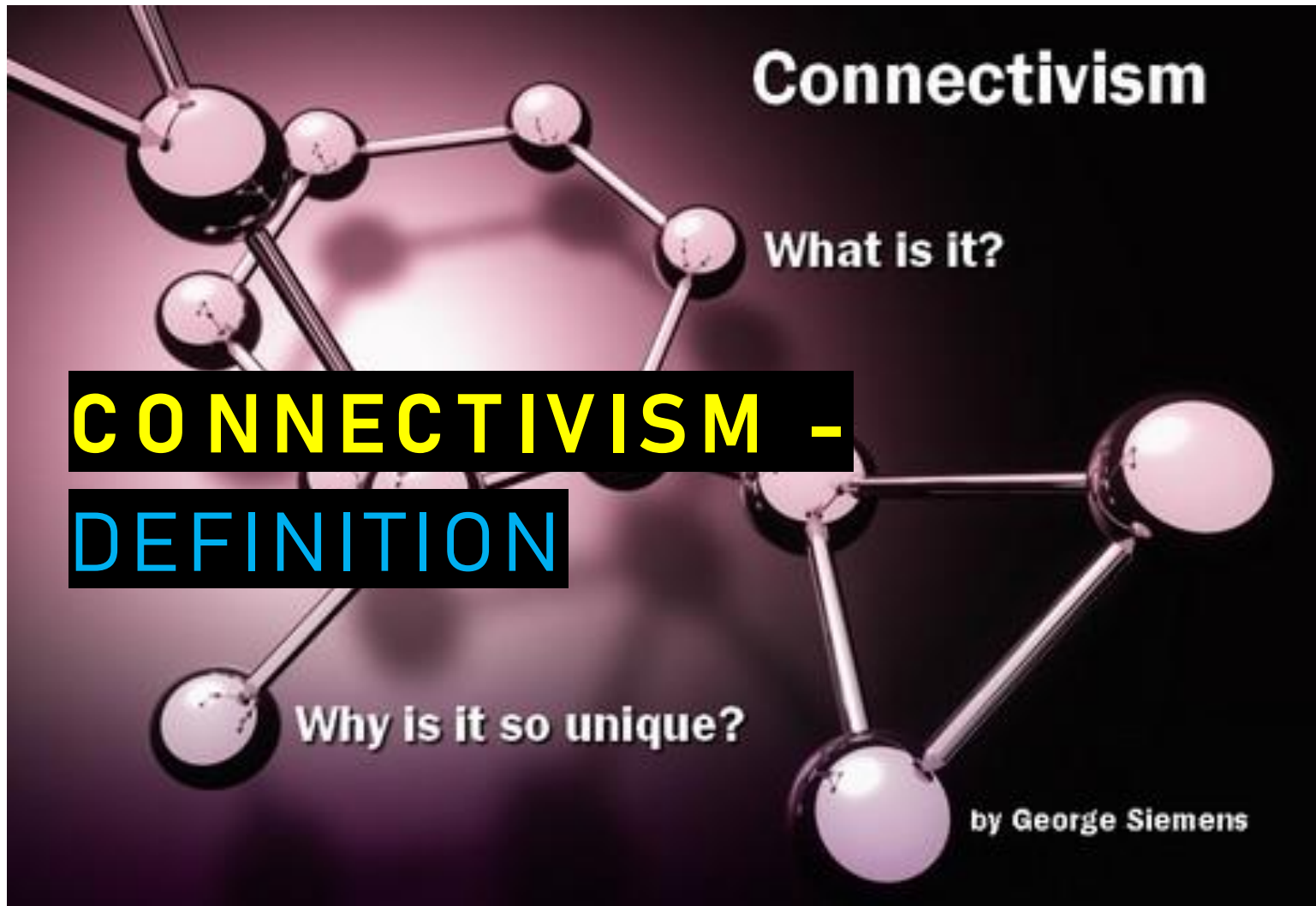
MARIA MONTESSORI

Key principles:

• Independence

• Prepared Environment

• Learning by Doing

• Learning from Peers

• Teacher's Guidance

• Observation (Daily Montessori, 2021)

VON GLASERFELD

• Radical constructivism

• "Knowledge is what we made of experience"

• Knowledge is personal and in an individual's mind

• Knowledge is subjective construction (D'Agness, 2015, pp. 132-133)

CONSTRUCTIVISM – TEACHING/LEARNING

- Collaborative & Cooperative Learning – Group Work & Discussion

- Reflective Learning

- Learning must be meaningful

- Interactive Learning – to promote higher-level thinking

- Reciprocal Learning

- Inquiry-based Learning

- Problem-based Learning (Kurt, 2021)

Connectivism

What is it?

Why is it so unique?

by George Siemens

CONNECTIVISM –
DEFINITION

- "A theory for the digital age, where individuals learn & work in a networked environment (Ally, 2008, p. 34)

- Knowledge is outside the control of humans; it is constantly changing (Bates, 2019)

- "The pipe is more important than the content within the pipe" (Siemens, 2004, qtd by Bates, 2019)

- Learning is an external and collective process

CONNECTIVISM – THEORISTS

G. SIEMENS

- Knowledge rest in the diversity of opinions

- Learning is a process of connecting the nodes within the network

- Capacity to know is more valuable than what is presently known

- Nurturing and maintaining connection is vital to continuously learning

- Stay up-to-date with the information

- Learn and unlearn the knowledge

- Knowledge is fluid, and can reside outside of human

- Decision-making is a learning process (Siemens, 2005)

S. DOWNES

- Making connections and association between the information available in the network.

- Knowledge is out there; we make the connections

CONNECTIVISM – TEACHING/LEARNING

- Massive Open Online Courses (MOOCs)

- Gamification

- Collaborative Learning

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