English and Digital Literacies

Unit 2.2: Behaviouristic CALL

Bessie Mitsikopoulou

School of Philosophy

Faculty of English Language and Literature

Behaviourism

- What do you know about behaviourism?

- What are the main principles of behaviourism in language learning?

- From your experience with computers and language learning, how do you think that behaviourism will affect computer-assisted language programs?

Behaviouristic CALL (1/2)

Defined by the dominant behaviourist theories of learning of Skinner as well as the technological limitations of computers from the 1960s to the early 1980s.


[1]

Behaviouristic CALL (2/2)

- In this theory, the learners observe the information, practice the information and then receive reinforcement through praise.

- Behaviourists believed that all kind of learning, including the learning of a foreign language, operates through conditioning.

Skinner's box

Some time ago, psychologist B.F. Skinner decided to put a mouse inside of a box. This box contained a lever which the mouse could press to open a closed compartment, revealing food. The mouse would then be conditioned to expect food after pressing the lever. This is known in Skinnerian psychology as continuous reinforcement.
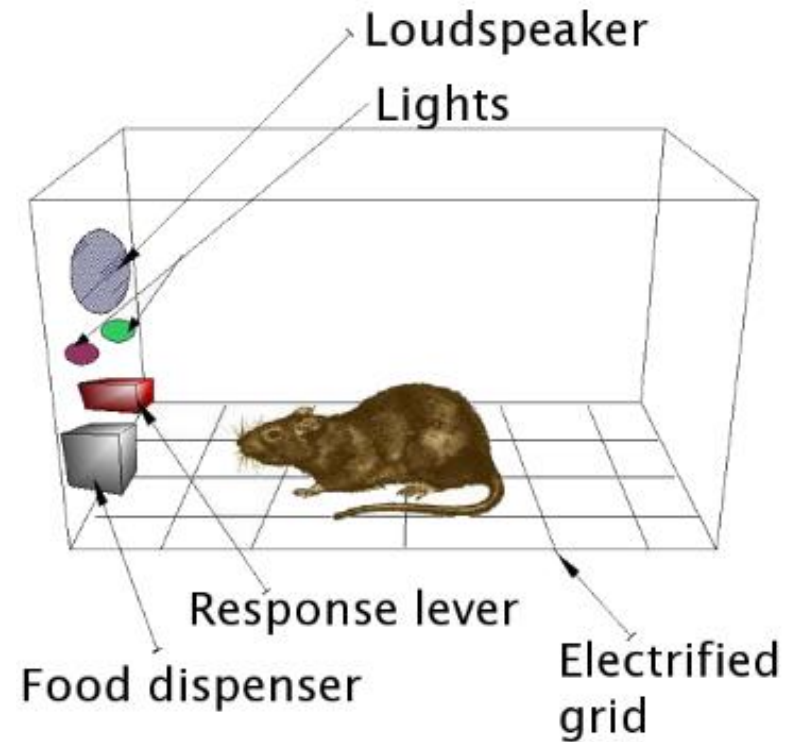
[2]

Pavlov's dog

Another classic example of behaviourism is Pavlov's dog. He investigated the digestive system of dogs by conditioning the dogs to react to the sound of a tuning fork.
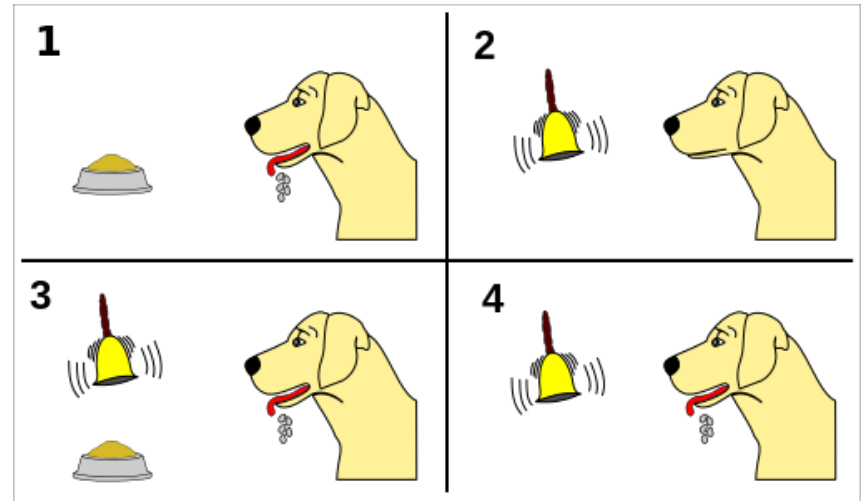
[3]

Stimuli and Behaviour

Behaviourists believe that our responses to environmental stimuli shape our behaviour.

[4]

Behaviourism in Language Teaching

- In language learning behaviourism was expressed through the **audio-lingual method** which arose as a direct result of the need for foreign language proficiency in listening and speaking skills during and after World War II.

- This method focused on drilling, repetition and habit-formation as central elements of instruction.

- Repeated exposure to material was considered beneficial.

Computers in audio-lingual method

- Computers were thought to be ideal for this aspect of learning as the machines did not get bored with learners and the computer could present material to the students at their pace.

- CALL programs of this period presented a stimulus to which the learner provided a response. More sophisticated programs reacted to students' mistakes by offering remedial activities and referring to help screens.

Behaviouristic CALL programs in Language Laboratories (1/2)

Language Labs: the dominant technical device for language learning, it provided increased opportunities for students to hear and repeat language, important facets of the audio-lingual method of language instruction.

[5]

Behaviouristic CALL programs in Language Laboratories (2/2)

- In their original design (programmed instruction), programs entailed repetitive drills, commonly referred to as **drill and practice.**

- Learning is broken into chunks and the learner is drilled to mastery before moving on to the next level.

- Repeated exposure to the same material is considered to be beneficial to learning.

Teaching machine and programmed learning

[6]

Watch the Video:
[B.F Skinner - Teaching machine and programmed learning](#)

Critique of Behaviourist CALL (1/2)

Late 70's and early 80's:

Behaviouristic approaches to language learning were rejected both at a theoretical and a pedagogical level.

Critics claimed that this over-emphasis on repetition and accuracy ultimately did not help students achieve communicative competence in the target language.

Critique of Behaviourist CALL (2/2)

Noam Chomsky argued "Language is not a habit structure. Ordinary linguistic behaviour characteristically involves innovation, formation of new sentences and patterns in accordance with rules of great abstractness and intricacy".

The drill and practice programs did not allow enough authentic communication to be of much value. **At the same time, the introduction of microcomputers provided more possibilities.**

Echoes of Behaviouristic CALL today (1/2)

Although behaviourist approaches to language learning have been rejected, the rationale behind these programs has been not rejected completely due to a number of advantages.
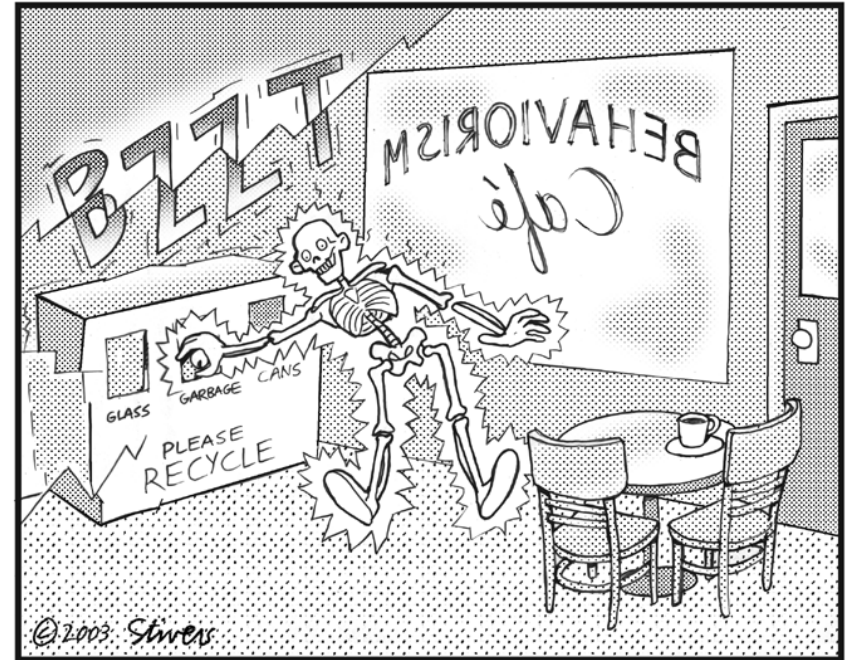
[7]

Echoes of Behaviouristic CALL today (2/2)

- Repetition is beneficial and even essential to learning (computer is an ideal tool).

- Immediate non-judgmental feedback.

- Students can work at their own pace and acquire these skills outside class to free up class time for communicative activities.

- Efficient record keeping,

- Motivation.

Financing

- The present educational material has been developed as part of the educational work of the instructor.

- The project "Open Academic Courses of the University of Athens" has only financed the reform of the educational material.

- The project is implemented under the operational program "Education and Lifelong Learning" and funded by the European Union (European Social Fund) and National Resources.

Notes

Note on History of Published Version

The present work is the edition 1.0.

Reference Note

Copyright National and Kapodistrian University of Athens , Bessie Mitsikopoulou 2014. Bessie Mitsikopoulou. "English and Digital Literacies. Behaviouristic CALL". Edition: 1.0. Athens 2014. Available at: http://opencourses.uoa.gr/courses/ENL10/.

Licensing Note

The current material is available under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International license or later International Edition. The individual works of third parties are excluded, e.g. photographs, diagrams etc. They are contained therein and covered under their conditions of use in the section «Use of Third Parties Work Note».

[1] http://creativecommons.org/licenses/by-nc-sa/4.0/

As Non-Commercial is defined the use that:
- Does not involve direct or indirect financial benefits from the use of the work for the distributor of the work and the license holder.
- Does not include financial transaction as a condition for the use or access to the work.
- Does not confer to the distributor and license holder of the work indirect financial benefit (e.g. advertisements) from the viewing of the work on website .

The copyright holder may give to the license holder a separate license to use the work for commercial use, if requested.

Preservation Notices

Any reproduction or adaptation of the material should include:

- the Reference Note,

- the Licensing Note,

- the declaration of Notices Preservation,

- the Use of Third Parties Work Note (if available),

together with the accompanied URLs.

Note of use of third parties work

This work makes use of the following works:

Image 1: [B.F. Skinner at the Harvard Psychology Department](), Creative Commons Attribution 3.0 Unported, Wikimedia Commons.

Image 2: [Skinner box](), Attribution-ShareAlike 3.0 Unported, Wikimedia Commons.

Image 3: [Diagram Ivan Pavlov's conditioning experiments with dogs](), Creative Commons Attribution-Share Alike 4.0 International, Wikimedia Commons.

Image 4: [Cruella De Vil]() from the 101 Dalmatians Movie, Copyright Disney Enterprises Inc. All Rights Reserved. International Movie Database (IMDb).

Image 5: [Language Lab](), CC0 Public Domain, Pixabay.

Image 6: Screenshot of the video "[B.F Skinner. Teaching machine and programmed learning]()", Standard YouTube Licence, Youtube.

Image 7: [Behaviourism Café](), Copyright Mark Stivers. All rights reserved. Mark Stivers Website.