

A New Way of Walking

Living Life for The Praise of His Glory: A Study of the Letter of Paul to the Ephesians

Recently *The New York Times* reported on a study conducted in Switzerland on implants that can serve as a digital bridge between the brain and spinal cord, offering hope to those who are paralyzed due to injury. Dr. Grégoire Courtine and teams of scientists from the Swiss Federal Institute of Technology have led the way in this research and have developed technology for those suffering from spinal cord injury. In 2016, they were able to restore the ability to walk in paralyzed monkeys. In 2018, electrical pulse generators were developed to stimulate the brain, allowing partially paralyzed people to walk and ride bicycles again. Last year, more advanced brain stimulation procedures allowed paralyzed subjects to swim, walk, and cycle within a single day of treatment. Now, in a new study, artificial intelligence thought decoders are implanted and linked with spinal cord stimulators to reestablish voluntary movement. As I understand it, the thought decoders read a person's intentions, record those thoughts as electrical signals, relay them via spinal cord stimulators that bridge over the injured area of the spine, and stimulate muscle movement in paralyzed areas once unresponsive.

The article featured an interview with Gert-Jan Oskam. Gert-Jan Oskam was living in China in 2011 when a motorcycle accident left him paralyzed from the hips down. Researchers implanted electrodes in his skull and spine. A machine-learning program was used to observe the parts of his brain that lit up as he tried to move various parts of his body. The thought decoder matched the activity of the electrodes with particular intentions. Algorithms connected brain implants to spinal cord implants to stimulate movement.

After more than a year of device adjustments and physical rehabilitation, Mr. Oskam can walk in a limited way around his house, get in and out of a car, and stand at a bar for a drink.

Scientists are quick to point out that the technology does have limitations. The current system does not fix all spinal cord paralysis. The procedure is very invasive and requires multiple surgeries. While hopeful for some lower body paralysis, it has not yet shown effective for upper body movements.

Now, for the first time in a long time, in a limited way, those suffering paralysis due to certain kinds of spinal cord injury have a way to be able to walk again.

Ephesians chapter 5 is about people learning to walk again. We who were once darkened in our understanding and separated from the life of God; we who had lost all sensitivity and were given over to sensuality; we who were indulging in impurity with a continual lust for more have undergone a marvelous, miraculous operation! Operation redemption! Through the blood of Jesus, we have rescued, resuscitated, transformed, and raised to live a whole new life! This new life results in a new walk.

Focus: Ephesians 5:1-33 – 6:1-4

- I. Walk in Love (5:1-7).
 - A. Follow God's Example.
 - B. Imitate Christ's Service.
 - C. Say "No" to Immorality.

- II. Walk as Children of Light (5:8-14).
 - A. Live in Goodness.
 - B. Live in Righteousness.
 - C. Live in Truth.

- III. Walk in Wisdom and Make the Most of Every Opportunity (5:15-16).
 - A. Our Days Are Endangered by Evil.
 - B. Our Days Are Complicated by Complexity.
 - C. Our Days Are Disrupted by Distractions.
 - D. Wisdom to Know the Lord's Will and Discernment to Recognize Opportunities

- IV. Walk in the Spirit (5:15-6:4).
 - A. Life in the Spirit Produces a Devotional Life of Worship.
 - B. Life in the Spirit Produces a Relational Life of Grace.
 - C. Life in the Spirit Produces a Family Life of Mutuality and Respect.