

# Why Travel?

## The Mind: Neuroscience and Psychology



### Introduction

What are the origins of our impulses to travel? Many scientists believe that the answer lies in the brain, and the way it is programmed. There are two dimensions to the way the mind influences our propensity to travel. First, we can explore through insights from neuroscience how physiological characteristics of the brain influence movement, and second, we can investigate how human psychology relates to travel.

*I feel the need... the need for speed.*

Maverick, *Top Gun* (1986), dir. Tony Scott

*The use of traveling is to regulate imagination by reality, and instead of thinking how things may be, to see them as they are.*

Samuel Johnson, 'Letter to Hester Thrale' (1773)

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*Our style of locomotion, together with our cognitive abilities, probably was instrumental for evolving our style of social life. As for the other way around, that is, whether socialization plays a major role in the development of locomotion in human children, I really don't know what to answer... the issue is wide open.*

Professor Francesco Lacquaniti, *Atlantic Magazine* (2011)

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## Key Aspects

### NEUROSCIENCE

#### Humans have unique neural mechanisms for movement

Human babies are believed to follow the same chains of motor command as other animals, until they learn to walk, at which point we develop neural mechanisms that are unique in allowing us to co-ordinate complex movements. Professor Francesco Lacquaniti of the University of Rome believes that the co-ordination and maintenance of upright balance during human walking is more difficult than achieving balance during quadrupedal locomotion, and requires specific and complex neural pulses.

#### Our brains are wired to adapt to new forms of movement

Over the course of human social evolution, we have adapted rapidly towards new forms of movement. As Stephen Gislason has explained 'Ten thousand years ago, if you were male, you learned to throw a spear, catch a fish or carry a deer carcass on your back. Today, you learn to throw a football, move a pen across a paper surface, push keys on a keyboard and control movement with a mouse or joystick.'

#### Our brains have a circadian rhythm and are wired for sunlight

Long distance travel can be disorientating, particularly if we cross multiple time zones in a short timeframe. We are wired to wake and work under sunlight: travel outdoors can therefore release endorphins and improve our feeling of well-being.

### PSYCHOLOGY:

- Many Journeys are not motivated by need but by desire. Sometimes we travel further than we need and we do not always seek to minimize economic costs.
- Cognitive psychology indicates that travel decision-making is complex, based on personality, perception and information processing.
- The aging process has significant effects on our propensity and psychological attitude towards travel. Older people tend to be less adventurous in their travel choices, preferring to use modes and visit destinations that are familiar.
- The emotions have a strong role to play in our travel choices. The sometimes competing feelings of pleasure, nostalgia, fear and freedom all affect our individual ideals of travel and the limits that we place on our movement. Perceptions of danger and safety, for example, can strongly affect the destinations we choose. One of the most common themes for anxiety dreams is the imagining of journeys gone wrong.

## Practical Implications

- **Movement is hard wired into the human brain. Scientists argue that increasingly we should appreciate the benefits of movement as a human need. These benefits can be physical, from the endorphins released when we exercise, or psychological, by changing our surroundings.**
- **Problem of confinement. Humans can become psychologically distressed if their movement is restricted; hence confinement is commonly seen as form of a punishment. For mobility-disabled people the need for travel is often particularly important. Until recently most public transport was inaccessible to disabled people, resulting in their isolation and arrest of their full potential.**
- **The psychological motivations for travel are complex and differ between individuals, reflecting such factors as age, gender, emotions and experience.**

## Key Questions

How adaptable are we to new forms of movement?

What role do the emotions play in our travel choices and behavior, and how can our transport systems incorporate these insights?

## Further Reading/Resources

Hannaford, Carla *Smart Moves: Why Learning is not All in Your Head.* (2000)

Explains how movement can help cognitive development and learning

Harrison, Clearwater, and McKay (eds) *From Antarctica to Outer Space: Life in Isolation and Confinement.* (1991)

Investigation into the way isolation and lack of movement affect the mind

Tony Hiss, *In Motion: The Experience of Travel* (2010)

Enjoyable investigation of the psychology of motion and 'deep travel'

Michael Brien –

The Travel Psychologist:

<http://www.michaelbrein.com/index2.htm>

Readable popular introduction to the psychology of travel



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