

INDIVIDUAL AND ORGANISATIONAL AMBIDEXTERITY IN DYNAMIC CONTEXTS

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INTRODUCTION

Ambidexterity is the state of being equally adept in the use of both left and right appendages (such as the hands). It is one of the most famous varieties of cross-dominance.

People that are naturally ambidextrous are uncommon, with only one out of one hundred people being naturally ambidextrous. The degree of versatility with each hand is generally the qualitative factor in determining a person's ambidexterity.

The word "ambidextrous" is derived from the Latin roots ambi-, meaning "both", and dexter, meaning "left" or "favorable". Thus, "ambidextrous" is literally "both right" or "both favorable".

The term ambidexter in English was originally used in a legal sense of jurors who accepted bribes from both parties for their verdict.

handedness has its roots in the brain—right-handed people have left-hemisphere-dominant brains and vice versa—and the lefties who claim Einstein weren't all that far off. While he was certainly right-handed,

autopsies suggest his brain didn't reflect the typical left-side dominance in language and speech areas. His brain's hemispheres were more symmetrical—a trait typical of left-handers and the ambidextrous.

By comparison, 95 percent of righties have brains that strictly divide up tasks: The left hemisphere almost exclusively handles language and speech, the right handles emotion and image processing—but only about 20 percent of lefties have brains that divide up these duties so rigidly.

1. Handedness

a) Paws to claws

Researchers have also looked to other animals to help them solve the human riddle of handedness.

Many mammals, including our closest living relatives the chimpanzees, bonobos and gorillas, exhibit a preferred hand. So, too, do dogs.

"Your dog is one-pawed," said Carey. "If you force a dog to reach for a toy through an aperture, it will tend over many trials to use one paw over the other."

b) Righties rule

About 90 percent of people are right-handed, says Corballis. The remaining 10 percent are either left-handed or some degree of ambidextrous,

though people with "true" ambidexterity—i.e., no dominant hand at all—only make up about 1 percent of the population.

That means the vast majority of people on this planet have strongly lateralized brains. That's probably no accident, Corballis says. Early in human history, and possibly even in our pre-human ancestors,

evolution delegated
different cognitive
responsibilities to the brain's
two hemispheres, he posits.
It would be inefficient for
both sides to, for example,

process a person's speech when one hemisphere can do that just fine on its own. That frees up the other hemisphere to do something else, such as sort out the speech's emotional content.

c) "Sinister" lefties?

Whatever handedness' origin in humankind, it's clearly been around a long time. For example, cave paintings have shown the occasional lefty ancestor clutching a spear.

For biological reasons yet unknown, lefties might indeed be slightly cursed. That gene associated with left-handedness, LRRTM1, is also associated with the mental disease schizophrenia.

Correlations have been found for left-handedness and illnesses such as inflammatory bowel disease and alcoholism.

On the other hand, some evidence points to lefties possessing on average more intelligence or artistic giftedness than righties, perhaps given their alternative brains.

Interestingly, four out of the last seven presidents in the USA have been left-handers: Gerald Ford, Bill Clinton, George H.W. Bush and Barrack Obama.

"There is not a one-to-one correlation. It is not as if you are left-handed [so] you will become brilliant or get a disease," said Amar Klar, a geneticist at the National Cancer Institute's Center for Cancer Research in Frederick, Md.

"Poor lefties have to live in a right-handed world," Carey told Live Science. "The fly in your trousers is right-handed; even a can opener is right-handed."

Ambidexterity in real life situations:

a) Sports

Athletics

In athletics, Jonathan Edwards, a now-retired British triple jumper who still holds the world record in that event, was known to be able to kick with either foot while he played rugby.

He displayed
unprecedented
ambidexterity while
jumping off either foot
during his competitive
jumps.

Basketball

In basketball a player may choose to make a pass or shot with the weaker hand. NBA stars Kobe Bryant, Kyrie Irving, David Lee, Derrick Rose, Andrew Bogut and Michael Beasley are ambidextrous players.

Soccer

In soccer, being able to kick with either foot provides more options for passing and scoring, as well as the ability to play on either side of the pitch.

Therefore players with the ability to use their weaker foot with proficiency are valuable in any team.

Former football players Andreas Brehme, Paolo Maldini and Pavel Nedved are ambidextrous from birth. Franck Ribery, Andrea Pirlo, Pedro, Louis Nani, Boubacar Barry and Zlatan Ibrahimovic are all examples of ambidextrous footballers.

Players such as Ronaldo, Cristiano Ronaldo, Zinedine Zidane, Wayne Rooney, Thierry Henry, Steven Gerrard, and Neymar are considered [weasel words] good enough with either foot to be termed 'two footed' without being truly ambidextrous.

In art

Although most artists have a favored hand, some artists use both of their hands for arts such as drawing and sculpturing. It is believed that Leonardo da Vinci utilized both of his hands after an injury to his right hand during his early childhood.

In music

In Drum & Bugle corps and Drum & Bell corps, Snare drummers, Quads (Tenors), and Bass Drummers need to be somewhat ambidextrous. Since they have to abide by what the composer/arranger has written, they have to learn to play their piece starting with either left or right.

Medicine and surgery

Ambidexterity is a rare quality also in the medical field: the Scottish anatomist John Lizars was known to be ambidexter, as well as Marco Abbondanza, the Italian eye surgeon.

Ambidexterity is also useful after surgery on a dominant hand or arm as it will force the patient to use their non-dominant hand.

Ambidextrous organization

Organizational ambidexterity refers to an organization's ability to be efficient in its management of today's business and also adaptable for coping with tomorrow's changing demand.

Being ambidextrous means being able to use both the left and right hand equally; organizational ambidexterity requires the organizations to use both exploration and exploitation techniques to be successful.

Ambidexterity in an organization is achieved by balancing exploration and exploitation, which allows the organization to be creative and adaptable, while also continuing to rely on more traditional, proven methods of business.

Exploration includes things such as

- search,
- variation,
- risk taking,
- experimentation,
- flexibility,
- discovery or
- innovation

Whereas exploitation includes such things
as:

- refinement,
- choice,
- production,
- efficiency,
- selection,
- implementation, and
- execution

Companies that focus only on exploration face the risk of wasting resources on ideas that may not prove useful or never be developed. On the other hand, companies that focus only on exploitation may accept status quo performance and products and fail to reach optimal levels of success.

Two Models

Organizational ambidexterity can be considered primarily from two angles. One is architectural or structural ambidexterity, which uses dual organizational structures and strategies to differentiate efforts towards exploitation and exploration.

Structural ambidexterity

includes dual parts, with one part focusing on exploitation and the other focusing on exploration. It's also known as the spatial separation of the dual strategies concepts outlined above.

The other approach is **contextual ambidexterity**, which uses behavioral and social means to integrate exploitation and exploration at the organizational unit level. Contextual ambidexterity is a balanced type that takes a mid-level position between exploitation and exploration, also known as parallel structures or hybrid strategies.

Outcomes

- ❑ Ambidexterity is beneficial to organizations in many aspects. As it is the ability to keep a balance between explorative and exploitative processes, the most core outcome of ambidexterity is innovation because innovation needs both explorative and exploitative aspects
- ❑ An ambidextrous organization is able to pursue innovation (creating new products/services) while also maintaining itself through the continued use of proven techniques/products.
- ❑ The interaction between explorative and exploitative innovation strategies (in other words, ambidexterity) is positively related to sales growth rate, and imbalance between explorative and exploitative innovation strategies is negatively related to sales growth rate (He & Wong, 2004).

❑ Various organizations have been able to overcome organizational challenges and become more innovative because of ambidexterity. A study looking at 41 businesses found that ambidexterity was highly correlated with performance.

❑ Companies such as Apple, General Radio, Nordstrom and British Airways have all had continued success throughout the years because of their capacity for ambidexterity. From 1981 to 1986, British Airways experienced increased profits and customer satisfaction. The top executives of British Airways credited the formation of a more ambidextrous culture and leadership with the company's improved performance.

Conclusion

Organizations need to explore opportunities and exploit that which is already known (March, 1991) to meet the demands of an increasingly dynamic environment. The inherent tension that exists in the two seemingly opposing modes presents a challenge in doing both well.

Ambidexterity is the term used to describe the active management of these poles. While most ambidexterity research focuses at the organizational level, it remains a multilevel phenomenon also driven upward by individuals as they contend with a dynamic context.

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