

Filosofia ja systeemiajattelu

Elämänfilosofia, kokemuksesta oppiminen
ja systeemiäly

Luento 7

Moninkertainen sinä

Esa Saarinen

Aalto-yliopisto, Dipoli, sali 1

18.3.2015

Enrico con spirito
alleg.

Aug. 20 (M. ...) dedicated to Busch

Sisäinen pöpöttäjä

A handwritten musical score on aged paper. The title 'Sisäinen pöpöttäjä' is written in large, bold red letters in the center. The score consists of several staves of music, including a vocal line with lyrics and piano accompaniment. The lyrics are written in Finnish. The handwriting is in black ink, and the paper shows signs of age and wear. There are some annotations and markings throughout the score, including dynamic markings like 'pp' and 'f', and performance instructions like 'con spirito' and 'alleg.'. The score is dedicated to Busch, as indicated by the text at the top right.

"Enrico con spirito
alleg.

Aug 20 (M. ...) dedicated to Bush

"We are now ready for take-off"

A handwritten musical score on aged paper. The score consists of several staves of music, some of which are heavily scribbled over with dark ink. The notation includes various notes, rests, and dynamic markings. At the top left, there is a tempo marking: "Enrico con spirito alleg.". At the top right, there is a dedication: "Aug 20 (M. ...) dedicated to Bush". In the center of the page, a large red quote is superimposed: "We are now ready for take-off". The right side of the page contains some vertical text and markings, including "50", "5", "10", "15", "20", "25", "30", "35", "40", "45", "50", "55", "60", "65", "70", "75", "80", "85", "90", "95", "100".

Enrico con spirito
alleg.

Aug 20 (M. A. Numminen) dedicated to Bush

M.A. Nummisen 3. persoonan tekniikka

A handwritten musical score for piano, featuring multiple staves of music. The score includes various musical notations such as notes, rests, and dynamic markings. Annotations in the margins include "Enrico con spirito alleg." at the top left, "Aug 20 (M. A. Numminen) dedicated to Bush" at the top right, and "50" in the upper right corner. The handwriting is in black ink on aged paper.

Vincent Vegan filosofia

1. Kun asiat menevät pieleen, syytä jotakuta muuta
2. Etsi perusteita pahoittaa mielesi
3. Kiistä ylemmänasteisten sibeliaanisten Leif-mutta-sitten-kuin luonnossa-yhtäkkiä - mahdollisuuksien mahdollisuus (kiistä Talebin "mustat joutsenet")
4. Anna heikkouksiesi hallita veikeinä persoonallisuuspiirteinä ja huristele nykypohjalta kohti tulevaa

Exercício com espírito
alleg.

Aug. 20. (M. ...) dedicated to Busch

Pienten askelten tekniikka

A handwritten musical score on aged paper. The score consists of several staves of music, with some parts written in ink and others in pencil. The notation includes notes, rests, and various musical symbols. There are several annotations and markings throughout the score, including the word 'Exercício' at the top left, 'Aug. 20.' at the top center, and 'dedicated to Busch' at the top right. The paper shows signs of age, with some discoloration and faint smudges. The overall appearance is that of a personal manuscript or a working draft of a musical composition.

Enrico con spirito
No. 20 (Mozart) dedicated to Bach

Käsitteet ja hahmotustavat oman ylösrakennuksen apuvälineinä

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Peter Senge

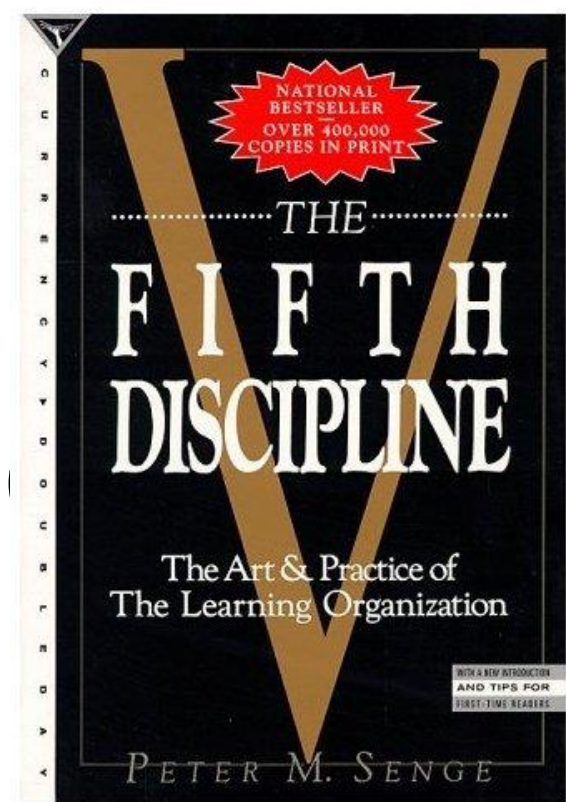
”viisi pääkohtaa”

Peter Senge: The Fifth Discipline, 1990

1. Henkilökohtainen mestaruus (personal mastery)
2. Oletusmallit (mental models)
3. Jaettu näkemys (shared vision)
4. Yhdessä oppiminen (team learning)
5. Systemiajattelu (systems thinking)

Peter Senge: ”Systems Thinking for a Better World”

<https://www.youtube.com/watch?v=oQtQqZ6Q5-o>



Persoonallisuuden kolme tasoa

Dan P. McAdams, *The Psychological Self as Actor, Agent, and Author*, *Perspectives on Psychological Science* 2013

1. Ominaisuudet
2. Päämäärät, motiivit, huolenaiheet, tavoitteet
3. Tarinat

Tehtäväpositiivinen, uloskatsova tavoitesuuntautunut, ulkoisiin ärsykkeisiin keskittynyt vs.

”tehtävänegatiivinen”, kuljeskeleva, sisäänkatsova systeemi

”Kun toisen aktiivisuus kasvaa, toisen heikkenee”

Immordino-Yang et al 2012

”Rest is Not Idleness”

Perspectives on Psychological Science

recalling personal memories, imagining the future, feeling emotions about the psychological impact of social situations on other people, and constructing moral judgments (Buckner, Andrews-Hanna, & Schacter, 2008; Gilbert & Wilson, 2007; Spreng & Grady, 2010; Spreng, Mar, & Kim, 2009). Studies examining individual differences in the brain's DM connectivity, essentially measures of how coherently the areas of the network coordinate during rest and decouple during outward attention, find that people with stronger DM connectivity at rest score higher on measures of cognitive abilities like divergent thinking, reading comprehension, and memory (Li et al., 2009; Song et al., 2009; van den Heuvel, Stam, Kahn, & Hulshoff Pol, 2009; Wig et al., 2008). Taken together, these findings lead to a new neuroscientific conception of the brain's functioning "at rest," namely, that neural processing during lapses in outward attention may be related to self and social processing and to thought that transcends concrete, semantic representations and that the brain's efficient monitoring and control of task-directed and non-task-directed states (or of outwardly and inwardly directed attention) may underlie important dimensions of psychological functioning. These findings also suggest the possibility that inadequate opportunity for children to play and for adolescents to quietly reflect and to daydream may have negative consequences—both for socio-emotional well-being and for their ability to attend well to tasks.

Despite the potential implications, however, psychological scientists are largely unaware of or have underappreciated the relevance of this actively growing body of neural findings, and cognitive neuroscientists interested in development and education have largely focused on the immediate, negative effects of attention lapses on task-directed performance (e.g., Kane et al., 2007; McVay & Kane, 2010; Smallwood, Beach, Schooler, & Handy, 2008; Smallwood, Fishman, & Schooler, 2007). Therefore, our goals in this article are (a) to introduce psychological scientists to recent advances in understanding the functioning of the brain and mind during lapses in outward attention; (b) to generate an early hypothesis from the neuroscience findings concerning the effects of consistently high external attention demands in schools and leisure environments on socioemotional development in children and adolescents; (c) to propose preliminary examples of productive connections between this hypothesis and current educational and developmental psychological research findings, in order to demonstrate the utility of the neural findings for psychologists; and (d) to advocate educational practices that promote more effective balance between children's needs for external attention and internal reflection. The overarching premise of the article is that although daydreaming and other lapses in outward attention lead to poor performance on concentration-requiring tasks in the moment, skills for reflecting during lapses in outward attention and time for safely indulging mind-wandering may be critical for healthy development and learning in the longer term.

Looking out and Looking in: The Discovery of Complementary Brain Networks

Neuroscience studies over the past several decades have revealed that contrary to early theories, attention is not a general property of the whole brain but the product of specific networks that contribute to various aspects of processing. Decades of study have differentiated three systems responsible for monitoring and responding to the environment around us and for focusing our mental processing on incoming stimuli: alerting, orienting, and executive control (see Corbetta & Shulman, 2002; Fan, McCandliss, Sommer, Raz, & Posner, 2002; Posner & Petersen, 1990). These functions, which rely heavily on lateral frontal and parietal regions, are important for cognitive development, and interventions that support children in strengthening skills related to these aspects of attention improve cognitive and academic performance in a variety of domains (Posner & Rothbart, 2005; Smallwood et al., 2007; Stevens, Lainger, & Neville, 2009).

But what does the brain do when not engaged in a focused, goal-directed task? Newly emerging theories of the brain's functional architecture reveal that the attention networks described above are part of a broader complement of brain networks that can roughly be conceptualized as supporting two alternating systems. One of these networks is "task positive"; its recruitment is associated with active engagement in goal-directed tasks involving attention to the world and evaluating the salience of external stimuli (Seeley et al., 2007). This network supports what we will call the "looking out" system. Another network, known variously as the "task negative" or "resting" network, has been found to be associated with the brain's default mode of operation (Buckner & Vincent, 2007; Raichle et al., 2001). This network comprises mainly regions along the midline of the brain, in both the parietal and the frontal lobes, along with more lateral regions in the inferior part of the parietal lobe and the medial part of the temporal lobe (see Fig. 1). During neuroimaging experiments, the activity in these regions is heightened most reliably during passive rest (Greicius, Krasnow, Reiss, & Menon, 2003), induced by paradigms such as asking participants to stare for several minutes at a plus sign shown in the center of their field of vision or to relax with their eyes open or closed. We will call this the "looking in" system. (Note our nomenclature: We use the term network to describe sets of brain regions whose activity is functionally coordinated. We use the term system to describe the psychologically relevant capacities that are supported by the brain network.)

The past decade of neuroscience research has revealed that as one network is increasingly engaged, the other is deactivated (Esposito et al., 2006; Fox et al., 2005). It is thought that the toggling of these networks reflects a shift from a state of external monitoring and focus on goal-directed activity ("looking out") into a more free-form, internally directed, stimulus-independent mental state ("looking in"), see

Tehtäviin suuntautunut vs. Sisäänpäinkatsova järjestelmä

M.H. Immordino-Yang et al 2012 Rest is Not Idleness, Perspectives on
Psyc. Science

”adequate developmental opportunities for appropriate lapses in outwardly directed attention, and potentially even for high-quality introspective states, may be important for well-being and for optimal performance on focused tasks”

Enrico con spirito
alleg.

Op. 20 (Missa) dedicated to Busch

Pelon parametri

The image shows a handwritten musical score on aged paper. At the top left, there is a tempo and mood marking: "Enrico con spirito alleg.". At the top right, it says "Op. 20 (Missa) dedicated to Busch". The score itself consists of several staves of music. The notation includes various note values, rests, and dynamic markings such as "pp" (pianissimo) and "ppp" (pianissimissimo). There are also some handwritten annotations and corrections throughout the score. The title "Pelon parametri" is written in a large, bold, red font in the center of the page. The overall appearance is that of a working draft or a composer's sketch.

Ensiöo con spirito
alleg.

Aug 20 (M. ...) dedicated to Bush

Sisäinen hehku

A handwritten musical score for the piece "Sisäinen hehku". The score is written on multiple staves. At the top left, there are performance instructions: "Ensiöo con spirito" and "alleg.". At the top right, there is a dedication: "Aug 20 (M. ...) dedicated to Bush". The score itself consists of several staves of music, with some parts appearing to be repeated or marked with "LINK". The notation includes various musical symbols such as notes, rests, and dynamic markings. At the bottom of the page, there are some additional markings and a signature that appears to be "Ferr".

Ensiöo con spirito
alleg.

Aug 20 (M. ...) dedicated to Bush

Sisäinen hehku, taikapiiri

The image shows a handwritten musical score on aged paper. The score consists of several staves of music, with some parts written in ink and others in pencil. The notation includes notes, rests, and various musical symbols. There are several annotations and markings throughout the score, including the word 'LINK' written vertically on the left side of the first few staves. At the top left, there is a note 'Ensiöo con spirito alleg.' and at the top right, 'Aug 20 (M. ...) dedicated to Bush'. The bottom of the page features a large, bold title 'Sisäinen hehku, taikapiiri' in red text. The overall appearance is that of a personal or working manuscript.

J. T. Bergqvistin laskuoppi

$$1,2 \cdot 1,2 \cdot 1,2 \cdot 1,2 \cdot 1,2 \cdot 1,2 = 2,99$$

$$1 \cdot 1 \cdot 1 \cdot 1 \cdot 1 \cdot 1 = 1$$

$$0,8 \cdot 0,8 \cdot 0,8 \cdot 0,8 \cdot 0,8 \cdot 0,8 = 0,26$$

Enrico con spirito
1.2 versio toisten 1.2:si
moninkertaistavassa
kokonaisuudessa
voi hyvinkin saada ihmeitä
aikaan

**Kun perusasiat ovat kunnossa,
valtaosa olennaisesta on jo
kunnossa**