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Research

The Coordinate System of Connectedness: Theoretical Framework

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Abstract

Connectedness is on everyone's lips — yet disconnection and loneliness seem more widespread than ever. Despite constant digital interaction, we often remain alone, disconnected from ourselves, others, and the world. This article introduces a three-dimensional model of connectedness: the generativity axis (past–future), the axis of presence (companions), and the vertical axis (earth–transcendence). These intersect in one's center, forming a personal coordinate system. Inspired by Buddhist practice and informed by Viktor Frankl's insights, this model offers a vivid, almost tangible way to reflect on connectedness.

Keywords: Coordinate System of Connectedness, measurement of connectedness, health promotion, mind-body medicine, theory

Background

Connectedness seems to be on everyone's lips these days. What's more: Disconnection, loneliness, for example, seems to be rampant. We even hear about it in politics; even the new German government (2025) has taken up the issue.

Even though we are constantly interacting on social media today, seemingly connected to one another everywhere and at all times, we are mostly alone; we gaze lonely at our “screens”. The people we see there are also all too often alone. This problem has been known for many years and was vividly described by Tristan Harris with the term “social dilemma” (2020).

We humans are cooperative, collaborative, we are there for one another and with one another. We are born for togetherness and connection. Not for isolation and opposition – this only happens in exceptional cases.

The general rule is: We all need a home, the feeling of being at home, of being cared for, of having a place. Research clearly shows that people who lack this ability have a huge risk of dying earlier, suffering more heart attacks, strokes, depression, diabetes, and dementia (Holt-Lunstad et al. 2010; Holt-Lunstad et al. 2015; Holt-Lunstad 2021; Esch et al. 2024; Michaelsen und Esch 2023). Overall, the health risk from a lack of connection is at least as great as smoking (Holt-Lunstad et al. 2015). Some studies show that it even doubles mortality (Holt-Lunstad et al. 2010). But what exactly do we mean by connection? What specific dimensions exist, and how can they be measured and represented?

Description

Professionally, we distinguish between either three or five types: self-connectedness, social connectedness, and spiritual connectedness would be one classification. Here, some authors distinct between the self (inner world), the other (complement), and nature as a whole (environment or outer world) (e.g., Michaelsen 2021). Alternatively, the five-level framework: connection with myself, with one's direct counterpart, with one's immediate peer group, with society, with the universe or absolute.

As practitioners and interested readers of Buddhist texts, we came across a meditation or exercise a few years ago (see below: Practice) that has recently been incorporated into our professional assessment and analysis of connectedness. We attempted to translate these dimensions into a *three-dimensional coordinate system of connectedness*. Now, the connectedness — or lack of connectedness — suddenly became vivid, graphically representable.

Let's imagine we have axes and levels of connectedness within us. One level, the horizontal, essentially represents our relationships with people (or animals). One axis runs from back to front: Behind us would be the people who brought me up, perhaps my parents, teachers, and also role models, my "heroes". In front: those I brought up, who perhaps look up to me, my own children, students, people for whom I may be a role model. This axis can also be called the "generativity axis": it ultimately connects my ancestors and my descendants. In the middle: myself. How connected do I feel to these two groups?

Also on the horizontal (or social) plane, now on the lateral axis — from right to left or vice versa — we find people who are our companions, who walk with us through life in the here and now. This axis is thus the human presence, the "axis of presence". Again, the question: Who is there, who walks with me, who accompanies me? And how connected am I to them?

Then comes the vertical plane. Here, the central axis runs from the ground through me to the sky, or vice versa. The question: What is the ground on which I walk, on which I stand, the culture, the nature — we could also call it the "region". How connected am I to it, how "at home" am I in it? The invisible path runs upward through me and emerges again from a vertex — into the sky, into the universe, into the transcendent. What is "up there" for me? And how connected am I here? How located am I between "up there" and the earth "down there"? How centered am I between the two, and do I have good contact?

If you imagine these planes and axes visually, they ideally meet in your center. You could also imagine Leonardo da Vinci's famous illustration of Vitruvian Man: the person, in ideal proportions, with his arms and hands outstretched, forming a circle around himself. If this person also stretches his hands upward, or forwards and backwards in the same way, not just a circle but a sphere is created around him (Figure 1).

If I considered the axes and planes described above, would my sphere be round and uniformly shaped? Would its center truly be within me, within my core, perhaps in the area of my heart or not far below, in the "Dantian" or "Hara"? Or would it be shifted, even if only slightly — would I, in a sense, be living in the "neighborhood" of myself in terms of connectedness, not centered? And how would that feel?

Isn't this perhaps a common problem — that we live everywhere, but not in connectedness, in our center, not completely at home in ourselves and in life?

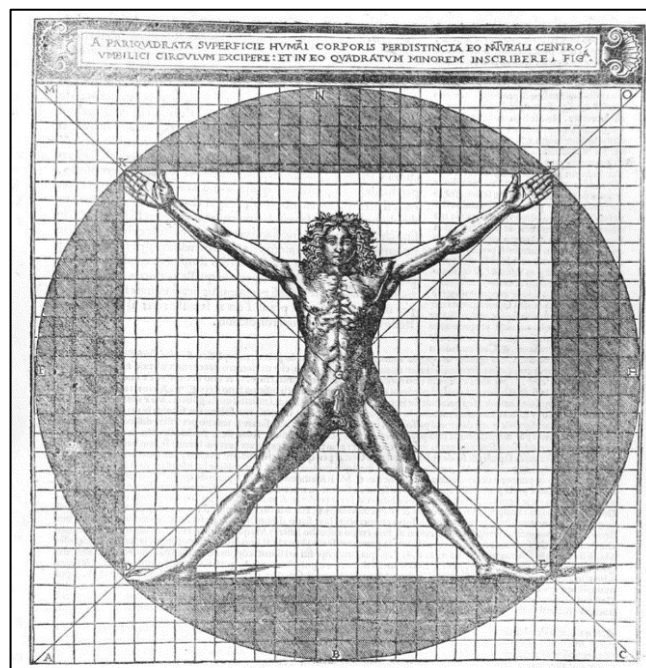


Fig. 1: Cesare Cesariano Vitruvius grid organization. Drawing is licensed under a [Public Domain](#) license.

We have currently begun research on precisely this question (and with this model). The first nearly 500 data sets are available. We are still in the evaluation phase, but what we can already see is that it's getting exciting.

Yet perhaps we don't even need scientific methods to sense and understand the essence of the described location of connectedness?

It is always astonishing how strikingly precisely the famous neurologist Viktor Frankl saw and described all of these things almost 100 years ago. This also includes his central theme regarding our "wandering through" the described axes and levels in the course of life (Esch 2023; Frankl 2023). Frankl stated that life passes through us; it always starts from the beginning (Frankl 2006; Esch 2023; Frankl 2023). In front is the young and fresh, behind us lies the past. We humans, however, are "masters of transience", as he called it: We have the ability to give our lives meaning simply by transcending life itself and ourselves within it. Our legacy is the manifestation of our meaning and our very existence: Like the hungry caterpillar, at the end, when we have worked our way through life, when our storehouse is full, we will have reaped the harvest, be transformed, and be able to (or must) let go — in order

to ascend as a butterfly, so to speak, and leave this place behind. And so, the axis of the transcendent, the absolute, is always present in Frankl's work. Ultimately, this image may give us lightness and freedom.

In our personal experience, anyone who feels this freedom, who consciously allows life to flow through them while ultimately remaining centered within themselves, is unlikely to suffer from burnout. Frankl called it the "manager's disease" back in the first half of the last century. He also spoke of neuroses; today we might perhaps call it a "nervous breakdown" — a now outdated term. Yet all these descriptions ultimately express a curvature or imbalance, a shift in our coordinate system: the "spiritual-cultural" and "social" axes no longer meet in the middle.

Technical Realization

Coordinate system of connectedness = 3 axes/5 dimensions/2 levels:

I) Horizontal level (=social level)

a) Dorsal dimension (=sub-axis)

Who supports me and has "brought me forth" (ancestors, (grand)parents, teachers, mentors, role models)

b) Frontal dimension (=sub-axis)

Who I am a role model for, who I have supported and "brought forth" (descendants, (grand)children, students, mentees)

=> *dorsal and frontal dimensions/sub-axes together form the generativity line (=axis: past – future)*

c) Lateral dimension (axes, both sides)

Companions (partners, immediate peer group, close community: social relationships with whom a real exchange "at eye level" is experienced)

=> *the lateral axes together form the presence line (social present)*

II) Vertical level (=transcendental level)

d) Lower dimension (=sub-axis downwards)

The earth/ground on which I walk/stand (home, culture, nature: "region"; society/community-at-large = environment & environment)

e) Upper dimension (=sub-axis upwards)

The space above me ("heaven", universe; spirituality, transcendent or absolute space)

=> *Lower and upper dimensions/sub-axes together form the spirito-cultural line*

(Note: Nature – i.e., the concretely experienced relationship to nature – is implicitly contained in the term "culture" = integrated through the image of home or "region")

=> *These 5 dimensions or 3 main axes ideally meet in the center of the body (or not), i.e., the self-reference or omega point is the intersection of all resulting axes.*

The original questions of the Coordinate System of Connectedness (CSC) as developed by Tobias Esch are presented below (Box 1).

Please read through the following statements and indicate how true each statement is for you!

Please rate from – to:

"not at all true for me" ← 0 1 2 3 4 5 →

"very true for me"

I feel connected to the older generation and my ancestors.

I feel connected to the younger generation and my descendants.

I feel connected to my generation and companions.

I feel connected to my region – to nature, the land and its people.

I feel connected to something "higher" or spiritual.

Box 1: Original CSC questions as developed by Tobias Esch.

Based on the ratings of each CSC item, an individual or sample description of the three-dimensional coordinate system of connectedness can be presented as in Figure 2 (empty), Figures 3a and 3b with exemplary data points for individuals with a tendency to feel more connected to the older generation and younger generation, respectively.

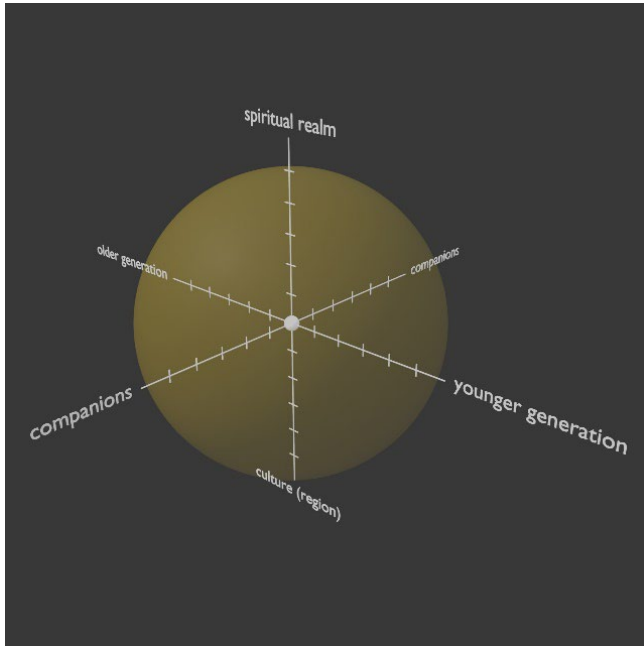


Fig. 2: Coordinate System of Connectedness - 3D representation; provided by Thomas Geib.

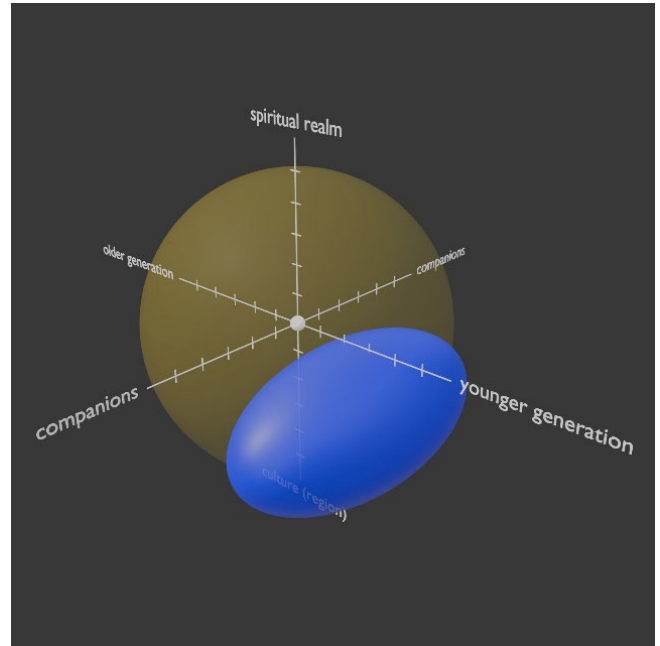


Fig. 3b: Coordinate System of Connectedness - 3D representation with exemplary data points – tendency to feel more connected to younger generation; provided by Thomas Geib.

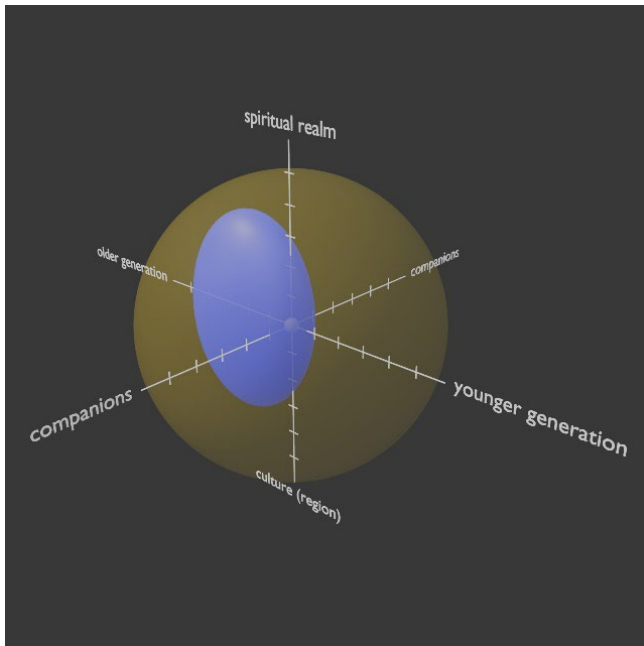


Fig. 3a: Coordinate System of Connectedness - 3D representation with exemplary data points – tendency to feel more connected to older generation; provided by Thomas Geib.

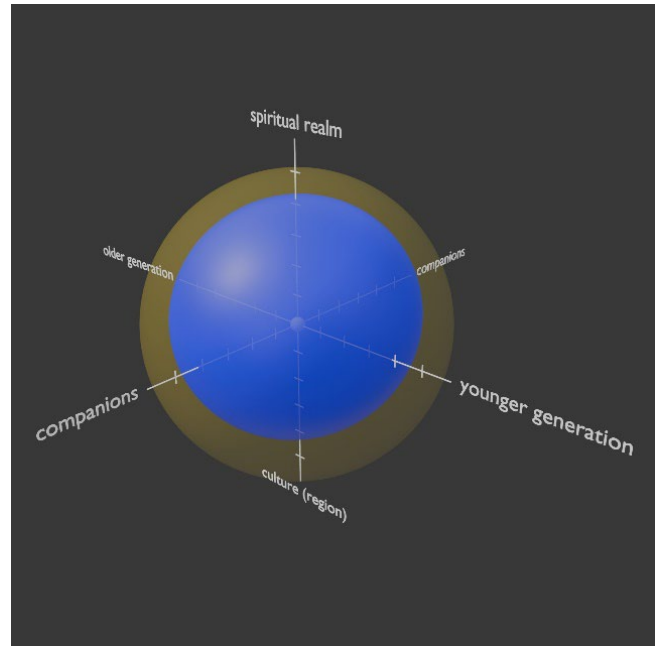


Fig. 4: Coordinate System of Connectedness - 3D representation means of the coordinates of a survey with

experienced mindfulness practitioners (Michaelsen et al., manuscript in preparation); provided by Thomas Geib.

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References

- Bundesministerium für Bildung, Familie, Senioren, Frauen und Jugend. (2025). *Strategy against loneliness*. <https://www.bmfsfj.de/bmfsfj/themen/engagement-und-gesellschaft/strategie-gegen-einsamkeit>
- Esch, T. (2023). Foreword. In V. E. Frankl (Ed.), *Sinn, Freiheit und Verantwortung* (pp. 7–17). Beltz.
- Esch, T., Stefano, G. B., & Michaelsen, M. M. (2024). The foundations of mind-body medicine: Love, good relationships, and happiness modulate stress and promote health. *Stress and Health*, 40(4), e3387. <https://doi.org/10.1002/smi.3387>
- Frankl, V. E. (2006). *Man's search for meaning* (I. Lasch, Trans.). Beacon Press. (Original work published 1946)
- Frankl, V. E. (Ed.). (2023). *Sinn, Freiheit und Verantwortung*. Beltz.
- Harris, T. (2020). *The social dilemma* (J. Orłowski, Director) [Documentary]. Netflix.
- Holt-Lunstad, J. (2021). Loneliness and social isolation as risk factors: The power of social connection in prevention. *American Journal of Lifestyle Medicine*, 15(5), 567–573. <https://doi.org/10.1177/15598276211009454>
- Holt-Lunstad, J., Smith, T. B., Baker, M., Harris, T., & Stephenson, D. (2015). Loneliness and social isolation as risk factors for mortality: A meta-analytic review. *Perspectives on Psychological Science*, 10(2), 227–237. <https://doi.org/10.1177/1745691614568352>
- Holt-Lunstad, J., Smith, T. B., & Layton, J. B. (2010). Social relationships and mortality risk: A meta-analytic review. *PLOS Medicine*, 7(7), Article e1000316. <https://doi.org/10.1371/journal.pmed.1000316.g001>
- Michaelsen, M. (2021). Four dimensions of connectedness: What distinguishes connectedness from connection, how existentially important it is to our lives, and how it can be promoted. *WittenLab Magazin*, (2), 100–102. WittenLab. Zukunftslabor Studium fundamentale, University Witten/Herdecke.
- Michaelsen, M. M., & Esch, T. (2023). Correlations, causality, and mechanisms between happiness and health. In H. Brockmann & R. Fernandez-Urbano (Eds.), *Encyclopedia of happiness, quality of life and subjective wellbeing*. Edward Elgar Publishing.
- Michaelsen, M. M., Kriegesmann, M., Klode, C., & Esch, T. (manuscript in preparation). *The relationship between mindfulness and connectedness in experienced meditators: A quantitative survey*.