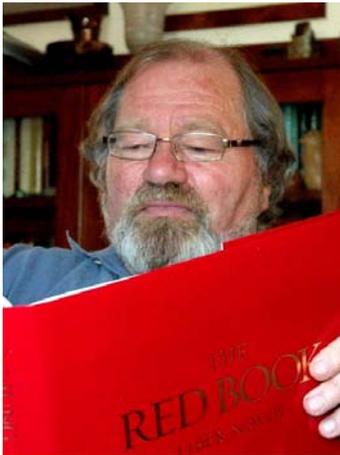


Metaphysical elevators and other maps

Dario Nardi's brain research adventure (1.0)



Peter Geyer

Dario Nardi
*Neuroscience
of personality:
Brain savvy insights for
all types of people 1.0*

Radiance House, 2011

Peter Geyer (INTP) would like to see psychological type a respected part of general and professional discourse about people's work and lives.

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Maps are not the territory, although some of us are attached to one of our maps.

Linda Berens

Whether you think that there are different kinds of personality, with essential core distinctions; that humans are more or less the same, with variations in the strength of measurable traits; or that there is no individual self at all, simply mediated selves – adaptations to situations as they arise – then the relationship of brain to mind is of especial interest.

As far as fundamental principles go, those three beliefs are mutually exclusive, but there is some overlap in external behaviours—or, at least, in their assessment.

Interestingly enough, some users of personality type (an example of the first category) take positions on measurement (e.g. 'I'm an IS/NTJ, because I have close scores on S and N, so I'm a bit of both'), or on mediated selves ('You can flex and adapt, no matter your type or the situation') that actually contradict the whole idea of different types of people. There's also personal branding, which is a denial of self, or at least a conscious one, but that's another issue, as well as an ethical conundrum.

The idea of different types of personalities and how they come about has a long history. The four temperaments of Hippocrates, Galen and others were based on the idea that different moods, or *humours*, were contained in the blood, an idea compatible with contemporary medical presumptions and techniques. This idea survives today, usually without descriptions of various kinds of bile. Noga Arikha has described its lengthy history.

Keirseyan temperament, a constitutional theory of personality (i.e., related to the body) references Hippocrates, Galen, Paracelsus, and also 20th Century frameworks like those from Kretschmer and Spranger, before arriving at Isabel Myers's formulation (not Jung's). Bruce Rowland, the late thinker about type, considered Keirsey's genealogy problematic, given the original formulation of a theory of moods, not of other kinds of behaviour. Hans Eysenck connected his theory of personality and its factors to Hippocrates and provided a diagram linking them as a guide.

When C G Jung wrote *Psychological Types*, the classical formulation of temperaments was not prominent. In later writing, now contained in the broader text in *Collected Works*, Jung references the temperaments in historical context. He makes a distinction between Kretschmer's body-oriented personality types and his own idea, although he did think that brain activity was a logical biological basis for his psychological types (1921/1971), but not that the brain and mind or personality were the same thing.

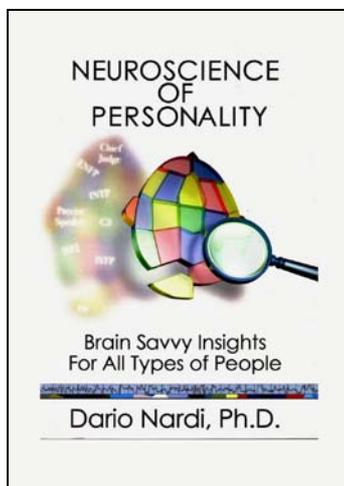
For neuroscientists, brain and mind are the same thing.

Dario Nardi

Consciousness is an achievement of the whole animal in its environmental context.

Alva Noe

Researchers in the neurosciences, and thinkers on personality in general, have been conflicted on the relationship between the brain and who we are. Sometimes this can be because a mechanical, empirical



A combination of research report and workbook

position is taken on research – for example, the observation and measurement of brain electrical activity or blood flow via tasks suited to laboratories, but perhaps not life. Much research on emotions appears to be of this kind, a kind that suggests researchers have a limited idea of what personality might be, and that the research methodology used might predetermine a result. It can also be relevant where the researcher sits on the line between nature and nurture, a kind of imaginary model for two entangled processes.

The use of rats and mice in experiments, an interesting topic in itself (Lemov 2005), has its limitations, particularly regarding personality, where a term such as ‘fear’ describes something different in rats than in humans. Jerome Kagan has pointed out that people get annoyed when researchers tell them they have no self, as it contradicts their own experience (Kagan 2008).

What the brain does, how adaptable it is, and where the mind is located are topics that generate much debate. In his history of memory, Kurt Danziger discusses the idea that ancillary devices such as computers, diaries and the like are considered to be part of human memory, as they contain data that no longer has to be recalled in the mind, but can be accessed outside the body (2008).

This kind of idea is compatible with the notion of a ‘social mind’ (Valsiner, van der Veer 2000). Evan Thompson takes a general biological approach to the idea of mind itself (2007).

Terms to describe the brain have changed over time. A decade or so ago, computer-based metaphors led to the idea of the brain as hardwired—but arguments around the level of rigidity in brain structures and evidence of the adaptability of the brain in the lives of several individuals have challenged the utility of that metaphor (Doidge 2007; Clark and Grubstein 2008).

Observations that the brain itself is cobbled together in a makeshift kind of way and not a perfect machine have made the field a little more jumbled than some with a reductionist bent might like, although that is much more attuned to reality (Marcus 2008).

Type and the brain

The contentiousness of psychological type from the mainstream perspective of empirical psychology, as well as an interest in the mind and brain that goes back to Jung, have meant a small but continuous interest in whether type preferences can be located in the brain, or otherwise inferred.

At the APT International conference in Baltimore in 2007, the neuroscientist Elkhonon Goldberg presented engagingly and knowledgeably on his work (2001, 2005) in a way that was full of inference to the kind of processes presumed by type theory, without mentioning type at all. For me, it was a highlight of the event; it also left a few attendees cold.

The Research and Theory symposium at the APTi conference in Boston in 1997, which I attended, was organised by James Newman, and provided presentations on type and brain research by Newman and Martha Alcock, and by Carolyn Barnes and Donald Johnson. The symposium also featured the inventor of Emotional Intelligence, John Mayer, and clinical researcher Theodore Millon.

Newman, Lenore Thomson and Henry L (Dick) Thompson are the major figures who have used brain metaphors and models to explain type preferences and their presumptions. Newman and Thompson also engaged in researches, Newman with the neuroscientist Bernard Baars.

In their expositions, both Newman and Thompson use a modular approach invoking left and right brain – an approach still used in the Hermann Brain Dominance Model and in educational and business workshops, notwithstanding its lack of veracity, critiqued outside the realm of type by William Uttal (2001), who made links between this method and the now-discredited phrenology.

Dario Nardi

As with the three people mentioned above, Dario Nardi prefers INTJ, a type that seems more inclined than others to be interested in the neurosciences and various models. Dario is the best known of what might be

called a younger generation of practitioners contributing to type thought and practice.

Dario has been using type for the best part of two decades. He made his first appearance at an international type conference, with Linda Berens, in 1999 at Scottsdale, Arizona, where I first met him. Our paths have crossed regularly since then, particularly in forums intended for serious discussions of type theory. We are currently colleagues in 'Consilience', a forum on type theory and research instigated and coordinated by Roger Pearman.

Dario has written several publications under the broad umbrella of the temperament and 8-Function model schools, although it should not be inferred from this that he is not an independent thinker. He holds a faculty position at the University of California (Los Angeles), from whence his research originates and where he undertakes a variety of other activities.

The publication under review here is his first book-length work. Some of the work has been presented at type conferences in the USA, Europe and New Zealand, and relevant workshops are also available.

The work

My book is a narrative of experience.

Dario Nardi

Neuroscience and Personality operates as a combination research report and workbook, in which Dario presents the results of a five-year continuing study. The text is clear and breezy in style, which makes for easier understanding of what might be a daunting subject. The author describes it as a 'practical guide', and the workbook component allows for some self-assessment and reflection whilst engaging with the book, if that is an inclination.

Research background is provided, including relevant theory (neuroscience and type), methodology, some case study reports, and other observations. The explanations of the theory set the context for explaining the research, particularly choice of research method.

I didn't want to pre-design, because I didn't know what I was looking for.

Dario Nardi

Dario's research methodology is a combination of the usual neuroscientific approaches with ethnographically-oriented research strategies such as feedback and discussion, and he outlines the method clearly in the book. Elsewhere he has called it a 'situated research paradigm'. It also demonstrates that the author knows what he's talking about in both areas and can express his knowledge confidently.

The research aim was to investigate whether people of different type preferences or codes use different parts of their brains (in this case, the neo-cortex) by performing different tasks, which Dario describes, in an EEG laboratory setting that allows for informality. This is in some ways a modest goal, but it's important and significant in itself, mostly because no-one else has attempted it.

Dario describes the neo-cortex as an area of higher cognition, and says his research doesn't look deep into the brain, to the area of primal emotions. In any case, the limbic system is a dark area, even for neurologists.

In the neo-cortex there are apparently 16 different areas accepted as a kind of map in the neuroscientific field. These don't have anything to do with the 16 types (or any other group of 16), and are 'arbitrary to some extent', which means that boundaries are fluid, not defined by walls or structures. These categories and labels from conventional neuroscience are used to explain activities in particular brain regions are about and what they might mean, and these categories are used in comparison between the types.

Brain research with preferences doesn't work.

Dario Nardi

A key point Dario makes is that researching using type dimensions simply does not work. This points to difficulties with the Five-Factor Model, a measurement construct in that regard. This raises a query



Dario Nardi
presents the results
of a five-year study

about the nature of much published research on Jung's typology, or aspects of it, where the concentration is on continuous dimensions, not the whole type. Perhaps this is an example of a favourite map, where the actual territory might in fact be another land.

This is not a new issue: attempts in the 1920s and 1930s to measure Jung's constructs, notably extraversion-introversion, founded for what I think were similar reasons (Geyer 2011). The problem didn't stop there and continues today.

Dario's book presents the success of the research in suggesting different patterns of activity and the reasons for that activity relate to the 16 Jungian types, as well as what was learned on the way. It suggests that people of the same type have 70% to 90% of their brain activity in common.

An emphasis is placed on the nature of the research, and that results are indicative and shouldn't be taken literally. Also that not every activity of the brain is related to type: when using a skill set, for instance, type may not be engaged.

Off-the-cuff comments made by Dario in presentations, such as 'INTJs just make things up' and 'INTPs don't listen', are amusing in themselves, but he makes it clear that they are not to be taken literally and that there is a depth behind the throw-away lines. For instance, I have a pretty good idea of what his comment about INTPs implies with regard to when I stop listening. The book contains descriptions of the types in the context of the research which are very useful and provide many reflective moments, at any rate.

People behave with computers differently to human beings.

Dario Nardi

The research subjects were mostly UCLA students: a list of their names at the front of the book indicates a mix of ethnicities and gender. Their type preferences were ascertained through completion of a type questionnaire devised by Dario, combined with subsequent discussions to arrive at a best-fit type. He is aware of the problems of conducting research using students, as

far as representativeness of the population and type theories about development, which gives an informed context to the results.

Using research

An issue of direct concern of the author is how people might interpret his findings. Dario's off-the-cuff comments might be taken literally or without deep consideration, a regular occurrence in the type world for many ideas and observations.

In his keynote address at the recent APTi conference in San Francisco, Dario received spontaneous applause at a point that had to do with scientific verification of brain patterns that could be associated with Jungian types. That suggested to me some kind of ideological relief more than research appreciation, and he appeared a little uneasy at that point. People liking one map to the exclusion of others, I suppose.

The plausibility of an idea rests on more than the success or failure of particular research. In fact, Dario averred that if he hadn't known what he was looking for, he might never have found it: he needed to know about type in order to look for evidence of type interactions. That might be worrisome to some scientists, but it also suggests that many results in research can be the consequence of method.

Neuroscience of Personality is an interesting and significant publication in the type field, and it's also a work in progress. I'd like to see some published journal articles in the relevant fields, although I don't know whether that's Dario's aim, or whether the relevant journals are closed to typology-related research. They may also require a different style of writing and presentation than experienced here.

The book was a necessary purchase for me, given my own interests, and also fuelled by listening to and chatting with Dario. I found it an entertaining and informative read. There are some typographical errors, and James Newman is referred to as John throughout, but presumably those will be fixed in edition 2.0, whenever it appears. It has added to my map of type territory, at any rate, and opened the door to some unknown regions. ❖

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