

## Exploring Why Neuro-Semantics Works, from Models to Meta-Coaching

By Pascal Gambardella, PhD, APMC

A little girl, playing by herself outside, watches a flock of geese take flight. This sparks her curiosity, and she runs into the house and asks her father “Daddy, why do geese fly?”

“So they can quickly get away from cats”, he says, grinning.

Watching the girl run out of the house, the girl’s mother turns to her husband, smiling.

“I would have interpreted the question as ‘how do geese fly?’”

“I answered her ‘why’ question with a reason”, he says. “If she were older, a question she might have asked is ‘why do geese fly in a V formation?’ What would you tell her in that case?”

Thinking for a moment, the mother answers, “I would tell her they do it because it takes less energy for them to fly. By synchronizing their wing beats with the bird in front of them, they surf on one another’s air currents.”

“Yes” said her husband, “that is also why Bomber planes fly in a V formation. It is so trailing planes use less fuel. When we start asking and answering ‘why’ questions, they can shed light on many related topics. It seems like “why” questions can take off with a life of their own.”

### I. Introduction

#### (1) Why does Neuro-Semantics work?

When some people hear this “why-question” they raise their eyebrows and ask: “Don’t you really mean *does* Neuro-Semantics work?”

“No”, I say, “I am taking an engineering view and asking the ‘**why does it work**’ question, although, like a serious engineer, later we will need go further and ask ‘**how could it work**’ to better understand the why-question.

If I take the scientific view, I would first ask the **“does it work”** question. This is like asking “is it true?” At one time I was very interested in the “scientific” view and asked: “Does Neuro-Linguistic Programming (NLP) work?” This is similar to the question “Does Neuro-Semantics work” since Neuro-Semantics is an extension of NLP (Hall, 2011a), remodeling existing models and adding new ones. Some refer to Neuro-Semantics as Neuro-Semantic NLP. When I first encountered NLP as a young physicist about thirty-two years ago, I felt like I was looking through an open door into another world. Walking through that door was enough to change the direction of my life. I had spent many years looking at mathematical structures in physics, and here was a discipline that claimed to study the “structure of experience.” In high school, I was fascinated with Freud’s book on dreams because he studied the structure of dreams. And because of his book, I briefly thought about majoring in Psychology, shifting focus from the physical world to the world of people’s experiences. In NLP, unlike theoretical physics, I could do personal experiments and see results.

In the early 1980s, I remember meeting with Dennis Hupp, former director of the NLP Institute of Washington DC, and using concepts from the book “Einstein’s Space and Van Gogh’s Sky” (LeShan and Margenau, 1982) to discuss the relationship between science and NLP. Since that book was written by a physicist and a psychologist, it served as a great way for me to move, at least intellectually, from physics to NLP. A few years later, I joined the then National Association of NLP (NANLP) Research Committee. As a member, I co-authored an article for Anchor Point magazine called “NLP on Trial” (Gambardella, Chubb, Rawlins, and Brossman III 1991), which related NLP to science and referenced important scientific research on NLP at that time.<sup>1</sup>

Today, I take a more engineering view (and to me a more practical one) leading us back to question (1). Let’s look at the content of this question in more detail beginning with the term “Neuro-Semantics.” Michael Hall writes:

“Neuro-Semantics is a communication model for exploring how the body (Neuro-, the nervous system, physiology, neurology) gets programmed by the use of language (linguistics, symbols), and meaning (semantics). Neuro-Semantics is a model that models expertise and best practice.”

He continues with the distinction between NLP and Neuro-Semantics.

“NLP focuses on the how of human behavior. Its central question is, ‘How do you do that behavior?’ Neuro-Semantics adds another distinction - the why of behavior (its meaning). From a higher level of mind, meaning drives behavior.”

When you know about Neuro-Semantics and hear question (1), natural questions are: “works where?” And, by the way, “what does ‘work’ mean?” To answer these questions we need to revise question (1) to be more specific. Then, we can be more grounded in our answer when we discuss the meaning of “work.” Let’s use the application of Neuro-Semantics to coaching an individual client. The revised question becomes:

(2) Why does Neuro-Semantics work for coaching individual clients?

When coaching a client, the coach helps the client gain the resources needed to get his or her desired outcomes, and address any problems or challenges the client encounters along the way. The coach facilitates the client exploring what he or she wants, and does not provide advice. A coach is focused on the “bright side of human nature”, and not on healing “past hurts”, traumas, or phobias; a coach is not a counselor or therapist. If a client wants to be better at writing romance novels, a coach would not give her advice on the best way to craft a plot or sketch a torrid scene. Instead, as a prelude for the client to express her outcome, a coach might first ask her “what does **better** mean?” The coach might need to explore the frames (e.g., with facets like beliefs or permissions) and perceptual filters that hold the present state in place before helping the client determine and move toward a well-formed, well-framed outcome. Coaching aligns with my interest in working with the “structure” (or process) of experience since a coach is competent in eliciting the structure of how people run their own brains, and not in the content of their experience. When we discuss coaching in this article, we mean Meta-Coaching, which is the application of Neuro-Semantics to coaching.

## II. Model of Models

I am going to change question (2) one last time to further narrow its scope, to better align it with the definition of Neuro-Semantics we discussed earlier, and to make it easier to provide a reasonable answer in this short article. This change is from the point of view of a modeler. Again, we assume the new version is true and explore why.

Before we make the change to the question, we need to discuss models. A modeler reading the definition of Neuro-Semantics discussed above hears the word “model” repeated many times: “Neuro-Semantics is a **model**<sup>2</sup> that **models** expertise and best practice.” NLP consists of many **models**. And, Neuro-Semantics **re-modeled** all of the original NLP **models** and added new ones. From a modeler’s point of view Neuro-Semantics (and NLP) is a **model** that consists of **models**. What does Neuro-Semantics as a “model with models” mean to us? Let’s step back first and look at the term “model” itself.

A model is a simpler representation of something else; it is a map, or one particular view, of a territory. The table of contents of a book is a model of the book. So is the cover of a book. Theories and hypotheses are all specific models. From a systemic point of view, a model has a **target territory** (what it is a model of), a **domain of applicability** (where it works well), a **motivation** for creating it, a **language** it is expressed in, a **modeler** who creates it, and its **stakeholders** or audience. When Neuro-Semantics is applied to coaching (i.e., meta-coaching), we assume, for now at least, it works well. A primary motivation of Neuro-Semantics is to “model the best in human nature so we can transfer it to our everyday lives (Hall, 2011a).” One aspect of a modeling language is its variables. The key variables in Neuro-Semantics are meaning, performance, neurology, (human) development, self-actualization, inner and outer game, and modeling (see Hall 2011a for details). Most of these variables will be evident in the coaching models we discuss later. Some models used in coaching were specifically designed to support coaching (e.g., the Facilitation Model), others (e.g., Meta-Programs Model) can be applied more generally (e.g., meta-programs, which are perceptual filters, can be used in therapy, for profiling people in business, or for persuading people). For most of the models the stakeholders include both coaches and coaching clients

As a model, Neuro-Semantics is also a collection of interrelated models. An appendix to the book “Innovations in NLP”<sup>3</sup> lists the requirements for a new model to be included in NLP (and Neuro-Semantics). These requirements include (1) **theory** to provide background, hypotheses, etc. to explain how the model works and answer “**why does it work**” questions, (2) **model variables and elements** (i.e., language of the model), (3) **guiding and operational principles** explaining the mechanisms allowing the model to work and **how** to use them systematically, and (4) **technologies or patterns** for actually applying the model. Each of the models used in Meta-Coaching satisfies these requirements and brings along a theory that helps answer the question why does each particular model work. *This article is about why they all work well together for coaching.* A modeler would rephrase question (2) in terms of models as follows:

(3) Why do Neuro-Semantics models work in the coaching of individual clients?

Again, we assume these models work and explore why. The short answer to question (3) is that the models in Neuro-Semantics used in coaching provide a rich language, and serve useful roles in both orchestrating a coaching conversation with the client and in training the coach. The models provide practices and processes for successful coaching. The rest of this article will explain this reason further and add another critical piece to this answer.

### III. Engineering Coaching

One approach to providing a more detailed answer to question (3) from another angle is to ask: “using Neuro-Semantics models, including NLP models, how would you engineer a coaching system that works?” That is our mission for the rest of this paper. This mission reminds me of the old Mission Impossible TV series when Jim Phelps gets a recording for a critical mission. After listening to the recording, which naturally self-destructs, he assembles a team to accomplish the mission. Each member of the team has special talents; each model used in coaching has special talents. The models work together, like members of a Mission Impossible team, to make a coaching session work.

“Working” to me means consistently seeing coaching clients (more than 90%) gain insights toward their outcomes. It also means actually achieving their outcomes. For the client, this could include performing better in areas that mean most to them. For example, a coach might help someone who feels blocked from writing “the book” that expresses what is most important in his or her life. And, through coaching the client might discover that the book is not the means to express this, and telling stories to an audience works better.

Engineering a successful coaching system<sup>4</sup> requires models<sup>5</sup> for orchestrating a coaching session and for training coaches<sup>6</sup>. Meta-Coaching can work because these models are in place and they work well together. Let’s look at each of these areas, “models for orchestrating a coaching session” and “models for training meta-coaches”, and illustrate them with a few example models.

#### A. Models for Orchestrating a Coaching Session

You can look at the major models in coaching as fitting into a set of layers. This is like the human body, whose interconnected set of systems (e.g., nervous, skeletal, circulatory) is often demonstrated in an anatomy book using overlapping, transparent layers. We will discuss just four model layers from the most abstract to the particular: Self-Actualizing, Changing, Facilitating, and Questioning. Each layer contains models (e.g., Axes of Change Model); some models depend on other models (e.g., the Axes of Change Model depends on the Meta-Program Model). This discussion provides one view through the many models used in Meta-Coaching. Neuro-Semantics works for coaching if the coach is skilled enough, like a conductor in an orchestra, to orchestrate these different layers and models during a coaching session.

**(1) Self-Actualizing.** Meta-Coaching implements Abraham Marlow’s Self-Actualization Psychology (Hall, 2007, 2008; Maslow, 1962). According to Michael Hall:

“The Neuro-Semantic Vision is to make explicit the processes by which we create rich and inspiring *meanings* and integrate them into our *performance*. Neuro-Semantics, as the performance of the richest meanings, focuses on applying what we know to ourselves and to close our knowing-doing gap and unleashing our highest potentials.”

A simple model within Neuro-Semantics that illustrates this vision is the Self-Actualization Quadrants, which reflects Abraham Maslow’s psychology of self-actualization. The quadrants reside on a plot with meaning increasing (how much it means to you) on the vertical axis, and performance (how well you perform) increasing on the horizontal axis. The diagram below illustrates the quadrants, with each quadrant reflecting different degrees of meaning and performance. An interesting exercise is to place your own experiences in each of the four categories.

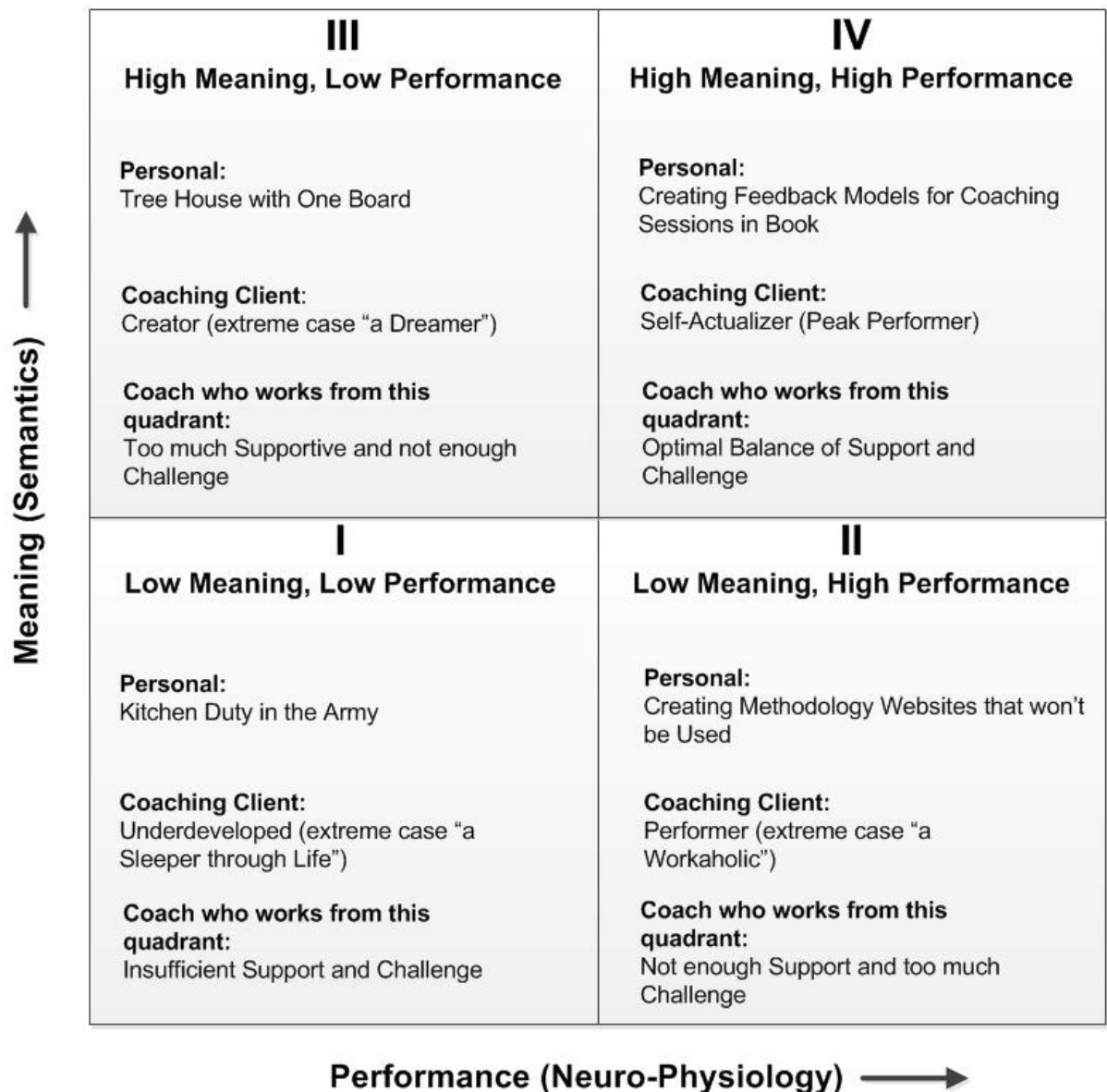


Figure 1. Self-Actualization Quadrants

Here are examples from my own personal experience.

- **Quadrant I (Low Meaning, Low Performance).** I felt that doing kitchen duty in the US Army did not have a great deal of meaning for me, and I was not inspired to work like a Mr. Clean on steroids
- **Quadrant II (Low Meaning, High Performance).** I worked very hard as a methodologist creating a business development methodology for an internal company client that I suspected would never use.
- **Quadrant III (High Meaning, Low Performance).** Then, there was the time I dreamed of building a tree house in my backyard for my kids. I put up one board and that is as far as I got. When the kids were in their twenties I finally took down this one board. My backyard neighbor thanked me. I had not realized he cared.
- **Quadrant IV (High Meaning, High Performance).** I felt fully engaged in discovering and modeling when I created feedback loop diagram models of coaching sessions for a book on systematic coaching (Hall and Gambardella, 2012).

For coaching clients, Neuro-Semantics provides approaches and guidance for helping clients move from quadrants I (Underdeveloped), II (e.g., Workaholic), or III (e.g., Dreamers) to IV (e.g., Peak Performers). One use of the quadrants during a coaching session is to show it to a client. For example, a coach can show it to a business leader who has a “corporate vision”, but has difficulty communicating it (Quadrant III) to the team who needs to implement it (Quadrants II and IV). The coach could ask the leader if he or she wants to work on this communication issue during the coaching session.

The Self-Actualization Quadrants model does not stand alone. It and several other models are supported by the Meta Programs Model, which describes perceptual filters (e.g., all or nothing, intuitive versus sensory, details versus big picture, options versus procedures, matching versus mismatching). Certain meta-program distinctions support the meaning axis (e.g., options, internal, mismatching), while others support the performance axis (e.g., procedures, external, matching).

**(2) Facilitating:** According to Michael Hall “Coaching is process facilitation - a mobilizing of the internal and external resources of a client to an agreed upon outcome to unleash and actualize potentials.” The Facilitation Model provides an overarching framework (e.g., theory, guidelines, patterns) to support this process facilitation. Neuro-Semantics established key skills (i.e., supporting, listening, questioning, meta-questioning and inducing states, receiving feedback, and giving feedback) needed to both coach a client and to train coaches.

Although not explicitly shown in the figure some of these coaching skills directly support the meaning axis (i.e., listening, supporting, and receiving feedback), while others support the performance axis (i.e., questioning, meta-questioning, and providing feedback). Inducing states (e.g., reflection, curiosity) supports the movement from quadrants I, II, or III to quadrant IV.

In facilitating a coaching session, Meta-Coaching works when coaches can operate in quadrant IV and provide the optimal amount of support and challenge needed for the client. If, for example, they work from quadrant I, they will provide insufficient support and challenge and Meta-Coaching will not work.

**(3) Changing.** Another model that supports the Facilitation Model by setting the high-level direction of coaching sessions is the Axes of Change Model (Hall, 2015). This model has four phases of change: Motivation, Decision, Creation and Solidification. Each phase corresponds to an axis with the end of each axis related to an extreme value of a specific meta-program. For example, one end (Awaken) of the Motivation axis could serve to awaken a person's big dream and the other end (Challenge) could serve to challenge their current reality so he can move **away from** his comfort zone and **towards** his dream. This axis corresponds to Motivation Direction meta-program whose extremes are **away from** and **towards**. Moving along the axis acts like a propulsion system. If the person feels enough pain in his present state, he will more likely move toward his dream.

The beauty of the Axes of Change Model (and many other models used in coaching) is they apply to both the coach and the client. If the coach leans primarily to the "towards" end of the meta-program he may not hear the problems the client is having, or if he hears the problems he may not discuss them long enough for the client to feel enough of his pain to desire change and begin pursuing his dream.

The result of using the Motivation and Decision axes during a coaching session can provide the client with an "informed decision" to proceed with her desired outcome. The result of using the Creation and Solidification axes can take this decision to proceed with the outcome and create internal and external resources to implement the outcome, test it in the world, sustain it over time, and celebrate its successes.

**(4) Questioning.** Asking questions lies at the heart of coaching. Most of a coach's speaking time during a session is spent asking questions. Some questions are designed to elicit a well-formed outcome (e.g., sensory-based, actionable, initiated and maintained by the client) while others a well-formed problem. The NLP Meta-Model (Hall, 2001) provides linguistic distinctions that support asking precise questions. One use is to uncover ways a



client's map of the world can cause him or her problems. Many times a client will gain insights just by hearing someone else repeat what they have said.

The Meta-States Model includes meta-questions that elicit the higher-level frames (e.g., beliefs, permissions, expectations, realizations, intentions) supporting a client's present state or desired outcome. "What do you believe about that particular experience" or "what have you decided about that particular experience" are examples of meta-questions. Some of these meta-questions reveal limiting beliefs or permissions that need to be addressed for the client to get his or her outcome; other meta-questions reveal the highest level intentions of the client (e.g., his or her ultimate desire "to connect with people" or "to share what he or she knows"). Then there are questions that ensure the coach not only hears what a client is saying but can create a movie (or internal simulation) of it (e.g., clarity, checking, and testing questions). This movie helps the coach better understand the client's world.

There are also exploratory (open-ended) questions that probe areas potentially relevant to the client's problem or outcome. For example, if the client mentions something related to their identity like self-trust, the coach might ask the client to tell him more about self-trust in a particular context.

Finally, the Matrix Model (Hall, 2003), besides providing a cognitive behavioral framework for coaching, also helps segment questions in to different areas: meaning, intention, self, other, power, time, world and state. The Matrix Model helps identify the frames we use to create our world. We can also associate specific meta-programs and Meta-Model linguistic distinctions to each area within the Matrix Model.

## **B. Models for Training Meta-Coaches**

The Benchmarking Model (Hall, 2011b) provides detailed benchmarks for each coaching skill. Using these benchmarks an assessor can evaluate a coach during a coaching session. To be graded competent a coach must achieve a minimum grade in all the skills. For example I am highly intuitive, which is a great trait for solving physics problems and many social ones. However, it can be a terrible trait for a coach (or a husband). During my first experiences in coaching a client, I was not asking enough clarity questions about "semantically loaded (lots of meaning) terms" that were related to a client's outcome because I thought I knew what the terms meant. For example, asking a client: what do you mean when you say you "work hard?"

The coaching benchmarking form is a model for coaching a session listing the behaviors and frequency of those behaviors that can contribute to making a session a success (e.g., asking clarity questions) or a failure (e.g., asking irrelevant questions). To be a successful coach a person needs to be competent in the NLP and Neuro-Semantic models supporting this form (e.g., models for inducing states, maintaining rapport, eliciting perceptual filters, and exploring things in the back of the mind), and have the ability to access states and associated frames that support his or her coaching. Many of these models initially came from eliciting the expertise of others, and have evolved into useful tools. The Benchmarking model acts like a lens to bring the use of these models into focus for coaching. A thousand years from now a cultural anthropologist discovering the benchmarking form and an explanation of its use might look at it as the Rosetta Stone of Meta-Coaching! Another reason why Neuro-Semantics works for coaching is that this form is constantly improving and is now in its 31st revision. Discoveries of how master coaches operate successfully is fed back into Neuro-Semantic models and into this form.

Gaining competency in meta-coaching, which I eventually did, is challenging because of all the skills (and models!) you need to master. You cannot be certified as a meta-coach during instructor-led training sessions. At the end of the last instructor-led, meta-coach training you are given a list of skills you still need to master to become a certified meta-coach. You have several months to submit recordings of coaching sessions you conducted that demonstrate your competency in mastering these skills. I submitted three coaching sessions before becoming certified an Associate Certified Meta-Coach (ACMC). After I submitted each session I received feedback on how to further improve.

There is another model that helps Neuro-Semantics work for coaching. It is a Credentialing Model<sup>7</sup> of the requirements needed for someone to become an Associate, Professional and Master Certified coach with each level requiring a benchmarked assessment during a coaching session.

#### IV. Conclusion

*“Once you start whying, there’s no end to it<sup>8</sup>” D.H. Lawrence*

If I enter a dark bedroom and see a flickering image of a person near my bed it is very likely I will be scared to death. If a friend asks me **why** I am scared, I think I just need to point to the image as the reason. In contrast, when my sister was about five years old she saw a little man dancing at the foot of her bed each night. This delighted her. She still remembers that man with fondness. A coach might ask me meta-questions (e.g., about my beliefs, remembrances, anticipations) related to the chilling fear I experience when seeing

the ghostly image. The coach wants to know **how** I structure my experience to feel that fear. My sister certainly structured her experience differently!

“Why questions” ask for the reasons, cause or an explanation. “How questions” ask as to the manner of doing something. “Why is a cake baked?” is different from “How is a cake baked?”

This article explored the “why does this work” question: Why do Neuro-Semantics models work in the coaching of individual clients? And, it answered it with a reason: the models in Neuro-Semantics and NLP used in coaching provide a rich language and serve useful roles in both orchestrating a coaching conversation with the client and in training the coach. However, meta-coaching does not always work. It works when the coach continues to improve his or her skills through continuous learning and feedback, so he or she can operate primarily from the self-actualization quadrant IV.

The books, trainings, and websites<sup>9</sup> devoted to meta-coaching provide material to answer the related question: “How do Neuro-Semantic models work for coaching?”

## Notes

1. For those interested in current directions in NLP and Neuro-Semantics research see Chapter 22 (The NLP Research and Recognition Project, by Richard Liotta and Frank Bourke) and Chapter 23 (The International NLP Research Conference, by Lisa Wake and Karen Maxim) in the book by Hall and Charvet (2011). Also see the book by Wake, Gray, and Bourke (2013).
2. In Chapter 1 of his book “Neuro-Semantics”, Michael Hall discusses the Neuro-Semantic model (Hall, 2011a).
3. See Appendix B in Hall and Charvet (2011).
4. For a summary of the features of meta-coaching and related models see the first chapter in the book Systemic Coaching (Hall and Gambardella, 2012) or the book Meta-Coaching (Hall, 2015).
5. It is more complex than this, however this is a good enough reason for answering question (3).
6. You also need many other models (e.g., for running a coaching business), but let’s just focus on the first two areas.
7. See <http://www.metacoachfoundation.org/>
8. This quote with the word “whying” appears in the “The New Shorter Oxford English Dictionary (1993)” under the “why” entry.
9. <http://www.meta-coaching.org/> and <http://www.metacoachfoundation.org/>

## About the Author

Pascal Gambardella is a licensed Neuro-Semantic Trainer and an Associate Certified Meta-Coach (ACMC). His specialty as a coach is “self-actualization in the creative and martial arts.” He is a master modeler, who has modeled physical phenomena, satellite motion, and the behavior of people, organizations, and corporations. He is a contributing author to the book: “Systemic Coaching: Coaching the Whole Person with Meta-Coaching” (Hall, Gambardella, 2012), where he provided system thinking models for all of the coaching sessions.

He is President of the Institute of Neuro-Semantics USA (<http://www.insusa.org/>). Its mission is to help people live their lives more meaningfully and effectively with the skills that Neuro-Semantics offers. It is dedicated to helping people actualize excellence and maximize their potentials!

He co-manages the Studio of Korean Karate, where he teaches Tae Kwon Do.

He co-chairs the Psychology Special Interest Group (SIG) of the System Dynamics Society. Within the System Dynamics community he is actively involved in exploring ways of incorporating psychological and sociological variables in computer simulations. He co-presented a workshop on the subject during the System Dynamics Society Conference in July 2015.

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