

"A man's a man for a' that."

*Robert Burns*<sup>i</sup>

„Think of yourself as a dreaming robot on autopilot,  
and you'll be much closer to the truth.“

*Albert-László Barabási*<sup>ii</sup>

## SNIPPETS

### knowing-how and knowing-that<sup>iii</sup>

Like it or not, the performing arts, just like mathematics, philosophy, tactics, scientific method and literary style cannot be imparted but only inculcated. The experts in them cannot tell us what they know, they can only show what they know by operating with cleverness, skill, elegance or taste.<sup>iv</sup> Nevertheless do the performing arts consider themselves as a kind of knowledge, though not as ardent as the before mentioned disciplines. Following an ancient opposition, their mimesis / ratio proportion has a strong inclination towards mimesis.

The knowledge invested in dance, for instance, or in playing an instrument, in handling tools in general, is way far away from being reducible to and communicable in the well articulated, linguistically and logical unit of the sentence. This knowledge comes up in form of dispositions, not in form of propositions. It is not a kind of knowing-that, it is a kind of knowing-how. If a task is concise without being evident, an achievement efficient without being adaptive, one operates in the field of knowing-how. Showing gives access to this vivid type of knowledge, while saying is never sufficient, mostly not even necessary, neither to the task, nor to the achievement.<sup>v</sup>

The heuristics people in asymmetric, imperfect and uncertain settings, with one word in life, employ, are highly intuitive and perceptual, therefore open to all kinds of biases. Different starting points, for instance, yield different estimates, which are biased toward the initial value. Since knowing-how is not a sort of knowing-that, so it is neither an intuitive nor a discursive sort of knowing-that.<sup>vi</sup> It's economics could be conceived as the interplay of gains and losses rather than that of different states of wealth. Knowing-how is more experience than memory driven.<sup>vii</sup>

Being physical by its very nature, knowing-how has more in common with the weak-force, being capable of changing things and violating symmetry, than with the strong-force, being capable of binding and holding things together. Knowing-how follows a logic which is complementary to 'result logic': it follows a 'process logic'. It initiates and supports interactions that follow an emerging and developing, not a final and developed rhythm<sup>viii</sup>

Being polymorphic – existing in more than one form and structure, and polytopical – existing in any general number of dimensions, knowing-how can be thought of rather as a process from one practical solution to this solutions improved version, than as a motion from one problem to another. Problem-posing does not constitute the main motive power in knowing-how. For instance: trying to use illusions to understand the principles of normal perception or trying to learn about memory by studying forgetting are tasks closer to piecing together a puzzle than to solving a riddle or disclosing a secret. <sup>ix</sup> Knowing how is neither an implicit nor a tacit kind of knowledge.<sup>x</sup>

Asking *how* starts a quest, a search for an unexpressed and intangible asset, item, property or value. One may call it a *Gestalt*.<sup>xi</sup> In the performing arts, both, performer and spectator, are invested in the process of searching for it. In this process, knowing-that facilitates a translated view of the spectator, <sup>xii</sup> while knowing-how enables a dilated view of the performer.<sup>xiii</sup> The level that deals with how to render the performers energy scenically alive, that is, with how the performer can become a presence that immediately attracts the spectator's attention, is the pre-expressive level. In learning and in practising knowing-how one acquires not a habit but a skill.<sup>xiv</sup>

The relation between knowing-how and knowing-that is logically and psychologically posing a problem the performing arts explore, draw on and work with. One may call it the problem of the same dream in different beds. Knowing-that is principally concerned with contextualization (alignment, combination and predication). Its main object is the sign. Its process could be conceived as a rewind of attribution in designation. Knowing-how is principally concerned with codification (alternance, selection and substitution). Its main object is the trace. Its process could be conceived as a progress from artikulation to derivaton.<sup>xv</sup>

In the performing arts codification aims at a *dilated* entity by means of a double path: by dilation in space which amplifies the dynamics of the movements, or by a set of oppositions which the performer generates within the body, thus activating its muscular tonus. In both cases, codification requires an extra-daily body technique, to lave the body from *deja-vu*<sup>xvi</sup> The principles governing the dilated body can be combined into three lines of action:

1. alteration of daily balance in the search for precarious or 'luxury' balance;
2. dynamic opposition;

### 3. use of coherent incoherence.<sup>xvii</sup>

When we try to express these principles as principles of knowing-how we find that they cannot easily be put in the indicative mood. They fall automatically into the imperative mood. We can not call an imperative a truth or falsehood.<sup>xviii</sup>

*That* in knowing-that stands for conjunctions and demonstrations, carrying an imperative mood.<sup>xix</sup> Any sentence with *that* (quod) is bearing an enormous assertive power to orient and direct. A line of reasoning bearing an intuitive and perceptive force gets established, making every search choke. Getting determined by this linear, imperative mood of being oriented and directed, any performance in human-dynamics faces an imminent jump to an augmented, dilated, more excited state of knowing-how to choreograph its minimal elements (space – body – movement – rhythm)<sup>xx</sup> or is going to exhaust itself in forms of the notorious 5 Ws, i.e. knowing who / what / where / when and why. For it is a feeble logic which leads one to think that knowing how the performance functions (or having opinions in this regard) also means having the basics necessary to make it function. Knowing *when* and *why* a performance 'lives' does not presuppose knowing *how* to make it live.<sup>xxi</sup>

To end these rough remarks, let me draw on an Aristotelian concept: *exomenon* or *aptomenon* or, to use the more but not very familiar Latin name, *contiguity*.<sup>xxii</sup> Contiguity is a concept stronger than mere succession, and weaker than continuity. Aristotle uses this concept to describe a setting, where two entities get as close as possible to each other, at their limits, in space, without intersection and no third in between. At least not in 3D. An analogy in the social-world is the concept of the neighbour.<sup>xxiii</sup> A beautiful geometric model for this intricate neighbourhood-relation of knowings in the performing arts is the 4D simplex with its five tetrahedral faces that get tangled and cross each other: chiasmic, interdependent, scrolling and rearranging<sup>xxiv</sup> As an intangible entity of imagination it controls our lack of predictability. I even have a name for it. Call it HTW.<sup>xxv</sup>

The Frankfurt Living Archive of Social Kinaesthetics **FLASK** - a network of neighbours in an user-friendly information society- is trying to make these kind of knowledges, which are dispositional to, embodied in, emerging from, and living within the the performing arts available to the use of others and to other uses. Drawing on the spatial turn in the social sciences and the performing arts, **FLASK** will become a venue of imminent relations between historio-, geo- and choreography. A center of contiguity, continuity and contact.

- i <http://ingeb.org/songs/istheref.html> (and all following links retrieved 06.12.2011)
- ii Albert-László Barabási, The best Bodyguard in the Business, in: BURSTS. The Hidden Pattern Behind Everything We Do, Dutton, New York 2010, p.11 on human-dynamics and the science of networks at MIT: <http://cambridgenights.media.mit.edu/index.php/2011/albet-laszlo-barabasi> László Barabási doctores Honoris Causa por la UPM 2011, his speech starting at 0:25:00 <http://www.youtube.com/watch?v=aJsEaijV6XI>
- iii For further information see the interdisciplinary research project Wissen und Können at Bonn-University <http://www.wuk.uni-bonn.de/>
- iv Gilbert Ryle, Knowing How and Knowing That, in: Proceedings of the Aristotelian Society, Vol. I 1945-46, S. 1-16, cit. p.15 again in: Collected Papers Vol. II, Collected Essays 1929-1968, London: 1971(1946), Hutchinson, S. 212-225, for a critical discussion and references see: Jason Stanley and Timothy Williamson, Knowing-How, *Journal of Philosophy* 98.8 (2001) [www.rci.rutgers.edu/~jasoncs/JPHIL.pdf](http://www.rci.rutgers.edu/~jasoncs/JPHIL.pdf) for a discussion of their argument see Jason Streitfeld <http://specterofreason.blogspot.com/2009/09/stanley-and-williamson-on-ryle-knowing.html> and in hindsight of the difference between KH and Kws see his <http://specterofreason.blogspot.com/2010/02/stanley-and-williamsons-knowing-how.html>
- v An exhibition presented at Akademie der Künste Berlin in 2008 *Notation, Calculus and Form in the Arts* has been dedicated to this problem. For deeper information concerning dance and augmented reality, visit The Forsythe Company motionbank website <http://motionbank.org/>
- vi Ryle, I.c. p.12
- vii Daniel Kahneman, Amos Tversky, On the study of statistical intuitions, in: Daniel Kahneman, Paul Slovic, Amos Tversky (eds.), *Judgement under uncertainty: heuristics and biases*, Cambridge University Press, New York 1982 p. 493, for further reading see: Daniel Kahneman, Apendix A: Judgement under uncertainty, in: *Thinking, fast and slow*, Farrar, Straus and Giroux, New York 2011 or watch Nobel prize lecture 2002, *Maps of bounded rationality* <http://www.nobelprize.org/mediaplayer/index.php?id=531>
- viii In scientific terms we see this process of an emerging knowledge beautifully described in Robert B. Laughlin, *A Different Universe, Reinventing Physics from the Bottom Down*, Basic Books, N.Y.C. 2005, esp. *Chapter Two, Living with uncertainty, p.9-23*
- ix Daniel Kahneman, Amos Tversky, Introduction, in: I.c. p. 14
- x For further reading: Andrea Kern, Handeln ohne Überlegen, in: Stefan Tolksdorf/ Holm Tetens (eds.), *In Sprachspiele verstrickt - oder: Wie man der Fliege den Ausweg zeigt. Verflechtungen von Wissen und Können*, De Gruyter, Berlin 2010, p.193-220, esp. p. 214
- xi Gabriele Brandstetter/ Gabriele Klein, Bewegung in Übertragung am Besipeil von *Le Sacre du Printemps*, in: Gabriele Brandstetter/ Gabriele Klein, *Methoden der Tanzwissenschaft*, transcript verlag, Bielefeld 2007, p.12 ff.
- xii Jaques Rancierre, *The emancipated spectator*, Verso, London 2009 (2004) <http://digital.mica.edu/departamental/gradphoto/public/Upload/200811/Ranciere%20%20spectator.pdf>
- xiii Eugenio Barba, PRE-EXPRESSIVITY, in: Eugenio Barba, Nicola Savarese (ed.), *A Dictionary of Theatre Anthropology. The Secret Art of the Performer*. Routledge, New York 2005 (1991), p.218
- xiv Ryle, I.c. p.15
- xv Michel Foucault, Le quadrilatère du langage, in: *Les mots et les choses. Une archéologie des sciences humaines*, Gallimard, Paris 1966, p.131-136
- xvi Eugenio Barba, Physiology and codification, in: PRE-EXPRESSIVITY, in: I.c. p.221
- xvii Eugenio Barba, The dilated Body, in: DILATION, in: I.c. p.53
- xviii Ryle, I.c. p.12
- xix For further reading see: Werner Hamacher, Sätze – Zur Kunst, in: Rüdiger Campe, Michael Niehaus (ed.), *Gesetz. Ironie*, Synchron Verlag, Heidelberg 2004, S. 257 / 58, und Dieter Mersch, Maß und Differenz. Zum Verhältnis von Mélós und Rhythμός im europäischen Musikdenken, in: Patrick Primavesi, Simone Marenholz, *Geteilte Zeit. Zur Kritik des Rhythmus in den Künsten*. Edition Argus, Schliengen 2005, S. 50, elektronische Ressource (pdf) S. 19 <http://www.dieter-mersch.de/download/mersch.mass.und.differenz.pdf>
- xx Dieter Mersch, Medien des Tanzes – Tanz der Medien, in: Gabriele Brandstetter/ Gabriele Klein, *Methoden der Tanzwissenschaft*, transcript Verlag, Bielefeld 2007, p.280

- xxi Ferdinando Taviani, The view of the performer and the view of the spectator, in: VIEWS, in: Eugenio Barba, Nicola Savarese (ed.), A Dictionary of Theatre Anthropology. The Secret Art of the Performer. Routledge, New York 2005 (orig. 1991), p.291
- xxii Aristotle, physics, book 5, 227a
- xxiii Management can be conceived as the art of maintaining neighbourhoods. See: Dirk Baecker, Welchen Unterschied macht das Management? (2006), p.9 and p.17 <http://www.dirkbaecker.com/Management.pdf>
- xxiv For further reading: Dieter Mersch, Zur Methodologie einer *dance literacy*, in: Medien des Tanzes – Tanz der Medien, in: Gabriele Brandstetter/ Gabriele Klein, Methoden der Tanzwissenschaft, transcript Verlag, Bielefeld 2007, p. 273 ff.
- xxv [http://www.dimensions-math.org/Dim\\_reg\\_AM.htm](http://www.dimensions-math.org/Dim_reg_AM.htm) click to dim3 in the menu and watch from 05:00 – 07:50