

A Handful of Remarks on the “Terminology Reference for the Science of Psychophysiological Detection of Deception”

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I find it appropriate to commence by recalling that the realisation that one of the defining characteristics of a science (or its field) that allows for its recognition as distinct and mature, alongside its subject of study and methods of research, is its language dates back to as early as the mid-19th century (Okasha, 2016).

Contemporary scientific methodology demands that each science must have a specific subject and objective distinct from other sciences, as well as its own unique language so that it makes use of clearly defined and named concepts (Humphreys, 2014).

It must also employ research methods assigned to it, although these as a rule are of a more universal character. The same methods may be applied across various scientific disciplines, possibly undergoing modifications dictated by the subject matter or the objective of the science or field in which they are employed. Numerous scientific fields, such as sociology, ethnology, criminology, as well as psychology, and even medical sciences, use both quantitative and qualitative research methods that are proper to social sciences. Surveying and interviewing, not unlike observation and experimentation, are employed by numerous sciences, both social and natural.

The purpose divides sciences into theoretical and applied. The former, broadly speaking, serve exploring previously unknown reality, describing it, identifying regularities, and articulating them through propositions and theories. The role of latter is to make use of the discoveries and findings of theoretical sciences for practical application. Both types in a crucial degree rely on language and its precision. For it is language that is used to record research problems, formulate hypotheses, and articulate propositions. The key is to have the same concepts named identically. The more developed a scientific discipline, the richer and more precise its language. Such a language creates a conceptual community within which specialists in the field operate. It enables effective communication among them.

As the language of virtually every science is a particular variation of the language a general national community uses, assorted specialist dictionaries are published as a matter of course. For instance, Oxford University Press has produced dictionaries of psychology (Colman, 2015), law (Law, 2015). Peter Collin Publishing has produced dictionary of military terms (Bowyer, 1999), and so on.

Similarly taken for granted are specialist bilingual dictionaries, such as for example English-Polish dictionaries of medical terminology (Jędraszko, 1974).

For several decades, experts in lie detection, also known as forensic psychophysiology, have undertaken efforts to reconcile and standardise terminology, thereby refining the language of their discipline.

This endeavour is by all means highly desirable. Even the device today commonly referred to as the “polygraph” has operated under various names in professional literature, not to mention all the colloquial terms given to it. Larson called his first polygraph “cardio-pneumo psychogram”, or “sphygmomanometer”, and terms like “Berkeley psychograph”, “sphygmomanometer” (or shortly “sphyggy”) (Widacki, 2021) were also used, not to mention the widespread “lie detector”.

Incidentally, alongside the name *poligraf*, the Polish language also uses the word *wariograf*, which is a peculiar substitution of the Greek prefix *poly-* meaning “multiple” with the Latin *vario* (different), keeping the Greek root *graphos* unchanged. The modification did not make much sense, as the traditional name *poligraf*, used since the 19th century to describe a device recording more than one parameter, was replaced without any real reason by a neologism artificially constructed from two classical languages, Latin and Greek (Widacki, 2016).

Returning to the main discourse, it must be stated that work on the language of a discipline and its terminology does never end. On the contrary, it has to continue as disciplines continue to evolve. New descriptive needs arise with the discovery of new examination techniques, and emergence of new conventions, practices, and facts, while new concepts that arise require new names.

Recognising the efforts of the authors and the value of their work, we ought to strive for further refinement and standardisation of terminology. Suggestions and new proposals should, and have to be made.

Personally, I hold in high regard the “Terminology Reference for the Science of Psychophysiological Detection of Deception” (4th Edition, 2022) by Donald Krapohl, Mark Handler, and Michael Lynch. Nevertheless, I have a few comments concerning their edition for consideration. I question the advisability of including biographical notes on individuals who have contributed to the development of the “Science of Psychophysiological Detection of Deception”, to mention Cleve Backster, Vittorio Benussi, Fred Inbau, Leonarde Keeler, John Larson, Cesare Lombroso, Alexander Luria, David T. Lykken, William Marston, Étienne-Jules Marey, Angelo Mosso, and Hugo Münsterberg. These biographical notes do not fit within the scope defined by the title (Terminology Reference) and their inclusion in this context seems somewhat awkward. Additionally, inclusion of the dates of birth and death in biographical notes is a standard practice that has not been followed here.

Another redundancy is the inclusion of entries for well-defined concepts that belong to other fields, notably “chi-square test”, “control group”, “empirical”, “electrocardiogram (ECG)”, “functional Magnetic Resonance Imaging (fMRI)”, “habituation”, “hypnosis”, and many others. Furthermore, there is hardly any justification for including the names of legislative acts (such as the Employee Polygraph Protection Act of 1988), well-known landmark court rulings (like *Daubert v. Merrell Dow Pharmaceuticals, Inc.*), and official names of institutions (such as the Department of Defence Polygraph Institute (DoDPI) and the National Center for Credibility Assessment).

All these, along with biographical entries edited properly according to a single template, should be compiled into a future dictionary, handbook, or encyclopaedia of forensic psychophysiology, rather than being included in a publication whose title makes it a “terminology reference.”

Perhaps the creation of such an encyclopaedia for the science of psychophysiological detection of deception could be worthwhile to undertake? It would be a significant further step towards unifying the language of our discipline, elevating it to a higher level, and promoting it both within the scientific community and the legal profession. Especially as encyclopaedias of forensic sciences, forensic psychology, forensic psychiatry, and police sciences have been published for years successfully fulfilling their purpose⁷.

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⁷ See: for example: Houck, 2022; Morgan, 2019.