

in Kateb's line of thought, insisting that "Human dignity is an existential value; value or worthiness is imputed to the identity of the person or the species" (p. 10). On p. 24, Kateb says of human stature: "Human stature is essentially an existential, not a moral, value."

An alternative would be, then, not to focus on the 'human' part of 'human dignity' but rather to deem a characteristic decisive which some may be said to exhibit and which others lack, such as rationality. Such an alternative brings its own complications with it, but these need not be discussed here as Kateb does not opt for it (indeed, as I indicated, the problem is rather that he does not choose at all). I mention it merely to remark that an alternative to Kateb's theory, which would, of course, have to be examined just as critically, is not readily available, at least not as long as one aspires to present a theory that is just as elevated. Perhaps one may even reach the conclusion that such a project must be given up.

In any event, Kateb's ambition seems to exceed what he can demonstrate, and the extent to which a theory must be justified corresponds with that of its claims rather than with its (intuitive) appeal or the aspirations of its originator. That is not to say that the book is without merit, but such merit lies primarily in indicating what is at stake in the human dignity debate, and in which setting such a debate can take place.

*Jasper Doomen*

Williamson, Jon/Russo, Federica (eds.) 2010. *Key Terms in Logic*. London/New York: Continuum (192 pages, ISBN 978-1-8470-6114-0; £ 12,99 (paperback))

Concise encyclopedic dictionaries of logic are rare. This is rather surprising, since they can serve at least two distinctive and very useful purposes: they can deliver quick but essential information which the specialist seeks in order to refresh her memory on one or even half a page and they can be an easy primer for the student. The dictionaries of logic which are in use beside Williamson's and Russo's are Kondakow's Soviet logic dictionary (Moscow: Nauka 1971), Marciszewski's *Dictionary of Logic as Applied in the Study of Language* (The Hague: Nijhoff 1981) and, finally, Roy Cook's *Dictionary of Philosophical Logic* (Edinburgh University Press 2009). Kondakow's dictionary is a useful work with only a couple of grotesque entries on Lenin and Engels none of which causes much harm, but for the following two reasons also a work which is out of reach for the vast majority of the audience for dictionaries of logic: the first reason is that it is out of print; the second is that Russian and German, two languages in which Kondakow's dictionary is available, are not the most common languages of the target group. Marciszewski's is a very valuable work but extraordinarily expensive. Williamson's and Russo's *Key Terms in Logic* is free of such disadvantages and competes with Cook's *Dictionary* in the same class of not-expensive-and-not-out-of-reach dictionaries of logic – these two being the only members of the class.

Perhaps more broadly recognisable as editors of the online-journal *The Reasoner* (<http://www.thereasoner.org>), the editors of *Key Terms in Logic*, Jon Williamson and Federica Russo of the Philosophy Department of the University of Kent (Russo has also research appointments in Brussels) have strong research interests in theory of science and probability theory. Williamson is the author of *Bayesian Nets and Causality* (Oxford University Press, 2005); Russo is the author of *Causality and Causal Modelling in the Social Sciences* (New York: Springer, 2009).

Being a work of general interest, *Key Terms in Logic* does not reflect the research interests of its editors. It is rather a great panopticum of logic, consisting of two hundred and forty-one entries, every single one of which can be read in a few minutes – as a quick introduction or for memory-refreshing. *Key Terms in Logic* has been written in modern and clear English by sixty-three contributors, among whom are names like Dale Jacquette, Amirouche Moktefi, Hartley Slater and Zach Weber, to mention some of the most well-known.

The book has three major parts. The first (pp. 3–111) contains key-terms of logic from “A Priori/A Posteriori” to “Verisimilitude”. The second (pp. 112–155) contains entries on great logicians (“key thinkers”). The third part of the book is an annotated bibliography (pp. 156–173).

The first part (“Key Terms”) seems to have been written following the strategy: maximal possible diversification and brevity. Some examples of diversification are: there is one entry on epistemic logic and one separate entry on doxastic logic. Further, there is one entry on necessary and sufficient conditions and one on implication. But this is not all there is on implication, since the six subsequent entries after “Implication” distinguish the causal, the counterfactual, the indicative, the material, the strict and the subjunctive implication. Synonymous key terms find their place in the book as individual cross-referring entries: e. g. “Conditional” refers to “Implication”; “Tableau” refers to “Semantic Tree”. The requirement of brevity in the book is mainly to be recognised from the fact that most of the entries on the key terms are from a quarter of a page to one page long. Only very few are longer than this: The entries on predicate logic and on paradox occupy two pages and the entry on truth is almost three pages long – but these are three of the very few exceptions.

In the second part of the book (“Key Thinkers”), short academic biographies of philosophers and logicians like Aristotle, De Morgan, Frege, Kripke, Ruth Barcan Marcus, the Megarians, Russell and many others are presented.

The annotated bibliography, the third part of the book, is a brief but very useful one – especially to the beginner. It is divided in appraisals of modern introductions (pp. 156–157) broadly used in class, like Lemmon’s *Beginning Logic*, Hodges’s *Logic* and Halmos’s *Naïve Set Theory*, and in brief discussions of classical texts (pp. 158–173). This is, of course, where Aristotle’s *Organon* and Russell’s and Whitehead’s *Principia* among others are discussed.

There is a list of symbols in the beginning and an index of terms and names at the end of the book.

The main focus of the book is the logic of the last hundred years. Entries on traditional logic are written from the point of view of modern logic. However, the authors were obviously instructed to avoid a usage of symbols which would be too vast for non-experts to follow and they fulfil this task with refreshing ease in expression, which belongs to the pedagogic merits of the book. It is, of course, not always easy to succeed in the task to combine logical precision with pedagogic merits without falling too short of logical rigour. However, very rarely was I in the position to identify an explanation or a remark given in the book as potentially misleading for a beginner. An example of such a rare case is found in the entry “Contingent” (p. 19), in which a contingent formula is defined with reference to modality only. Another example is the English expression offered on p. 46 (entry: “Logic vs Linguistics”) as an interpretation of the formula  $(\exists x)(\forall y)Lyx$ : ‘someone (say, Ervin), everyone loves’, which is, of course not a sentence but a description. The author of the entry “Linear Logic” (pp. 51–52) thinks that it is an important information to the reader that the premises of an argument are separated by a comma. But then this information should be given in the beginning instead of the middle of the article. And the same entry uses the expression “to use a premise” as meaning: to tick the premise in order for it *not* to be used again, without explicitly making the reader notice this linguistic convention. In the entry on multivalued logic (p. 52), Graham Priest’s Logic of Paradox (LP) is mentioned as an example of a three-valued logic, which is, of course, true in terms of the formal semantics of LP, but does not account for Priest’s *interpretation* of the third value as the “glut” of the other two. Arguably, the third value of LP is not an “extra” value and there are surely much more representative examples of many-valued logic than LP. Taking LP as an example of many-valued logic is obviously due to the fact that today it is very fashionable to speak of LP and *Key Terms in Logic* is a work very keen in keeping up with what is shiny in logic – in spite of being introductory, that is.

The usage and translation of foreign terms is, generally, very careful. However, on p. 74 the term “ontology” is said to derive from Greek “ontos” and “logos”. This is true. However, in etymology one usually uses the nominative singular case or the stem of the words involved, which should be “on” or “ont-” respectively, not the genitive singular form “ontos”. Frege’s German neologism “Begriffsschrift” is translated as “conceptual notation” on p. 123 and as “concept-script” on p. 159 – which could be a nice example of the notorious incompatibility of translational beauty on one hand (the former translation) and translational faithfulness on the other (the latter translation). The mentioned bits of the book do not contribute much to avoiding misunderstandings. However they do not cause great misunderstandings either. Perhaps they could be revised in the next edition.

Speaking about things which have to be amended in the editions to come: in the biographical part, although the entries on Bernard Bolzano (p. 115), Alonzo Church (p. 120) and Richard Jeffrey (p. 129) do contain most of what the reader expects to find, one misses these philosophers’ dates of birth and death – in opposition to all the remaining biographical entries, that is. In the expression “Relativized Hilbert programmes” (p. 32), either the capital “R” must be substituted by the minuscule, or the first letter of “programmes” must be capitalized. The condition (4) of epistemic logic in the corresponding entry (p. 48) is, of course, not  $\Box\varphi \rightarrow \Box\varphi$ , but  $\Box\varphi \rightarrow \Box\Box\varphi$ .

All in all, *Key Terms in Logic* can be highly recommended. It is a reasonable investment for undergraduate students, but it could also serve as a handy quick reference for graduate students and researchers who do not want to refresh their memory on certain topics in logic by trusting the hits of their PCs browser.

*Stamatios Gerogiorgakis*

Feyerabend, Paul K. *The Tyranny of Science*. Edited, and with an Introduction, by Eric Oberheim. Cambridge: Polity Press 2011 (165 pages, ISBN 978-0-7456-5190-3; £ 12.95 (paperback))

Paul Feyerabend’s *The Tyranny of Science* is based on a series of five lectures he gave in 1992 – two years before his death – at the University of Trent, Italy. In these lectures Feyerabend posed a couple of questions and presented some arguments which every scientist, philosopher and fan of them should consider at least once in a lifetime. Videotapes of these lectures were transcribed and edited by Feyerabend. Already in 1996, the book was published in Italian (Feyerabend 1996) and two years later in German (Feyerabend 1998). Nineteen years after Feyerabend had held these lectures in Trent, the book appeared in 2011 finally in English.

*The Tyranny of Science* is divided into four chapters: “Conflict and Harmony”, “The Disunity of Science”, “The Abundance of Nature” and “Dehumanizing Humans”. Every chapter has two parts: The first parts contain Feyerabend’s presentations and the second parts are discussions between him and the audience. Feyerabend’s central ideas can nearly all be found in his presentations, the most parts of the discussions are merely of an explanatory nature and do not really lead to additional insights into his theory.

Feyerabend does not give a systematic argumentation in his lectures, but “fairytales woven around events that are vaguely historical” (p. 13). Protagonists of these fairytales are scientists and philosophers, like Platon, Xenophanes, Galilei, Pauli, and their theories. By telling these fairytales Feyerabend tries to convince his audience that basic assumptions about science are wrong and the insistence upon the right of academic freedom “[...] is a silly attitude” (p. 89), which has to be suspended.

One of the first and also most important questions in Feyerabend’s book is if there is a connection between the so called “great discoveries in science” and everyday life. It