1 Ideals of knowledge

Humanity has striven for knowledge from the dawn of time. To know which mushrooms are edible and which poisonous, to predict the weather and know when to plant crops, to know how to appease the gods, whether the circle can be squared and why entropy always increases with time – the problems with which humans concerned themselves were continuously transformed by the currents of history, but the concern itself remained evermore strong and unabated.

With this concern come questions. How is knowledge to be attained, captured and preserved? Are these tasks to be undertaken by the individual or rather by society as a whole? Is there an eternal and immutable truth which we can reach through sufficient effort and talent, or is our intellectual life destined to be in a state of everlasting flux? With the answers to these queries comes an ideal of knowledge, a vision of successful research and the fruits which it can bring humanity. This ideal, this vision, has undergone considerable change in the history of Western society. Providing a cursory glance at this development, from the thought of Plato to a state-of-the-art encyclopedic project using the latest technology, is the first aim of this essay. The other is suggesting that the medium used to store and preserve knowledge, although it may not affect the content very much, certainly reflects and is reflected by the ideal of knowledge of its users.

2 The Platonic vision

Since all of philosophy has been said to be merely a footnote to Plato, it is fitting to start our enquiry with the ideal of knowledge he expresses in his famous dialogue The Republic. Plato’s concern in the seventh part of this dialogue is to prove that his Utopian state ought to be ruled by philosophers, where a philosopher is someone who loves Truth ardently and uncompromisingly, and
has the ability to transcend the all too earthly concerns of his fellow men. As an example of this transcending, Socrates tells us about those who love beauty. Although all ‘music-lovers and theatre-lovers are delighted by the beauty of sound and colour and form, and the works of art which make use of them’, they unfortunately lack the ability ‘of seeing and delighting in the essential nature of beauty itself’. The philosopher does have the ability to see this essential nature and to rejoice in it. There are, Socrates stresses, only a few philosophers – ‘very few indeed’, replies Glaucon.

Plato next proves that the kind of object of which the philosopher has knowledge is different in kind from that about which the average person has opinions. Whereas the philosopher has deep and infallible insight into that which is really real – the eternal and immutable world of Ideas – the lay person is only acquainted with the changing and uncertain world around us. Only the philosopher can be said to have real knowledge. Socrates asks, rhetorically: ‘If philosophers have the ability to grasp eternal and immutable truth, and those who are not philosophers are lost in multiplicity and change, which of the two should be in charge of the state?’, and his intended answer is clear.

Plato’s ideal of knowledge thus contains two core components. First: real knowledge is eternal and immutable, and transcends the world of the senses. Second: it can only be attained by a few special persons, philosophers, who can reach this complete certainty through the process of almost mystical enlightenment described in Plato’s Symposium. Knowledge is possessed only by a select class of people, and is final and infallible.

If we have such an ideal of knowledge, how are we to capture and preserve it? In the Phaedrus, Plato expresses a great deal of skepticism about the usefulness of written language: it impoverishes people’s memory and bestows on them only the appearance, but not the reality, of wisdom. The only way to attain true knowledge is by being taught by a living teacher, one who is already enlightened. That the oral dialogue is Plato’s preferred medium fits seamlessly with his ideal of knowledge: teaching is a relation between exceptional individuals, where the teacher’s task is not to communicate information, but to show the pupil the path to enlightenment.

Both of the two main components of Plato’s vision, that complete knowledge can be reached by the individual and that knowledge is immutable, have been overthrown in the course of history. These developments will be sketched now.

## 3 The rise of the community

In the time of Plato, philosophical and scientific thought were just awakening in Greek culture. The social infrastructure of knowledge was mainly limited to schools for rich boys, who were taught the art of being a statesman, an education which centred on rhetoric – more a practical art than one concerning theoretical knowledge. There was no tradition of systematic scientific or philosophical research, no cooperating groups of thinkers trying to solve concrete problems. A thinker in Plato’s milieu was not part of an extensive social network of other thinkers and did not have access to an established body of research results either.

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3Paragraph 247-248; [3].
In our time, millions of people all over the world are engaged in scientific, mathematical and philosophical research projects controlled by tight and exceedingly complex institutions such as universities, government funds, journals and conferences. The amount of published results, on which any researcher is supposed to base his own thoughts and actions, is immense: in a lifetime one could not read what the scientific community publishes in a month. In almost all areas of research, specialisation has reached a level so high that only a tiny minority of the educated people have any idea what issues are being explored; in fact, most published articles are unreadable and uninteresting for all but a few colleagues of the author. The main medium for disseminating knowledge is no longer the Platonic dialogue, but the peer-reviewed journal article.

Together with the quantity and the social embedding of knowledge, the ideal of knowledge has changed completely. For Plato, as we saw, attaining knowledge was the process of an individual thinker groping towards and eventually reaching the perfect world of Ideas. Knowledge is that which is attained by the individual at the end of his path towards enlightenment. But, at least from the scientific revolution and the – in this context perhaps ironically named – Enlightenment onward, the ideal of knowledge has been very different. The creation of a scientific method promised progress in the understanding of nature which was theretofore undreamt of. But this progress did not come cheap: to wrest from nature one small truth is often no mean task, and the creation of scientific theories with which to describe the world proved a very time-consuming enterprise. In addition, the vast richness of the natural order, a richness which only seemed to increase as more and more subtleties were uncovered by scientists, necessitated a myriad of research programmes focussing on different subjects. The whole gigantic undertaking was far too great to be completed by one man, by one generation, even by several centuries of unrelenting scientists. And as the number and variety of subjects grew, the edifice of science became too big for any single person’s mind to range over. The time of the *homo universalis* who could grasp all human science and master all human skills had passed; the scientific specialist adding his own modest building blocks to the ever-growing tower of knowledge had superseded him.

How to view knowledge in these changed circumstances? No longer could its attainment be equated with the individual path to enlightenment, as knowledge had become something emancipated from the subject, something much bigger than the individual, only a small part of which he could ever hope to grasp. The new ideal of knowledge, more adapted to the new circumstances, no longer contained a reference to the individual; it is, as Karl Popper calls it in *Objective Knowledge*, ‘knowledge without a knowing subject’. Knowledge is no longer contained within the mind of an individual, nor even within the minds of the scientific community, but within the pages of countless issues of countless peer-reviewed journals. Its guardian is no longer the philosopher, but the librarian.

For Plato, the highest knowledge-related good is *knowing*. This stance cannot be copied by the scientific community: there is already so much more knowledge than could ever be grasped by a single individual, that continuing the scientific enterprise cannot be justified by an appeal to the worth of individual knowing. Instead, the ideal is the ongoing growth of scientific knowledge, the ever deeper penetration into the secrets of nature, the slow but inexorable ap-

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4[5], p. 109.
proach to the ultimate scientific truth. The new ideal of knowledge is that of a massive community effort to construct, brick by brick, a tower that reaches all the way to the heavens. And the medium used, the peer-reviewed journal, facilitates the coordination of the project and the preservation of the bricks already laid, guarantees the solidity of every new brick and its seamless fit with the rest, and is thus essential to the prosperity of the whole undertaking.

4 The loss of finality

We have seen that one of the two main features of Plato’s ideal of knowledge – that it belongs to the individual – has been transformed into its opposite: the idea that knowledge is essentially related to a community, that finding it is a community effort. The other main feature – that knowledge, once attained, is infallible and irrefutable – has not survived the passage of twenty-four centuries either. The Platonic scheme of a transcendent world of Ideas has fallen into disrepute, and the emphasis of intellectual enquiry has moved to the world of the senses, the ‘empirical’ world. This shift in attention was accompanied by a change in attitude towards knowledge. It is all too clear that we can be wrong about the world around us: we often have false beliefs, make generalisations which turn out to be contradicted by later experience or come across events which we thought to be impossible. The scientific method was designed to minimise the chances of error by requiring stringent tests and repeatable experiments, counseling against broad generalisations where narrower ones may serve as well and suggesting that fellow researchers check the results of their peers. However, everyone will agree that these safeguards are not enough to guarantee infallibility: every scientific belief is up for grabs. As Wilfrid Sellars summarised this spirit:

\[ \text{E} \text{mpirical knowledge, like its sophisticated extension, science, is rational, not because it has a foundation but because it is a self-correcting enterprise which can put any claim in jeopardy, though not all at once.} \]

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This claim, that every part of our knowledge\(^6\) is in principle refutable, can well be seen as a central part of the modern conception of knowledge. But it can affect the ideal of knowledge in several, widely divergent, ways. The first way, which is most reminiscent of Plato, is that it appears as an unfortunate concession to the reality of research: what we are aiming at is the real and true knowledge, but alas, complete certainty cannot be had. In the great building erected by the community of scientists, the position of no brick is safe; but the ideal is a static building, without change, except for that at the top where it is ever extended towards farther and more exotic layers of clouds.

Against this ideal, two major criticisms have been leveled. The first of these is that the metaphor of an ever rising building is misleading: in reality large parts of the tower are periodically razed to the ground and entirely new edifices are constructed on the ruins. This thesis has been proposed by Thomas Kuhn in his *The Structure of Scientific Revolutions*, where he claims that radical

\(^5\)[6], section 38.

\(^6\)Except, perhaps, for privileged subjects such as mathematics, or privileged knowledge such as sense data. We will ignore these issues in the present essay.
transformations in scientific thinking – paradigm shifts – occur with a certain regularity, leaving no things unchanged. Presumably, Kuhn’s ideal of knowledge would be a playful affirmation of the eternal cycle of creation and destruction. I do not think this consequence has been embraced by many, and I therefore focus myself exclusively on the second criticism against the ideal of the static building, which has been more influential in shaping ideals of knowledge. This second criticism is the claim that the fact that change, disagreement and continuous partial revision – but not Kuhn’s periodic radical revision – are an inevitable part of the quest for knowledge, is not lamentable, but a blessing.

How is it supposed to be a blessing, this lack of certainty, this multiplicity of opinions and this constant change of the body of knowledge? The benefits of such a conception of knowledge, its proponents will argue, are many. It teaches people not to rely too much on authority; it teaches them to be critical towards information, to think for themselves and not to be led by the opinions and claims of others; it creates a spirit of tolerance towards people with other views, a willingness to review and revise our own beliefs; and it is the best medicine against conservatism, the best catalyst for change whenever it is needed, the best safeguard of intellectual freedom. When final certainties are no longer the ideal and everyone clearly recognises the historical contingency of his own opinions, there will be no more tyranny in the name of truth and no more violence in the name of immutable moral laws. Having this vision in mind, Paul Feyerabend writes:

Unanimity of opinion may be fitting for a rigid church, for the frightened or greedy victims of some (ancient, or modern) myth, or for the weak and willing followers of some tyrant. Variety of opinion is necessary for objective knowledge. And a method that encourages variety is also the only method that is compatible with a humanitarian outlook.7

The new, anti-Platonic, ideal of knowledge is that of a pluralistic and ever-changing body of purported facts created by a heterogenous but non-hostile community. In theory, the scientific community could be seen as striving for such an ideal; but I will presently argue that its medium of expression, the journal article, is not well-suited to either pluralism or changeability.

A journal article is written by one person or a small group, presenting their point of view on some topic. Once published, it is static, it will not ever change. Obviously, a set of journal articles can present a myriad of opinions; and a chain of articles on a single subject can present an evolution of thought through time. But every article itself is written with the intention to present a single point of view, that of the author. And as it is static and unchanging, it is written – not as a matter of necessity, but as a matter of general fact – with the purpose of getting things finally right, making the last statement that needs to be made, arriving at the long sought-for truth. In his article, the writer wishes to express the truth, and he wishes others to accept it, not to disagree and overthrow his opinion. Because of its static nature, the article offers the author an environment in which he can imagine playing the last move of the dialectical game, saying the last word, laughing the last laugh. The journal article is in a schizophrenic

7 Against method, chapter 3; [1], p. 31-32.
position: on the on hand, it is an element in a pluralistic and changing whole; on the other, its internal nature is monistic, static and Platonic.

Is there a medium which is better suited to the needs of the new ideal of knowledge? There probably is: the wiki. This new medium is only now gaining wide-spread attention through projects such as Wikipedia, a wiki-based encyclopedia. A brief description of this project will enable us to understand how the new ideal of knowledge might be reflected in new practices.

5 The Wikipedian vision

Wikipedia is a free, open-content internet encyclopedia in many languages, located at http://www.wikipedia.org. At the time of writing, the English version of Wikipedia has over 260,000 articles, 60,000 of which were added in the last three months. This means that the English Wikipedia has thrice as many entries as the Encyclopedia Britannica, although the entries are, on average, only half as long. It is probably the largest general encyclopedia in existence, and it is still growing with almost 700 entries a day. In all languages combined, there are over 660,000 articles, with more than 2,100 being added each day. How is this huge growth possible? What army of writers is typing away day and night to produce these figures?

Actually, Wikipedia uses a strategy both simple an daring: anyone – anyone at all – can write and add a new encyclopedia article, or edit an existing one, immediately. There is no process of peer review, there are no ranks with attached privileges; indeed, one can remain anonymous and still contribute. If you think a certain topic which is not yet covered should be in the Encyclopedia, you can add it. If you think some important information, a necessary qualification or an alternative point of view is missing from an article, you can add it too. If you spot mistakes or inaccuracies, you can correct them. Perhaps surprisingly, the system seems to work – although the article quality on Wikipedia varies from the atrocious to the supreme, the average quality is quite good. But whether or not Wikipedia will turn out to be a success, the way in which its new medium – the wiki – allows it to embody the new ideal of knowledge is very interesting.

A wiki ‘enables documents to be authored collectively in a simple markup language using a web browser’. In general, it is a set of highly interconnected pages on the world wide web which can be edited instantly by anyone, and with anyone having the right to add new pages, new links to other pages, and in general help the wiki change and grow. This means, first of all, that a wiki is essentially a community project, and everyone with an interest and an internet connection has the ability to join the community. Thus, the wiki embodies the ideal of knowledge as being the product of a community effort. Secondly, the wiki medium ensures that not only is the encyclopedia itself written by a community, so is every single article. Articles do not have authors, they are the product of the efforts of many different people with different perspectives; in this way, the wiki embodies the ideal of plurality. Wikipedia writes:

[B]ecause there is a huge variety of participants of all ideologies, and from around the world, Wikipedia is committed to making its articles as unbiased as possible. The aim is not to write articles from a single
objective point of view – this is a common misunderstanding of the policy – but rather, to fairly present all views on an issue, attributed to their adherents.\(^9\)

In addition to being created by a community rather than by a single author, an article in a wiki is always essentially unfinished. Everyone who reads it will be presented with an *Edit this page* link, inviting him to make his own contribution. No article is ever ready; the wiki is in a constant change of flux. Thus, the wiki medium embodies all for which the proponents of the new ideal hoped: community, plurality, change.

The latest cultural and technological developments – the invention of the computer and the world wide web, and their penetration into daily life – have enabled the creation of a new medium which, if successful, may change the way we think of knowledge in our society – for better or for worse. The enlightenment of the individual has been superseded by the progress of a community; the hope for uniformity by the affirmation of a myriad of opposing visions; the quest for certainty by the idea of constant flux. The development of new media may well have played a crucial role in the genesis of this radically anti-Platonic ideal of knowledge.

References


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