

CAN SCIENCE ALONE PROVIDE MAN WITH ADEQUATE REFLECTIVE AND AUTHENTIC ENGAGEMENT WITH THE WORLD?

By

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EXECUTIVE SUMMARY

Formal education today has two broad divisions – humanities and science. The German educational system makes the distinction clearer: Geisteswissenschaften and Naturwissenschaften. Initially, education consisted in the reading of the original works of authors such as Homer and Hesiod. Later, it shifted to Shakespeare. In the 20th century, the rapid development of science and technology led to profound transformation in every aspect of human life. From the industrial revolution to the rise of digital technologies. Humanity's relationship with the world has become increasingly mediated by technological advancements. The result was profound transformations in human thinking and life. Today, humanity's relationship with the world has become increasingly mediated by technological advancements. The result is the conclusion by some that science has overtaken humanity. Even in our secondary schools, those students who offer science subjects tend to look down on the ones that offer arts subjects as their academic inferiors. Our world seems to be moving purely towards the digital direction. However, it is a truism that man is a being in the world. The question is: can science alone provide man with adequate reflective and authentic engagement with the world? This paper answers in the negative. This position is by no means a rejection of science and technology. Taking a clue from the critic of science made by Edmund Husserl and Martin Heidegger and the mediatory Encyclical of Pope Francis, this paper rejects the dominant role assigned unreflectively to science in our contemporary world. It takes the position that a reciprocal relationship between humanities and science can aid man better in his relationship with the world enabling him to objectively face the challenges of the contemporary era. Hermeneutics can be a veritable method. As recorded in the Book of Genesis, when God looked at his creative act, he described it as Good. The meaning is deeper and more profound than what we can find in any dictionary. It means perfect, spotless. God thereby replaced darkness with light. It is not light generated by man. It is light that is God himself. God is Light, GodLight. This paper proposes this maxim to our scholars – both of humanities and sciences. Every research should end with a declaration, God is Light. That is an acceptance of human limitation and at the same time the supremacy of God.

Science: General Meaning

The word, science is too amorphous. In the widest sense of the term, it could be used to incorporate such areas as politics, sociology, ethics, anthropology, etc. In this paper, 'science' will be taken to mean the natural sciences such as physical and biological sciences

with their respective subdivisions. Technology would also be understood as applied science. Subdivisions also include genetic engineering, atomic physics, cosmology, mathematics, astronomy etc. It is not our intention here to delve into an in-depth etymological consideration of the word. We are aware that it has gone through many centuries of linguistic development. We only undertake a general explanatory analysis. According to Uzoma science is:

The whole body of ascertained and reasoned truths Human reason has established as truths and has systematized and arranged, no matter fields of specialization or experiment such as arrangement may entail – each specific department of that universal body of reasoned and certain knowledge is a science. (Uzoma 5)

It is usually divided into two, empirical and non-empirical.

A problem arises already here. Is scientific knowledge exact? is it indubitable? Some have replied in the affirmative. For instance, Kant through the synthetic a-priori method. Scientism is also a philosophical position which maintains that only scientific method is valid and exact in the pursuit of knowledge. Smith clearly articulated and expressed its spirit.

...science discovers truth the hard way; entertaining no apriori certitude. She starts from ignorance and by tested and critical procedures little by little wrests from nature successive fragments of information which prove to be verifiable by competent observers at all times and at all places. The body of verifiable knowledge is what the scientist means by truth and the process by which science extracts it from nature is called the scientific method...the scientific method has been tried and tested by some three centuries and remain inviolate as the only reliable method for discovering something or anything that can be called 'truth'. (Smith 2)

The following kinds of explanation are found in science: causal, statistical probabilistic, teleological, genetic, deductive-nomological. (Mbat 57-66)

Critique of Science

We are now at the core of the main project of this paper. It is to develop the theme of the inexactitude of science. More precisely, to assert and prove that science alone cannot provide man with adequate reflective and authentic engagement with the world. Our position is that the so-called exactness of science as advocated by a good number of scientists and philosophers is not a reality. It is an illusion. The advocates of this exactness may have what they consider valid reasons for taking the position. We point out one of them. The belief that science is exact may not be unconnected with the conception by some scientists, especially those with atheistic tendencies, that science is the be-all and end-all of all that is. Hence, the ease with which God and all that He stands for are relegated to the background in the course of scientific enquiries.

We make our critique through the perspectives of two philosophers, Edmund Husserl and Martin Heidegger. The views of Husserl are the results of our reflective reading of his last work, *The Crisis of European Sciences and Fundamental Phenomenology*. Hereafter, we refer to it simply as *The Crisis*. For purposes of clarity, we have to answer a fundamental question: why the choice of *The Crisis*? It is because this is the work that Husserl regarded as his definitive exposition of phenomenology. (Husserl XXIX). This view is confirmed by Alfred Schutz when he reported that “in the last conversation which the writer had the good fortune of having with Husserl, he repeatedly designated this series of essays as the summary and the crowning achievement of his life work.” (Schutz 165). *The Crisis* is placed within the framework of the teleological-historical reflections.

There were peculiar circumstances surrounding the writing of *The Crisis*: “a deeply felt lack of direction for man’s existence as a whole, a sense of the emptiness of Europe’s cultural values, a feeling of crisis and breakdown, the demand that philosophy be relevant to life.” He goes on to admit that in our vital need, we find this science irrelevant. It does not have genuine answers to our problems. It puts in bracket thereby excluding “in principle precisely the questions which man” in his unhappy and moments of upheavals finds burning and agitating within him; “questions of the meaning or meaninglessness of the whole of human existence.” These questions are universal and necessary for all men. They, therefore, demand universal reflections and answers based on rational insight. (Husserl XXV-VI). His aim is to correct wrong popular thinking that science alone makes man wise and can give him full contentment. This was his main point in the Vienna Lecture.

Is it not the case that what we have presented here is something rather inappropriate to our time, an attempt to rescue the honor of rationalism, of “enlightenment,” of an intellectualism which loses itself in theories alienated from the world...? Does this not mean that we are being led again into the fateful error of believing that science makes men wise, that it is destined to create a genuine and contented humanity that is master of its fate? Who would still take such notions seriously today? (Husserl 289)

Precisely, it was against ‘irrationalism’ pure and simple that Husserl makes his most vigorous attacks. He gives the rising wave of existentialism as an example. He attacks the old rationalism with its sterile legacy of 19th century positivism. “But existentialism was not only symptomatic of Europe’s problems. It was also symptomatic of the desperate and false solutions being accepted by society as a whole.” (Husserl XXVII). He sees a red light – Europe coming to an end. “At present we are faced with the immediate danger of extinction of philosophy in this sense and with it necessarily the extinction of Europe founded on the spirit of truth.” (Husserl XLIII). His target is the attainment of scientific objective truth which is “exclusively a matter of establishing what the world, the physical as well as the spiritual world is in fact.” (Husserl 6). It is only in pursuance of this truth that Europe can regain its lost leadership in the completely new shaping of European community which began with the renaissance. It is at this point that Husserl accepts that the European nations are sick.

The European nations are sick; Europe itself, it is said, is in crisis. We are by no means lacking something like nature doctors. Indeed, we are

practically inundated by a flood of naïve and excessive suggestions for reform. But why do the so richly developed humanistic disciplines fail to perform the service here that is so admirably performed by the natural sciences in their sphere? (Husserl 270)

A way out is the distinction as well as correlation of the life-world as the universe of what is intuitable in principle and the “objective-true” world as in principle nonintuitable logical substruction. “The life-world is a realm of original self-evidences. That which is self-evidently given is, in perception, experienced as “the thing itself,” in immediate experience, or, in memory, remembered as the thing itself; and every other manner of intuition is personification of the thing itself. (Husserl 127-8). There is a contrast between the two. It lies in the fact that the “objective” and the “true” world“ is a theoretical-logical substruction, the substruction of something that is in principle not perceivable, in principle not experienceable in its own proper being, whereas the subject, in the life-world, is distinguished in all respects precisely by it being actually experienceable”. (Husserl 127).

We now turn our attention to Martin Heidegger. He is one of the most influential critics of science and technology. His critic has its roots in his philosophy of being. The two most important works in this respect are: *Being and Time* (1927) and his essay, “The Question concerning Technology” (1954). Let us immediately point out that Heidegger does not outrightly reject science and technology. He only criticizes the way in which modern science and technology represent the world. The main line of argument is that modern technological thinking reduces everything to resources to be exploited thereby turning human beings into mere technicians or operators of machines. Heidegger is not just concerned with the material world. His critic is strongly tied to human existence because it challenges the very way we understand and relate to the world around us (*umwelt*). His critical views are threefold: the essence of science and technology, the role of modern science, the alienating effects of technological thinking. Our choice of Heidegger is because his concerns are not just about the external effects of technology but about how technological thought has permeated our very understanding of existence. Consequently, our position is that Heidegger’s philosophy offers a powerful framework for understanding the human cost of unchecked technological advancement and provides critical insights into the need for a more reflective and authentic engagement with the world.

In “The question concerning Technology”, Heidegger argues that technology is not simply a collection of tools. It rather represents a way of revealing the world. He begins with the fundamental question: What is the essence of technology? He refused to follow conventional thinking that sees technology as a neutral tool, that is, tools used by humans to achieve specific ends. For him, it is much more profound. It is not a means to an end. It is rather a mode of revealing, a way of disclosing the world to us. To make his meaning of the essence of technology clear and distinct, he introduces the concept of enframing (*Gestell*). Enframing means the way of revealing that holds sway in the essence of modern technology. In itself, it is not technological. (Heidegger 287). In a technological age, human beings themselves are enframed. That is, they are viewed not as autonomous agents engaged in meaningful activities but as cogs in a larger machine. Man in the modern world is treated as a resource to be optimized, used and controlled. We continue to emphasize that Heidegger’s

critic of technological enframing of human beings is linked to his existential philosophy epitomized by his notion of *Da-sein* (being-there). With the notion of enframing as a solid foundation, he goes on to state the threat of technology. This threat “does not come in the first instance from the potentially lethal machines and apparatus of technology.” Rather, the threat is the essence of technology because “the rule of enframing threatens man with the possibility that it could be denied to him to enter into a more original revealing and hence to experience the call of a more primal truth. The result unfortunately is that truth itself is concealed. Heidegger undertakes his project in the conviction that unless humanity makes an effort to re-orient itself, it will not be able to find revealing and truth. Truth is actually Heidegger’s primary objective. He, therefore, concludes that the question concerning technology is one “concerning the constellation in which revealing and concealing, in which the coming to presence of truth comes to pass.” Put in clearer terms, it is finding truth. For him, it is through art (the poet) that one can navigate this constellation. It is so because the artist or the poet views the world as it is and as it reveals itself.

Let us conclude this section by casting a critical look on the method applied in science, induction. Thomas Kuhn in 1962 (*The Structure of Scientific Revolutions*) proposes a new and to most philosophers rather upsetting account of scientific change. Like Aristotle, Kuhn emphasized the collaborative character of science and the role of shared facts, concepts, procedures. He nevertheless warned that change or progress (in clearer language) might sever all logical connections with the past. If we accept his views, we are perhaps assuming that science accumulates facts, or that theories can be reduced, by approximations, to their more precise and more comprehensive successors.

In general, induction is a method or principle of reasoning that argues or draws inference from the observation of particular or single instances of the occurrence or presence of certain phenomena, events or state of affairs in nature to a general position, conclusion or law about the class of phenomenon, or event in question. It means or implies that by the method of induction, we can construct general statements or laws based on our observation of particular instances of things, events or states of affair in nature. However, in science, the understanding of induction is not so simple. Bertrand Russell in his book, *The Problems of Philosophy*, devotes an outstanding chapter to induction. Let us assume that he holds that the laws of nature like the law of gravitation, motion, the law of thermal expansion and so on have always held in the past. Then we pose the question: do we on this account suppose that these laws will continue to hold in the future? Paul Edwards in his article on Bertrand Russell has ingeniously reformulated Russell’s question. He puts it in form of questions:

- (i) Assuming that we possess n positive instances of a phenomenon, observed d in extensively varied circumstances, and we have not observed a single negative instance (where n is a large number), have we any reason to suppose that $n+1^{\text{st}}$ instance will also be positive?
- (ii) Is there any number n of observed positive instances of a phenomenon, which affords sufficient evidence that the $n+1^{\text{st}}$ instance will also be positive? (Edwards 55-56).

The important question here is: do we have any reason assuming that all the large number of observed instances of a phenomenon are positive, to suppose that an instance which is yet unobserved is also positive? This is a problem. Russell himself sees this problem of induction as that of the justification of our belief in what is called “the uniformity of nature”, which according to him “is the belief that everything that has happened or will happen is an instance of some general law to which there are no exceptions.” (Russell 35). It is clear that Russell and those who hold his perspective doubt the truth of the conclusion of an inductive inference. The question is why? A key point held by the critics of inductionism is that the conclusion of an inductive argument compared with that of deductive argument is never necessarily true or certain. This can mean a number of things. The first is that the conclusion of an inductive argument cannot be certain because it rests on premises that cannot be known with certainty. Secondly, as Carnap also notes, even if the premises were assumed to be true or the inference is a valid inductive one, the conclusion might be false. In this view, considering the premises of an inductive argument, there is only one justification for its conclusion – that it has a certain degree of probability. We learn from inductive logic how to calculate the value of this probability.

Danger of over dominance of Science

It is clear from preceding presentations that the result of scientific research has undoubted limitations. It does not have the whole truth. What happens then if in spite of this, science exercises unquestioned dominance over other disciplines? The answer is danger. But how? The answer to this occupies us in this section. It can have many approaches. We have chosen an approach through the ecological crisis. The reason for the choice is because it is topical. We shall draw extensively from *Laudato Si*. It is an Encyclical Letter issued by Pope Francis, *On Care For Our Common Home*. He invites us to pause and consider a certain way of understanding human life and activity that has gone awry to the serious detriment of the world around us. We begin with his proposal “that we focus on the dominant technocratic paradigm and the place of human beings and of human action in the world.” (Pope Francis No. 101).

For more than two centuries, humanity has benefitted immensely from scientific and technological inventions. These have no doubt improved the quality of our life. Yet it must also “be recognized that nuclear energy, biotechnology, information technology, knowledge of our DNA, and many other abilities which we have acquired, have given us tremendous power. More precisely, they have given those with the knowledge, and especially the economic resources to use them, an impressive dominance over the whole of humanity and the entire world. Never has humanity had such power over itself, yet nothing ensures that it will be used wisely, particularly when we consider how it is currently being used.” (Pope Francis No. 104). That is, humanity has entered a new era in which our technical prowess has brought us to a crossroads. The Pope invites us to think of the nuclear bombs dropped in the middle of the twentieth century; how Nazi, Communist and other totalitarian regimes have employed technology to kill millions of people. Today, we have an increasingly deadly

arsenal of weapons available for modern warfare. This power lies in the hand of a small part of humanity. This is risky. He warns that increase in power does not necessarily mean increase in progress. Man must acknowledge that he is not autonomous. We ought not allow certain superficial mechanisms to replace sound ethics. That is, we should nurture a culture and spirituality genuinely capable of setting limits and teaching clear-minded self-restraint.

The basic problem goes even deeper: it is the globalization of the technocratic paradigm. That is the way that humanity has taken up technology and its development according to an undifferentiated and one-dimensional paradigm. "This paradigm exalts the concept of a subject who, using logical and rational procedures, progressively approaches and gains control over an external object. This subject makes every effort to establish the scientific and experimental method, which in itself is already a technique of possession, mastery and transformation. It is as if the subject were to find itself in the presence of something formless, completely open to manipulation." (Pope Francis No. 106). The constant intervention men and women have only ended up being in tune with and respecting the possibilities offered by the things themselves. It follows that many problems of today's world stem from the tendency, at times unconscious, to make the method and aims of science and technology an epistemological paradigm which shapes the lives of individuals and the workings of society. Unfortunately, "technological products are not neutral, for they create a framework which ends up conditioning lifestyles and shaping social possibilities along the lines dictated by the interests of certain powerful groups." (Pope Francis No. 108). The technocratic paradigm also dominates economic and political life. The maxim for acceptance of any advance in technology is profit. Maximizing profit is the motto. "We fail to see the deepest roots of our present failures, which have to do with the direction, goals, meaning and social implications of technological and economic growth."

There is further the crisis and effects of modern anthropocentrism. Unfortunately, in our time, the technological mind sees nature as a mere given, an object of utility, as raw material to be hammered into useful shape. The cosmos represents for it a mere 'space' into which objects can be thrown with complete indifference. "The intrinsic dignity of the world is thus compromised. When human beings fail to find their true place in this world, they misunderstand themselves and end up acting against themselves". (Pope Francis No. 115) Modernity has been marked by an excessive anthropocentrism which today, under another guise, continues to stand in the way of shared understanding and of any effort to strengthen social bonds. A misguided anthropocentrism leads to a misguided lifestyle. When human beings place themselves at the centre, they give absolute priority to immediate convenience and all else becomes relative.

The culture of relativism is the same disorder which drives one person to take advantage of another, to treat others as mere objects, imposing forced labour on them or enslaving them to pay their debts. The same kind of thinking leads to the sexual exploitation of children and abandonment of the elderly who no longer serve our interests. ...Is it not the same relativistic logic which justifies buying the organs of the poor for resale or use in experimentation, or eliminating children because they are not what their

parents wanted? This same “use and throw away” logic generates so much waste, because of the disordered desire to consume more than what is really necessary. We should not think that political efforts or the force of law will be sufficient to prevent actions which affect the environment because, when the culture itself is corrupt and objective truth and universally valid principles are no longer upheld, then laws can only be seen as arbitrary impositions or obstacles to be avoided. (Pope Francis No. 123)

Pope Francis proposes integral ecology. This is important because “many intensive forms of environmental exploitation and degradation not only exhaust the resources which provide local communities with their livelihood, but also undo the social structures which, for a long time, shaped cultural identity and their sense of the meaning of life and community.” (Pope Francis No. 145) Thus upholding the earth, our common home is also an action toward the common good of man. To achieve this, the Holy Father calls for informed dialogue, a kind of decisive action to preserve our common heritage, the common patrimony given to us. There is urgent need to tame our technology and prevent it from being a monster or terror to man. **Integral ecology** is the encyclical’s main solution to ongoing social and environmental problems.

There is yet another aspect of the over dominance of science. It is the emergence in our time of comprehensive and deeply reflective literature on human extinction. For instance, there is Émile Torres’ *A History of Science and Ethics of Annihilation*. For our paper, we prefer to draw from Todd: *Should We go Extinct?* It has as subtitle: *A Philosophical Dilemma for our Unbearable Times*. A number of complications sparked off the thinking and made him “to think it might be worthwhile to revisit in a more sustained way the question of whether the end of humanity would ultimately be a good thing.” (May 4). He mentions the Russian invasion of Ukraine and the attendant nuclear threats that we witness. He opines that facing climatic destruction and the revived specter of nuclear annihilation even as humans continue to cause untold suffering to our fellow creatures on planet earth, we are forced each day to contemplate whether the world would be better off in our absence. There could be two options: should we bring new humans into the world? Or would it be better off without us? That the answer is unclear underscores the need for our paper. For him, human extinction would be both a tragedy and a good thing. There are two reasons why it would be a tragedy. “First, in addition to the suffering that would precede it, it would involve the loss of much of what humans value and only humans can create: art, science and so on. Second – here is the classical tragic part – that loss would be caused by humans.” He identifies the advantage non-human animals have over humans. “But no non-human animal can cause the extra ordinary level of suffering that humans do, through factory farming and the consumption that goes along with it, deforestation, plastic disposal into the oceans, scientific experimentation, and the like.” (May 3). It can further have adverse effect on world population. A number of young couples today find it difficult to decide whether to bring the next generation into the world or not. “They have come to the entirely reasonable conclusion that the climate crisis is only going to worsen and that the world they would be bringing their kids into will in all likelihood be, at best, environmentally challenging for them.... Current emissions are going

to compound present ills with others that are more powerful and more dangerous than what we're experiencing now." (May 5). Let us note that May makes it clear that his argument is not that our exit from the planetary scene would definitely be good.

Conclusion

Let us recall that our objective in this paper is to answer a question: can science alone provide man with adequate reflective and authentic engagement with the world? In the introductory part of the paper, we answered in the negative. Now, as we conclude, as position has not changed. It is rather made more formidable and stronger by preceding arguments. We reiterate that we are not arguing against science and scientific inventions per se. The key word in the caption of the paper is 'alone'. The criticisms of science in our paper are directed against this key word. We should not be misunderstood as advocating a return to the Stone Age. No. Nevertheless, our paper is against the notion of scientism, a philosophical position which maintains that only scientific method is valid and exact in the pursuit of knowledge.

It is a truism that technoscience when well directed can provide important means of improving the quality of human life. Such advantages range "from useful domestic appliances to great transportation systems, bridges, buildings and public spaces. It can also produce art and enable men and women immersed in the material world to "leap" into the world of beauty. Who can deny the beauty of an aircraft or a skyscraper? Valuable works of art and music now make use of new technologies. So, in the beauty intended by the one who uses new technical instruments and in the contemplation of such beauty, a quantum leap occurs, resulting in a fulfilment which is uniquely human." (Pope Francis No. 103) What we mean here is personal life. That is, how man can get fulfilment. Personal life does not mean private isolated life. Rather, it means living communalized as 'I' and 'We' within a community horizon. This should take place in communities of various simple or stratified forms such as family, nation, supernational community. The word 'life' here does not have a physiological sense; that is simply a being who breaths. It is not the opposite of death. It signifies *purposeful* quality life accomplishing spiritual products. The German term – *Maximierung des Menschensein*– portrays our meaning clearer. That is living humanity to the fullest, obtaining all the qualities of being human. It is a stage where man undergoes transformation. He goes beyond mere material benefits to spiritual benefits. The word 'spiritual' has both spiritual and intellectual meaning. Man creates culture in the unity of historical development. He manifests himself as a unique individual whose identity is not lost within the community. Riggle's aesthetic community makes our point of view clearer. "Aesthetic community is the community of mutual supportive individuals, people whose aesthetic lives fit together. People in aesthetic community support, encourage, value, and generally care about each other's aesthetic lives." The aesthetic freedom which each individual brings into the aesthetic community is an essential part of it. This freedom consists of one's style, creations, insights, and enticements. Also, "people in aesthetic community invite each other into spaces of aesthetic freedom, present each other with opportunities to be aesthetically free, to cultivate and explore their individuality." (Riggle 194). There is no way

science alone can enable man to achieve this reflective and transformative level. It needs humanistic disciplines. We cannot rationally build a solid and workable world on the ideal types of Max Weber. There ought to be emphasis on interconnectedness and interdependence of man and nature. A science which would offer solutions to the great issues of life would necessarily have to take into account the data generated by other fields of knowledge, including philosophy and social ethics. There must be collaboration through informed dialogue. We say must because when each from its own standpoint engages in self-justification and claim to supremacy, the results produced are intellectually and spiritually lame. Such results lead man to blind alley. We propose an alliance between the two; what Prigogine and Stengers in their classic work refer to as *La Nouvelle alliance* (in literal translation, new alliance). Prigogine and Stengers show how the two great themes of classical science, order and chaos which coexisted uneasily for centuries are being reconciled in a new and unexpected synthesis. The theme of their work is the conceptual metamorphosis of science (*métamorphose conceptuelle de la science*). (Prigogine et Stengers 40).

All of this shows the urgent need for us to move forward in a bold cultural revolution or do we better say, revival. Culture is a way of life of a people. One derives his identity from his culture. Among the Igbo of southeast Nigeria, the word for man is *mmadu*. Etymologically, *mma* – good; *ndu* – life. That is, there is beauty, joy, fulfilment in being human. These are realized within a community. The emphasis is on ‘we’ not ‘I’. A cherished value among this group is solidarity. Hermeneutics with emphasis on *auslegen* – manifestation, can be of aid towards better understanding. Despite the various theories of creation, the Igbo and a number of other cultural groups accept that both life and the earth as their abodes are gifts from God. Man, ought to use the earth with respect for the original good purpose for which it was given. Man is also a gift to man. This statement is for us universal. That is, it is true both in Africa and in Europe. Africa should avoid blind imitation and copying of western values. A copy can only reflect the original but can never in itself be the original. We should mutually borrow what is good from the other.

It is in this respect that we laud the GodLight project – illuminating the path toward a world where scientific project is harmonized with ethical consideration and human dignity. We agree that this project is topical and essential for addressing the complex challenges of our time. Our paper is a philosophical cum theological contribution to the project. Let us hope that we, humans who benefitted and still benefit from God’s creative act accept that God is light.

Finally, an advantage of this paper is that it dissuades researchers from becoming armchair scholars. That is, people who unquestioningly say yes to every scientific finding without further reflection and consequently critic. The thesis is that every researcher is important; his findings are important to scholarship be they in the area of *Naturwissenschaften* or *Geisteswissenschaften*. Both areas are complementary.

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