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## Contributors

**Gabriele Baratelli** studied philosophy at the University of Turin and at the University of Lille. He has recently earned his MA with a thesis on the philosophical thought of Jacob Klein. He is currently a PhD candidate at the University of Cologne, where he is working on a project concerning the question of formalization of natural language in a phenomenological perspective.

**Stefania Centrone** is currently *Privadozentin* at the University of Hamburg and holds a *Heisenberg-Stelle* at the Technical University of Berlin. In 2012, she was awarded a DFG-Eigene Stelle for the project “Bolzano und Husserls Weiterentwicklung von Leibnizens Ideen zur Mathesis Universalis” at the Carl von Ossietzky University of Oldenburg, where she remained as a research assistant until 30 September 2018. In 2016, she was deputy professor of Theoretical Philosophy at the Georg-August-Universität Göttingen. She is also author, among others, of the volumes *Logic and Philosophy of Mathematics in the Early Husserl* (Springer 2010) and *Studien zu Bolzano* (Academia Verlag 2015) and is editor, among others, of *Versuche über Husserl* (Mainer 2013), *Essays on Husserl’s Logic and Philosophy of Mathematics* (Springer 2017), *Reflections on the Foundations of Mathematics: Univalent Foundation, Set Theory and General Things* (Springer 2019) (with Deborah Kant and Deniz Sarikaya) (Springer 2019) and *Mathesis Universalis, Computability and Proofs* (with Sara Negri, Deniz Sarikaya and Peter Schuster) (Springer 2019).

**Giovanna C. Cifoletti** is a professor (Directrice d’études) at the School for Advanced Studies in Social Research (EHESS), Paris. She is the author of “Renaissance: series of problems as *varietas*” (2016); *The Art of Thinking Mathematically* (2006); *Mathematics and Rhetoric. Jacques Peletier, Guillaume Gosselin and the Making of the French Algebraic Tradition*. Princeton PhD Dissertation (1992); *Les algébristes français du seizième siècle: subtilior arithmetica ou une science briefve et claire* (1991); *La méthode de Fermat: son statut et sa diffusion. Algèbre et comparaison de figures dans l’histoire de la méthode de Fermat* (1990) and various articles on Descartes and Kepler.

**Jean-Marie Coquard** is a PhD candidate at Centre Alexandre Koyré and EHESS, Paris, under the direction of Prof. Giovanna Cifoletti. His works are about Simon Stevin’s art of thinking and Early Modern mathematics.

**Deborah De Rosa** (1988) received her PhD from the University of Calabria (Italy) in 2015. She currently works as an assistant professor at University of Calabria (Italy). She is a member of the organizing committee of the “Seminar of History

and Philosophy of Mathematics” (University of Calabria and Milan), of the Research Centre “Philosophy and Psychoanalysis” and of the “Phenomenological Research Laboratory” (LaRiFe) of the University of Calabria. She is the author of *L'ordine discontinuo. Una genealogia foucaultiana* (2016) and *Intrecci. Fenomenologia e psicoanalisi in Lacan e Merleau-Ponty* (2020).

**Daniele De Santis** is an assistant professor in the Department of Philosophy and Religious Studies of the Univerzita Karlova in Prague (CZ). His main interests revolve around the history of 20th-century phenomenology, with a special focus on the concept of reason and the doctrine of essences.

**Yuval Dolev** received his PhD from Harvard University. In 2007 he published *Time and Realism* (MIT press), and in 2016 he co-edited with Michael Roubach a volume entitled *Cosmological and Psychological Time* (Springer). His published papers focus on the philosophy of time, philosophy of physics and the philosophy of perception, and draw equally from works in the analytic tradition and from phenomenology.

**Mirja Hartimo** specializes in phenomenology and history of philosophy of mathematics and logic. She is currently a university lecturer at Tampere University and Docent at the University of Helsinki, Finland. She has published several edited volumes and journal special issues, and around 60 articles on Husserl in international journals, such as *Synthese*, *Review of Symbolic Logic*, *Husserl Studies*, *Southern Journal of Philosophy* and *Inquiry*.

**Burt Hopkins** is an associate member of Université de Lille, UMR-CNRS 8163 STL and a visiting researcher at the Institute of Philosophy, Czech Academy of Sciences (2019–2020). He is author of *The Origin of the Logic of Symbolic Mathematics: Jacob Klein and Edmund Husserl* (2011), *The Philosophy of Husserl* (2010), and *Intentionality in Husserl and Heidegger: The Problem of the Original Method and Phenomenon of Phenomenology* (1993).

**Talia Leven** teaches in the department of Computer Sciences at the Open University in Israel. Her research is on the philosophy of mathematics. Her doctoral thesis is on Abraham Robinson’s philosophy of mathematics. She also published articles on the philosophy of Kurt Gödel.

**Ah Hyun Moon** is a PhD candidate at Seoul National University.

**Luis Niel** is a scientific researcher at the Argentinian Research Council (CONICET) since 2012, and professor of philosophy at the Universidad Nacional del Litoral, Santa Fe, Argentina. His research topics include Husserlian phenomenology, 19th-Century theoretical philosophy and the relation between phenomenology and analytic philosophy. He has published two books: *Absoluter Fluss – Urprozess – Urzeitigung. Die untersten Stufen der Konstitution in Edmund Husserls Phänomenologie der Zeit*, Orbis Phaenomenologicus, K&N, Würzburg, in 2011, and *Representación, objeto e intencionalidad en el siglo XIX: De Bolzano a Meinong*, Editorial Prometeo, Buenos Aires, in 2019, as well as many journal articles and book chapters.

**Fabrizio Palombi** (1965) received his PhD from the University of Turin (Italy) in 1988. He was a student of Gian-Carlo Rota, and is editor of his philosophical writings

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(*Pensieri Discreti*, 1993 and *Indiscrete Thoughts*, 1997), coeditor of *From Combinatorics to Philosophy The Legacy of G.-C. Rota* (2009) and author of *The Star and the Whole: Gian-Carlo Rota on Phenomenology and Mathematics* (2011). He was a visiting professor at MIT in 2012. From 2012 he is a member of Husserl Circle and, from 2014, an associate professor at University of Calabria (Italy). He is also the author of *Elogio dell'astrazione. Gaston Bachelard e la filosofia della matematica* (2017) and *Jacques Lacan* (2019).

**Mario Ariel González Porta** is a professor of philosophy at the Pontifical Catholic University of São Paulo (PUC-SP). He is also the head of the Research Group “Origins of Contemporary Philosophy.” His research interests include 19th- and 20th-century philosophy of logic, language and mind, with a special focus on the *Psychologismstreit*. He has authored the entry on *Psychologism* in the Routledge Encyclopedia of Philosophy, 5 books and numerous papers.

**Michael Roubach** is a senior lecturer in the department of philosophy at the Hebrew University of Jerusalem. He is the author of *Being and Number in Heidegger's Thought* (2008), and has published articles on Heidegger, Husserl, Levinas, Cassirer, and the interface between the analytic and continental traditions. He is co-editor, with Y. Dolev, of *Cosmological and Psychological Time* (Springer: 2016).

**Franco Trabattoni** is a full professor of History of Ancient Philosophy at the State University of Milan. His main research areas are Plato, the Platonic tradition and the reception on Plato's thought in contemporary philosophy. He is author, among others, of the following books: *Scrivere nell'anima. Verità, dialettica e persuasione in Platone* (Firenze 1994); *Platone* (Roma, 2009); *Essays on Plato's Epistemology* (Leuven 2016).

**Michele Vagnetti** (1990) graduated in Philosophical Sciences at the University of Florence. He currently holds a PhD in Philosophy from the University of Florence (Italy) and Paderborn (Germany). He is co-author of “James lecteur de Lotze”, in *Lotze et son héritage. Son influence et son impact sur la philosophie du XX siècle* (2015). His other published works include a review of the book by A. De Palma and G. Pareti, *Vitalismo o meccanicismo? I fenomeni della vita e la fisiologia europea del secolo XIX* (2017) and the article “The Logik by Rudolf Hermann Lotze: the concept of Geltung”, in *Philosophical Readings. Online Journal of Philosophy* (2018).

Part 1

Text

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# 1 The end of objectivity

## The legacy of phenomenology<sup>1</sup>

*Gian-Carlo Rota*

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## Foreword

### The end of objectivity and the legacy of Gian-Carlo Rota

*Fabrizio Palombi*

An authentic phenomenological description will leave you with the feeling that everything is floating in the air. It [...] gives you the feeling of being nowhere. The temptation is tremendous to try to pin down something, like identifying the function with some small physical thing, anything. This is what we call reductionist anxiety.<sup>1</sup>

The philosophical landscape of the 1980s was dominated by two currents that were different in terms of approaches and interests: epistemology and hermeneutics. These two traditions were often interpreted as being in conflict in a manner akin to the opposition between analytic and continental philosophers, despite the attempt of dialogue between the two philosophical traditions.<sup>2</sup>

In that period, I was studying Philosophy at the Università Statale in Milan and, as a consequence, our education was greatly influenced by these two traditions. I was interested in the comparison between the reflection of some epistemologists that focused on the historical dimension of the scientific enterprise, such as Thomas Kuhn (1922–1996) and Imre Lakatos (1922–1974), and the reflection of other philosophers belonging to the current of phenomenological hermeneutics, such as Martin Heidegger (1889–1976) and Hans Georg Gadamer (1900–2002). In this context, I chanced upon a writing by Gian-Carlo Rota (1932–1999), titled *Three Senses of 'A is B' in Heidegger*,<sup>3</sup> which attempted a productive comparison of some aspects of both philosophical perspectives. I was particularly affected by the attempt to highlight the scientific and mathematical interests in Heidegger's education that had generally been obfuscated by the *Leitmotiv* of the second phase of the thinking of the German philosopher, according to which "science does not think".<sup>4</sup> Thus I started taking an interest in Rota's reflection and carried out some preliminary bibliographical research on his philosophical writings that could be hardly found in Italy in that period.

In May 1990, while I was walking along a long corridor on the third floor of the Department of Philosophy in Via Festa del Perdono, I passed by Corrado Mangione's office (1930–2009), who was Full Professor of Logic. I've always had a sort of compulsion to read whatever my eyes meet while I walk: notices, ban signage, emergency signs, advertisement billboards, and even the surnames on the button panels

<sup>1</sup> *Infra* Part I, chap. 1.

<sup>2</sup> See D'Agostini (1997), Ferraris (1988), Rorty (1979).

<sup>3</sup> Rota (1987).

<sup>4</sup> Heidegger (1954, 8).

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of apartment buildings. In that case, this habit was a resource; in fact, after a few meters, I stopped with the sensation I had read something important. I went back and noticed that there was a poster on professor Mangione's notice board announcing a conference of the cycle *Lezioni leonardesche*, given by Rota at the Department of Mathematics in Milan.

The very day of the conference, I arrived in the austere building of Via Saldini earlier than the set time, with a mood suspended between curiosity and respect. In the hall, I saw a group of people who were coming down the left staircase, where they surrounded a tall and refined man, with a gentle and reserved attitude. He looked like a politician whose stride was hindered by a crowd of journalists waiting to grasp important announcements. I asked a student the reason for that hustle and I learnt that the person who was at the core of those people's attention was, indeed, the person I wanted to meet. I awkwardly got out of the way among the crowd and I finally succeeded in getting his attention.

Sometime later, Rota confessed to me he had been puzzled to find a student of philosophy among mathematicians and that was the reason why he had immediately consented quickly to meet me in an office on the first floor. We had a short talk and he asked for a confirmation about my interest in the philosophical 'side' of his research, and then he agreed to meet the subsequent week in Rome. That meeting changed my life forever: after a whole day spent discussing philosophy and walking across the center of Rome, Rota invited me to participate in his course on phenomenology, in the winter semester that year at the MIT.

In July, I met him in his office at the Department of Mathematics in Cambridge where I was handed a large volume called *The End of Objectivity. The legacy of Phenomenology*, and I was encouraged to study it and, possibly, to do a critical review of it.

I attended his course from September to December and started a sincere and profound friendship with Rota, who quickly became my mentor and master. Rota's philosophical research was the topic of my graduation dissertation, and – subsequently – of a book titled *The Star and the Whole*.<sup>5</sup> Our collaboration continued over the subsequent ten years through long inter-continental phone calls and long texts sent per fax (he always insisted on paying the costs of these communications himself); we also met twice a year and we spent another period at the MIT in 1995. In that period, I wrote two articles signed by both of us<sup>6</sup> and edited three anthologies of his philosophical writings<sup>7</sup> and – above all – discussed with him the editorial approach necessary to confer *The End of Objectivity* a final form. Finally, we decided on the details for the organization of a seminar at the University of Strasbourg in 1996. The core topic of his dissertation was the transcription of his lectures for the course on phenomenology held between 1974 and 1991, which Rota had only roughly and partially proofread. The version of his lectures was generally updated by a student of his course, who added new transcriptions, without taking into account the parts that had previously been mentioned, which resulted in the accumulation of a lot of redundancy. These

<sup>5</sup> Palombi (2003–2011).

<sup>6</sup> Palombi, Rota (1992, 1999).

<sup>7</sup> Rota (1993, 1997, 1999).



repetitions of course did not streamline the volume, which amounted to 450 pages. Thus, we had decided that in order to publish this sort of philosophical *Zibaldone* it was necessary to remove useless repetitions, review the argumentations, and reorganize the index. Unfortunately, three years later Rota suddenly died without leaving instructions for the publication of his unpublished writings. The resulting legal issue was so complicated and delicate that it went on for about 20 years, until today. We are therefore happy to see that finally this work has been published in the *New Yearbook for Phenomenology and Phenomenological Philosophy* supervised by Burt Hopkins, the Permanent Secretary of the Husserl Circle, of which Rota was proud to be a member. The publication was edited by myself in collaboration with my student and colleague Deborah De Rosa. We tried to follow Rota's instructions with the utmost attention, being aware of the responsibility of managing a posthumous book that has been orphaned from its author for such a long time. We removed the repetitive parts, streamlined the index, and added, where possible, footnotes which could help the reconstruction of Rota's quotations that were lacking indications about their sources or any accurate bibliographical reference. In this preface, I want to present a brief overview of this fundamental work by Rota along with some considerations on a fundamental aspect of Rota's research, i.e. the relationship between phenomenology and mathematics.

### The structure

*The End of Objectivity* is organized into six parts, integrated by a synthesis and an appendix with an approach inspired by Heidegger's first writings. The programmatic and explicit aim of the book is a "training to think phenomenologically".<sup>8</sup>

The table of contents shows how Rota's assumptions followed, at least in general terms, the ideas exposed in *Being and Time*<sup>9</sup> and Rota's attempt to provide a more modern reinterpretation that could be easily understood by his students who were mainly from scientific departments of the MIT. Unfortunately, Rota did not make reference to any bibliographical sources, as in other cases; as a consequence, the parallelism between the two books should be outlined mainly based on his conceptual and thematic point of view.

This very extended comment to *Being and Time* integrates and modifies the reflections proposed by Heidegger through the interpretation of other authors, in particular by Edmund Husserl (1859–1938) and Ludwig Wittgenstein (1889–1951). The latter is particularly valued in relation to the second phase of his thought, subsequent to the approach of the *Tractatus logico-philosophicus*.<sup>10</sup> Rota believed that the *Logical Investigations*<sup>11</sup> of the Austrian philosopher were of great importance and he interpreted them in terms of in-depth philosophical analyses, whose phenomenological scope was unclear to the author himself. This assumption was also supported by Ray Monk who, in a chapter of his book *Ludwig Wittgenstein. The Duty of Genius*,<sup>12</sup> pointed out the analogies between the mature phase of Wittgenstein's thought and phenomenology. Rota highly valued this

8 *Infra* Part I, chap. 3.

8 Heidegger (1927).

10 Wittgenstein (1922).

11 Wittgenstein (1953).

12 Monk (1990).

## 12 *The end of objectivity*

book, and he bought an Italian version of it from a bookshop of the neighborhood Città Studi of Milan, which he gave to me as a present, before his lecture at the Department of Mathematics of Milan University. Rota's philosophical genealogy was probably not very far from Wittgenstein's phenomenological interpretation, which he had learned thanks to John Rawls (1921–2002), of whom Rota had been a student at Princeton, and through the mediation by Norman Malcolm (1911–1990), who was directly connected to the Austrian philosopher.<sup>13</sup>

### A phenomenological deconstruction

Part I of *The End of objectivity* is largely devoted to the *pars destruens* of the phenomenological deconstruction of the scientific prejudices affecting contemporary common understanding and its implicit philosophy. The second chapter focuses on the analysis of the main philosophical myths of our times, and it includes a kind of contemporary list of sophistries encompassing the myths of “progress”, “quantity”, and “homogeneous personality”.<sup>14</sup>

Chapter 3 proposes a critical review of Descartes and is supported by a series of examples whose aim is to highlight the inner contradictions of his philosophical approach. Rota's main argumentative model consists in finding binary oppositions of metaphysical thinking, to demonstrate that they both lead to paradoxical outcomes that contrast with human experience or with scientific experimental practice. In fact, Rota believed that philosophical problems cannot be solved but only be *dissolved*, thus demonstrating their aporetic nature or their universality. In this second case, Rota wanted to demonstrate that the apparent uniqueness and peculiarity of an issue was shared by other problems and situations that had (wrongly) been considered totally different. According to Rota, Descartes approach had been responsible for the diffusion, in the modern culture, of the “dualism between mind and matter”<sup>15</sup> that prevents us from understanding the fundamental correlation between these two polar aspects. Rota maintains that

mathematicians are more trained to avoid than philosophers [...] the fallacy of running from one extreme to the other. When I told you everything is context dependent, I proved it to you by glaringly simple examples. You could say [...] there is nothing stable in the world anymore, everything is floating.<sup>16</sup>

The abstractive ability of mathematicians should make them more accustomed to the sensation of unstable fluctuation highlighted in the quotation. In particular, mathematicians are able to focus their attention on the relation among entities, rather than on the entities themselves. The fundamental model of this type of approach and description is Husserlian intentionality,<sup>17</sup> despite the fact that this term is actually never mentioned in the book, probably for educational reasons, or to simplify matters. However, there is some occurrence of the term “intention” and of the adjective

<sup>13</sup> Palombi (2017a).

<sup>14</sup> See Palombi (2017b).

<sup>15</sup> *Infra* Part I, chap. 3.

<sup>16</sup> *Infra* Part I, chap. 1.

<sup>17</sup> See Hopkins (1993 and 2011).

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“intentional” that is worth mentioning as it clearly manifests Rota’s adhesion to phenomenological correlationalism.<sup>18</sup>

Another fundamental topic is Husserl’s analysis that divides the field of being into ontological regions with special features and characteristics.<sup>19</sup> Rota, in particular, affirms that

to compare the statement ‘the chess game exists’ with the statement ‘molecules exist’ is to see that there is a completely different view of the word ‘exists’ in the two sentences.<sup>20</sup>

Ontological regions are not isolated and, for this reason, it is particularly important to investigate how they are connected the one with the other through the *Fundierung* relation. The concept of *Fundierung* is taken from the third *Logical investigations*<sup>21</sup> and represents the haven of the first part of *The End of Objectivity* and the transition to the *pars construens* of the book.

### Heidegger’s suggestions

The second section of the book focuses on the analysis of Heidegger’s concept of “worldliness” which Rota translated with the more generic and understandable term “context”. The essentially contextual nature of objects in the world is introduced through the famous example of the hammer by Heidegger, which will be quoted several times.<sup>22</sup> The concept of context represents the theoretical framework where the paradox of the physicalistic reductionism is proposed; this concept was criticized from different perspectives, according to Heidegger’s inspiration. His main philosophical criticism, however, is the tendency to consider the theoretical entities of science as original vis-à-vis the phenomena that we originally and constantly face in our experience in the world. According to this approach, Rota introduced his method and some key words and expressions taken from phenomenology such as *eidōs*, *bracketing*, and *ontological difference*. In the last paragraph of this section dealing with the “phenomenology of learning”, Rota introduced the concept of the “hermeneutic circle” which, as we will see, will be mentioned in other parts of the book.

The third part focuses on the phenomenological analysis of Heidegger’s concept of “project” that Rota characterized in terms of its “structure”. The project allows Heidegger to rephrase the concept of the subject, a peculiar topic in the modern and contemporary metaphysical tradition, in terms of *Dasein*. Rota employs Heidegger’s approach to reconsider his own human experience and his existential condition as a mathematician. We will focus on this aspect in the conclusion of the chapter, but – so far – I’ve only provided very general indications of the main concept of Heidegger’s philosophy considered by Rota.

*The End of Objectivity* analyzes the organization of phenomenological subjectivity, enhancing its division into cognitive aspects and emotional shades with special

18 Rota (1993, 116–118).

19 Rota (1993, 110).

20 *Infra* Part I, chap. 4.

21 Husserl (1900–1901).

22 See among others *infra* Part II, chap. 2, 5, 6; Part IV, chap. 2; Part VI, chap. 5.

## 14 *The end of objectivity*

reference to the concept of “familiarization”. The structure of knowledge, which is traditionally ‘cold’, is supported by the analysis of emotional situations that characterize understanding. Rota is aware of the huge effort implied by the work and research that goes into understanding and the emotions that accompany it, which for him are characterized by feelings of inadequacy and nonsense that can only be rewarded by a fleeting sense of success. The tragic aspect of this situation is summed up in the descriptions of important mathematicians Rota presented in some papers,<sup>23</sup> such as the foolishness of his friend John Nash (1928–2015), or the stories of some of his colleagues and students, who had been subject to short- and long-term depressions.

Moreover, Rota devotes an entire chapter of the third part of the book to a concept drawn from Heidegger’s thought that was translated into English with the phrase “emotional disclosure”. We could place the semantic area of this phrase in an intermediary position between the concepts of ‘opening’ and of ‘disclosure’.

### Phenomenological right and left

Part IV of the book connects the topics of the initial phase of Heidegger’s thought – such as the analysis of the transcendence of *Dasein* or of the time as a transcendental horizon for the understanding of being – with other concepts that are typical of a subsequent phase of the thoughts of the German philosopher, such as the concept of *Ereignis* that is interpreted as follows: “the phenomenon whereby a facticity is transcended towards sense”.<sup>24</sup>

Finally, there is an interesting paragraph on the division of the phenomenological movement into two branches that – in compliance with a Hegelian division – are respectively defined as phenomenological “right” and “left” according to the different analysis of the relationship between “facticity” and “function” articulated in the *Fundierung*.<sup>25</sup> The phenomenological right preserves the fundamental nature of facticity interpreting the concept of function (based on a conservative philosophical approach) as a super-structural level or even as a superfetation of the concept itself. On the contrary, phenomenological left considers sense as an original phenomenon that can be identifiable with the concept of function, while facticity is regarded as a secondary and derivative approach. This second and radical wing of phenomenology confers importance to facticity only in those particular crisis situations where the usability of things no longer applies.<sup>26</sup> Apparently, Rota did not take any position in this paragraph; however, his interpretation and other parallel paragraphs seem to clearly indicate that he supported the phenomenological left.

The fifth and sixth parts of *The End of Objectivity*, again, make reference to the “worldly” structure of *Dasein* with special attention to its originally public and social condition of “Co-being” (*Mit-Dasein*). Once again, great importance is conferred to the emotional sphere, focusing on the above-mentioned concepts of “anxiety” and “authenticity”, while Heidegger’s concepts of “Fall”, “at-homeness”, “call”, and “decision” are examined by Rota with a sensitivity close to Sartre’s existentialism.

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<sup>23</sup> Rota (1988, 1997, 21–38) (Duren 1988).

<sup>24</sup> *Infra* Part IV, chap. 2.

<sup>25</sup> *Infra* Part IV, chap. 1.

<sup>26</sup> Rota (1993, 117).

### Phenomenology of the mathematical discovery

Thanks to the philosophical reflection on his own experience as a mathematician, Rota wrote a series of articles that generated interest and controversies.<sup>27</sup> His reflection on this matter was not systematic, but rather transversal to his philosophical production, as is shown in some paragraphs of *The End of Objectivity*. Particularly relevant is his approach to combining understanding and the emotional background in the phenomenological analysis of the mathematician's research and discoveries; on this matter, Rota affirms:

the honest description of the phenomenon of solving a mathematical problem is that the mood-disclosed solution is triviality. To have solved the problem is to see the problem as trivial [...]. Thus, with the project itself, there is a mood-disclosed feeling which is part of the project itself, which consists of the fact that *Dasein* never quite is what it plans to be [...] And, this 'not quite' is disclosed, not gasp-wise, but mood-wise as Angst. This is the reason why Heidegger says that Angst is the primordial mood.<sup>28</sup>

Thus, he reformulates (for the exclusive use of mathematicians) the concept of anxiety, which Heidegger had originally outlined as the fundamental "state-of-mind" generated by *Dasein* when confronting the totality of the being. The German philosopher distinguished anxiety from the fear of possessing an object or a specific situation. Rota interpreted it in a simpler ontological way, despite its wider experiential perspective, because anxiety is present in all those situations where an individual strives to understand an issue that is considered fundamental. More specifically, Rota describes anxiety as the emotional situation of a mathematician facing a problem to be solved and the sense of inadequacy that emerges in an existential and professional project. It seems that the analysis of the state-of-mind of mathematicians, proposed by Rota, lies between the concepts of anxiety and "fear" described by Heidegger.

On the contrary, the feeling of irrelevance is a symptom that is perceived while solving a problem. It seems possible to outline an emotional parallel with what is defined as tautological in the field of logic. Both conditions stem from the solution of a problem and from discovery, once the long process of familiarization with a specific problem is finally over.

Rota attempts to better clarify his approach by comparing two terms in the phenomenological lexicon, respectively taken from Husserl and Heidegger. In the perspective of phenomenological analysis, he affirms that

there is a term, introduced by Husserl, which is used in describing the phenomenon of discovering theories. The term is *Wesenschau*. Literally, this means 'vision of essence', which comes from seeing *X* not as *X* as such, but as an instance of a general *X*-ness [...]. The vision of *X* as a special case is authentic, because it is motivated by a genuine call. However, later it may go into an inauthentic preservation, as when it develops into a theory which forgets its origin. However, the alternative to this inauthentic theorizing is what Heidegger calls *Wiederholung*,

<sup>27</sup> Rota (1990a, 1990b).

<sup>28</sup> *Infra* Part III, chap. 7.

16 *The end of objectivity*

which [...] we should translate [...] as ‘creative repetition’. In other words, going back to the origin and retracing the forgotten origin is a form of *Wiederholung*. The famous sentence in which this is summarized, which is used by both Husserl and Heidegger, is “tradition is the forgetting of the origin”. That is, tradition is something very inauthentic.<sup>29</sup>

Rota again pivots his analysis on Heidegger and on the binomial perspective of authenticity-inauthenticity of his experience as a mathematician and he examines the existential correlates that accompany his demonstrations.

On several occasions Rota tries to describe the complex relationship between what is passed on and what is hidden by tradition. The historical deconstruction of tradition and the recovery of the forgotten origins in *Being and Time*, and their critical reinterpretation are indispensable for the development of mathematical knowledge attained through the never-ending and provisional recovery of authenticity.

In this perspective, it is interesting to focus on the translation of Heidegger’s term *Wiederholung*, which Rota renders through the English locution “creative repetition”, unlike Macquarrie and Robinson who simply translated it “repetition”. The adjective added by Rota highlights the importance of insisting on an aspect that almost becomes an obsession for the researcher. This insistence imposes the researcher to go back to his choices several times so as to carry out a transformation. By using a metaphor, we could imagine the steps of a wayfarer continuously walking on the same path, which leaves their mark on the soil by making cracks, which allow observers to see the hidden layers of the ground.

One of the most interesting passages on the analysis of the mathematical discovery hints at Heidegger’s model of the hermeneutic circle to examine the history of the solution of a problem, known as Euler’s conjecture. Rota underlines that

the axioms in an [...] system are conceived in order to justify a certain fact that we want to be true. I discover that in three dimensions there are only five regular solids. Plato knew this. Then, I invent the axioms of geometry to justify this fact, which is beyond any shadow of a doubt. I discover the Euler formula for polyhedra, wherein the number of vertices minus the number of edges plus the number of faces is always equal to two. I’m not quite sure how to prove it, but I’m sure beyond any shadow of a doubt. So, what do I do? I invent an axiom system to justify it.<sup>30</sup>

Rota is often able to combine the authors of the continental tradition and those of epistemological inspiration (which is at the origin of our interest for his reflection). This is one of the most successful attempts that confronts two apparently different philosophers, such as Heidegger and Lakatos, with the aim to investigate phenomenologically mathematical discovery. Rota reminds us

a beautiful book by Lakatos called *Proofs and Refutations* [...] where he gives the whole history of how everybody knew this formula was true, but the axioms were wrong, because someone invented axioms that didn’t include one case, and

<sup>29</sup> *Infra* Part III, chap. 7.

<sup>30</sup> *Infra* Part III, chap. 7; cfr. Lakatos (1963–1976).



someone invented another set of axioms that included too many cases. Everybody wanted a very general set of axioms. This went on for one century until, finally, they fixed it. [...] The real truth is that those axioms are the result of a series of re-elaborations that were conceived with the sole motivation that we knew the evidence of Euler's formula, and on the basis of that evidence we invented the axioms.<sup>31</sup>

Rota maintains that the historical case studied by Lakatos has not only a specific epistemological value, but also a general phenomenological validity. His model can be used to study the theoretical dynamics that promotes the mathematical demonstration as any form of reasoning. In fact, he affirms that

there is [...] a very deep circularity in mathematical reasoning. The axioms are motivated by what we know already to be true. And, what we know to be true is only verified beyond any shadow of a doubt when we have a satisfactory axiom system. This is a deeper circularity [...] called the hermeneutic circle, and it's the claim of phenomenology that this kind of circularity goes on in all arguments.<sup>32</sup>

Consequently, Rota believes that also mathematical demonstrations can be encompassed in a complex dynamic of strategic advances and retreats. Their reiteration determines Heidegger's "creative repetition" that allows a certain theory to initially disclose itself in incomplete and blurred forms and – subsequently – to be consolidated in an axiomatic framework. Rota described this complex logical and historical process as follows:

it is therefore a back-and-forth game, a feedback game between the evidence we want to achieve and the means whereby we want to achieve the evidence. Typically, this pertains to the axiom-theorem situation in mathematics, but also is found in every reasoning process.<sup>33</sup>

This idea is applied to the founding problems of mathematics where no assumed priority should be attributed to a mathematical field compared with others. Rota takes into account a historical period between the late nineteenth century and the first decades of the twentieth century where "logic comes first and mathematics is just a variant of logic and set theory".<sup>34</sup> He maintains that mathematics is like a living body whose organs share the same dignity, notwithstanding the different importance that some might have as compared to others in some specific historical periods.

The foundation of mathematics is therefore always a re-foundation where the whole theoretical approach can be rotated to rest on one of its countless walls. Sometimes it could be reversed and be based on what, in other historical ages, was the roof. Rota believes that we could imagine a topological and probabilistic foundation or (taking into account his specialization) a combinatorial foundation of mathematics that could be bestowed the same dignity that is generally attributed to logic.

<sup>31</sup> *Infra* Part III, chap. 7.

<sup>32</sup> *Infra* Part III, chap. 7.

<sup>33</sup> *Infra* Part III, chap. 7.

<sup>34</sup> *Infra* Part I, chap. 5.

The subtitle of *The End of Objectivity* is *The Legacy of Phenomenology*. Reflecting on this phrase chosen many years ago, to give a title to the collection of his lectures, which is the only monography Rota specifically devoted to philosophy, we could perhaps complete it and define it as the legacy of Rota's phenomenology.

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## Editors' note

AU: In TOC of this chapter, 'Editors' note' is appearing in italics.

This volume is the result of a critical edition established by Fabrizio Palombi and Deborah De Rosa on the basis of the transcriptions of the lectures that Gian-Carlo Rota gave at the Department of Mathematics of MIT, between 1974 and 1991.

The book was born as a lecture notes for the exclusive use of the students of the course held by Rota; in its first version, written in collaboration with Sean Murphy and Jeff Thompson, it consisted of 457 pages. Subsequently, between 1995 and 1998, during a period of joint work between Boston, Strasbourg, and Cortona, Rota expressed his desire to Palombi to edit the text for publication, by giving him the latest version available.

The superfetation of the transcriptions of the lessons, repeated with some variations during the courses held over 17 years, had resulted in a text redundant and repetitive in many parts. We have eliminated the most obvious repetitions, thus reducing the typescript to the current 209 pages. However, we have respected the dialogical style which, apart from the didactic requirements, constitutes a stylistic code in Rota's writing.

As a consequence of the cuts due to the elimination of the redundant parts, the index according to which the Second Preliminary Edition typescript was organized also underwent a drastic reduction, still respecting the order and articulation in **Parts** into which the material was proposed in the draft.

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Much of the critical work consisted in the reconstruction of the quotations: we identified numerous references that were not explicit, quoted and replaced with the original text the passages proposed in an incorrect way, marked with 'see' the quotations that were very paraphrased. The footnotes that appeared in the transcription have been reabsorbed into the body of the text; therefore, the remaining bibliographic notes are by the editors. Where possible, we have used the editions actually consulted by Rota, reconstructed on the basis of personal communications of the author to Palombi, referred in particular to the English edition of *Being and Time* and to the cited texts by Gilbert Ryle and Ludwig Wittgenstein.

The material already edited by Mark van Atten in *The New Yearbook for Phenomenology and Phenomenological Philosophy*, VII (2007), concerning only the transcription of the last course of Rota held in 1998, which consists of 99 pages, has been taken into account for the sole purpose of comparison. This text is the most extensive version of all the lectures so far unpublished. We would like to thank Ester Rota Gasperoni, who has granted permission for the publication of these unpublished texts; Pio Colonnello and Marco Rigoli, for their precious bibliographic advice; and Burt Hopkins, for the fine editorial revision and for encouraging us to publish this volume in the journal he directs.

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The editors have collaborated in the preparation of the text, divided as follows: pp. 17–106 are edited by Deborah De Rosa; pp. 107–206 are edited by Fabrizio Palombi.

T&F Proofs – Not for Distribution

Part I

**Introduction**

*T&F Proofs – Not for Distribution*

T&F Proofs – Not for Distribution

# 1 A brief description of phenomenology

There is a ‘natural attitude’ toward every human phenomenon, and we can only understand the phenomenon if we describe the natural attitude ‘as such’, previous to any reduction to non-natural attitudes. We use the word ‘reduction’ to denote the non-natural attitudes that we can take toward a phenomenon.

This is Husserl’s main thesis, which makes him one of the greatest Western philosophers of our century. What worried Husserl terribly throughout his life was that during the development of Western science, there was a gradual loss of the natural attitude toward a number of human phenomena. There was a replacement of the natural attitude by reductionist tendencies.

The explanation of reductionism is an example of genetic phenomenology, which was invented by Husserl in the late nineteenth and early twentieth centuries. We have done genetic phenomenology when we have traced the craving for reductionism – the tendency to want to reduce everything to the physical world – back to the craving for ‘oneness’ that comes from our history. This is why phenomenology has frequently been compared to psychoanalysis, because we dig up, from these unconscious sources, these forgotten phenomena like the craving for ‘oneness’. In fact, phenomenology and psychoanalysis developed at the same time, which is no accident.

You could say that phenomenology is an extreme form of realism, taken to an absolute extreme. The phenomenology that we will be studying is sometimes also called existential phenomenology. So what phenomenology has decided to start with, especially existential phenomenology, is a description of the world – not of objects and things and physical laws, but as the world of that which we deal with. It seems that that is the most neutral, least committed way of starting – it has the fewest commitments as to what exists. We start by investigating our dealings with the world. If you want a postulate, then the postulate is: our basic relationship with the world is the relationship of dealing with it.<sup>1</sup>

There are more prejudices about existential phenomenology than about any other system. True, we are going to deal with ‘existence’. And, to use the classical platitude, philosophy is concerned with the ‘search for reality’. But such a search is understood in a sense which will turn out to be completely unexpected. What we look for is a totally new way of approaching the problem.

We are mainly going to discuss the existential phenomenology of Martin Heidegger’s book *Being and Time*. The English translations are quoted from Heidegger.<sup>2</sup> We

<sup>1</sup> See Heidegger (1927a, 66–71).

<sup>2</sup> Heidegger (1927a).

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provide many of our own translations and American slang adaptations of Heidegger's key terms. When we discuss a term from Heidegger, we will provide the original German term and also the translation used by Macquarrie and Robinson if it is different than ours.

### The place of phenomenology in philosophy today

For the last 2,500 years, Western civilization has lived on one kind of evidence – the evidence of the objective world, the evidence of objectivity. In our civilization since the Greeks, the ultimate component of the world has been facts and the physical world. That seemed to be the ultimate – completely independent and irreducible, beyond which there is no explanation. Of course, there was investigation of the structure of the physical world, but this investigation was always carried on under the assumption that the physical world was the ultimate. This evidence has a very interesting evolutionary history.

One of the main steps in the evolution of the concept of objectivity came with René Descartes in the formal introduction of the mind/body duality – or the mind/object duality – which developed into the system of Idealism and also that of Empiricism. Besides clarifying a set of issues, this duality opened the way for a very rigorous development of modern science. It is exactly that belief in objectivity – in facts, and in the existence of the external world – which is being questioned today.

How do we get the vanishing of the evidence in this world which seems so well established? I am reminded of some of the words of a great American philosopher, John Dewey, in his book *Experience and Nature*. He starts his book by saying:

The office of physical science is to discover those properties and relations of things in virtue of which they are capable of being used as instrumentalities [...] The *intrinsic* nature of events is revealed in experience as the immediately felt qualities of things. The intimate coordination and even fusion of these qualities with the regularities that form the objects of knowledge [...] characterizes intelligently directed experience, as distinct from mere casual and uncritical experience.<sup>3</sup>

I will state what the two main problems of phenomenology are. First, to understand how function is the same despite a change in facticity. If you reject the idea that functions are all in our mind, functions stay the same though their physical appearances' change. If we want to describe a function, then the problem of identity becomes paramount. How can it stay the same? The second problem is the constitution of time. Where does time come from, to put it bluntly and naively? Worldly time is founded on the time of clocks, but it cannot be identified with it. This is an example of a *Fundierung* relation<sup>4</sup> that is very difficult to realize. If time is no longer the time of clocks, then what is it? We experience worldly time, but where does it come from? We experience aging, but to identify time with aging is to make a grave reductionist error. Again we get to this problem of the origin of time, which the best phenomenologists are working on. This is the ultimate question.

<sup>3</sup> Dewey (1929, V).

<sup>4</sup> See Husserl (1901), especially 25–27.

One of the purposes of phenomenology is to bring out the pluralistic nature of the world. The thesis of phenomenology, which it is our task to support, is the notion that the emotional and the rational are both carried equally in an authentic description. They are, as we shall say, equiprimordial (in German, *gleichursprünglich*). By equiprimordial, we mean that they have equal right to the disclosure of what the world is like. Emotions and reason, according to phenomenology, are equally valid modes of disclosure of the world. There is an emotional component that cannot be denied. As phenomenologists, far from denying this past, we try to describe its non-reductionist structure. The authentic structure of how things really work in the world. We have a factual dependency which is not our fault.

### **The relevance of phenomenology for other fields**

Why should we be interested in phenomenological description? For one thing, it is a more honest description, it is useful under certain circumstances; it's something that we hope to make scientific. But for another thing, we want to bring out the emotional background that keeps us, in many cases from taking the authentic, non-reductionist view of things; the emotions that keep us from focusing authentically on a function. This emotional situation is what is called reductionist anxiety.

One of the purposes of a phenomenological description is to get a description that is so authentic, that we have to bring in the emotional side of the phenomenon. We want to describe the emotional side of the phenomenon, purely as a worldly phenomenon, without regard to how this emotion is registered. We want to describe the sense of the emotion as such, not the effects of this emotion on us. In the case of giving an effective phenomenological description, there is a resistance due to what we call reductionist anxiety. An authentic phenomenological description will leave you with the feeling that everything is floating in the air. It sort of gives you the feeling of being nowhere. The temptation is tremendous to try to pin down something, like identifying the function with some small physical thing, anything. This is what we call reductionist anxiety.

Phenomenologists can give a description which is equally good as an emotional description as it is a rational description. It is pluralism to its extremes. One should not confuse pluralism with relativism. When I say that you have an equiprimordial description, I don't say that things are relative when I give this description, because there is an authentic truth to be described, which can be authentically described, or missed. I can give an inauthentic emotional description, if that's all I take into account. Proof of this does not exclude the fact that something can be true or false, emotional or not. There is still right and wrong, inauthentic and authentic. When we try to describe a purely emotional situation, we are at a loss, because we don't have the relevant baggage of terms, as we have in rational situations. This is the major failing of our time, which we are paying for.

So to me, this is one of the great dramas of our time – the drama of liberating ourselves from the language of materialistic objectivity – in order to describe more realistically the phenomena of perception. It is no accident that a science such as the science of vision is encountering such tremendous difficulties – these difficulties are in fact partially due to the fact that we do not have a logic of vision like we have a logic of mechanics. And we don't have a language of vision because we have not described the primordial phenomena that underlie vision, which would be philosophical

phenomena. That's what philosophy is for, not just for the contemplation of the philosophy of life.

So in phenomenology, we say that science, religion, and philosophy are all equiprimordial ways to disclose the world. Any one of these alone is not sufficient. There have been times when people reduced everything to religion, and in recent times, people have been known to reduce everything to science. What we have to see is the autonomy of these three. That doesn't mean independence, religion is not independent of science. These relations of dependence are much more sophisticated than we were led to believe. These relationships are complicated, and they require lots of philosophical effort to bring them into their proper perspective.

Let's weigh phenomenology against other philosophical ideas of our time. That implies that the idea that there is only one truth does not make any sense. There is a truth, and it is inevitably and constitutively context dependent. But that doesn't mean there is no truth. One of our bad habits is to say, since everything is context dependent, why bother? There is still the truth, and it is context dependent. There is no contradiction. It is complicated. What we are really saying is that there is no absolute truth because, on analysis, this term proves to be nonsensical.

Another objection is to say that this whole argument is not rational, so it must be irrational. This is a major oversimplification of our time, just because a marble is not red, it must be blue. If something is not rational, it can be arational. In a sense, sex is not rational. Does this mean that sex is irrational? Of course not. It's just that rationality does not apply to sexual life. Or art. Rational or irrational? It is arational.

So there is the realm of the arational that does not conform to rationality, yet it is an essential part of our world, and we neglect it, that is what art, philosophy, science, and religion describe. You cannot reduce the arational to the rational. The arational depends on the rational, but they are still distinct.

Here we want to make this distinction as subtle as possible. For example, how would we distinguish between science and philosophy? What is the phenomenological description of the difference and dependence between science and philosophy? We start to observe how scientists behave, how philosophers behave. How does philosophical reasoning differ from scientific reasoning? Some people say today that all philosophy has to do with science; in the past, they used to say the exact opposite, that all science could be reduced to philosophy. I say neither. I take no such position. One difference is that in science, truth depends on the verification of facts. Philosophical truths cannot be deduced from facts. I cannot verify anything I say in this book. Philosophical truths have to be realized. You realize with a shock that what I say is true. There is no more I can do, I cannot force you to believe. The same happens in science. I cannot force someone to accept the results of an experiment if that someone doesn't want to. For each there is a level of honest evidence in which the truth has to be accepted. In the face of honest evidence, after honest argument, the truth must be accepted.

The most striking difference is that in science you have verification, and in philosophy you have realization. In science, you begin by taking something for granted, and build on this. In math, you have a set of axioms on which you suspend judgment of whether they are true or not, then you proceed from there. In philosophy, you do not such thing, you don't begin by taking something for granted. In philosophy, you begin by showing that you've been taking something for granted all these years. It begins by thematizing some presupposition that we all have, which our reductionist



anxiety, or something like that, has prevented us from bringing up and focusing on. When you state a scientific truth it is accepted with open arms, but when you state a philosophical truth, people will throw you out. People have accepted their world, and philosophy breaks the world into pieces.

Another observation. Comparing math and philosophy, one common feature is the emotional way in which truth is accepted or rejected. The ultimate mathematical truth is one of triviality. The purpose of mathematics is to prove that all mathematical truths are trivial. For example, if a mathematician has discovered the solution to a problem, you say, that's it, the problem has been solved, onto another problem. But that's not the way things work. In the libraries, you will find hundreds of research papers about problems that have already been solved. Are these people just trying to make a living? Maybe. But these papers are accepted and read and discussed. So how is it that mathematicians keep producing papers using different approaches, different methods of solving problems that have already been solved? The only honest answer we can give is that mathematics is not just about solving problems. If it were just about solving problems, once a problem was solved, it would be buried, and mathematicians would go on to other things.

The fact that in mathematics you have this handling over and over of already solved problems proves that the purpose of mathematics is not just to solve problems, it's more than that, it is to create an ambience, where the solved problem is seen as trivial. Exactly because it has got to be so that if you understand the concepts, you have no choice in the glaring light of truth, but to accept the solution of the problem. The idea is called triviality.

The same is true of philosophy. When you understand phenomenology, you'll say, is that what you're talking about? It's just one simple idea, and once you have it, you have it, and it's trivial. And from that moment of realization on, you wonder how anyone could ever think otherwise. Conclusion: both mathematics and philosophy are concerned not with finding the truth, but proving that all truth is trivial.

Another similarity between mathematics and philosophy is that they both attack the fallacy of immediate gratification. I write down the definition of the integral, and the student pretends that if he copies down that definition, he or she has learned the integral. One does not gain understanding by staring at the definition. Everybody at MIT knows that. Here, if you want to know what an integral is, here's the definition in the dictionary. This is the fallacy of immediate gratification. Once you know the definition of the integral, you go for years before you understand what the integral really means. Five years, maybe ten years, maybe never. In the same way, philosophers start with an idea, and they have a small idea, an inkling of what the idea means. When I told you that phenomenology is the formalization of context dependence, if you understood what phenomenology was from this definition, you wouldn't need this course. But in a sense, this whole class is a definition.

A very common fallacy in both mathematics and philosophy, but for which mathematicians are more trained to avoid than philosophers are, is the fallacy of running from one extreme to the other. When I told you everything is context dependent, I proved it to you by glaringly simple examples. You could say "there is nothing stable in the world anymore, everything is floating". That is just as bad as saying that everything is absolute, going from one extreme to the other. Everything is absolute, or everything is context dependent, nothing in-between. We do it all the time, it's a very bad habit, which it is our duty to get rid of. So when I say I gave you a definition of

the integral and you understand nothing, I'm exaggerating. I'm really falling into this fallacy, or just criticizing you. It's not true that when I give you the definition of the integral, you understand nothing. When I give you the definition, you have an inkling of what I'm talking about. When a phenomenologist hears me say this, he would say, wait, formalize the notion of inkling. If you get an inkling when you see a definition, it means that inklings should be part of our logic. They should be added to our vocabulary as a step in the learning process.

### **What phenomenology is for and what it is against**

There is an emotional side as well as a rational side to grasping this kind of philosophy, or all philosophy, that is the feeling of wonder. This is the beginning of understanding phenomenology. That's something that has been around since the beginning of philosophy actually, namely, the wonder at some phenomenon that was taken for granted and it is precisely this wonder that is nowadays called the beginning of deconstruction. As you wonder and then at the same time you see that what you are wondering about is somehow questionable, that there are problems about it, you exactly investigate the unsaid about them.

All of the phenomena that we are dealing with are not phenomena pertaining to what exists, but they are phenomena pertaining to what relevates. We could say that one of the slogans of phenomenology is that relevance precedes existence. Relevance comes first and we are primarily interested in relevance. Our world is a world of relevances, not a world of objects, really, even though I often slip and use the word 'object'. Human weakness! But without human weaknesses I couldn't speak.

Now, what's the strongest possible objection one could raise against the thesis that the world of physics is one context among many, equiprimordial, that delivers a certain kind of truth, which is not the whole truth, which is valuable in its own context but incomplete? It would be the classical objection saying: "what about hydrogen atoms? We see a hydrogen-atom in a bubble chamber. Isn't this existence in its most primitive, objective, massive way?". How would you answer such an objection? You would say, "haha! What is this that you see?", and the guy says, "a hydrogen atom!", but you say, "you see *a* hydrogen atom!", just like when I see this chair I see *a* chair. What is really there and you see is some phenomenon produced by experiment which we see *as* a hydrogen atom. We never see a hydrogen atom any more than we see a chair. And now don't take again the 'one-zero attitude' and say: "therefore, this invalidates atoms". I am not saying that in any way. I am just saying that the law of all viewing is that you view a function through an instance, you sense through a facticity; whether it is a hydrogen atom, or a chair, it is always the same law that acts.

The next point that I want to make is to stress that what in common parlance are called 'facts' have become in the phenomenological view inextricably contextual happenings. The fact that they are inextricably contextual does not in any way imply that they are arbitrary, which is something quite different. Since we have this craving for something massive, since we have this reductionist anxiety, it's very difficult for us to adjust to the realization that contextuality is all there is, that there is nothing underneath, no underpinning of a massive thing that holds it up and makes it true forever. It is the lack of this readjustment which is rushing to a very materialistic view of the world. So to completely readjust to this point of view means really to change a lot of our prejudices. And we could view that learning phenomenology is learning in

that direction. For example, the idea of basic components of some contexts or some project, the basic components of language. Phenomenologically, the basic components of language would not be primarily propositions, prepositions, sentences, adjectives, verbs, and what not.

In a phenomenological description, the basic relevant components of language would be something like consent, disagreement, agreement, invitation, advice, discussion, rapport, pleading, commending, greeting, warning, etc. That's what language is! There is a change of focus and whereas the analysis of language has been carried out by analyzing the factual components or sentences, verbs and adjectives, the contextual components of language have not received an equally adequate analysis. In fact, in an age that is happily gone by, not only this analysis was not given but it was universally pretended that it should be given only from a psychological point of view. It was purely psychological! Whatever that means. If there ever was a cop-out expression, it is that.

I want to point out now one more prejudice, called 'the temptation of one-ness'. Our civilization descends from the civilizations of the Jews and the Greeks and draws most of its basic thoughts from them. There has been a tremendous tension to prove that everything is one in some sense. There must be one God. There must be one constitution of reality. Physicists are trying desperately to reduce all of physics to one basic law.

So, at bottom, when phenomenologists say that there is a complete fragmenting, a fracturing, of this one to many which are equiprimordial and irreducible, like facticity and sense, you clash against this prejudice of oneness. Here you have a philosophical movement that tells you for the first time in thousands of years that there is an irreducible equiprimordiality of all things which are related to be sure – whatever that means – but we never dream of reducing them to one thought, one concept, one reality, and so forth.

The next point is: there are words that are phenomenologically gauche, such as the word 'directly'. Notice how often we use this word in our everyday speech. I see this chair directly. I prove this theorem directly. And so forth. Again, we take strong issue with this use of the word 'directly'. Most of the phenomena that we study are highly indirect phenomena. I am using words from common parlance, not precise terms now. The bug-a-boo of phenomenology is that things can happen directly without any mediation from anything.

In a phenomenological description all sorts of fringe phenomena are given equal standing. Negativities are given equal standing with positivities. Absence is given equal standing with presence. Unthematized presence, for example, is a new concept. It's unacceptable on classical objectivistic terms. Either it's there or it's not there. You have no alternative. Here we come and we start talking about unthematized presence which is neither presence nor absence. It's something completely new, because we are enlarging the range of our logical terms. Just like we talked about other fringe phenomena, like foreshadowing or harking-back-to, and we take them seriously as logical props. Not as something that has a purely emotional side. This is part of our reasoning. And we learn to use them and act in order to analyze whatever we analyze by phenomenological description without reduction as equiprimordially valid terms. So we could say that there is a strong push to give equal time to fringe phenomena in phenomenology. In an objectivistic description, what do people do? You find a tacit assumption that fringe phenomena are something that are there because what we are

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describing is not quite perfect. If the thing that we were describing were perfect, you wouldn't have any fringe phenomena. The idea of fringe phenomena is something to be done away with. But our attitude is the exact opposite. Fringe phenomena are part and parcel of what we are describing and we take no position about what should be true; how something would be if it were perfect, whether these fringe phenomena would still be there if what we are describing were more perfect.

Next, the thesis of equiprimordiality. In phenomenology, you have a triumph of the pluralistic view of experience. Phenomenology is nothing if not a pluralistic way of thinking. An invitation to pluralism. Science, religion, philosophy, art, dance, and emotions are equiprimordial modes of disclosing the world. This is a revolutionary thesis, if you take it seriously.

The next thesis is that the truth is not completely expressible by rational discourse. The truth is equiprimordially rational and emotional. Reason and emotion will be given equal time. There are certain phenomena which are actually primarily disclosed emotionally, like, "I am on the wrong track!", or whatever. Other phenomena may be primarily rational but there is an emotional component which it is the task of a phenomenological description to bring out and thematize.

Another point I want to make is that whereas the method of experimental science is a method of verification on the basis of experiment, whereas the conjectures of science can be verified, the statements of phenomenology and of philosophy are generally realized, not verified. All you can do is realize with a shock that what I am saying is evident. There is nothing beyond honest evidence. Just like there is nothing beyond function. There is nothing underneath that gives us verificationist criteria to make sure that what we are told is really true. In answer to objections against the ultimateness of pure honest authentic evidence, we criticize the error which we have labeled 'verificationism'. That is the error that consists in trying to find something that gives you a rubber-stamp verification and save you from having to check for yourself and save you from the doubt that will always be there, that what I am saying may be wrong. There should be a name for this, or maybe we should invent one, for another craving: we can't stand the insecurity that goes with philosophical statements.

At this point, I should tell you that there are really two kinds of phenomenology: a very radical kind and a sort of 'middle of the road' one. The radical kind is the phenomenology which, having reached this point of the discussion, you will say,

well, if that's true, if all the mess that we have had so far is true, then there is no such thing as the 'physical world'! Because the abyss that we have set up between the world of sense, of relevance, and the world of physics is so unbridgeable that it is even worse than the abyss between mind and matter, it is even worse than any of the classical philosophy.

So, if we take phenomenology as the most radical exemption from verificationism, then we will have to admit that the physical world is just one context among many, equiprimordial with other contexts and with no more or less of a right to deliver the constitution of the world than any of the other equiprimordial and formerly neglected contexts. We are coming out in our time, out of 2000 years of the blackest world of materialism, of the most incredible reductionism of, say, the middle of the eighteenth century to our day approximately of a period of extreme materialistic reductionism. I am not saying just reductionism; I am saying materialistic reductionism, a period

of incredible wishful thinking as has seldom been seen in the history of mankind where people refused even to take into account that which didn't fit in them as a pre-conceived notion that everything should be reduced to the way certain little marbles knock against each other. So, we are like people who have been ill for a long time and we are convalescing and phenomenology is like a medicine you give to a former patient to try to get him out of this incredible narrowing of our experience which our civilization has been through in the last 200 years.

Now, don't use the one-zero mistake, which is when I tell you that we are coming out of a period of materialism, then you jump to conclusion and you say that, therefore, we are going through a period of spiritualism, i.e., an 'either... or': if it is not materialistic then it must be spiritualistic. That's not less a mistaken view. The alternative to materialism is not spiritualism. There are many other alternatives some of which are quite rational and reasonable and I claim that phenomenology is the beginning of one of those.

What is phenomenology? Phenomenology is a form of pluralism. We are pretty much in tune with today's pluralistic movements. Phenomenology has this great message of equiprimordiality of those modes of contextual reality. Phenomenology will tell you that what happens to you is as much disclosed by emotion as it is by reason, thereby having to do away with the idea that there is a primacy of reason before emotion. It will tell you that it is time to develop a logical emotion like we have a logical reason in an equiprimordial way. It will tell you that eventually we must try to develop the 'logic' – I am misusing the term logic – of emotional behavior or emotional disclosure, for example, what is the emotional analog of an error? Just like there's a logical error, it's conceivable that there is something analogous in emotional disclosure. What is it? We don't have the language, we don't have anything, but we have at least a start. It is the thesis that sense – making takes place in multiple contexts which are not reducible to each other. They stand side-by-side and the best you can do is describe their side-by-side-ness rather than try to reduce them. There are two extreme poles of imagining that there is one context of sense-making and they are both independent of the others. Or else an opposite view, where there are several multiplicities of context dependence which are completely unrelated, in the sense that you cannot reduce them to each other, but they are not independent at the same time. They depend on each other but in relationships which, again, we are trying to describe. We are left with a language where the only relationship that we can account for is the simple relationship of, say, containment or logical education, and that's not enough for us to describe this relationship.

What would be some other equiprimordial contexts of sense-making that the terminology would consider? Let me take the most shocking, sexual behavior and religious behavior. Phenomenology would hold that there is such a thing as sacred which is irreducible to the everyday, the scientific, the logical, whatever, which has a life of its own. You're not going to shove thousands of years of civilization under the rug by pretending that it doesn't exist, which is a favorite occupation of the twentieth century. We deal with something by pretending that it doesn't exist. That's the way we deal with the sacred, and that's what we do when we're dealing with sex by and large; we pretend that it doesn't exist.

Well, somehow, things will right themselves, but however these are forms of behavior, forms of relating to people, for relating to the world to someone. They're not purely psychological for the simple reason that we forbid anything to be purely

psychological. As I have said every time we meet, anything that is thought to be purely psychological has to have a counterpart in the world; otherwise, how could you account for it? Something not only in your mind. So, are you going to take into account this pluralistic world and deal with it courageously and realistically, or are you going to pretend it can be reduced to science? There's nothing worse that can happen to science than dumping upon science problems that science cannot deal with, problems that are on the other end of the spectrum of rationality, or are constitutively unscientific and which are not psychological.

There are other quite disturbing theses that we have been slipping in and that we have to bring out to the forefront. One of them is the thesis of degrees. The phenomenology that, again, takes issue with the point of view whereby something is or isn't truly false, and will hold that most decisions that we make are neither true nor false. They are partly true or partly false, and the best we can do is describe this partliness. We cannot force them to be true or false by artificial means. It is so much more realistic to describe them in their ambiguity. We cannot do away with ambiguity by inventing a zero-one behavior; instead, it's much better to educate your ambiguity, rather than doing away with it.

Now let me re-announce what the two basic problems of phenomenology really are: first, the problem of the nature of time; and second, the problem of identity. It will take much more training before the reader can focus on these problems for what they are. In the meantime, keep them in mind as the underlying goals.



## 2 Myths of our time

This book is meant as an introduction to phenomenology, an influential philosophical system, and one that may well be the most significant philosophical system of our time. The reasons for this significance will appear as we proceed.

Phenomenology, like all great philosophical systems, is really one single, short idea which at some point suddenly becomes clear. At that point, one may choose to agree or disagree with it, but the understanding of the idea, like the understanding of every philosophical system, is just a flash of a certain point of view. This is what all philosophical systems are like – each person has to choose what is best suited to his or her vocation. Whether a certain kind of philosophy clicks or not depends upon one's makeup, on whether one is attuned to it. It is not a matter of intelligence. It's a matter of tuning in, of needing, or of being ready. However, being ready to tune in does not necessarily mean agreeing.

How do you learn any piece of philosophy? Well, you can read books that tell you what it is and it gives you a lot of declarative sentences that the philosophy states. But as you read these books, you always get the impression that you're missing something. Some of you may have had that feeling. There's one reason why one gets that feeling in a philosophy course: one essential ingredient in order to understand any piece of philosophy is to understand what that piece of philosophy is directed against. Unless you are into the secret of what the philosophy is against, it is very difficult to understand what it's all about. You can't understand what game they're playing.

What is the kind of prejudice that phenomenology attacks? All philosophy is an attack against some prejudice of some kind of wishful thinking or established thinking that we do not wish to abandon or which we are dearly attached to.

Phenomenology has identified many unspoken, unexamined falsehoods by which most people form their impressions of daily life. These false assumptions are largely unnoticed and are deeply entrenched in the outlook of the greater part of humanity in the form of everyday 'common sense'. Einstein's definition of common sense as "a deposit of prejudices laid down in the mind prior to the age of eighteen"<sup>1</sup> is representative of the phenomenological viewpoint.

Very often, the facets of the phenomenological viewpoint are not only revolutionary, but actually contradict the dictates of common sense, such that one may easily be put off balance by the change of view that phenomenology discloses. The proponents of phenomenology have suggested that this powerful reaction is due to the necessity that the declarations associated with phenomenology are, in fact, readily apparent to

<sup>1</sup> Barnett (1949, 49).

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a thinking person and that such a person's distress is connected to his or her attempt to sublimate or ignore this knowledge.

Collectively, the falsehoods of our inherited 'common sense' viewpoint constitute a type of timeless sickness or ingrained distortion in perception against which phenomenology directs its criticism. As a way of introducing the phenomenological point of view, we will discuss some of the commonly held myths which phenomenology criticizes.

#### **Declarative sentence**

Declarative sentences are those statements that simply announce things and are of the form "snow is white", "sand is not good to eat", "kangaroos cannot digest oysters", or "A is B".

According to classical thought, declarative sentences should make up a large portion of speech. However, phenomenology demands that we examine and confront the actual ways in which we communicate. One sees that declarative sentences are actually only rarely used in everyday discourse. For example, declarative sentences have no place in confessions, ruminations, speculation, appreciation, or inspiration. Even in areas of discourse where it would seem that declarative sentences would be most necessary, such as in the field of persuasive speech, declarative sentences are again rarely used. One does not convince with uncompromising proclamations. Rather, a more effective plan might be to bring upon oneself the maximum degree of doubtfulness and show how, in spite of these handicaps, one's argument remains reasonable.

Declarative statements on their own are, in fact, totally inert, and it is only through the interpretative and deciphering powers of our perception by which declarative sentences hold any value. All in all, phenomenology asserts that the logic of declarative sentences is incomplete.

#### **Canonized logic**

This myth refers to the tendency of many to evaluate the truth value of a statement very grossly – that is, sentences are either unquestionably true or unquestionably false. In actuality, it must be admitted that virtually all sentences are not the unalloyed essence of trueness or falseness of the absolutist thinker, but consist often of inseparable strands of conditionality, uncertainty, or contextual dependency.

Canonized thinking constitutes an oversimplification – a wishful attempt on one hand to define the world as a system of innumerable processes and sub-processes which interact with each other in every which way, and on the other hand to reduce the universe to something predictable and unthreatening. This 'exclusion in the middle' on a grand scale composes a widespread distortion whose cumulative inaccuracies have only pernicious effects. Phenomenology demands that one abandons the naiveté of canonized logic and gives equal recognition to 'messy' sentences such as paradoxes or lies.

#### **Precision**

The myth of precision is best stated by the sentence: "what we cannot speak about we must pass over in silence".<sup>2</sup> Wittgenstein later repudiated this sentence

<sup>2</sup> Wittgenstein (1921, 89).



in almost all his later writings. The myth of precision is the myth of believing that if anything that makes sense can be said, it can be said precisely. In philosophical circles, it is a common event to encounter those who insist on 'precise' statements and definitions. Although this may be a noble attempt to employ language to its maximum effect, the logical strategy behind this pursuit contains fundamental inconsistencies. For one, the value of a statement is independent of its degree of precision. The declaration "virtue is freedom" is a passionate and extremely significant statement – so much so that many have built their lives around it. However, it is very far from being formalized or systematically evaluated. Furthermore, the impossibility of attaining absolute precision extends far beyond the circles of dialectic or rhetorical assertions, but into the physical realm as illustrated by Heisenberg's uncertainty principle. Logic has also shown itself unable to eliminate the uncertainty within a system as illustrated by Gödel.

We have been so trained to either be precise or to quit that we do not see that there is another way. That other way is one of the great contributions of phenomenology. Phenomenology says that if a phenomenon is imprecise, don't try to give it a precise description, but instead give a phenomenological description of its imprecision. Try to distinguish various types of imprecision. Do a phenomenology of imperfectness, of 'not quite'. That is the only way we will be able to describe our mode of being.

So, are we going to believe what things ought to be like, or are we going to believe the facts? If we believe the facts, we better change our philosophy accordingly. We better believe that most things in the world cannot be precisely stated. It must not only be imprecisely stated, but we have to study the nature of the imprecision as well. Now if you take this seriously you are headed to a very drastic reform of what it means to have an idea. Most ideas will be imprecise. Hard to state, hard to understand, ill-defined, and with varying meanings.

Now there is one field of endeavor which is based upon our making things precise. It is called mathematics. The ideas of mathematics are precise. It is not unlikely that mathematics was an attempt in answer to our craving for precision. Only in mathematics you find a precise concept.

### **Definition**

The next three myths involve our perception of the world we live in. First, most of us feel that it is natural to assume that all words have definitions. In other words, we feel that all concepts and objects can be defined. Even if a particular definition seems a little skimpy, we believe that all that one needs, in order to relay the meaning of a word, is to have a longer definition.

We tend to believe that all objects and concepts can somehow be defined, that their essence can be captured in words. But, is this actually a valid assumption? Can, in fact, the essence of an object be completely represented by a finite number of words? You've got to understand the meaning of the word phenomenology, why don't they give you a definition? You take it down and you understand what phenomenology is, and the course is over. Why don't we do that? Or else why do you take this course? You look it up in the dictionary, and you know what it is!

We want to know what something is, so we define it. Does that happen anywhere? Not even in a math course! I can define the integral. Does that mean you can work

with the integral? I can define how to fly an airplane, that doesn't mean you really know how to fly an airplane. It looks like when you're given a definition, you're really just given a question. What's this really about? You are under the illusion that if you don't know the meaning of a word, you're missing out on the thing itself. It's a ridiculous illusion, it doesn't make any sense! In fact, when you really don't know the meaning of a word, like phenomenology, and you look it up in the dictionary, it becomes even more mysterious, even less what it is about. The prejudice is of the people who believe that you can understand something by defining it. If I want to explain what phenomenology is, what I do is engage you in a complicated back-and-forth game where I give you half a definition and tell you what that is for, then I go back and complete it a little bit, then I tell you a little more. So you go into this feedback game for a long time maybe, and then maybe you understand what phenomenology is. And then when someone asks what phenomenology is, you can't answer in so many words. You can say it's a wonderful thing that takes a while to understand.

Upon reflection, one almost certainly will admit that there are at least some concepts which defy definition.

The key here is the word 'experience'. No amount of explaining will give an eight-year-old the concept of sexual love unless he has something in his own experience to give the words meaning. In fact, it would seem that most, if not all, abstract concepts require a certain amount of experience to give the definitions something to adhere to. Evidence that this 'need for experience' is not just a feature of youth can be found by examining the experiences of anthropologists. Despite their ability to speak a particular native language, almost invariably a number of concepts remain untranslatable until the necessary cultural experience is absorbed. The fact is, learning concepts is a complex feedback process, and defining the concept is only one of the steps.

It is important here to note that in admitting that definitions alone do not provide meaning to a concept, we are admitting that virtually nothing – including concrete objects – can be represented by definition alone. This is because when one describes a particular object such as a chair, one is in fact trying to define a concept such as 'chair-ness', and this is as difficult to do to someone ignorant of chairs as it is to try to define 'love' to the eight-year-old. It is important to note, also, that the description of one particular chair is indeed not a definition at all, but rather the statement of the fact "I have a chair with the following specifications..."

So, does this lead to the conclusion that definitions are worthless as explanations? Not at all. Instead, one should be convinced that definitions alone can never represent a given concept. At best, definitions provide a starting point from which a more experiential process of understanding the concept can begin.

### **Quantity**

A second misconception we often have concerning our perceptions of the world deals with the concept of quantity. Caught up on a desire to understand everything by labeling, we often feel that everything can be quantified in one way or another. Our experience with mass, distance, number, etc. leads us to transfer quantifying from the realm of factual representation to that of attempting to quantify less tangible items. We realize that our measures are less precise, but we feel quite content to label a

child's reading ability as being 'third grade level', and believe that it is obvious that a second-year French student knows 'more French' than a first-year student.

However, it is not clear at all that we can quantify how much one can read, or how well one can speak French. It is obvious at the extremes – that is, an infant can do neither, while a typical High School student in Paris can presumably do both. It must be admitted, however, that the measure of ability in any human endeavor such as these is very subjective at best. A second-year French student may be weaker at grammar than he was before, but who is to say that his knowledge of French has decreased? Perhaps his vocabulary has grown, or perhaps his ability to communicate has increased.

Again, something we have been conditioned very strongly to believe in, for example, we are conditioned to believe that in this class I can rank you, one to thirty-five. We are so used to the idea that things can be ranked into more or less, that we balk when someone comes around and tells us that this ranking is artificial and arbitrary, that it is performed only in the light of certain specific objectives, like do you pass the course or not. Someone tells you that it's not something that you have as one of your properties, then you think that that's absurd! You really have an I.Q. of 135, you really have! If I come around and tell you that having an I.Q. of 135 is an artificial situation based on a completely trumped up concept of intelligence, I can get you to react to this. So we are very conditioned into ranking any quality into a numerical order. We need to detach ourselves and realize that these rankings are artificial. It's not something that we have found in the world, it's something that is based on wishful thinking, something that we would like to be true. But whether it's true or not is a very, very complicated question.

Was Newton a better scientist than Einstein? Do apples taste better with or without peanut butter? If all things can be quantified, then there should be an answer to both these questions. But, any response at all would be absurd. We must realize, though, that as in the case of definition, admitting that some things can't be quantified is a first step to feeling that no abstract concept can be quantified.

As an example of how this inability to quantify things reaches even into the physical, consider how differently a sixteenth-century Englishman and a modern American, when taken to a display of modern-style furniture, would respond to the question "how many chairs are there here?". Clearly they observe the same objects, but because the concept of 'chair-ness' is undefinable, they would not be able to agree on the answer to such a supposedly simple question. Certainly, two people would agree on a fact such as "there are thirty-seven objects in the room", but once concepts are involved, belief in the inherent ability to quantify everything must fall by the wayside with the myth of definition.

### **Priority of physical reality**

The last myth dealing specifically with our perception of the world is perhaps the most fundamental motivation for phenomenology. This myth has to do with our conviction that the only things which concretely exist are those which manifest themselves physically in some way. Complete branches of philosophical thought, such as Logical Positivism, base their beliefs on this conviction, and this is the cornerstone of much of the scientific attitudes of today. But, clearly, this dogmatic belief in the

AU: Please check whether 'Logical Positivism' should be made lower-case here.

priority of physical entities denies the existence of many actual facts, just as real as the chapter this is written on.

What's the world made of? That's easy, everybody knows what the world is made of: atoms and molecules. If you want to deduce the properties of the icosahedron, you study atoms and molecules close enough and out will come the properties of the icosahedron. It's all based on physical laws where the atoms collide together. If you understand the laws well enough, you'll understand anything, music, chess, bridge, etc. Then you have to realize the absurdity of this consequence, because the temptation that we have inbred within us is to believe that if we don't believe that, then the only alternative is mysticism.

It's like saying: if an orange isn't red, it must be blue. But it's not so. When we attack the prejudice that the world of our experience is identical with the world of physics, neither do we deny the world of physics nor do we accept that the world of our experience is made up of some sort of mysticism. We simply look at world of experience with the eyes of reason and try to deduce what it's like, from what we observe, rather than from preconceived notions.

To presume from the start, that the world is nothing but the world of physics, is to start with prejudice. It may be correct, but we cannot start with it as a philosopher. It would be the conclusion of a long argument, if it's true or not. We're not going to swallow it and say it is the beginning, not if you want to be a philosopher. So this is the trick: divest oneself from the prejudice that if you understand the laws of physics well enough, you can deduce Beethoven's Symphony No. 9. Anyhow, this has been knocked into our minds for generations and generations, and I repeat, it's hard to believe because you're always suspicious that someone who attacks it is some sort of a mystic.

But what we say is not that. We do not say that the alternative to this blind belief in absolute physical reality is mysticism; what we say is that the alternative is to look at the world of experience with fresh eyes and see what it tells us, without any prejudice as to what comes first. Philosophy is very much concerned with the problem, what comes first? Philosophers of all kinds have some conclusion up their sleeve, of some idea of what comes first and I'm no exception. I want to tell you what comes first too. But what comes first in existential phenomenology is so much more sophisticated than anything that's said before that you just cannot object to it.

For example, if an alien came to Earth and were to abduct the President of the United States and examine him, the alien would have no way of determining his special status. This is because there is nothing physical about the President which distinguishes him as the President. Yet, just the same, he is incontrovertibly the President. That is a fact which exists outside the bounds of physical reality.

Similarly, any abstract concept is a fact that exists in its own sense. A single person's belief in angels is a fact. However, no one could ever tell by any physical investigation that this was the case. He and an actor could lead the same lives, but only one of them would believe in angels. Of a more universal nature, a particular set of rules comprises the game of chess. It is a fact that these rules are the rules of chess. That they are written down many places doesn't establish that these are the real rules. Someone could write down any rules and call them the rules of chess, but only one set would actually be chess.

The concept of non-observable facts ties in with the idea of indefinability in an interesting way. In both cases, it is not obvious how an individual learns the meaning of a word or the existence of the rules of chess. There is clearly something very interesting going on that allows someone to learn these ideas without direct physical evidence of their existence.

### **Homogeneous personality and rational behavior**

Now we get into something far more controversial. Let me tell you a story: during World War II there was a famous concentration camp where Jews and Gypsies and other groups were put in a gas chamber. Many people were burnt. The director of this concentration camp you think was a monster. No, he was one of the greatest performers of Bach's music for the harpsichord. Now this is very hard to swallow, because we'd like the director of this concentration camp to be an ogre. But instead, you find a cultivated man who plays the harpsichord better than anyone else in Germany, and then you begin to wonder. These phenomena are not at all exceptional. If, for example, you look at the personalities of the great philosophers, like Plato, you will find that they have rather repulsive personalities. Heidegger was a Nazi!

The prejudice is that if you're a good guy, you do well in math. There are people who are mathematical geniuses that I would never invite home for dinner. Vice versa, there are people of whom I am extremely fond, that if I give them the simplest mathematics problem, they cannot do it. The underlying prejudice is that if you do well in math, you must be a good guy. Because otherwise, how could you be a good mathematician? Vice versa, if you burn Jews in gas chambers, then you obviously could not play Bach very well. That's contradicted by reality. This is a clear case where what should be true is one case and what is true is another. Are you going to accept the way things are, or are you going to go on believing that things should be otherwise? On purpose I'm giving you extreme cases, but we can pile up example after example.

The underlying prejudice is the prejudice that human personality is a monolithic thing. If you are a good guy, you're good at everything; if you're good in math, you are also good at tying your shoelaces. A mathematician must be good at tying his shoelaces, and so on. There is no spillover from one ability to another. The pluralistic view is precisely that human personality is made up of a myriad of complicated qualities that do agree with each other. In fact, you'll take a more realistic view of personality by bringing out the underlying contradictions that make up everybody's personalities. This assertion is in striking contrast to what people believed only a century ago in the Great Victorian age and most of these prejudices come to us from that or farther back about 2,000 years.

There's the other prejudice. Just last week I had a big discussion with a friend about the fact that one of the greatest philosophers of this century, Heidegger, was a Nazi, and he couldn't accept it. The underlying fact was that they were not good guys but that they wrote good books. Bad guys write good books, that's the way it is. If you don't like it, tough. But he couldn't swallow it. He had this craving to believe that the men who wrote those beautiful books, they had to be good. That's not the way it is, and we have to restructure our beliefs accordingly.

Another oversimplification inherent in our common perceptions of other individuals consists of the tendency to translate specific characteristics of a person's makeup to other areas of their personality – in other words, to apply extrapolation to derive a

homogeneous perception of that person. For example, many would be tempted to expand upon Newton's abilities in the fields of mathematics and physics to form an impression of him as a passionate philanthropist dedicated to alleviating the miseries of mankind through scientific research. However, he was, in fact, a very rich and unscrupulous fellow. One of his occupations included the direction of a mint. An outlook which would be more consistent with the phenomenological viewpoint would be to identify the tensions and not the stabilities of a personality as the quality which determines a person's makeup.

A further principle of classical thought which is also accepted as self-evident in society is the belief that a human being, as the rational animal, should form rational goals in a rational fashion. Almost needless to say, there is a definite discrepancy between this lofty ideal and the experiences of real life. These logical tensions force us to abandon the concept of rational behavior as the primary relevance to the human condition. For example, rationality would be hard pressed to dismantle such human behavior as anger, elation, the desire to be intoxicated, or the appreciation of beauty. This is not to say that human behavior should obey no rules. It is but a conclusion that the rules for human behavior transcend the rules of rationality.

### **Staring**

The prejudice of staring is the following prejudice: to believe you can understand something just by staring at it. If you look at something close enough, you will understand what it is. Well, that's very nice and in some cases it does work, but rarely. Ordinarily, when I stare at something that I know nothing about, I simply don't get any idea what it is. To understand what it is, what do I do? I stop staring at it and I look behind, underneath, away, where it comes from, who brought it in, what's it for, what's it meant for, and all circumstances that surround the object that I am staring at, but which cannot be gained by simply staring at the object. In other words, if I want to understand what an object is, the last thing I want to do is stare at it.

This happens every day. If I don't know what a chess game is and I watch two people play chess, I can watch all my life and never understand unless I take some steps which are not suggested by merely staring, which are done on my own initiative and which have nothing to do with what goes on there. Like learning the moves of chess, which I would never understand just by looking. From the simplest examples, we conclude that it is a prejudice to believe that we can understand the nature of something by just looking at it closely enough.

Understanding is a completely different process from just looking at. It's a looking behind rather than looking at. Looking for what's not there. Yet we are still enslaved by this prejudice that we understand things when we concentrate on them closely. Now, try to do that with your calculus courses, it doesn't work. You can look at it, you can stare at the page, you can flunk the quiz. So, it's a prejudice we have all the evidence against, we know that it is not so; nevertheless, we talk as if it were true.

### **Progress**

The final myth deals with the tendency to believe that the world in general is improving. While a few societies in the past – notably ancient Chinese society – have



not overtly displayed this belief, the fact that almost all present-day societies profess the 'naturalness' of progress indicates that this is probably an innate tendency of the human condition.

Many seem to believe that history is a series of improvements in every area of human life – people live longer, eat more nutritious food, are more civilized, produce more mature art, etc. It seems only natural to ridicule one's ancestors as being backward and underdeveloped. To admit that things were better in the past is to admit failure to advance.

The fact is that the 'naturalness of progress' is not a rational belief at all. There is only a finite base of resources from which the world population must subsist. In addition, the population is increasing, so there are fewer resources to go around. Yet, in the face of the absurdity of continued expansion and growth, we not only cling to the belief that they are more advanced than those of a mere generation before, but we believe also that it is only right that they are.

Despite the claim that things are getting better, it is not clear at all that this is true. Longer life spans and increased technology come at the expense of new psychological and nervous disorders – not to mention new physiological disorders – as well as with increasing disparity between the rich and the poor. An amazing thing, though, is that even the poor will claim that things are getting better overall.

Underlying these beliefs is not rational evidence, but a deep-seated psychological phenomenon which phenomenology tries to address. There appears to be an intense desire to be able to understand by oversimplifying and reducing the world to one fundamental or ultimate level, frequently with the result of making things seem more favorable than they might otherwise seem. This is the need that phenomenology must meet head-on. It must provide us with an understanding of our world which won't lead to absurd conclusions. It must make it easier for us to live in a complicated and uncertain world.

In essence, each of these myths represents an individual's attempt to oversimplify the universe in an effort to further his feeling of understanding and security in his obviously complicated surroundings. It is an attempt to create absolutes where only diversity exists.

But, as has been demonstrated already, the systems commonly built up by an individual fail to adequately deal with any of a number of concepts, including those of definition, truth, progress, etc. More fundamentally, common beliefs repeatedly fail to adequately address such relevant questions as "how much of what is involved in our daily lives is concrete and physical, and how much is dependent on our point of view?" and "is it possible to develop some satisfying alternative to understanding our world as completely as we once thought we understood it?"

Phenomenology asks these questions. However, just acknowledging these questions is not constructive in itself. What remains is to replace the apparently flawed theories and 'common sense' beliefs with ones which will hopefully more fully acknowledge certain properties of the world, properties which up until now have been ignored. While we don't expect to find an absolute theory which will 'explain everything', it is hoped that the approach of phenomenology will add some insight to these and other relevant issues.

### 3 Phenomenology vs. Cartesianism

We want to get into the thick of phenomenological reasoning. What we are doing is dealing with a question in philosophy that was raised at least 2,000 years ago and was explicitly written down by Aristotle. The question is: why is there something rather than nothing?

A lot of philosophy since Aristotle has been concerned with this problem. We claim, however, that our main question involves a way of focusing on this problem.

We could list various methods that have been devised to focus on this problem. We could, for example, think of focusing on this problem by studying the origin of the universe from the point of view of physics, to study electric particles and hope to reach some sort of answer to the question from this view.

We could focus upon this problem from the point of view of the theory of evolution – a theory which is now very much in the news because it's been rewritten and revised. It is one of the great scientific theories that we have, but it is not likely that it may contribute another point of view to our discussion.

We could also take a theological point of view. Far be it for us to dismiss the theological point of view as being irrational or whatever. Some of the most intelligent people teach theology in divinity school. There is, of course in this case, the problem of unacceptance of a point of view which is beyond rational acceptance, the acceptance of certain theological theses which some people are not ready to accept. This acceptance is not rational. It is a very deep-seated phenomenon. When we say that it is not rational, our temptation is to infer that it is therefore 'irrational'. We must, therefore, guard against the mistake of thinking that everything that is non-rational must automatically be 'irrational'. The alternative of 'rational' or 'irrational' is one of the faulty ways of thinking that has been left to us by a certain traditional thinking and which we want to discard. Of course, side by side with the theological point of view, we can have a materialistic point of view, and that also involves a non-rational acceptance of certain initial theses.

All these are various ways of focusing on, directly or indirectly, the problem of "why is there something rather than nothing?". Of course, science – in particular, biology and physics – contributes to our knowledge in many ways other than just the quest for an answer to this question. Nonetheless, in the background we can feel, unstated and lurking behind the questions of biology and physics, the question that has been going on ever since philosophy started.

Our objective is to focus on this problem from yet another point of view, and that is from the philosophical point of view. In so saying, we are tacitly implying the assertion that there is such a thing as philosophical reasoning, that this reasoning can



lead us to correct conclusions, and, last but not least, that philosophical reasoning is equiprimordial with other kinds of reasoning. In this sense, equiprimordial roughly means what in common parlance we mean when we say 'equally valid'.

The problem of comparing these kinds of points of view – for example, the point of view of physics with the point of view of philosophy – is itself one which philosophers have wrenched well. It is the problem of 'turf', or boundaries between fields, and what belongs to philosophy and what belongs to science. It is a problem that has been widely discussed in this century and in preceding centuries.

For the moment, we assert that we want to learn to focus on this preliminary problem of "why is there something rather than nothing?" from the point of view of phenomenology. This book can be viewed as training to think phenomenologically. When we say "view it as training", we imply that we should try to withhold judgment on some of the assertions that we make. In other words, not to decide right away, upon listening to some assertion that sounds perhaps wild, whether it is correct or not, but keep an open mind and see why that assertion is really made, what it is motivated by, and what it is tending toward. So we reach an authentic understanding of the assertion rather than preventing the understanding by deciding that it is false, or something else other than true. Unless we do this, we will not be properly trained in thinking phenomenologically.

### **Focusing on philosophical problems non-reductionistically**

What is focusing? Well, let's take the case of mathematics. We can view mathematics as a sociological enterprise. We can view a mathematics book as a sequence of printed symbols to be copied. We can view mathematics as some sort of a recreation. But, in all these views, we are not focusing authentically upon mathematics. When we have to teach mathematics, when we have to study for an exam, or when we are trying to solve a mathematics problem, we are focusing authentically on mathematics rather than on side issues.

We already used the word authentically, and have already perceived that we will use this word to designate the authentic focusing on the thing itself. Now we want to make this 'authentic focusing on the thing itself' much more explicit.

When we focus authentically on mathematics, we do not appeal to non-mathematical reasoning. We do not appeal, for example, on the fact that mathematics is something that also goes on in our brains. We can do that, but it will not help us to solve the mathematics problem or to teach mathematics. So, to focus on the brain activity that is characteristic of all thinking about mathematics is not to authentically focus on mathematics. It will not help us learn mathematics. It will not help us teach mathematics. It's important to focus on mathematics as it actually is.

Let's take another example – the phenomenon of *fear*.<sup>1</sup>

If we are asked to describe fear, chances are that we will give a reductionist description of fear. We will start describing our emotional reactions, or blood pressure, or whatever goes on in our mind. The word 'in' here is meaningless because it's not like a container that contains little pebbles. So, already we are misusing the word 'in'.

<sup>1</sup> See Heidegger (1927a, 179–182).

Chances are that if we are asked to describe what fear is, then we will miss it. We will give a reductionist description. This is because we've never been taught how to give a non-reductionist description of fear. We haven't been trained. It's like someone being asked all of a sudden to solve a problem in differential equations without knowing any calculus. We now have to retrain ourselves from scratch to give a non-reductionist description of fear, which we call a purely phenomenological description.

In order to see that this is possible, we may do the following thought experiment. There are worldly situations where we are forced to give non-reductionist definitions of fear. Through "eidetic variation",<sup>2</sup> we can imagine worldly situations in which we must face up to the phenomenon of fear in a non-reductionist way, and view it in a non-reductionist way, for example, stage fright, or a general and his troops, or a child is afraid of the dark.

These are phenomena where, if we want to face someone who has stage fright and correct stage fright – for instance as a physician or as a stage director – we have to have a non-reductionist grasp of what fear is. Forget what goes on in the mind or whether the blood pressure goes up. We have to have a non-reductionist understanding of what the contextual sense of fear happens in the world as a phenomenon as it happens to us. At the same time, we do not describe it as an individual phenomenon. We describe it as a universal phenomenon, in a non-reductionist way.

So, we want to focus on issues philosophically. In science, we are already well trained to avoid ineffective focusing. When we focus on physics, we know that we have to abstract from psychological considerations. When we focus on chemistry, we know that we have to abstract from biological considerations.

But, we are not as well trained to focus authentically on philosophical issues 'as such'. We are more trained to focus on scientific issues. It's a weakness of our times, and we'd like to believe that the philosophical mode of reasoning is about to make a big comeback. Whether we believe it or not, we see that, just like there is an authentic focusing on mathematics as mathematics and there is focusing on physics as physics, similarly there is an authentic focusing on philosophy as philosophy – in other words, focusing on philosophy without appealing to extraneous attacks.

### **The equiprimordiality of philosophy**

Whereas we are prepared, in view of our training, to admit the equiprimordiality of each of the sciences, we are not yet trained to admit the equiprimordiality of philosophy. And yet, it is our assertion that there is an equiprimordiality of philosophy that goes side by side with the equiprimordiality of the sciences. It is our objective to train ourselves to focus authentically on philosophical issues in a way that does not tend to reduce these issues to extraneous questions. This, of course, requires training and thinking.

There are good reasons to insist on the equiprimordiality of philosophy more than ever, because this equiprimordiality was lost in the first half of this century when a very strong reductionist point of view prevailed which pretended to do away with traditional philosophical reasoning. Over and above this, we will assert not only the equiprimordiality, but the validity of philosophy, and also its necessity for the viewing of certain problems in today's science.

<sup>2</sup> See Husserl (1913).

When certain sciences reach an extraordinary degree of development, they arrive at problems like the big bang or the structure of matter, which are borderline with philosophy and which only stand to help from the contribution of philosophical reasoning.

What kind of prejudices have we inherited that prevent us from realizing right away the equiprimordiality of philosophy? The main culprit is what is known as Cartesianism – a philosophy that has been with us for about four centuries and which can be very, very roughly summarized as a philosophy based the dualism between mind and matter.<sup>3</sup> In Cartesian philosophy, everything that ‘exists’ is either physical or mental. The habit of classifying everything as either physical or mental has been with us for centuries, and is so ingrained in us that it is hard to see an alternative. And yet, our objective is precisely to establish a critique of Cartesianism and, in particular, to bring out the incompleteness of this view, the oversimplification that is involved when one classifies everything as either mental or physical.

### **The limitations of Cartesianism**

The first step in the journey of our intellectual realization of the limitations of Cartesianism is to become very aware of the main error that phenomenology criticizes. Every philosophical system is mainly the critique of some error. If you want to understand the philosopher, first look what he is against. Then you have a chance to understand. In other words, philosophy is the response to breakdown, whether in science or society, or even personal breakdown. An authentic philosophy is an authentic response to a breakdown of sorts. Our age is an age of breakdowns. In the sciences today, there is a serious breakdown of foundational studies. Fifty years ago, people were sure of what the foundations of mathematics ought to be, similarly for the foundations of physics.

The phenomenological movement is a reaction to this attitude of the dictatorship of the ‘ought to be’. In contrast, instead of prescribing what ought to be, phenomenology tries to describe what is by developing a sensitivity to facing the unusual situations that are to be described that have seldom been described before precisely because philosophers of the past were caught in the ‘ought to be’ prejudice.

For phenomenology, the error of errors is reductionism. To demonstrate the inadequacy of reductionism and to illustrate the concept of context, let’s consider the example of ‘being guided’. Following are five instances of being guided.

- 1 I am in a field with my eyes blindfolded, and someone leads me by the hand. I respond readily by moving in whichever direction my hand is pulled.
- 2 Someone leads me by the hand against my will, pulling me along by force.
- 3 I am guided by a partner in a dance. You make yourself as receptive as possible in order that my partner and I move together smoothly.
- 4 I am out walking with a friend. Since I am having a conversation, I go wherever he goes.
- 5 I walk along a path in a forest, simply following it.

<sup>3</sup> See Heidegger (1927a, 122–134).

These are all examples of being guided, but they are clearly different from one another. Hence, we see that being guided is a phenomenon which is not reducible to a purely physical point of view. This is true because the meaning of being guided is influenced by conditions ‘extraneous’ to it, and these conditions are non-physical. If being guided were to be composed of certain physical elements, then its meaning would always remain unchanged, which is clearly not the case. The ‘extraneous’ conditions influencing the meaning of being guided are the context of being guided. In case 2, the context is that I am being guided against my will. In case 4, the context is that I am being guided because I choose to follow my friend.

The preceding example lent itself more readily to physical reductionism as opposed to psychological reductionism. Let us consider the example of ‘cursing’, which is a phenomenon which lends itself more readily to psychological reductionism.

Cursing is an event which can, to an extent, be reduced to elements within one’s mind – for example, anger and ferocity. But again, reductionism will not accurately describe the phenomenon of cursing, because cursing is not a purely psychological event. The intention of cursing, for example, is not included in the reductionistic view of cursing – it could not be, because the intention of cursing is part of the context and is therefore different in different instances, such as to frighten someone, to relieve tension, or to express anger. Clearly, the meaning of cursing in each instance is different depending on its intention. Hence, any description of cursing which doesn’t take into account its intention cannot be an accurate or valid description.

### Description of reading

A description of the phenomenon of ‘reading’ is provided by Wittgenstein,<sup>4</sup> who was a very interesting case in philosophy. He was a very wealthy Austrian who one day showed up at Cambridge University in England with a book which he had written which is now called *Tractatus Logico-Philosophicus* and is usually referred to as the *Tractatus*. He showed it to Bertrand Russell, who said “fantastic!” and wrote an introduction and had it published right away. So Wittgenstein said something like: “well, now that the book is published, all the problems of philosophy are solved. There is no business for me staying at Cambridge University”. He went back to Austria and started teaching at a school in a little village. Later on, he inherited a large sum of money and gave it all away because he felt he didn’t need it. The years went by, and Wittgenstein started developing doubts about what he had written in the *Tractatus*, which by then was a famous book – the so-called ‘bible’ of logical positivism. As his doubts developed, he went back to Cambridge University to see Russell and the other great philosopher of Cambridge, George Edward Moore. Wittgenstein said: “I have to study philosophy again because I have some doubts about what I said in the *Tractatus*. I thought all the problems of philosophy had been solved, but they weren’t”. So, Russell and others told him: “I’m sorry, but if you want to stay at Cambridge University, you have to have a Ph.D.”. So, he took the *Tractatus* and submitted it as his Ph.D. thesis and he got it.

Shortly afterward, he was made a professor of philosophy at Cambridge University. There, he had weekly meetings with his students where he had a stream-of-consciousness

<sup>4</sup> Wittgenstein (1953, 61–70).

way of lecturing by asking a question and then attempting to answer it himself. In the course of his lectures, he drafted several books which were not published until very late, some not until after his death. One of them, the *Philosophical Investigations*, was published before his death, and that is one of the great philosophy books of this century. Wittgenstein begins by saying in the preface

four years ago I had occasion to re-read my first book (the *Tractatus Logico-Philosophicus*) and to explain its ideas to someone. It suddenly seemed to me that I should publish those old thoughts and the new ones together: that the latter could be seen in the right light only by contrast with and against the background of my old way of thinking.<sup>5</sup>

By that time, he had completely changed his mind, and he felt that everything that he had written in the *Tractatus* was pretty much nonsense, and therefore had to write a critique. Of course, the book had tremendous influence again. Russell condemned it and, after he had read the *Investigations*, refused to speak to Wittgenstein ever again. Russell remained wedded to the first view of philosophy, the one expounded in the *Tractatus*. Wittgenstein died in 1951 while he was visiting Cornell University. After his death, several of his books and lecture notes were edited. It gradually became clear – though it is still a matter of great contention – that much of what Wittgenstein says is very close to phenomenology. There is, in fact, a very active dispute over whether Wittgenstein had read Heidegger. The dispute goes on and on – probably forever. But the fact is that some of the best examples leading up to phenomenological discussion can be taken from Wittgenstein. If you want to see the most striking examples of contextual paradoxes, such as the example of reading, then you can leaf through the *Philosophical Investigations* and find them there one after the other. The question here, as always, is “how do we describe reading?”. In trying to answer this question, we see the beauty of the example, for we soon learn that no reductionistic description of reading can possibly be valid. When we try to simplify reading by removing all so-called ‘extraneous’ conditions, we are left with a clearly invalid notion of what reading is. Thus, we see that the motive of reductionism is invalid in general.

For example, suppose that we try to employ reductionism by trying to reduce reading to some physical or mechanical act. We might do so by saying that reading is the physical act of seeing certain written symbols and then interpreting these symbols to have a particular meaning. Well, this sounds plausible, but considers the following example.

A young child is given a book which contains a sequence of pictures telling a story. Although unable to read the text, he understands the meaning of the pictures and is thereby able to follow the story.

Here we encounter a problem. We would not say that the child is reading, but what he is doing fits the description of reading we have given precisely. Where is the discrepancy? The discrepancy is in the meaning of ‘certain written symbols’. We don’t consider the interpretation of pictures to be reading because pictures aren’t the right kind of written symbols. Thus, we see that our description of reading is based on a presupposed notion of alphabetic letters. So, let us include exactly what kind of

<sup>5</sup> Wittgenstein (1953, VIII).