Glen Miller
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Reimagining Philosophy and Technology, Reinventing Ihde

Springer

Philosophy of Engineering and Technology

Volume 33

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Preface

Before explaining the rationale for this collection of essays about the work of Don Ihde, we thank the contributors who have given us the privilege of their time and the pleasure of their work. Their time and effort have brought together an exciting collection that examines different facets of postphenomenology, its impact, material hermeneutics, media and sensory technologies, and the technological bent of political and social life. We are proud to have such wonderful contributors' work to share with you in this volume. Thank you, Trish Glazebrook, Paul Thompson, Bob Scharff, Yuk Hui, Lenore Langsdorf, Peter-Paul Verbeek, Galit Wellner, Ingrid Richardson, Carl Mitcham, Zhang Kang, and Don Ihde.

Ihde's work is influential in philosophy of technology, and one cannot engage in the field without coming into contact with his work in some way. His work has become focal, to use a visual metaphor that he might say comes with some risk, in the practice of philosophizing about technology; it serves as a keystone for people working between phenomenology, philosophy of science, philosophy of technology, and science and technology studies and is easily explored and enmeshed with other theoretical approaches.

This book was commissioned by Springer to coincide with the Society for Philosophy and Technology's Lifetime Achievement Award, the first such award given by the Society in its 35-year history and awarded to Don Ihde in 2017. We are unusual editors for a volume on Ihde: neither of us is a former student of Ihde nor do we work in research groups dedicated to postphenomenology. We come to this volume as philosophers of technology who appreciate the tradition that Ihde has created within our field. Our collection of essays differs from previous volumes on his work: we aim for a reinvention of Ihde. We did this by inviting some authors who commonly contribute to postphenomenological discourse as well as others from outside of these circles. We asked for articles that would both plumb the depths and deepen and explore the intersections of postphenomenology to other theories and how it has been taken up in different cultures in order to reinterpret and reimagine his work in new contexts and alongside other theoretical frames.

Our authors have delivered chapters that are carefully researched and incisive, and we are proud to share this collection that presents a different entry to Ihde's

work than previous festschrifts and edited volumes. We hope this volume serves as an entry point for scholars outside the postphenomenological tradition and those from other disciplines. We seek to reimagine Ihde's work in three sections: (1) plumbing its origins, both pragmatist and phenomenological; then turning to (2) the theoretical intermingling, deepening, and expanding that his work invites; and finally (3) looking at new investigations using Ihde's work and postphenomenology. These three sections are, as it were, sandwiched between Ihde's works, old and new. We are excited to share Don Ihde's 1973 introduction to *Sense and Significance*, reprinted for the first time. The volume concludes with Ihde's own words, a short new chapter from Don Ihde, "Hawk," where he considers his work at its own interplay with feminist STS engagements and reflects on his youthful observations of vision and predation. Many thanks to Don for his cooperation with this volume and his permission to share this work.

   We again thank our authors for their contributions (and for what we have learned from them through this project) and hope the readers can see the many facets through which and by which they might reimagine the work of Don Ihde in different contexts, applied to different technologies, alongside different theories, and in different disciplines. We also would like to thank Pieter Vermaas, series editor for Springer's POET series, for his support and guidance through this project, as well as our incredible indexer Laura Shelley, and Virginia Tech Ph.D. students, Jack Leff and Ariel Ludwig, for their editorial assistance in preparing this volume.

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Chapter 1
Editors' Introduction

Glen Miller and Ashley Shew

Don Ihde's voice has been influential in philosophy of technology for more than four decades. Credited with writing the first monograph on philosophy and technology in English, *Technics and Praxis*, in 1979, Ihde has published 25 books and numerous articles over the course of his fifty-year career. In addition to his voluminous output, a great deal has been written about his work, notably Evan Selinger's edited volume *Postphenomenology: A Critical Companion to Ihde* (2006), Jan Kyrre Berg Friis and Robert P. Crease's *Technoscience and Postphenomenology: The Manhattan Papers* (2015), and a special issue of *Techne: Research in Philosophy and Technology* dedicated to "Postphenomenology: Historical and Contemporary Currents" (2008), also edited by Evan Selinger. Lexington Press's book series devoted to volumes on postphenomenology, one of his signature contributions, and philosophy of technology, has published 11 books as of January 2019. Many of Ihde's graduate students are productive and innovative thinkers forging new intellectual projects, and many are active in the Society for Philosophy and Technology (SPT). In recognition of these contributions, among others, Ihde was the recipient of the first SPT Lifetime Achievement Award, which he received in Darmstadt, Germany in 2017.

This volume, proposed to us in the wake of this award by Pieter Vermaas, arose in recognition that, in spite of all that had already been written, more is needed. One, a new generation of scholars who have not traveled along with Ihde over the course of the last fifty years is thinking through problems of philosophy and technology. This volume is designed to introduce his work to these scholars who come from a

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range of disciplines, meaning they are not necessarily experts in philosophy, much less pragmatism or phenomenology, and our contributors have written chapters that advance scholarship while avoiding unexplained technical jargon. Also, many of Ihde's books and the books written about him are either not indexed or the indexes are minimal, which makes these works less useful to scholars not already steeped in the space; the index to this volume, in which many of the central ideas are approached in a variety of ways, is especially valuable. In addition to an appendix which lists all of Ihde's books, all of the chapters acknowledge the scholarly literature on which they are based, especially their connections to Ihde's works, and they all have extensive references for those who wish to further pursue ideas they find interesting.

Two, Ihde's continued production leads to additional insights and discourse on many topics. What Ihde wrote in 2008, "the *corpus* is not closed, nor complete," remains true today. He frequently engages his interlocutors and expands his arguments, which keeps his longstanding conversation of Robert C. Scharff, which continues in this volume, lively. Scharff's article, as well as Paul Thompson's explanation of Ihde's pragmatism and Yuk Hui's consideration of philosophy of technology after Bernard Stiegler and Ihde, draw from Ihde's recent books, including *Heidegger's Technologies* (2010) and *Husserl's Missing Technologies* (2016). The latter includes a chapter on "Dewey and Husserl: Consciousness Revisited" and another on "Adding Pragmatism to Phenomenology," adding more detail to this dimension of postphenomenology, but also arguably introducing some problems.

Three, we sought a blend of contributors, some of whom regularly publish using postphenomenological research, but many who do not, that differs from many of the usual anthologies. As we mention in the preface, our distance from Ihde and the postphenomenological community affords some benefits. There was no "Ihdefest," the term used to describe the conference that birthed *Technoscience and Postphenomenology: The Manhattan Papers* (Friis & Crease, 2015, p. xvii). While we did not exclude contributions from those who self-identify as postphenomenologists, we actively sought those outside of this circle.

Four, relatedly, in spite of all the attention given to Ihde's work, we think that other intellectual circles, philosophical and otherwise, would benefit from taking his arguments seriously, and this volume explores some possible connections, while hopefully inviting others. In contrast to the recognition given Ihde by philosophers of technology, pragmatists and phenomenologists have tended to ignore his work. In the *Oxford Handbook of Contemporary Phenomenology* (Zahavi, 2012), neither Ihde nor technology are listed in the index; he is mentioned just once in *The Routledge Companion to Phenomenology* in an article on philosophy of science (Luft & Overgaard, 2012, p. 461). Similarly, Ihde is not even listed in the index of Princeton University Press's *The Pragmatism Reader: From Peirce through the Present* (Talisse & Aiken, 2011), *The Cambridge Companion to Pragmatism* (Malachowski, 2013), or Blackwell's *A Companion to Pragmatism* (Shook & Margolis, 2006). Given their influence in phenomenological and pragmatist circles, Hui, Scharff, and Thompson's articles have the potential to make some progress in addressing this omission. In addition to those traditions, ethicists and political philosophers may find insights from postphenomenology useful, extensions advanced

in the present volume by Lenore Langsdorf and Peter-Paul Verbeek. Ihde's work also deserves consideration from scholars in fields other than philosophy. Glen Miller and Carl Mitcham's paper, which considers what those thinking about engineering can learn from phenomenology, is one of what we think are many possible extensions.

Ihde's signature contribution is the development of postphenomenology, which springs from a blend of resources from Husserlian phenomenology and Deweyan pragmatism, a "nonsubjectivist and interrelational phenomenology" that is "a first step in a postphenomenological trajectory" (Ihde, 2009, p. 11, italics removed). While Ihde more clearly describes these relationships in later works, as mentioned above, with the benefit of "retrospective vision" (ibid.), phenomenology and pragmatism (the latter, indirectly) are present in the title of *Experimental Phenomenology* (1977, 2nd edition 2012), even though neither Dewey nor pragmatism were mentioned in the introduction (see Mitcham, 2006); they were both mentioned in the introduction to *Sense and Significance*, although pragmatism was dismissed in favor of phenomenology, "the more recent arrival" with "the audacity to claim a rigor and comprehensiveness not often matched in philosophic investigation" (1973, p. 13), which is reprinted here as Chap. 2.

The second step of postphenomenology utilizes phenomenological ideas of variational theory, lifeworld, and embodiment, the second supplemented by pragmatism and the last by Merleau-Ponty's work, to better describe how we experience and interact in the world. While Husserl thought that variational theory revealed invariants or essences, Ihde thought that what was revealed was multistable, dependent on perspective. He recognized that this same insight applies to technologies, such as the bow-and-arrow, where materiality, bodily techniques and practices, and cultural context all shape the trajectory of technologies, i.e., how they are developed, seen, understood, used, and valued. Technological stabilities often vary across times and cultures, yet they are not fluid. Galit Wellner's article in the present volume further develops the idea of multistability.

Ihde has called "the empirical turn" the third step of postphenomenology (Ihde, 2009, p. 20). This move is a definitive rejection of analyses of technology in general, such as those found in Martin Heidegger's "The Question Concerning Technology" (1977) and Jacques Ellul's *The Technological Society* (1954), for an investigation of particular technologies. We think Ihde overstates the distinctiveness of this step, which seems better described as the field of philosophy of technology moving closer toward Ihde's work, which has been experiential and specific, as experiences are, since its beginning. Ihde describes his work from 1990 through 2006 as focused on "industrial technologies," which tend to trend toward "gigantism," which he distinguished from "electronic technologies" that tend to trend toward "miniaturization and multitasking" (2009, p. 39). Out of this analysis came the structure of technoscience, which indicates that "contemporary science is fully *techno*science, and much contemporary technology is techno*science*" (2009, p. 40, italics in original). Ihde explores this hybrid relationship at length in *Instrumental Realism: The Interface between Philosophy of Science and Philosophy of Technology* (1991).

Ihde is best known for his explanation of four sets of relations that describe how technologies modify experience of the world. Described originally in "The Experience of Technology" (1974) as human-machine relations, reprinted in *Technics and Praxis* (1979), they have since been called human-technology-world relations (see, e.g., Ihde, 1990, pp. 73–112), or I-technology-world relations. *Embodiment relations* describe technological experiences in which an artifact becomes, as it were, incorporated into the person, and the object disappears from consciousness while in use, as eye glasses do. Embodiment relations always involve a corresponding amplification and reduction: in the case of eyeglasses, better focused vision at the expense of peripheral vision. The former is intended, while the latter is often overlooked. *Hermeneutic relations* describe those in which a technology provides some information about the world to a user, who interprets "inscriptions, texts, codes, or also visual displays in science" (Ihde, 2015, p. xii). A simple example is a thermometer that conveys outdoor temperature to those inside who are not directly experiencing the heat or cool. *Alterity relations* are those in which the technology behaves something like a "quasi-other," coming to the fore in experience and displaying apparent autonomy, such as interacting with a robot or competing against a non-person character in a video game. *Background relations* are those in which technology responds to and alters the environment, absent any necessary human conscious involvement, such as a thermostat.

Let us point out a few more important characteristics of Ihde's unique style of scholarship. Owing to its attention to the empirical and contextual, Ihde's philosophy is necessarily interdisciplinary, taking from the social sciences, the natural sciences, and the arts.[1] The attention given to Ihde's human-technology relations often eclipses, sometimes totally, his cultural hermeneutics, called "Program 2" in *Technology and the Lifeworld* (1990), which incorporates these disciplines. Ingrid Richardson's paper in this volume investigates how postphenomenological insights can improve ethnographic studies of mobile media, demonstrating disciplinary openness and an analysis of one genus of technological artifacts. Scholars working in Ihde's tradition can learn much from Science, Technology, and Society (STS) studies, and their work, such as Richardson's, often contributes to this body of scholarship. Another notable feature of Ihde's work is that he is attentive to his experiences, and his examples and insights often draw off of experiences and technologies in various cultures. Among Ihde's many cultural experiences, his many visits to China stand out, and Zhang Kang's paper in this volume extensively plumbs his influence there. Lastly, unlike many scholars, and consistent with his philosophical arguments, Ihde's articles admit his perspective—following Paul Ricoeur, who argued that philosophy is always done from a point of view—and often include an autobiographical component, just as his "Hawk" in this book does. Trish Glazebrook's chapter follows the intertwined threads of Ihde's life and philosophical work from

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[1] Ihde also sketches one contribution that phenomenology can contribute to each space in "Interdisciplinary Phenomenology" (2012, pp. 97–112).

the start of his career in the late 1960s, with his focus on sound, to the present and his appreciation of the architecture of Arakara and Madeline Gins.

While all of the papers in this volume consider a number of ideas from Ihde's work, they are divided into three parts according to their central theme. The first part includes papers that consider the relation of Ihde's work to its origins, especially the pragmatist and phenomenological traditions. Papers in the second part look are oriented around ways that Ihde's work can be extended, in one case, as a conceptual extension of multistability within postphenomenology, and in the two others, to ethics and political philosophy, spaces in which his ideas have had little penetration. Papers in the third part bring to the fore the possibilities of extending Ihde's ideas to other areas of inquiry such as ethnography and engineering and to the development of philosophy of technology in China.

Part I, "Plumbing Phenomenological and Pragmatist Origins," appropriately begins with Ihde's own words, a reprint of his introduction to *Sense and Significance* (1973), increasingly difficult to find in print. The chapter is an articulation of Ihde's early intellectual underpinnings. It explains his decision to follow the phenomenological approach over pragmatism, a position that over the years has resulted in the merging of the approaches into postphenomenology. Over the course of his career, he has remained true to the three "investigative 'rules'" he offered for those wishing to practice phenomenology—"suspend explanation, describe," "vary possibilities," and "seek structures"—from which he has gleaned both "a transformation of the meaning of the world" and "the excitement of philosophical investigation" (Ihde, 1973, pp. 16–19).

In the second paper, "Ihde's Revolutions: From Paris to Science, Rock, and Radical Architecture," **Trish Glazebrook** follows Ihde's life and thought from Ihde's experience of the 1968 intellectual uprisings in Paris to his embrace of the radical architecture of Arakawa and Madeline Gins in the 2000s. She explains how his critiques of the visual, especially ocular technologies, and technoscience counter tendencies toward objectivity and away from embodied ethics. Glazebrook argues that auditory phenomenon, especially rock music, has a seductive power that can immerse a person in embodied relations that support a richer manner of ethical being than what visual technologies permit. Glazebrook finds a fulfillment of sorts of Ihde's progression in the design of Arakawa and Gins, which engages all the senses of its inhabitants and demands of them "active embodiment," promising a fuller experience of the lifeworld.

Paul B. Thompson, whom many know from his work on bioethics, animals, and agricultural technologies, and was Don Ihde's first Ph.D. graduate who studied philosophy of technology, has contributed "Ihde's Pragmatism." Thompson sheds light on the often neglected pragmatist resources that have shaped postphenomenology, in spite of their apparent initial rejection in the introduction to *Sense and Significance*, by exploring the influences of John Dewey, Charles Sanders Peirce, and William James, among others. Those who come to this book from outside the pragmatist tradition will benefit from Thompson's explanation of their epistemological ideas, the importance they gave to the organism/environment relation and the associated "evolutionary adaptations" (especially those that are social), and the pragmatists'

aversion to dualisms. Thompson's article doubles as a handy, very short introduction to pragmatism and its important thinkers that will also inform scholars who wish to better understand Ihde's work.

Ihde's late embrace of pragmatist ideas is questioned by **Robert C. Scharff**, a philosopher known especially for his work on technology and Continental philosophy. As the latest installment in a longstanding, thoughtful dialogue with Ihde, Scharff draws the reader's attention to the incompatibilities that arise between phenomenology and pragmatism. In "Postphenomenology, a Technology with a Shelf-Life? Ihde's Move from Husserl toward Dewey," Scharff takes note of trends within Ihde's work—from the phenomenological approaches of Heidegger (albeit always qualified) and Husserl toward Dewey—and asks whether Ihde has fallen prey to a "neo-enlightenment spirit." This attitude, Scharff argues, understands the world as a "problem-solving situation," at odds with Ihde's descriptive phenomenology, such as what is defended in the introduction to *Sense and Significance*.

Yuk Hui's "For a Cosmotechnical Event: In Honor of Don Ihde and Bernard Stiegler," which reconsiders the future of philosophy of technology in the wake of the influences of Ihde and Bernard Stiegler, concludes the first part of the book. Rather than following the paths of either of the thinkers, Hui plumbs this crossroads, especially what is found in Ihde's and Stiegler's partial rejections of Heidegger that result in different versions of postphenomenology.[2] Hui proposes *cosmotechnics* as a way for philosophers of technology to proceed after Ihde and Stiegler. The idea of cosmotechnics is to promote an understanding technical activity as localized, connected to its cultural genesis (especially ontologically and cosmologically) and the moral order, and multiple, rather than something that should be analyzed according to its essence.

Part II, "Extending Concepts and Theories," includes papers from Galit Wellner, Lenore Langsdorf, and Peter-Paul Verbeek, scholars steeped in the postphenomenological tradition. Wellner's paper deepens the understanding of multistability, a central term in Ihde's work, a contribution that enriches postphenomenological literature. Langsdorf and Verbeek both extend ideas from postphenomenology beyond its standard boundaries. Langsdorf develops a new moral framework that she finds especially beneficial for ethics pedagogy, and Verbeek shows how Ihde's thought complements and enriches political philosophy.

In "The Multiplicity of Multistabilities: Turning Multistability into a Multistable Concept," **Galit Wellner** notes that this central idea of postphenomenology should itself be understood as multiple, taking on different characteristics depending on the space in which it is used. Drawing off of the work of Kyle Whyte and Robert Rosenberger, among others, she notes that variational analysis yields a different number of stabilities depending on whether it is used to describe the work of scientists aiming to describe the natural world, for whom the stabilities are few; engineers and designers imagining and making new artifacts, for whom the possibilities are

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[2] While only Ihde uses the term "postphenomenology," Hui argues that it is implied by Stiegler's work.

practically endless; and innovative engineers and artists, which generate many new meta-stabilities, but far fewer than what the previous group can bring into existence.

Lenore Langsdorf starts from her own teaching experience in crafting "Relational Ethics: The Primacy of Experience." Disappointed with a common approach to ethics—namely, taking the ideas to Aristotle, Immanuel Kant, and John Stuart Mill, and applying them dogmatically to moral problems—she advocates an approach to moral development that blends ideas from postphenomenology with Dewey's pragmatism, Whitehead's process philosophy, and the late Husserlian ideas of genetic constitution and embodied intentionality, as well as resources from a number of more recent scholars. Her work results in an approach to ethics ("the fifth 'e'") that is "embedded, embodied, enacted, and extends into the sensory intensities that continually constitute a multistable moral life."

Whereas Langsdorf shows the complementarity between postphenomenological ideas and those of ethics, **Peter-Paul Verbeek** shows how postphenomenological ideas can improve political philosophy, which tends to ignore or minimize the effects of technology. Verbeek's chapter is guided by three main ideas. One, he shows how postphenomenological ideas can supplement the idea of political power, especially as it is understood by Michel Foucault, who argues that political power is "everywhere," far more than what is seen in official state acts or law-making and enforcement (see Brown, 2006), by including technological artifacts. Verbeek argues that this realization has implications for conceptions of liberal democracy that wrongly imagine, and so overstate, individual freedom because they do not recognize the shared dependence on one's technological milieu. Two, he refines Hannah Arendt's understanding of the *polis*, the space where individuals discuss the things that matter to them as a community, rather than focusing on satisfying needs or market-driven desires, by pointing out that technological infrastructure, the product of labor, plays an important part in its functioning. Three, the work of Noortje Marres and Bruno Latour, building on Dewey's writings, shows how technology affects the formation of both "the people" and "the issues" about which they care.

The third and final part, "Inventing New Connections," showcases some ways Ihde's work can be applied to different areas of inquiry that are outside of Western disciplinary philosophy. All of the contributions display the hybridity and complementarity that is characteristic of Ihde's postphenomenology: one can choose postphenomenology-and-, rejecting a reduction to a binary choice, postphenomenology-or-. The diversity of this section is an indication of the opportunities for new research that arise when postphenomenology is applied to other human activities and areas of inquiry.

Digital media scholar **Ingrid Richardson** shows how a postphenomenological perspective adds an important aspect to the study of mobile phone users. She incorporates Ihde's work to develop an ethnographic method that also incorporates ideas from new materialism, haptic studies, and Merleau-Ponty's phenomenology, to offer richer descriptions of the intimacies and habits of touchscreen device users than what is found in traditional media studies. Such research, which builds off an Australian Research Council Discovery Grant that she was awarded with Larissa Hjorth, offers a number of insights about the cultural and phenomenological

(socio-somatic) embeddedness of gaming on one's mobile device, which is especially important as the use of these devices transform our public and private spaces and our relationships.

In "Designing and Constructing the (Life)World: Phenomenology and Engineering," **Glen Miller** and **Carl Mitcham** address in a lacuna in Ihde's thought: engineering is rarely mentioned in his extensive publications on technology, and, while he has written at length about technoscience, its engineering permutation, the processes by which modern science and technology create the assembly of artifacts that constitute the technological world, has been almost completely ignored. Postphenomenologists usually consider the technological world as a given that is experienced, whereas Miller and Mitcham argue for a reimagination of human-technology-world relations that acknowledge technological agency in both the creation of artifacts and their use. This reimagining provides fertile grounds from which to consider questions in philosophy of engineering; it also brings to the fore questions of compatibility between the phenomenological and pragmatist strands of postphenomenology, as well as their adequacy.

Zhang Kang surveys Ihde's significant impact in China. Ihde has visited China several times and given a series of lectures there. In this aspect, one finds some similarities with Dewey, who visited China from 1919–1921. Zhang Kang's extensive review of the papers and books written by Chinese scholars on Ihde's works shows that their interpretations emphasize his approach to think about theoretical aspects of technology, which to that point had largely been concerned with practical economic objectives; to consider human-technology relations more carefully; and to develop a balance between constructivist and deterministic perspectives. She also details the more recent critical perspectives, which offer new insights into the "human" or "I" in human-technology relations, the differences between direct perceptual and instrumentally mediated experiences, and what a material hermeneutics entails. Zhang Kang supplements her research on Chinese scholars by drawing extensive connections to Ihde and other thinkers in the Western tradition, especially phenomenologists and pragmatists, in practice showing the complementarity and hybridity prized by postphenomenologists.

The final chapter is by **Ihde**. "Hawk: Predatory Vision" weaves together his critical insights into vision, first as a boy of red-tailed hawks, then of vision and imaging technologies over the course of his academic career, and here to surveillance technologies. This wide-ranging contribution, which weaves together a number of his ideas with the insights of Donna Haraway and feminist science studies, is yet another example of Ihde's openness to the ideas of others and other traditions, and it offers yet another way to think about postphenomenology and what it means to postphenomenologize. The chapter concludes with a promissory note from Ihde for one more book, *Material Hermeneutics: Reversing the Linguistic Term*, which he calls a "capstone project."

We hope that this volume encourages scholars to look more closely at Ihde's work, to see how postphenomenology has developed, especially among the community of postphenomenological scholars, and to encourage those from other disciplines and philosophical traditions to critically investigate how Ihde's analysis may

contribute to understanding and evaluating their fields. For those seeking to learn more about Ihde's work, *Postphenomenology and Technoscience: The Peking University Lectures* (2009) provides a concise overview of the main themes in his work. *Technology and the Lifeworld* (1991) is an earlier, longer, and richer exploration of those themes. Although now somewhat dated, Carl Mitcham (1994, pp. 75–78) offers a brief but informative overview of Ihde's early books relating to philosophy of technology in a section titled "Pragmatic Phenomenology of Technology," which, almost foreshadowing a connection that has become clearer more recently, discusses Dewey (and two of his American interpreters) and Ihde. Paul T. Durbin's *Philosophy of Technology: In Search of Discourse Synthesis* (2006, especially "Don Ihde and the Hermeneutics of Technological Perception," pp. 94–101) includes a summary of Ihde's work, especially as it relates to the philosophy of technology literature, and a brief explanation of Ihde's influence in SPT and broader philosophical circles. For an excellent and extensive overview of the main ideas of postphenomenology and many novel instantiations of the approach, see Robert Rosenberger and Peter-Paul Verbeek's "A Field Guide to Postphenomenology" (2015). The appendix to the present volume includes a bibliography of all of Ihde's book and the main books about his work, annotated by Ihde himself.

Although this volume can be seen as a celebration of Ihde's manifold contributions to philosophy of technology, we hope that its primary value comes from its consideration of postphenomenological insights and their origins, its initial exploration of theoretical extensions of his work, and its contribution to extending his work to other disciplines, technologies, and research trajectories. We hope that that readers will find this volume provides insight into how to think postphenomenologically, drawing from but never constrained to the fundamental concepts in Ihde's work, to both transform their understanding of the world and capture the excitement of philosophical investigation.

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Part I
Plumbing Phenomenological and Pragmatist Origins

Chapter 2
Introduction to *Sense and Significance* Reprint

Don Ihde

Philosophy is both an experience of the world and a thinking about that experience of the world. The Greeks claimed that the love of wisdom began in wonder. Oriental sages claimed that it began in suffering. But both rooted philosophy in experience—without this source philosophy soon withers and dies. In this respect philosophy is like the relationship between certain wisteria vines and the trees which they use as their hosts. The vine reaches the height it attains by encircling and climbing the trunk of the host tree, eventually reaching above the height of the tree itself. But, once in a while, the vine kills the very tree which supports it thus dooming the vine to a fall or death itself. Only so long as the tree continues to live can the vine stand full in the sun.

Phenomenology as philosophy begins in a call to return to the richness of human experience as the base for all subsequent knowledge. Of course phenomenology is not the first philosophy to issue this call. In our own American traditions in philosophy the "Golden Age" of pragmatism in the thought of John Dewey, William James and George Herbert Mead there was once such a call. But phenomenology is the more recent arrival and has the audacity to claim a rigor and comprehensiveness not often matched in philosophic investigation. Phenomenology begins its climb towards the sun by looking at the full ranges and possibilities of human experience.

In this phenomenology is timely. There is a pregnant readiness for the recollection of primal experience, particularly among students of recent years. Dissatisfied with the past, upset by the implications of the future, bored by the desert landscapes painted by the dominant forms of philosophy today, youthful thought has once again taken the turn towards the birthplace of philosophy. The battle cry is experimentation—"to the things themselves" even at the risk of sometimes desperate results. The search for alternate lifestyles, the flirtation with non-western forms of

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thought, even dangerous and often damning drug experience are all symptomatic of this experimental attitude towards experience.

I do not wish here to advocate phenomenology as a quick or simple therapy or salvation scheme in this arena where Western Civilization may be fighting a dying battle. But I do hold that only in a milieu open to experimentation can phenomenology begin to make its way. One cannot appreciate, much less understand, phenomenology without a sense of experimentation. The tribal language of "perspective variations," "free fantasy," "intuiting essences," concerns a careful and imaginatively directed concern with the limits and possibilities of experience.

In its Husserlian beginnings phenomenology was thought of as a new "science of experience" beginning in descriptive psychology. If the science metaphor is understood in its best sense as an open-ended, exploratory, exciting in discovery interrogation which results in *not* leaving things as they were, then it is indeed appropriate. Perhaps phenomenology is like science in another sense as well. To perform as a creative theoretical thinker it is necessary to change perspectives. The scientific thinker must abandon or at least suspend certain long held and habitual beliefs about things. He must begin to think in a new and often radically different way.

I remember the initial shock afforded me as a college freshman when taking my first serious course in the physical sciences. The professor, in order to justify his distance measurements between the earth and the sun, constantly regarded "nearly parallel" lines as parallel. I was appalled that science would begin by "cheating." My literal turn of mind was keeping me from entering the theoretical attitude which allowed the professor to "see" what he saw.

Eventually I learned from these "lies." Once their pedagogical usefulness began to open new vistas of thought which in turn allowed one entrance to undreamed of territory, the excitement involved in the theoretical attitude became irresistible. Phenomenology, like science in this respect, is also a conversion in perspective. Those who wish to learn phenomenology merely by reading texts, even those of the masters of the art, will remain essentially blind until this perspective is gained.

Those philosophers who constantly accuse phenomenologists of being "unclear," besides subtly attempting to make all the world fit into their mold, are often confused precisely because they have failed to discern the radical conversion needed to "see" what is to be seen. Their literal-mindedness is no different in kind than that of the perennial "common man" who historically fails to inhabit the imaginative perspective which allows the new to be seen. The "common man" of the Copernican era, insofar as his positivistic holding to his earthbound perspective holds, was quite correct in insisting that the sun sets and rises. But he also fails to see the possibility of inhabiting a different perspective, the imaginative perspective which places the thinker at that point which allows one to "see" that the earth moves around the sun. The Copernican abandons that earthbound context to inhabit this previously forbidden standpoint. Moreover, what the Copernican says must remain a hopeless confusion to the listener until the listener can "see" from the point of view of the new standpoint.

Phenomenology's conversion is similar in type and calls for the inhabiting of its own perspective—only it wishes to attain a universal end in placing the whole realm

of experience and its possibilities under scrutiny. Why is it and how is it that we inhabit perspectives? And, how is it that within these perspectives there are characteristic "shapes" to our views such that there is always an area taken for granted? And how do we take that which is taken for granted and make it the theme for discovering precisely what constitutes the perspective which we often did not even know we had previously inhabited? Phenomenology's conversion is such that its first aim is to make all which has been familiar strange.

To say that phenomenology is a different perspective is not yet to show what is seen from that perspective. Showing is what I am attempting in these essays. They begin simply with common areas of experience, with the "familiar" experiences of hearing, seeing, and touching. They are first a kind of descriptive psychology which is the first step towards the more radical implications of phenomenology. I begin with the simple question: what *does* "show itself" when I experience sound, sight, and touch?

I have tried to avoid too much tribal language. In their original forms these essays were addressed to different audiences at different times. They do not even demand that one be a phenomenologist to understand—but they are invitations to begin to look at the world phenomenologically. My philosophical "technology" is, as it were, submerged. I do presuppose the "phenomenological reduction" and only when that is ultimately seen can these essays be understood to be more than descriptive psychology. Husserl held that the psychology which becomes possible within phenomenology is ultimately justified and grounded only transcendentally, after the psychology can be viewed as transcendental itself. It was here that the radicality of the change of perspective is seen for what it was implicitly all along. The phenomenologist may begin with the "lie" that descriptive psychology is a starting place— but his aim is a transcendental turn towards an ontology of human experience.

But even the beginning calls for a few methological notes. The "phenomenological reduction" which provides the basis for the perspective may be simplified in this context as a set of investigative "rules." (1) *Suspend explanations, describe*. This rule is simple to state, but in fact difficult to effect. Phenomenology calls for the suspension of "theories" which attempt to go behind or under experience, for a suspension of "constructs" which are elaborated to account for such and such a phenomenon. In this phenomenology seems at first to be both anti-scientific and anti-metaphysical. In actuality its aim is to be *pre*scientific and *pre*metaphysical. Thus all physiology, all psychological theories which would account for experience on the basis of something unexperienced are "bracketed," placed out of play.

Does this mean, then, that the phenomenologist seeks some "pure" experience prior to theorizing? Is there a "pure" description? The answer must be *no*. The rule is a directive aim—it has a particular function in getting phenomenology started. It is a way of directing one's "looking." The descriptive rule turns out, in practice, to have two sides. First, it directs one's attention to what appears within whatever context is being questioned. It is a call to center one's focus upon the "thing itself."

It is almost amazing how much we, the actual experiencers, take little note of our experience. The descriptive rule asks that we pause and look carefully at what we experience. It usually does not take long, once so directed, for us to begin to note

many things that either we were unaware of or only vaguely aware of before having our focus so directed. Nor is it long before the serious investigator of experience begins to be overwhelmed by the sheer complexity of this richness. A frequent first result of attempting to describe is to encounter a certain sense of limitation in being able to describe the phenomenon. Words seem to fail one and one finds himself struggling with language, with metaphor, with new ways to express what is discovered. In this respect the early result of description is counter-traditional, counter-conventional. But it is this because of what the "things" teach us.

There is also a complementary function to the descriptive rule. The purposeful suspension of our habitual explanations also begins to create an awareness of how powerful and constant these taken for granted predispositions are. We begin to find our "world" is clothed with ideas as Husserl contended. Our expectations and beliefs not only guide *what* we see, but coupled to the first function of the descriptive rule, begin to be understood not only as a habitual guide but also as a way of "overing over" much of what is possible within experience.

The descriptive rule in both its functions is the phenomenologist's version of the scientist's "lie" which pedagogically shocks us out of our initial literal-mindedness and opens to us to a new way of viewing things.

(2) *Vary possibilities*. Once the descriptive way is opened the first foray into the field is expansive rather than reductionist. Already the curious investigator may suspect that our previously vague or unnoted experiences hide more wealth than expected and that if one such simple conversion shows the way to this that other discoveries lie ahead. This suspicion is what lies within the phenomenologist's use of perspective and imaginative variations.

One seeks to exhaust, insofar as possible, the full range of possibilities lying within any given region of investigation. Again the rule is simple to state but difficult to practice. How can one exhaust possibilities? But also again the question belies a misunderstanding of the role of perspective variations. The function of variations is to further open the field of investigation and to preclude too rapid closure. Its aim is to problematize experience in such a way that most of the usual theories of experience are forever seen to be oversimple reductions *of* experience.

Within this technique of variations I often have students utilize what I call a catalogue of experiential aspects. For example, within a given duration of time note as many features of what goes on as possible. One usually finds (a) that an amazing multiplicity of phenomenon occur and (b) that in taking note of this multiplicity one's awareness gradually becomes more and more keen in relation to what is "observed."

(3) *Seek structures.* The use of variations does not stand alone. If its function is to prevent reductionism and to expand the field and complexity of the field to an almost endless set of investigations, it needs a complementary rule. Phenomenology seeks not only the richness of experience, but its "shape." It seeks the structures of perception, of language, of the lifeworld. Variations are supposed to gradually reveal those structures both in terms of their boundaries and in terms of their characteristic features. Through variations the famed "resistance of the invariant" is to be found—

although not all invariants are clear and distinct as Husserl so well discovered. There are "inexact essences" just as there are "concepts with blurred edges."

The catalogue device, fortunately, is not the only means available to the phenomenologist. Often there is an all-at-once experiential availability to a structure. For example, in many of my essays I refer to the encompassing character of the Sound field, sound "surrounds" one. Cataloguing may detect this but only very clumsily, but in the paradigm case of listening to music this quality of sound experience becomes immediately available.

One word of caution is due here. A serious problem confronted by phenomenologists is the temptation at too fast closure. It is all too possible to discern features that in their context and dimension are clear enough, but upon further investigation turn out to be related to a wider context and deeper levels of phenomena so that what is initially taken as "apodictic" turns out to be relatively "inadequate." In relation to the investigations reported here if the attention to the experience of sound has taught me anything it is that no sensory realm is so limited or so clear in structure that *direct* implications can be drawn from it. In fact some of the apparent "antivisualism" expressed in my earlier essays on sound I now perceive to be unfair to vision—the problem today is not the reduction of a world to a seen or visualist world, but a reduction *of* vision itself. But l did not appreciate this without the lessons learned in the investigation of auditory experience. Perception lies imbedded within a tradition of interpretation and the first lessons of the descriptive rule must be returned to again and again.

Perception is seen here to have another side, inextricably bound to our sensory experience of the world in our "linguistic" experience of the world. Ultimately phenomenology cannot speak of perception *and* of language, its "unit" of meaning is perception-language, or better said, being-in-the-world. Thus the second part of the collection though differing in style belongs to the same question embodied in the nascent whole of these essays. How is the philosopher to understand his being-in-the world?

The reader should probably not approach this collection with the expectation that the latent whole is what is important. Rather, the parts should exercise their own separate interests. This is really an *introduction* to phenomenology. Each essay should therefore stand alone as well as in relation to the others. This is particularly apparent with the several essays on sound. There is often a minor repetition at the beginnings of these articles because they appeared in various magazines, but each takes its own direction and emphasis. In the second section some of the essays were directed to specific problems, but again the directions are multiple rather than single. Reading, like the beginning of phenomenology, should let the things teach what they will. If there is a unity to the question which animates these essays it will show itself.

Phenomenology is both an experience of the world and a questioning of that experience. But the philosopher's experience of the world is also a transformation of the meaning of the world. In that lies the excitement of philosophical investigation.

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