Wolfram Hogrebe

INDISTINCTNESS AND DISUNION

ABSTRACT

In the papers the concept of indistinctness is examined. In the author's view, indistinctness is present in all the aspects of the world. The problem of indistinctness is apprehended in four steps, namely, by 1. claiming and proving that the world of indistinctness and vagueness enhances our creative intelligence; 2. examining who and when discovered the advantages of indistinctness; 3. maintaining that precision is usually of advantage, but not always; 4. proving the misery of reductionistic programmes.

Keywords: indistinctness, disunion, space of meaning, space of being, Turing machine, Galileo Galilei, Leibniz, Willard Van Orman Quine, Wilhelm Dilthey.

It is sometimes good to begin with a consoling triviality—which in this case will be the concession that the notion of indistinctness is itself indistinct. From measurement readings to conceptions which rely on interpretation, from the *objet ambigu* to obscure magical incantations, from semantic vagueness and every sort of ambiguity to unavoidable, i.e. objective, inexactness—indistinctness is everywhere, often to our chagrin and at times to our advantage. I am, however, far removed from pursuing such petty and boring distinctions. What I do intend I will try to outline in four progressively (and very noticeably) less detailed subsections. First of all,

1. THE WORLD OF INDISTINCTNESS AND VAGUENESS ENHANCES OUR CREATIVE INTELLIGENCE

Of course the very term "world" is indistinct. Translated into the mathematical and logical language of set theory, it would have to mean something like a set of all sets—which, as we know since Bertrand Russell, can lead us onto rather slippery ground. However, it can also be used untranslated and uninter-

preted, simply to express our apprehending of wholeness. There can be no doubt that in this uninterpreted sense we know that we inhabit a spot within a whole. Why not? For the reason that true doubt is possible only where it contests the claims of knowledge, but we are unable to prove that we inhabit a whole, because how could it be contested? Here we are evidently faced with a non-conceptual, sub-semantic kind of certitude, a fundamental self-knowledge about our existence. Thus, our contestable knowledge is preceded by our inner certitude of the circumstance that we inhabit a spot within a whole. Already on the level of the epistemic base we are simultaneously and uninterpretedly idioand holomorphic, and this is what forms our "scenic existence." So, from the very start we exist in conditions of meaning which since Wilhelm Dilthey and Edmund Husserl are in their entirety defined as the lifeworld. Only in such a lifeworld can there exist reasons, numbers, meanings, the menacing and the affectionate, as well as that which is clear-cut, precisely measured and formed, and whose progress can be exactly calculated. In short: our lifeworld, as we can still today learn from Husserl, is the unfortunate "forgotten fundament of meaning" of not just the natural sciences but our entire cultural existence.²

The conditions of meaning are characterised by relations which take place on a polar plane, e.g. in juxtapositions like subjective—objective, material—formal, quantitative—qualitative, internal—external, global—local, extentional—intentional, etc. Such relations are not part of a broader genus, hence are called categorial. They form the structural base of the conditions of meaning, dimensionalise them, and open a *space of meaning* of which the *space of reason* (Wilfried Sellars) is only an element or subset. This "space of meaning" exists precisely in the same sense in which conditions of meaning exist. The *space of meaning* is simultaneously the graspable *space of being* in which we live. To be means to "occur as"—i.e. to "occur in conditions of meaning." Meaningless existence is nonsense. The first and so far only philosopher to give this any thought was Friedrich Wilhelm Joseph von Schelling.³ Certainly not the conservatively-minded Georg Wilhelm Friedrich Hegel.

This *space of meaning* is significant in all its aspects, and precisely for this reason open to interpretation, i.e. generally ambiguous. We live in a world full of contrasts which are graded, can escalate or diminish. This is the world we find ourselves in first, where human childhood and our individual growth be-

¹ Cf. Hogrebe, W. 2009. *Riskante Lebensnähe. Die szenische Existenz des Menschen* [Risky Proximity to Life: the Scenic Existence of Men]. Berlin.

² Cf. Husserl, E. 1970 (1936). *Die Krisis der europäischen Wissenschaften und die transzendentale Phänomenologie* [The Crisis of European Sciences and Transcendental Philosophy]. Carr, D. (Trans.). Evanston: Northwestern Univesity Press), § 9; also cf. Schwemmer, O. 1997. *Die kulturelle Existenz des Menschen* [The Cultural Existence of Human Beings]. Berlin.

³ Cf. Hogrebe, W. 1989. *Prädikation und Genesis* [Predication and Genesis. Metaphysics as Fundamental Heuristics Beginning from Schelling's "The Ages of the World"]. Frankfurt a. M.

gins. It is here that we learn to cooperate, though our efforts in this respect sometimes are under our equally strong competitive drive. In the long run an adolescent mankind, like an adolescent human being, needs reliability, predictability, justice, accuracy and precision as steadying forces. This is why argumentation, logical conclusion, figures and documentation—all themselves manifestations of meaning—move to the forefront of the space of meaning. Elaborate craftsmanship increasingly submitted to the demands of geometrical precision, and when Aristotle, in the first book of his Nicomachean Ethics, remarked that we should "not look for the same precision (ἀκριβεία) in everything" for the simple reason that "a carpenter and a geometrician approach the right-angle in different ways,"4 the always firmly praxis-rooted and down-to-earth Stagirite could not have known that this diversity of precision, this warranty of tolerance for indistinctness, carried an explosive load which would detonate nearly two millenia later with Galileo Gailei (1564–1641) and his statement of a fundamental split between two accessways to the world, which could not be retreated from at will.

In his 1623 book *The Assayer* (Il Saggiatore) Galiei made the since famous claim that the Book of Nature, or the Universe, was not written in the language of the carpenter but the geometrician, and was therefore incomprehensible to the carpenter, i.e. us. In order to decipher this book's specifically-written content, we first have to learn a new language, the language of geometry and mathematics, as without it is "humanly impossible to understand a single word of it (*é impossibile a intenderne umamente parola*)" and one is left "wandering around in a dark labyrinth" (*per un oscuro laberinto*)." However, while for Aristotle the carpenter and geometrician, though different, still belonged together as craftsmen in the practical sense, they definitely drifted apart after Galileo Galilei: the carpenter, and with him all who were unversed in the language of mathematics, were left in the sphere of the vague and obscure and only geometricians and mathematicians were able to read the Book of Nature.

Nonetheless Galileo still believed that both directions—revelation through nature and revelation through holy scriptures—belonged together. Although he did already then plead for

"the thesis that each side requires its own hermeneutics. This places Galilei [...] on the crossroads between two cultures, which in the contemporary era have often enough proven no longer capable of finding to each other: one

⁴ Aristotle. 2000. *Nicomachean Ethics*. Crisp, R.(Trans., Ed.). St. Anne's College, Cmbridge: Cambridge University Press, 12–13.

⁵ For the quotations cf. Galileo Galilei. 2005. *Schriften. Briefe. Dokumente* (Writings, Letters, Documents). Mudry, A. (Ed.). Wiesbaden. Horst Bredekamp offers a picture that is much more diversified than the common interpretations in 2007. *Galilei als Künstler* [Galileo as Artist]. Berlin, 328 sqq.

⁶ Wikisource.

based on understanding human and broader meaning relations, the other on the explication of external concreteness."

This disunion was of decisive import for the history of the world and is also responsible for the progress of indistinctness today. Since Galilei, the paths by which we access the world have been growing apart, and this is true for the entire *condition humaine*. Mathematical naturalism has distanced itself from comprehending humanism, the former remaining clear and precise, the latter essentially vague and obscure (even if quite able to provide convincing evidence for its claims).

In fact what we are dealing with here is the universalisation of an old picture which even its protagonists are unaware of. Since Hesiod literature has repeatedly shown people faced with crucial choices, a convention whose evolution Wolfgang Harms investigated some years ago in his still readable book *Homo* viator in bivio. 8 Literature has always portrayed situations in which people, similarly to Hercules at the crossroads, had to make choices of decisive import for them. Such decisions were symbolised by the letter Y, whose forked part indicated the disunion determined by such choices. For our purposes we can apply this model to mankind as such, i.e. universalise it. Mankind as a whole is also upon a frequently-dividing path, and one such historical—and still valid bifurcation began with what Galileo Galilei pointed to and carried through. His methodical disconnection of the mathematical and comprehending paths to nature has remained intact until today. A similar split can occur between modernisation and its established regulations and obligations—and it is precisely this disunion, first (and still validly) analysed by Joachim Ritter in connection with Hegel, that underlies today's global politics. 10

Nonetheless, there were always voices which contested Galilei's disunion theory. Not necessarily in the sense that one of its elements could be replaced with the other, but in the sense that also measurable access ways to nature occasionally led through areas which escaped a clear definition. The history of science offers many excellent examples. Quite instructive is the turbulent history of the concept "gene." In the early 20th century, when genetics was still in its

⁷ Hoffmann, T. S. 2007. *Philosophie in Italien* [Philosophy in Italy]. Wiesbaden, 336–67.

⁸ Harms, W. 1970. *Homo Viator in Bivio. Studien zur Bildlichkeit des Weges* [Homo Viator in Bivio. Studies on the Metaphoricity of the Path]. Munich.

⁹ Ibid., 40 sqq.

¹⁰ Cf. Ritter, J. 1956. "Europäisierung als europäisches Problem." [Europeanisation as a European Problem]. In: idem. *Metaphysik und Politik* [Metaphysics and politics]. Frankfurt a. M. 1969, 321–340, here page 329: "What leads on into the future has no continuity with what has become history." And page 333: "The bridge between the old and new learning is missing." This particular and irreversible severance can only be compensated for (reconciled) by more education. For more on this cf. Ritter, J. 1974. "Die Aufgabe der Geisteswissenschaften in der modernen Gesellschaft" [The Task of the Human Sciences in Modern Society]. In: idem. *Subjektivität* [Subjectivity]. Frankfurt. a. M., 105–140.

fledgeling phase, the term was understood as "the postulated unity of heredity, something like an 'empty' concept." This emptiness was richly imbued with content only after research showed that in the case of living organisms we were dealing with nucleic acid macromolecules, which in the mid-20th century allowed the so-called "genotype's" identification as deoxyribonucleic acid and distinction from the "phenotype" which underlay the structure and functions of proteins.

Finally, the term was even reconceptualised, or in a sense dematerialised into a byword for genetic information. Hans-Jörg Rheinberger, to whom I owe this observation, summed up the strange evolution of the gene concept as follows:

"Whereas on one hand the epistemic object 'gene' took on the material form of a macromolecule, hence manifested itself in a class of substance, on the other it simultaneously assumed the quite immaterial form of information, hence disembodied itself [...] to the transferable form of biological meaning. The gene became semantically charged." ¹²

This example gives good insight into the interplay between indistinctness and distinctness, both also underlie heuristic processes in the natural sciences, which programmatically go out from "epistemic objects" like "atom," "molecule," and "gene," as well as in mathematics, if one were to trace the path of $\sqrt{2}$ from the antique until today. Although still disputed, an example closer to our times is the incompressible and hence impenetrable number Ω representing the halting probability of all algorithms (Gregory Chaitin). ¹³

Nonetheless, the indistinctness at the outset of all programmes is always *the* heuristic provocation: "[E]pistemic objects [...] have indistinct edges; and it is this indistinctness which constitutes their challenge. Whereas the instruments with which research is conducted usually have distinct edges ..."¹⁴

We are unable to free ourselves of this asymmetry, therefore it is quite often precisely the instruments which hinder us in exploring the potential of vague but promising speculation. However, they also protect us from simply slipping

¹¹ Rheinberger, H.-J. 2012. "Epistemisches Ding und Verkörperung [The Epistemic Object and Embodiment]. In: *Verkörperungen* [Embodiments]. Blum, A. L., J. M. Krois, H.-J. Rheinberger (Eds.). Berlin, 3–9.

¹² Ibid., 7. For more and also extensively cf. Rheinberger, H.-J. 2006. *Experimental Systeme und Epistemische Dinge. Eine Geschichte der Proteinsynthese im Reagenzglas* (Experimental Systems and Epistemic Objects. A History of Test-tube Protein Synthesis]. Frankfurt M.

¹³ Chaitin, G. 2000. *The Unknowable*. Singapore, 98 sqq. Here also cf. Bromand, J. 2009. *Grenzen des Wissens* (The Boundaries of Knowledge]. Paderborn, 122 sqq.

¹⁴ Rheinberger, H.-J. 2012, op. cit., 3. The form in which we, in our condition of half-baked knowledge (conjectures, premonitions), nonetheless remain effective as researchers is the experiment. For more on this cf. Hans-Jörg Rheinberger's lecture: 2014. "Über die Kunst das Unbekannte zu erforschen." [On the Art of Investigating the Unknown]. *Neue Zürcher Zeitung*, June 9, 2014.

on the ice of *phlogiston*-like conjecture. The laboratory with its apparatus is a relentless rectifier, but sometimes also a club lounge in which wrongly-forgotten (and only seldom retrieved) ideas are discussed.

However, it is indeed indistinctness that stimulate us cognitively—as philosophers with good psychological insight have always known. Hegel, for instance, says that the spirit occupies itself with objects only as long as they harbour mystery, the non-obvious. ¹⁵ Objective vagueness stimulates our will to know and our inventiveness—in short, our creative potential. And usually we have nothing at our disposal but our will to know, also in cases where we are simply seeking greater precision. There are, however, objective boundaries here which are connected with the complexity of the conditions and known in equal measure to physicists, meteorologists and football players. If the world's conditions were by nature more distinct—like in a world made of building blocks—there would probably be nothing like spirit. Instincts need constance in narrow tolerance but the spirit starts out in unlimited (i.e. constant) tolerance, in contrariness to expectations, in other words—in indistinctness. ¹⁶

Such a full-bodied thesis, however, calls for immediate passage to the next issue, namely

2. WHO AND WHEN DISCOVERED THE ADVANTAGES OF INDISTINCTNESS?

It is highly improbable that mankind suddenly just began to value indistinctness. How can one value something that is deficient? People noticed, however, that indistinctness carried with it certain advantages related to the ancient idea of "saving the phenomena" (σώζειν τὰ φαινόμενα). Who wishes to embrace contexts must do so from a distance, who desires detail, however, must draw closer. Who wants to bring out the whole must "dim the lights." Such dimness is also advantageous for cognitive-theoretical reasons if what we are after is experiencing the whole—which no one knew better than the Romantics.

In any case, this is how the evaluation of the indiscreet, i.e. the vague and diffuse, began after Descartes' monopolisation of crystal-clear distinctness and discretion. This also led to the emergence in 1750 of a new discipline, which Alexander Baumgarten (1714–1762) named "aesthetics." Baumgarten noticed that darkness carried an enormous wealth on semantic content which needed to

¹⁵Cf. Hegel, G. W. F. 1975. *Aesthetics. Lectures on Fine Art.* Knox, T. M. (Trans.), 2 vols, Oxford: Clarendon Press.

¹⁶ Some analytical philosophers have meanwhile also realised this. Cf. Unger, P. 2014. *Empty Ideas. A Critic of Analytic Philosophy*. Oxford.

¹⁷ Cf. Mittelstraß, J. 1962. *Die Rettung der Phänomene. Ursprung und Geschichte eines antiken Forschungsprinzips* [Saving the Phenomena. The Origin and History of an Antique Research Principle]. Berlin.

be brought to light, either by means of art or thought. For Baumgarten "darkness" was not only the mother of error, but also "an indispensable prerequisite for discovering the truth, as nature makes no leap from darkness into the clarity of thought. The path from night leads only through dawn to midday." Thoughts which bring out the whole even if they are somewhat vague (cognitiones obscurae vel confusae) are not bivalent in the usual sense—i.e. true or false—but, as a monovalent "yes," simply nice. Here Baumgarten went out from a claim by Leibniz (1646–1716), the father of an explicative theory of pure observation:

"Every soul knows infinity—knows everything—but knows it in a confused way. It is like what happens when I walk along the seashore: in hearing the roar of the sea, I hear—though without distinguishing them—the individual 'little' noises of the waves out of which that total noise is made up." ¹⁹

This is also the source of the true epistemic power of art. Artists "see" what has been painted well and what badly, and are also able to explain why up to a point, but beyond it "all they can say is that the works that displease them lack a certain *je-ne-sais-quoi* (French for 'I don't know what') ..."²⁰

The poet expresses himself in a similar way when, in an initial confession, he declares: "I don't know what it should mean that I am so sad ...". All expressive utterances draw on the power of the vague to bring forth something which moves us as a whole, possibly even as a "fairy tale from ancient times." Indistinctness extends the scope of expressive articulation to the border of stammering or even silence. In this sense the precise vocabulary of discreet conditions is not expressive and insofar both the discreet and indiscreet actually belong together.

This was precisely what Leibniz wanted to show as the last thinker professing a universal *reunion*, but to no avail—Galilei's split theory won the upper hand. The human and natural sciences adopted an opposing stance which was groundless under the circumstances. Both *essentially* strove to propound truth, although *methodically* along different paths. This led to the establishment of two realms, which Dilthey called the realm of explanation and the realm of understanding. However, neither realm needs to hide from the other when it comes to their balance of precision. Even such a naturalistic thinker as Willard Van

¹⁸ Aesthetica § 7, Schweizer, H. R. 1973. Ästhetik als Philosophie der sinnlichen Erkenntnis [Aesthetics as the Philosophy of Sensuous Cognition]. Basel–Stuttgart, 109.

¹⁹ Leibniz, G. W. 2004. *Principles of Nature and Grace Based on Reason*. www. earlymoderntexts.com/assets/pdfs/leibniz1714a.pdf, copyright 2010–2015, all rights reserved. Jonathan Bennett, 6.

²⁰ Leibniz, G. W. 2004. *Meditations on Knowledge, Truth and Ideas*. www.earlymoderntexts.com/assets/pdfs/leibniz1684.pdf, copyright 2010–2015, Jonathan Bennett, 2.

Orman Quine (1908–2000) appreciated the subject-specific precision advantage of indistinct over exact vocabulary:

"A painter with his limited palette can achieve a more exact rendition by thinning and combining his colours than a mosaicist with his limited variety of tile [...]. The clever layering of vague things has similar advantages over the fitting together of precise technical terms."²¹

The sphere of vagueness has its own form of precision.

In the sphere of experience, e.g. in historical conditions, we usually need the painter's palette and not mosaic stones to articulate classified phenomena like the Renaissance or the Baroque, but also experiences like melancholy or nostalgia, which escape precise description. Of course we could use mosaic stones here—as proven by the virtuosity of Byzantine art—but then we would have to do without Michelangelo Merisi da Caravaggio's chiaroscuro. Thus we arrive at a kind of interim conclusion, that

3. PRECISION IS USUALLY OF ADVANTAGE, BUT NOT ALWAYS

If we were to sum up at this point, we could say that indistinctness in the lifeworldly and historical sense is rooted in the sphere of meaning-apprehending agents. Exactness is of advantage when we, despite remaining in our lifeworld, i.e. in our scenic existence, pursue explication and technical application. In such cases we resort to a *discreet* ontology which is best represented in digital devices (the Turing machine). Apprehension of meaning, or the realm of indistinctness, requires an *indiscreet* ontology in which all relations are a matter of context and degree.

Such gradation is naturally alien to discreet ontology unless it tries to broaden its logical apparatus by infinite-valued systems (fuzzy logic). However, as these must consistently all be reducible to two-valued systems, here too we in fact never leave the ground of discreet ontology. Transition, contrast, similarity and all kinds of modulation like nuance and mood belong to the domain of indiscreet ontology. This ontology proves itself in the life-practical sense in that it offers a speed advantage in the realm of the indistinct and vague. Of course there are analogical representations at play here too, but everything takes place really fast. The analogical models are practically indispensable, at least in situations where precision and nuance are important but time is scarce.²²

We will easily see how this is a life-practical advantage over processing information by means of discreet ontology if we imagine a scene in a crime

²¹ Quine, W. V. O. 1960. Word and Objects. MIT Press, 5.

²² Hogrebe, W. 2013. *Metaphysik und Mantik* [Metaphysics and Manticism]. Berlin, 177.

thriller: someone enters a dark cellar in the night, and there sees four armed figures at a table weakly lit by a swaying lamp. Unless this is a trusted group of conspirators to which this someone belongs, he/she will sense with lightning speed that the situation is "risky." Such indiscreet-ontology-driven apprehension is important, among others because it activates our flight and rapprochement instincts. Were we to write a computer programme for this kind of perception with the help of discreet ontology, it would quickly transcend the disk space of computers. What is needed here are stories that convey the situational context.

In any case, the architectures of computers and brains do not appear to be isomorphic. All computers are Turing machines, and if all intuitively calculable functions are also Turing-calculable—as has been assumed since Alonzo Church—then evidently brains, like other organisms, are not calculable in this sense.

However this may be, the human sciences will remain indispensable as long as the context-sensitivity and resulting complexity of life conditions make them inaccessible to calculation. This is why restricting complexity has become a new train in cognition theory with studies currently still in progress.²³ What is in progress should not be interrupted, so let us pass to the fourth and very brief final point of our reflections on indistinctness and disunion:

4. THE MISERY OF REDUCTIONISTIC PROGRAMMES

The postulate that indiscreet ontology must be converted into the discreet variant—if need be even at the cost of phenomena—would perforce entail adherence to a reductionistic programme which puts *method* before *phenomenon*. One can well imagine what this would mean for man as the object of science. Unfortunately quite popular today, reductionism is only possible given the partial destruction of phenomena. This is not *iconoclasm* but—please excuse the neologism—*phenomenoclasm*. However, both these destructive options are attacks on the human being in its metaphysical depth, i.e. on man as a sense-oriented being.²⁴

Thank goodness I in my moribundity have never yet encountered a physician who would back such a reductionistic approach. Thus, we can say that our reflections carry the following message: methodical differences are praiseworthy

²³ Especially noteworthy here are studies by Graham Priest, Patrick Grimm, Gregory Chaitin and others. For more cf. Joachim Bromand's abovementioned lucid study *The Boundaries of Knowledge*.

²⁴ Cf. Hogrebe, W. 1974. Kant und das Problem einer transzendentalen Semantik [Kant and the Problem of Transcendental Semantics]. Freiburg–Munich, 43, footnote. 80: "Every field of meaning [...] is always a semantic field, a field of sense." In this context cf. a new conception: Gabriel, M. 2015. Fields of Sense. A New Realistic Ontology. Edinburgh.

insofar as they do not infringe on our orientation on truth. One can also link this to a *modified* maxim from Juvenal (ca. 60–138), which is always quoted but no one can verify, ²⁵ or its later pronouncement by Claudio Aquaviva (1543–1615), the fifth and first non-Spanish Superior General of the Society of Jesus: *Fortiter in veritate, suaviter in methodo.* ²⁶ Some accounts also contain an important complement: *constanter in se.*

However, this principle of faith to oneself opens another issue, which would be hard to discuss under the heading "indistinctness and disunion."

ABOUT THE AUTHOR — professor of theoretical philosophy, University of Bonn, Regina-Pacis-Weg 3, 53113 Bonn (affiliation), Germany, since 2013—professor emeritus. In 2006 he was awarded by the professorship of the Gadamer Foundation at the Heidelberg University (German name: Ruprecht-Karls-Universität Heidelberg), Germany. 1999–2002— President of the German Philosophical Society. Main publications: 1974. Kant und das Problem einer transzendentalen Semantik. Freiburg-München; 1977. Archäologische Bedeutungspostulate. Freiburg-München; 1987. Deutsche Philosophie im XIX. Jahrhundert. Kritik der idealistischen Vernunft. München; 1989. Prädikation und Genesis. Frankfurt a. M.; 1992. Metaphysik und Mantik. Frankfurt a. M. 1997. Ahnung und Erkenntnis. Frankfurt a. M. 1997; 1999. Subjektivität. München; 2006. Echo des Nichtwissens. Berlin; 2007. Wirklichkeit des Denkens. Heidelberg; 2009. Riskante Lebensnähe. Die szenische Existenz des Menschen. Berlin; 2011. Beuysianismus. Expressive Strukturen der Moderne. Paderborn; 2013. Der implizite Mensch. Akademie Verlag, Berlin; 2014. Philosophischer Surrealismus. Berlin.

E-mail: wolfram@hogrebe.info

²⁵ I was also unable to verify this passage by Juvenal. Theo Kobusch referred me to similar passages in the *Book of Wisdom* [Old Testament] and Boethius, for which I am grateful. Practically all we have is Aquaviva. This is also a historical indistinctness whose clearance must be left to a future effort.

²⁶ Industriae ad curandos animae morbos 2,4.