12 Wittgensteinian 'Therapy', Experimental Philosophy, and Metaphilosophical Naturalism

Eugen Fischer

Introduction

There is a striking difference between scientists and scientifically-minded philosophers: Scientists have not been afraid of engaging with Wittgenstein. In cognitive psychology, for example, his ideas about family-resemblance concepts inspired theoretical and experimental work on prototypes in categorisation.[1] In computational linguistics, his idea that questions about words' meaning can be addressed by examining their use inspired the research programme of distributional semantics,[2] with seminal contributions by the group of his student Margaret Masterman.[3] In contrast, Wittgenstein's apparently anti-naturalistic views on philosophical method have generally prevented meaningful engagement with Wittgensteinian ideas by philosophers who wish to deploy scientific methods or findings. Conversely, many Wittgensteinian philosophers equated such methodological naturalism with 'scientism' and largely ignored developments in the cognitive or other sciences.

This chapter will argue that the advent of experimental philosophy, the most 'hands-on' form of methodological naturalism to date, facilitates a fresh, mutually beneficial, dialogue between Wittgensteinian philosophers and methodological naturalists:[4] I will argue that a prominent strand of experimental philosophy promotes a new kind of methodological natu-

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1 See, for example, Eleanor Rosch, "Principles of Categorisation," in *Cognition and Categorization*, eds. E. Rosch and B. Lloyd (Hillsdale, NJ: Erlbaum, 1978), 27–48, and J.A. Hampton, "Testing the Prototype Theory of Concepts," *Journal of Memory and Language* 34 (1995): 686–708.

2 See K. Erk, "Vector Space Models of Word Meaning and Phrase Meaning: A Survey," *Language and Linguistics Compass* 6 (2012): 635–653 and P.D. Turney and P. Pantel, "From Frequency to Meaning: Vector Space Models of Semantics," *Journal of Artificial Intelligence Research* 37 (2010): 141–188.

3 See K. Spärck-Jones, *Synonymy and Semantic Classification* (PhD. diss., University of Cambridge. Cambridge Language Research Unit, 1964).

4 This methodological stance is independent from naturalism as a metaphysical position. See J. Collins, "Naturalism Without Metaphysics," in *Experimental Philosophy, Rationalism, and Naturalism*, eds. E. Fischer and J. Collins (London: Routledge, 2015), 85–109. This paper is exclusively concerned with the methodological stance.

ralism, 'meta-philosophical naturalism', which is consistent with broadly Wittgensteinian aims and strictures (Section 1). This new naturalism facilitates research that can provide empirical foundations precisely for the 'therapeutic' aspects of Wittgenstein's conception of philosophy that *prima facie* seem most antithetical to methodological naturalism (Section 2). Recent psycholinguistic research is a case in point: It can vindicate Wittgensteinian ideas about how an 'urge to misunderstand' engenders merely apparent problems—like the classic 'problem of perception'[5]—which call for a therapeutic approach (Section 3). Using cognitive therapy[6] as a model, we will see that these insights into the cognitive sources of the problem already provide the best part of what is needed for therapy (Section 4).

This argument will not address exegetical concerns. (There is no question of attributing to Wittgenstein concepts developed only decades after his death, and little point in speculating how his views would have evolved in response to them.) Rather, this programmatic paper seeks to bring into view fresh avenues for philosophical research: Research in experimental philosophy can provide new, empirical, foundations for some key aspects of Wittgenstein's conception of philosophy (while remaining orthogonal to some others). Conversely, taking into account Wittgensteinian ideas about the nature and genesis of some philosophical problems can open up fresh applications for the tools of experimental philosophy—in a natural extension of one of its prominent strands.

1. A New Naturalism

1.1 Metaphilosophical Naturalism

Experimental philosophy imports empirical methods and findings from psychology into philosophy. Different projects in experimental philosophy deploy the new means towards different ends. The '*Warrant Project*' responds to the practice, common in mainstream analytic philosophy, to use intuitions about hypothetical cases, considered in thought experiments, as evidence for or against philosophical theories.[7] It is interested in the *evidentiary value* of specific intuitions: in whether the mere fact

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5 See Tim Crane, "The Problem of Perception," in *The Stanford Encyclopedia of Philosophy*, ed. N. Zalta, Summer 2015. http://plato.stanford.edu/entries/perception-problem/. See also A.D. Smith, *The Problem of Perception* (Cambridge, MA: Harvard University Press, 2002).

6 See J.S. Beck, *Cognitive Therapy: Basics and Beyond*, 2nd ed. (New York: Guilford, 2011) and A.T. Beck, N.A. Rector, N. Stolar, and P. Grant, *Schizophrenia: Cognitive Theory, Research, and Therapy* (New York: Guildford, 2008).

7 See Y. Cath, "Reflective Equilibrium," in *Oxford Handbook of Philosophical Methodology*, eds. H. Cappelen, T. Szabo Gendler, and J. Hawthorne (Oxford: Oxford University Press, 2016), 213–230, J. Nagel, "Intuitions and Experiments: A Defence of the Case Method in Epistemology," *Philosophy and Phenomenological Research* 85 (2012): 495–527, and J.M. Weinberg, "Intuitions," in *Oxford Handbook of Philosophical Methodology*, 287–308.

that thinkers have them, as and when they do, speaks for their truth.[8] It seeks to develop a naturalised epistemology of intuitions which determines intuitions' evidentiary value on an empirical basis.

The Warrant Project's most ambitious strand, variously characterised as *'cognitive epistemology'*,[9] the 'Sources Project',[10] or the 'underwater part' of 'iceberg epistemology',[11] seeks to develop and experimentally test explanations of intuitive judgments which trace their source to automatic cognitive processes that go on below the waterline of conscious awareness. This research seeks an understanding of these underlying processes that allows us to determine under what conditions we may (not) trust the intuitions they generate.[12] One approach seeks to trace intuitions back to processes that are generally reliable but predictably lead to cognitive illusions,[13] under specific circumstances.[14] Such explanations can vindicate intuitions generated under normal circumstances[15] and debunk intuitions formed under specific circumstances identified as vitiating.[16]

Experimental philosophy is often regarded as the epitome of methodological naturalism. But at any rate, the Sources Project promotes a new form of naturalism. Traditional or *first-order methodological naturalism* seeks to address philosophical problems about a topic X (say, the mind or perception) by building on scientific findings about X. The present projects, by contrast, wish to contribute to the resolution of philosophical

8 See J. Alexander, *Experimental Philosophy* (Cambridge: Polity 2012), R. Mallon, "Experimental Philosophy," in *Oxford Handbook of Philosophical Methodology*, 410–433, and S. Stich and K. Tobia, "Experimental Philosophy and the Philosophical Tradition," in *Blackwell Companion to Experimental Philosophy*, eds. J. Sytsma and W. Buckwalter (Malden, MA: Wiley Blackwell, 2016), 5–21.

9 E. Fischer, "Philosophical Intuitions, Heuristics, and Metaphors," *Synthese* 191 (2014): 569–606.

10 J. Pust, "Intuition," in *The Stanford Encyclopedia of Philosophy*.

11 D.K. Henderson and T. Horgan, *The Epistemological Spectrum: At the Interface of Cognitive Science and Conceptual Analysis* (Oxford: Oxford University Press, 2011).

12 J.M. Weinberg, "Humans as Instruments: Or, the Inevitability of Experimental Philosophy," in *Experimental Philosophy, Rationalism, and Naturalism*, eds. E. Fischer and J. Collins (London: Routledge, 2015), 171–187.

13 R. Pohl, ed., *Cognitive Illusions* (New York: Psychology Press, 2004).

14 E.g., one line of research traces intuitive knowledge-attributions to a 'mind-reading' competency, which is argued to be generally reliable (K. Boyd and J. Nagel, "The Reliability of Epistemic Intuitions," in *Current Controversies in Experimental Philosophy*, eds. E. Machery and E. O'Neill (London: Routledge, 2014), 109–127) but subject to biases, including an egocentrism (J. Alexander, C. Gonnerman, and J. Waterman, "Salience, and Epistemic Egocentrism," in *Advances in Experimental Epistemology*, ed. J. Beebe (London: Bloomsbury, 2015), 97–118) and focal bias (M. Gerken and J. Beebe, "Knowledge in and Out of Contrast," *Nous* 50 (2016): 133–164).

15 E.g., Nagel, "Intuitions and Experiments".

16 E.g., E. Fischer and P.E. Engelhardt, "Intuitions' Linguistic Sources: Stereotypes, Intuitions, and Illusions," *Mind & Language* 31 (2016): 65–101.

problems or debates about X by turning to scientific—psychological— findings about *the way people think about X*, in general or when doing philosophy. Fischer and Collins called this *'meta-philosophical naturalism'*.[17] This new 'higher-order' naturalism is distinct from, and implies no commitment to, first-order methodological naturalism.

This independence is illustrated by recent work on the 'problem of perception'. This problem arises from paradoxical arguments that build on intuitions about cases of illusion and hallucination.[18] Their proponents tend to consider *verbal* descriptions of *hypothetical* cases, rather than any actual cases; indeed, they stress they merely assume that the sort of hallucinations they are describing are *possible*. Recent contributions to cognitive epistemology[19] explore the hypothesis that their intuitions about what else is true in the cases described are due to the routine language comprehension process of stereotypical enrichment, which has us automatically extract a maximum of information from verbal and written utterances.[20] This body of research develops and experimentally tests psycholinguistic explanations of these intuitions, with a view to assessing whether philosophers have warrant to accept their intuitions in the absence of further argument. To help assess philosophical claims about sense-perception, this research thus draws on, and generates, empirical findings about how people talk, think, and reason about sense-perception. Where first-order naturalism would have philosophers turn to the psychology or neuroscience of perception, this work turns to the psychologies of language and judgment. This contribution to the Warrant Project exemplifies meta-philosophical naturalism but violates the strictures of first-order methodological naturalism, demonstrating their independence.

1.2 A Wittgensteinian Perspective

As we shall see, this new naturalism—unlike its first-order cousin—is open to the pursuit of broadly Wittgensteinian aims, within broadly Wittgensteinian strictures. Much work in the Warrant Project is directed at discrediting

17 E. Fischer and J. Collins, "Rationalism and Naturalism in the Age of Experimental Philosophy," in *Experimental Philosophy, Rationalism and Naturalism*, eds. E. Fischer and J. Collins (London: Routledge, 2015), 3–33.

18 See T. Crane, "The Problem of Perception," in *The Stanford Encyclopedia of Philosophy*; H. Robinson, *Perception* (London: Routledge, 2001); A.D. Smith, *The Problem of Perception* (Cambridge, MA: Harvard University Press, 2002).

19 E. Fischer, "Intuitions, Heuristics, Metaphors"; Fischer and Collins, "Rationalism and Naturalism"; E. Fischer and P.E. Engelhardt, "Stereotypical Inferences: Philosophical Relevance and Psycholinguistic Toolkit," *Ratio* (2017). doi 10.1111/rati.12174.

20 S.C. Levinson, *Presumptive Meanings: The Theory of Generalized Conversational Implicature* (Cambridge, MA: MIT Press, 2000).

intuition-driven philosophical theorizing.[21] This critical impetus is consistent with different metaphilosophical outlooks: It is consistent with the view that philosophers should construct theories that rely not on intuitions, but on scientific evidence, to support their claims and solve their problems (first-order naturalism). But it is also consistent with the more Wittgensteinian view that—some—philosophical problems should not be addressed by constructing philosophical theories but by 'diagnostic' approaches that 'dissolve' them, on the basis of (e.g., psycholinguistic) insights into 'the workings of language' or other processes that shape philosophical thought.

Let's develop the commonly neglected second possibility from a currently prominent perspective. Ongoing metaphilosophical debates concern the role of intuitions in philosophy.[22] What role intuitions actually play in philosophical work is an empirical question. We can address it through case-studies on philosophical texts: by identifying expressions of intuitive judgments in these texts, and examining the dialectical, heuristic, argumentative, and justificatory roles intuitions play in them.[23] To what extent philosophical authors attribute evidentiary value to intuitions and adduce them as evidence for theories is a focus of ongoing debate.[24] However, a series of case-studies on early modern and 20th-century analytic texts[25] revealed that intuitive judgments also play a role at a prior and perhaps more fundamental stage of philosophical thought, namely, in generating distinctive, and distinctively philosophical, problems.

A good example is the aforementioned 'problem of perception'[26]: "How is it possible that we perceive physical objects around us, when we use our five senses?" As standardly conceived (ibid.), this question is motivated by at least two related paradoxes, known as 'arguments from illusion' and 'from hallucination'. Both swiftly lead from brief descriptions of cases of illusion or hallucination, *via* intuitions about what else is also true of these cases,[27] to the conclusion [q] that when we use our senses, we are aware

21 See Alexander, *Experimental Philosophy*, 70–88; cf. J.M. Weinberg, "How to Challenge Intuitions Empirically Without Risking Scepticism," *Midwest Studies in Philosophy* 31 (2007): 318–343.
22 See H. Cappelen, *Philosophy Without Intuitions* (Oxford: Oxford University Press, 2012); Fischer and Collins, "Rationalism and Naturalism,"; J.M. Weinberg, "Intuitions," in *Oxford Handbook of Philosophical Methodology*, eds. H. Cappelen, T. Szabo Gendler, and J. Hawthorne (Oxford: Oxford University Press, 2016), 287–308.
23 See Cappelen, *Philosophy Without Intuitions* and E. Fischer, *Philosophical Delusion and Its Therapy* (New York: Routledge, 2011).
24 See Cappelen, *Philosophy*, M. Deutsch, *The Myth of the Intuitive* (Cambridge, MA: MIT Press, 2015), and J.M. Weinberg, "Humans as Instruments: Or, the Inevitability of Experimental Philosophy" in *Experimental Philosophy, Rationalism, and Naturalism*, eds. E. Fischer and J. Collins (London: Routledge, 2015), 171–187.
25 See Fischer, *Philosophical Delusion*.
26 See Crane, "The Problem of Perception,"; A.D. Smith, *The Problem of Perception* (Cambridge, MA: Harvard University Press, 2002).
27 See Robinson, *Perception*, 54.

only of subjective perceptions or sense-data. The apparent clash with the common-sense conviction that [p] we see the tables and chairs around us, then provides a distinctive pre-scientific motivation for the question of how this is possible, namely, in view of the apparent conflict[28]: "How is it possible that p, *given that q*?" This apparent conflict may engender a sense of intellectual disquiet, make the very possibility of the otherwise humdrum fact (that p) seem puzzling and engender the kind of sense of wonder in the light of familiar facts or phenomena that Plato regarded as the starting-point of philosophising (*Theaetetus* 155b-d).[29]

Classical *theoretical responses* (indirect realism, phenomenalism, etc.) seek to solve the problem and answer the question, mainly by showing that the parties to the apparent conflict are compatible, when properly understood. Such theories typically seek to honor the underlying intuitions and reconcile them with the background beliefs with which they appear to clash. *Diagnostic responses*, by contrast, seek to reconstruct the underlying reasoning that motivates the question and expose defects in that reasoning, with a view to showing the question ill-motivated or meaningless (e.g., Austin).[30] Where successful, such responses can be said to 'dissolve' the initial problem by showing its proponents that they have no right to believe there is any such difficulty [q] as they took to stand in the way of the familiar fact [p]: that they imagined a difficulty where they have no warrant to believe there is one [q is unwarranted]. In such a case, their question ('How is it possible that p, *given that q*?') may well be intelligible. But it will be ill-motivated and articulate a 'pseudo-problem' engendered by an imaginary difficulty.[31]

28   See Fischer, *Philosophical Delusion*, 206–11; cf. Paul Horwich, *Wittgenstein's Metaphilosophy* (Oxford: Oxford University Press, 2012).

29   The paradoxes underlying such problems can have roots, identified by Wittgenstein, ranging from adherence to unrealistic ideals of precision and rigour in natural language (PI §§ 98–103) to systematic reliance on "false analogies accepted into language" (BT 409, cp. BT 408, 427, PI §§ 90, 94, 11, 112, 115). In the light of recent metaphor research in psychology and artificial intelligence, the latter may be conceived as systematic but task-specific *over*reliance on linguistically realised conceptual metaphors (see Fischer, "Intuitions, Heuristics, Metaphors" and (in press) "Two Analogy-strategies: The Cases of Mind Metaphors and Introspection." *Connection Science*.) For a helpful general, if idealised, model of how distinctively philosophical problems arise through paradox, see Horwich, *Wittgenstein's Metaphilosophy*, 50–60, cp. 25–9. See fn. 33 and 36 for Wittgenstein references.

30   J.L. Austin, *Sense and Sensibilia* (Oxford: Oxford University Press, 1962).

31   More traditional diagnostic approaches (e.g., 'therapeutic diagnosis', as defined, for example, by Michael Williams) seek to show the targeted questions meaningless, rather than ill-motivated, but convinced few philosophers without prior commitment to them. See Michael Williams, U*nnatural Doubts: Epistemological Realism and the Basis of Scepticism* (Princeton, NJ: Princeton University Press, 1996), xvi. For the development of the present notion of epistemic (rather than semantic) problem-dissolution, see Eugen Fischer, "Wittgenstein's Non-cognitivism—Explained and Vindicated," *Synthese* 162 (2008): 53–84 and his *Philosophical Delusion*. Severin Schroeder magisterially

Where familiar first-order naturalism has philosophers draw on scientific findings to support a theoretical response to problems that may be imaginary, the metaphilosophical naturalism associated with experimental philosophy's Sources Project remains open to either kind of response: Whether theoretical or diagnostic approaches are appropriate depends, for any particular problem of this form, on whether the motivating reasoning actually is sound or defective. Typically, this reasoning is largely intuitive and proceeds from, or crucially involves, intuitive judgments. Where this is the case, experimental philosophy's Sources Project can determine which response is appropriate. Its 'restrictionist' proponents have sought debunking explanations of intuitions.[32] If successful, such explanations of intuitions which underlie philosophical problems provide empirical foundations for diagnostic approaches and vindicate their broadly Wittgensteinian aim of 'dissolving' particular philosophical problems without residue.[33]

At least where they expose misjudgments or fallacies, competent thinkers would not be expected to commit, diagnostic analyses need empirical foundations: On their own, logical reconstructions of arguments cannot establish that glaring misjudgments or fallacies have been made: Hermeneutic principles of charity impose constraints on attributions of 'irrationality' and make it difficult to attribute such cognitive misdeeds to competent thinkers.[34] Medium-strength principles of charity demand that we justify such attributions by providing empirically supported explanations of why competent thinkers make the mistakes attributed to them.[35]

Such an empirically grounded diagnostic approach keeps in line with Wittgenstein's provocative suggestion that "taking care of a philosophical problem is not a matter of pronouncing new truths about the subject of the investigation" (BT 416). Debunking explanations of relevant intuitions will establish new truths about the underlying cognitive processes and the way people think about the subject of the philosophical investigation (e.g., sense-perception). But, unlike theoretical responses

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develops Wittgensteinian ideas about genesis and treatment of 'pseudo-problems'. See Severin Schroeder, *Wittgenstein: The Way Out of the Fly-bottle* (Malden, MA: Polity, 2006), 151–168.

32 See Weinberg, "Challenge". Cf. J. Knobe, and S. Nichols, "An Experimental Philosophy Manifesto," in *Experimental Philosophy*, eds. J. Knobe and S. Nichols (Oxford: Oxford University Press, 2008), 3–14.

33 Ludwig Wittgenstein, *The Big Typescript TS 213*, eds. and trans. by C.G. Luckardt and M.A.E. Aue (Oxford: Blackwell, 2005), 421. For brevity's sake, we here focus on intuitions. The Sources Project also targets—e.g., religious or moral—beliefs (Knobe & Nichols "Manifesto") whose debunking explanation helps dissolve problems motivated by reasoning presupposing them.

34 See J.E. Adler, "Fallacies and Alternative Interpretations," *Australasian Journal of Philosophy* 72 (1994): 271–282 and M. Lewinski, "The Paradox of Charity," *Informal Logic* 32 (2012): 403–439.

35 See P. Thagard and R.E. Nisbett, "Rationality and Charity," *Philosophy of Science* 50 (1983): 250–267.

to philosophical problems, they will not even purport to establish new truths about *that* subject.

Accordingly, an empirically grounded diagnostic approach is also consistent with Wittgenstein's striking repudiation of *philosophical* theorizing:

> We may not advance any kind of theory. There must not be anything hypothetical in our considerations. We must do away with all explanation, and description alone must take its place. And this description gets . . . its purpose from the philosophical problems. These are, of course, not empirical problems; they are to be solved by looking into the workings of our language . . .[36]

Of course, cognitive epistemology (the Sources Project) seeks to explain why thinkers have certain intuitions (e.g., about certain linguistically described cases), and these explanations are informed by psychological theories (e.g., about language comprehension) and rely on hypotheses which are experimentally testable. But these explanations, theories, and hypotheses are psychological, not philosophical. They are used to empirically answer *meta*philosophical questions about how thinkers speak, think, and reason about X, when doing philosophy, not philosophical questions about X. In the context of a diagnostic approach, these questions are not treated as empirical, but as expressions of confusion, resulting from defective reasoning—driven also by routine language processes (like the above-mentioned process of stereotypical enrichment).

At any rate, one strand of experimental philosophy can thus contribute to giving fresh content to Wittgensteinian ideas that *prima facie* seem in direct conflict with methodological naturalism. Next, we shall consider how it cannot merely lend empirical substance to diagnostic approaches but provide a fresh empirical rationale for therapeutic conceptions of philosophy, which may appear to be even more opposed to a naturalist outlook.

2. Empirical Foundations for Therapeutic Philosophy

2.1 Philosophy as Therapy

More or less substantive therapeutic conceptions of philosophy can be obtained by identifying similarities between kinds of therapy and ways of doing philosophy, at the level of individual features (surface-similarities) or of relations between several elements in each domain (analogies). Surface similarities motivate the metaphorical extension of single words (e.g., 'elephant'), namely, to attribute one or more stereotypically

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36 Ludwig Wittgenstein, *Philosophical Investigations*, trans. G.E.M. Anscombe, 3rd ed. (Oxford: Blackwell, 2001), §109.

268   *Eugen Fisher*

associated features (clumsy, huge, has excellent memory), to elements of a new domain ('John is an elephant').[37] This motivates superficial talk of 'retail therapy' (like literal therapy, it—supposedly—makes someone feel better). By contrast, comprehensive analogies license the extension of several related words ("you don't have to be *bright* to *see* her point; it's *clear*"). These extensions are motivated by conceptual metaphors,[38] i.e., comprehensive mappings from one domain (e.g., vision) to another (cognition), which preserve inferential relations between the terms extended.[39] Where comprehensive analogies between domains[40] license such extension, a new, wider category (e.g., of 'vision', or 'therapy', or 'health') may be formed.[41]

A substantive therapeutic conception of philosophy can be obtained by identifying comprehensive analogies between particular areas or practices of philosophy, and either specific forms or the generic domain of psychotherapy.[42] On the 'generic approach', the metaphorical extension of 'therapy' is part-and-parcel of the wholesale extension of a family of related generic terms (including 'health', 'illness', 'disease', 'symptom', 'diagnosis', 'therapy'), first (and not without problems) from somatic to psychological phenomena,[43] then, second (and again not without problems), from these psychological phenomena to philosophy.[44] Accordingly,

37 See H. Bortfeld and M.S. McGlone, "The Continuum of Metaphor Processing," *Metaphor and Symbol* 16 (2001): 75–86 and John Searle, "Metaphor," in *Metaphor and Thought*, ed. A. Ortony, 2nd ed. (Cambridge: Cambridge University Press, 1993), 83–111.

38 See G. Lakoff and M. Johnson, *Metaphors We Live By* (Chicago: Chicago University Press, 1980) and G. Lakoff and M. Johnson, *Philosophy in the Flesh* (New York: Basic Books, 1999).

39 See Fischer, "Intuitions, Heuristics, Metaphors".

40 See D. Gentner, "Structure Mapping: A Theoretical Framework for Analogy," *Cognitive Science* 7 (1983): 155–170.

41 See B.F. Bowdle and D. Gentner, "The Career of Metaphor," *Psychological Review* 112 (2005): 193–216.

42 The 'specific approach' led some followers and scholars of Wittgenstein to construct more (e.g., M. Lazerowitz, "The Passing of an Illusion," in *Necessity and Language*, eds. M. Lazerowitz and A. Ambrose (Beckenham: Croom Helm, 1985), 200–240) or identify less (e.g., G.P. Baker and P.M.S. Hacker, *Wittgenstein: Meaning and Understanding: Essays on the Philosophical Investigations* (Oxford: Blackwell, 1983), 288; E. Harcourt, "Wittgenstein and Psychoanalysis," in *The Blackwell Companion to Wittgenstein*, eds. H.-J. Glock and J. Hyman (Oxford: Blackwell, 2017), 651–665) comprehensive analogies between Wittgenstein's approach and the specific form of psychotherapy dominant in his day, viz., Freudian psychoanalysis (cf. G.P. Baker, "Wittgenstein's Method and Psychoanalysis," in his, *Wittgenstein's Method: Neglected Aspects* (Oxford: Blackwell, 2004), 205–222, B.A. Farrell, "An Appraisal of Therapeutic Positivism," *Mind* 55 (1946): 25–48 and 133–150, and J. Wisdom, "Philosophy and Psychoanalysis," in his *Philosophy and Psychoanalysis* (Oxford: Blackwell, 1964), 169–181.

43 See M. Boyle, *Schizophrenia: A Scientific Delusion*, 2nd ed. (London: Routledge, 2000).

44 See E. Fischer, "Diseases of the Understanding and the Need for Philosophical Therapy," *Philosophical Investigations* 34 (2011): 22–54 and P. Tarras, "'Philosophie'

recent proponents of therapeutic conceptions of philosophy have begun to spell out the underlying analogies between the domain of psychotherapy and intended applications in philosophy[45] and to examine how their careless handling may mislead.[46]

In a nutshell:[47] A common notion of *mental health* is shaped by Plato's ideal of a balanced, rational agent who can master his feelings and impulses sufficiently well to be truly autonomous (*Republic* 443c—444e). People count as mentally *ill* when they fall significantly short of this ideal and have *emotional problems* (unwarranted and distressing or disabling emotions they cannot control) or *behavioral problems* (unwarranted behavior they cannot control), due to a *disease* i.e., a literally or metaphorically 'inner' process that is not under people's direct control, which brings about *symptoms* (emotions, thoughts, mental states) that are constitutive of or engender those problems. A process may qualify as *pathological*, i.e., a 'disease' in virtue of these consequences, rather than any abnormality of or in its course.[48] A *therapy* is a procedure that seeks to cure the illness, i.e., to put an end to the emotional or behavioural problems (symptom relief) and prevent their recurrence (relapse prevention). It should be based on a *diagnosis* that identifies the *disease* or process causing those problems, in a given case. To further extend these notions to philosophy, we need to identify an analogous structure in that domain. This has been attempted for philosophical efforts addressing emotional and behavioral problems which arise in ordinary life ('philosophical therapy', e.g., Stoics) and in philosophical reflection ('therapeutic philosophy'), respectively.

Wittgenstein can be regarded as engaged in efforts of the second kind. He often refers to emotional responses to philosophical questions or ruminations and explicitly seeks to liberate himself and others from these intellectual 'disquietudes'.[49] Since he takes them to be engendered by wrong analogies,[50] 'disorder in our concepts',[51] misleading expressions,[52] and 'misinterpretation',[53] he clearly regards them as unwarranted, if

Grammatisch Betrachtet: Wittgensteins Begriff der Therapie." *Kriterion—Journal of Philosophy* 28 (2014): 75–97.

45 See K. Banicki, "Philosophy as Therapy: Towards a Conceptual Model," *Philosophical Papers* 43 (2014): 7–31. See also Fischer, *Philosophical Delusion* and Fischer, "Diseases of Understanding".

46 Cf. B. De Mesel, "On Wittgenstein's Comparison of Philosophical Methods to Therapies," *International Journal of Philosophical Studies* 23 (2015): 566–583.

47 For more detail, see Fischer, "Diseases of Understanding," 43–49.

48 D. Clouser, C. Culver, and B. Gert, "Malady," in *What Is Disease?* eds. J. Humber and R. Almeder (Totowa, NJ: Humana Press, 1997), 173–219.

49 BT 409, 415, 416, 421, 431, PI §111. See also Ludwig Wittgenstein, *Culture and Value*, rev. ed. (Oxford: Blackwell, 1998), 50.

50 BT 409.

51 BT 421.

52 BT 416.

53 PI §111.

natural.[54] To such unwarranted emotional responses to philosophical questions, we can add unwarranted behavioral responses: Wherever such a question is ill-motivated, efforts to answer them will be equally unwarranted—at any rate, in the absence of an independent rationale.

However, to amount to emotional or behavioural problems in need of therapy, such unwarranted disquietudes and efforts need to be due to some sort of disease, i.e., to (literally or figuratively) inner processes that are not under the thinkers' direct control. Many metaphilosophical remarks of Wittgenstein's are consistent with such an aetiological view: Wittgenstein attributes the 'disquietudes' he targets to an 'urge to misunderstand',[55] i.e., a propensity that is not under subjects' control. He identifies a propensity to spontaneously make unwarranted inferences, in line with certain invalid 'thought-schemas',[56] from common-sense convictions or observations to puzzling conclusions.[57] Through a series of simple 'experiments',[58] he elicits such inferences in his own thought and thus exposes certain urges he may share with others.[59] When such uncontrollable urges to leap to conclusions engender distressing disquietudes (or simply have thinkers embark on unwarranted endeavours) the latter can qualify as *emotional (or behavioral) problems*, and the urges as *diseases* which he *diagnoses*, for a start, in himself,[60] by eliciting the spontaneous conclusions that are their *symptoms*. Accordingly, Wittgenstein maintains "the philosopher is someone who has to cure in himself many diseases of the understanding, before he can arrive at the notions of common sense",[61] namely, before he can return to the common-sense notions from which unwarranted inferences he could not help making drove him to bogus puzzles. Where these problems are entirely bogus, the only genuine problems facing the philosopher are the emotional and behavioral problems they engender. In this case, one may reasonably regard the resolution of *such* problems as one's 'entire [!] task', as Wittgenstein strikingly does.[62]

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54   CV 22.
55   PI §109.
56   PI §597.
57   See Fischer, *Philosophical Delusion*, 257–261.
58   PI §167.
59   E.g. PI §§ 166, 169, 173, 174, 176; cf. E. Fischer, "A Cognitive Self-therapy—PI 138–97," in *Wittgenstein at Work: Method in the "Philosophical Investigations"*, eds. E. Ammereller and E. Fischer (London: Routledge, 2004), 86–126.
60   For exegetical argument that Wittgenstein often is his own main 'patient', see Fischer, "Cognitive Self-therapy" and *Philosophical Delusion*, 261–264.
61   CV, 50.
62   BT 421, CV 50. In these passages, Wittgenstein asserts dispelling certain disquietudes is the sole purpose of his philosophizing. This is reasonable *for him*: Since he is generally careful not to accept the puzzling conclusions to which his urges have him leap, he does not engage in any theoretical efforts to reconcile them with common sense, and his urges fail to engender anything describable as behavioral problems.

This conception of philosophy posits the sort of analogy to psychotherapy that would motivate the extension of the concept-cluster reviewed from the domain of psychotherapy to that of philosophy: If cognitive processes we cannot control drive us, in philosophical thought, to agonize over ill-motivated questions and make unwarranted efforts to answer them, i.e., if such processes make our lives miserable with gratuitous worries and have us misspend them on pointless endeavors we would desist from if we were more fully masters of ourselves, then we philosophers can be said to have 'emotional and behavioral problems' that are caused by 'diseases' and call for 'therapy'.

2.2 Empirical Foundations

This argument for the need for therapy in philosophy relies on an *empirical assumption*:

> (EA) There are ill-motivated philosophical questions which are formulated due to cognitive (or other psychological) processes thinkers cannot directly control.

These processes may be normal in their nature and course and qualify as 'diseases' in virtue of causing emotional and behavioral problems,[63] under specific circumstances. But without (literally or metaphorically) 'inner' sources *beyond thinkers' direct control*, unwarranted worries about ill-motivated questions, and pointless efforts to solve them, will not qualify as emotional and behavioral problems, respectively, and there will be no need for anything analogous to psychotherapy.

So, is that crucial assumption true? This metaphilosophical question brings in experimental philosophy: The strand we discussed above is all about empirically developing and evaluating assumptions like this. The Sources Project considers assumptions about the cognitive sources of philosophically relevant intuitions and beliefs,[64] including intuitions and beliefs that motivate philosophical questions and problems; it turns such assumptions into experimentally testable hypotheses, and experimentally tests them; and it focuses precisely on assumptions about the role of automatic cognitive processes which we cannot directly control.[65]

One of the major findings of cognitive and social psychology[66] over the last decades has been the extent to which our judgments, decisions,

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63 Cf. Clouser, et al., "Malady", 190.
64 See Knobe and Nichols, "Manifesto", 7–8.
65 See Fischer, "Intuitions, Heuristics, Metaphors" and J. Nagel, "The Psychological Basis of the Harman-Vogel Paradox," *Philosophers' Imprint* 11(5) (2011): 1–28.
66 See J.St. B.T. Evans, *Thinking Twice: Two Minds in One Brain* (Oxford: Oxford University Press, 2010), D. Kahneman, *Thinking Fast and Slow* (London: Allen Lane, 2011),

and actions are shaped by cognitive processes which are *automatic*: effortless, unconscious, initiated regardless of the subject's goals, and not alterable in their course, once initiated.[67] All these properties are operationally defined (e.g., 'effortless' means performance requires little attention, i.e., is little affected by multitasking); they are thus measureable and gradable.[68]

Intuitions, as conceived by cognitive psychologists—and experimental philosophy's Sources Project—are judgments that are generated by automatic inferences, i.e., by highly automatic processes that duplicate rule-governed inferences, in particular inferences governed by heuristic rules.[69] The speed and amount of effort required are used as a metacognitive cue to assess plausibility.[70] Intuitions result from highly automatic processes and immediately strike the thinker as plausible, regardless of whether she accepts those judgements upon further reflection. Some intuitions are *cognitive illusions*: predictable misjudgments which are automatic in origin, modifiable by conscious reflection, but typically strike thinkers as intuitively compelling even once they have realized they cannot be right (if they realize).[71]

Above (Section 1.2), we noted that some philosophical questions are motivated by perceived conflicts between intuitions, or consequences derived from them, and background beliefs or common-sense convictions. Where such intuitions, first, qualify in the aetiological psychological sense explained and, second, are cognitive illusions unsupported by further argument, we are dealing with an ill-motivated pseudo-problem to whose formulation cognitive processes beyond our direct control make an essential contribution. We highlighted an approach from the Sources Project that seeks to construct psychological explanations of intuitions that trace them back to automatic cognitive processes that are *g*enerally *re*liable but predictably lead to *c*ognitive *i*llusions under specific circumstances (Section 1.1; cf. fn.14). By explaining the intuitions at the root of such a philosophical problem, and helping to expose them as cognitive illusions, such 'GRECI explanations'[72] can support the empirical

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   and T.D. Wilson, *Strangers to Ourselves: Discovering the Adaptive Unconscious* (Cambridge, MA: Harvard University Press, 2002).

67 J.A. Bargh, "The Four Horsemen of Automaticity," in *Handbook of Social Cognition*, eds. R. Wyer and T. Srull, (Hillsdale: Earlbaum, 1994), 1–40.

68 A. Moors and J. De Houwer, "Automaticity: A Theoretical and Conceptual Analysis," *Psychological Bulletin* 132 (2006): 297–326.

69 D. Kahneman and S. Frederick, "A Model of Heuristic Judgment," in *The Cambridge Handbook of Thinking and Reasoning*, eds. K.J. Holyoak and R. Morrison (Cambridge: Cambridge University Press, 2005), 267–293.

70 V.A. Thompson, J.A. Prowse Turner, and G. Pennycook, "Intuition, Reason, and Metacognition," *Cognitive Psychology* 63 (2011): 107–140.

71 Pohl, *Cognitive Illusions*, 2–3.

72 As we have called them: Fischer and Engelhardt, "Intuitions' Linguistic Sources," 67.

assumption (EA) on which the present therapeutic conception of philosophy relies, and show that, sometimes, philosophy needs therapy.

If successful, this approach can simultaneously show that nothing need be constitutionally wrong with the 'patients' targeted by therapeutic philosophy: Suppose that a successful GRECI explanation identifies vitiating circumstances which obtain in the formulation of the given philosophical problem and interfere with the generally reliable automatic process. Proponents of the problem are then in a similar position as mountaineers with altitude sickness, whose symptoms (headache, weakness, etc.) can befall even the physically fittest, due to the interaction of normal physiological processes with environmental conditions (oxygen shortage at higher altitudes with lower atmospheric pressure): Their 'symptoms' (disquieting puzzlement in the light of paradoxical intuitions) are ultimately due to the interaction between a normal (and generally reliable) cognitive process and specific vitiating circumstances, which obtain in the formulation of the specific problem and may recur systematically in certain kinds of philosophical thought.

3. A Case in Point

To lend substance to these general ideas and provide evidence for the EA, this therapeutic conception of philosophy relies on, let's return to our previous example: The 'problem of perception'[73] is generated by two paradoxes, the 'arguments from illusion' and 'from hallucination' (Section 1.2). These rely on particular intuitions about cases of 'illusion' and hallucination[74]: For example, when a round coin, viewed sideways, looks elliptical, the viewer is not aware of the round coin, but of something elliptical; or: when Shakespeare's Macbeth sees a dagger, there is something the hallucinating man sees.[75] Typically, proponents of those arguments do not provide any independent arguments to support these intuitive judgments.[76] Their warrant for accepting these intuitions in the face of tensions with background beliefs therefore depends upon the intuitions' evidentiary value: on whether the mere fact that the arguments' proponents have them, as and when they do, speaks for their truth.[77]

Suppose a GRECI explanation traces these intuitions to a particular automatic cognitive process and shows that, in the formulation of the paradoxes,

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73 See Crane, "The Problem of Perception" and Smith, *The Problem of Perception*.

74 See Robinson, *Perception*, 54.

75 These arguments first conclude that in these particular cases, subjects are aware of sense-data, rather than physical objects; their second half then transfers this conclusion to all cases of visual perception (Crane 2015; Smith 2002). We focus here on the key intuitions driving the first half.

76 See Fischer and Engelhardt, "Intuitions' Linguistic Sources" and Fischer, *Philosophical Delusion*, 167–200.

77 See Fischer and Collins, *Rationalism and Naturalism*.

this process operates under vitiating conditions and engenders cognitive illusions. Such an account will provide an undermining defeater[78] and show that the crucial intuitions lack evidentiary value—so that proponents of the argument typically lack warrant for accepting them and the further conclusions that rely on them that generate the problem of perception. This will show the problem ill-motivated. Simultaneously, it will reveal that the problem was formulated due to automatic processes thinkers cannot directly control. That is, such an account will support the existence claim (EA) by showing that the problem of perception is a case in point.

Such an explanation has been developed and experimentally tested by Eugen Fischer and Paul Engelhardt.[79] It traces the targeted intuitions to the routine utterance comprehension process of stereotypical enrichment.[80] This process automatically fills in detail: In the absence of explicit indications to the contrary, competent language users spontaneously infer that the situation talked about conforms to the stereotypes associated with the words used (e.g., that the 'secretary' is female). Verbs can be associated with typical features of actions, agents, and objects (e.g., the object 'seen' is located in front of the viewer, the person to whom something 'seems F' is inclined to think it is F, etc.).[81] These features can make up complex, internally structured situation-stereotypes, known as 'generalized situation schemas'.[82] Embedded in a communicative practice that requires speakers to make stereotype-deviations explicit,[83] this process is generally reliable but leads to cognitive illusions under specific circumstances.[84]

The proposed account of arguments from illusion and hallucination builds on the observation that, in formulating these arguments, philosophers use appearance- and perception-verbs in a rarefied phenomenal sense which serves to describe subjects' experience only[85] and is devoid

78 See J. Pollock, "Reliability and Justified Belief," *Canadian Journal of Philosophy* 14 (1984): 103–114.

79 See and E. Fischer and P.E. Engelhardt, "Diagnostic Experimental Philosophy," *Teorema* 36(3) (2017): 117–137. See also Fischer and Engelhardt, "Intuitions' Linguistic Sources" and "Stereotypical Inferences", and E. Fischer, P.E. Engelhardt, and A. Herbelot, "Intuitions and Illusions: From Explanation and Experiment to Assessment," in *Experimental Philosophy, Rationalism and Naturalism*, eds. E. Fischer and J. Collins (London: Routledge, 2015), 259–292.

80 See Levinson, *Presumptive Meanings*.

81 See K. McRae, T.R. Ferretti, and I. Amyote, "Thematic Roles as Verb-specific Concepts," *Language and Cognitive Processes* 12 (1997): 137–176.

82 D.E. Rumelhart, "Schemata: The Building Blocks of Cognition," in *Theoretical Issues in Reading Comprehension*, eds. R. Spiro, B. Bruce, and W. Brewer (Hillsdale, NJ: Erlbaum, 1980), 33–58.

83 See Levinson, *Presumptive Meanings*.

84 See Fischer and Engelhardt, "Intuitions' Linguistic Sources".

85 See A.J. Ayer, *The Problem of Knowledge* (London: Penguin, 1956/1990) and F. Macpherson, "The Philosophy and Psychology of Hallucination," in *Hallucination: Philosophy and Psychology*, eds. F. Macpherson and D. Platchias (Cambridge, MA: MIT Press, 2013), 1–38.

of stereotypical (doxastic, spatial or existential) implications these verbs carry in their dominant use in ordinary discourse. Arguably, this kind of situation recurs in philosophy, as philosophers repeatedly take words that have well-established uses in ordinary discourse and adapt them for special philosophical purposes.

While perfectly legitimate, such 'tampering with words' can have 'unforeseen repercussions':[86] Dominant uses of words shape our habits of inference. When we encounter a polysemous word far more frequently in a dominant sense or use than in any of its other uses, we cannot help making the kind of inferences we habitually, and typically rightly, make when we encounter the word in that dominant sense.[87] This leads to predictable fallacies: Even competent language users may leap to conclusions licensed—only—by the dominant (typically literal) sense of a word, when encountering the word in a more rarefied (technical or metaphorical) use.

This happens in particular

 (i) when a rarefied use is not explicitly marked by riders like 'in a special sense'[88] and
(ii) when the situation-stereotype associated with the dominant sense can contribute to interpreting utterances using the rarefied sense.[89]

Conditions (i) and (ii) typically apply, respectively, to phenomenal uses of appearance-verbs in arguments from illusion[90] and to phenomenal uses of perception-verbs in arguments from hallucination.[91]

On this account, the intuitions at the root of the latter arguments are generated by contextually inappropriate stereotypical inferences, namely, spatial and existential inferences, e.g., from "Macbeth sees a dagger" to "There is something before Macbeth's eyes"—if no physical object (as per the assumption that he is hallucinating), then a sense-datum, which must be before his mind's eye. The crucial intuition about hallucination is thus due to the interplay of two factors: Contextually inappropriate

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86 See Austin, *Sense and Sensibilia*, 63.
87 See R. Giora, *On Our Mind: Salience, Context, and Figurative Language* (Oxford: Oxford University Press, 2003), G.B. Simpson and C. Burgess, "Activation and Selection Processes in the Recognition of Ambiguous Words," *Journal of Experimental Psychology: Human Perception and Performance* 11 (1985): 28–39, and R.E. Till, E.F. Mross, and W. Kintsch, "Time Course of Priming for Associate and Inference Words in a Discourse Context," *Journal of Verbal Learning and Verbal Behaviour* 16 (1988): 283–298.
88 See S. Givoni, R. Giora, and D. Bergerbest, "How Speakers Alert Addressees to Multiple Meanings," *Journal of Pragmatics* 48 (2013): 29–40.
89 See Giora, *On Our Mind* and R. Giora, M. Raphaely, O. Fein, and E. Livnat, "Resonating With Contextually Inappropriate Interpretations: The Case of Irony," *Cognitive Linguistics* 25 (2014): 443–455.
90 See Fischer and Engelhardt, "Intuitions' Linguistic Sources".
91 See E. Fischer, P. Engelhardt, and A. Herbelot, "Salience Effects Drive Inappropriate Inferences in Philosophical Arguments: An Interdisciplinary Investigation of Philosophical Paradox," (under review).

inferences are automatically made from a rarefied metaphorical use of 'see' (the phenomenal use); and the conclusion is swiftly integrated with implicit background theories, namely, either introspective conceptions of the mind[92] or conceptions of 'phenomenal space',[93] rather than being discarded in the light of a conflict with the contextual information that no suitable physical object is around.

This account gives empirical content to Wittgenstein's idea that some philosophical problems are generated by "an urge to misunderstand the workings of our language",[94] which has us think "as if our thinking was based on a thought schema" and we were "'unconsciously' translating from a more primitive mode of thought into ours":[95] The present inferences are based on a generalised situation schema which we know not to (fully) apply to the given case. In making contextually inappropriate stereotypical inferences that project it onto stereotype-deviant situations, we are leaping to conclusions as if we had the urge to treat polysemous words as having only one (their dominant) sense and were 'unconsciously' translating from a primitive 'literalist' mode of thought into ours. The new account explains what Wittgenstein describes.

Thinkers lack conscious insight into automatic inferences.[96] Nor can logical reconstructions of arguments establish on their own that such inferences are made in clearly inappropriate contexts, as in the present example: Medium-strength principles of charity[97] demand that we justify attributions of clearly inappropriate inferences by providing empirically supported explanations of why competent thinkers make them (cf. Section 1.2). Accordingly, Fischer and Engelhardt[98] justified crediting competent speakers with inappropriate spatial and existential inferences from phenomenal uses of 'see', by invoking psycholinguistic theories that would account for them (see above)[99] and experimentally testing for the posited inferences.

92   See Fischer, "Intuitions, Heuristics, Metaphors" and E. Fischer, "Mind the Metaphor! A Systematic Fallacy in Analogical Reasoning," *Analysis* 75 (2015): 67–77.
93   See M. Hymers, *Wittgenstein on Sensation and Perception* (New York: Routledge, 2017), 6–13.
94   See PI §109.
95   See PI §597.
96   See Bargh, "Four Horseman" and Moors and De Houwer, "Automaticity".
97   See Thagard and Nisbett, "Rationality and Charity".
98   See Fischer and Engelhardt, "Stereotypical Inferences", "Diagnostic Experimental Philosophy", and Fischer et al., "Salience Effects".
99   The account outlined relies on the graded salience hypothesis (See Fein et al., "On the Priority of Salience-Based Interpretations: The Case of Sarcastic Irony" *Intercultural Pragmatics* 12 (2015): 1–32, Giora, *On Our Mind*, and Giora et al., "Resonating"), the cued-schemas account of language comprehension/production and Levinson's I-heuristic. See J.L. Elman, "On the Meaning of Words and Dinosaur Bones: Lexical Knowledge Without a Lexicon," *Cognition* 33 (2009): 547–582, Levinson, *Presumptive Meanings*, and Fischer et al., "Intuitive Inferences".

If subjects really make these inferences (e.g., from 'S sees X' to *X is in front of S*), they will be surprised when the verb is followed by a sequel inconsistent with the inferred conclusion, as in (1), but not (2):

(1) Jeb sees the spot on the wall behind him.
(2) Matt sees the spot on the wall facing him.

When we are surprised, our eyes' pupils expand; pupil dilation is an index of surprisal.[100] Accordingly, one can examine whether automatic inferences are made by measuring pupil size during and after participants hear sentences like (1) and (2): When significant dilations occur after sentences like (1) but not (2), this is evidence that the hypothesized (spatial-directional) inferences are automatically made from 'see', in language comprehension.

To examine the hypothesis that participants make spatial inferences (from 'S sees X' to *X is in front of S*) not only where 'see' is used in its dominant perceptual sense (as in 1 and 2) but also—inappropriately— where it is used in much less frequent (e.g., epistemic or phenomenal) senses,[101] experimentalists can use sentences like:

(3) Jack sees the problems he left behind.
(4) Joe sees the problems that lie ahead.

Here, a purely epistemic reading of 'see' (*Macmillan Advanced Learners' Dictionary [MEDAL]*, sense 4) and a purely metaphorical reading of the spatial sequel ('left behind' = in the past, 'lie ahead' = in the future) are readily available. On this interpretation, both (4) and (3) are perfectly consistent, and (3) is utterly unsurprising—of course people can know what problems they had in the past. But if the hypothesized inappropriate inferences occur, pupils will dilate when participants hear the likes of (3)—but not of (4).

To follow up the hypothesis that relevant inferences are supported by features (stereotypical associations) of the verb, we add otherwise identical sentences that replace 'see' by an otherwise similar verb without spatial associations. E.g., 'is aware of' is ordinarily used in an epistemic sense, to attribute knowledge that may, but need not, be acquired through the

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100 See D. Kahneman, *Attention and Effort* (Englewood Cliffs, NJ: Prentice-Hall, 1973) and B. Laeng, S. Sirois, and G. Gredeback, "Pupillometry: A Window to the Preconscious?" *Perspectives on Psychological Science* 7 (2012): 18–27.

101 A corpus analysis supports the hypothesis about relative frequencies. See Fischer et al., "Intuitive Inferences".

five senses (*MEDAL*, *WordNet*), and should have the same existential/factive implications as 'see'[102] but lack spatial associations:[103]

(3*) Jack is aware of the problems he left behind.
(4*) Joe is aware of the problems that lie ahead.

The present hypothesis predicts pupils will dilate after the likes of (3) but not of (3*).

Conclusions of automatic inferences can be suppressed,[104] before they can influence people's judgments or further reasoning. To determine whether the posited inferences were automatically made and went on to influence judgments, Fischer and Engelhardt[105] combined pupil measurements with a plausibility rating task: If conclusions are not suppressed, their clash with the sequel will make participants judge sentences like (1) and (3) significantly less plausible than sentences like (2) and (4), respectively, even more than a second after sentence offset—and even though it is at least as plausible that people should know what problems they had in the past (as per 3) than what awaits them in the hard-to-predict future (as per 4). Similarly, 'see'-sentences like (3) will strike participants as less plausible than analogous 'aware'-sentences (like 3*)—even though they mean the same, on the readily available epistemic reading of 'see'.

In both studies, pupil measurements suggested that participants indeed made spatial inferences both—appropriately—from perceptual uses of 'see' (as in 1 and 2), and—inappropriately—from less common non-perceptual uses (as in 3 and 4), though not from analogous uses of 'aware' (as in 3* and 4*). Plausibility ratings suggested that conclusions of both appropriate and inappropriate inferences influenced subsequent judgments: 'See'-sentences like (3) were judged less, not more plausible than sentences like (4), and less plausible than semantically apparently identical 'aware'-sentences, like (3*), which were deemed exactly as plausible as the likes of (4*): The manipulation of the spatial sequel affected the plausibility of 'see'-, but not 'aware'-sentences.

In these ways, experiments can examine hypotheses about what automatic inferences are made, appropriately or otherwise, from linguistic case descriptions and premises of arguments. The studies outlined

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102 Fischer et al., "Intuitive Inferences", submit that versions of the argument from hallucination which use 'aware' involve inappropriate existential inferences from this verb's phenomenal use.

103 This hypothesis is supported by a production experiment (See Fischer and Engelhardt, "Diagnostic Experimental Philosophy").

104 See M. Faust and M.A. Gernsbacher, "Cerebral Mechanisms for Suppression of Inappropriate Information During Sentence Comprehension," *Brain and Language* 53 (1996): 234–259.

105 See Fischer and Engelhardt, "Stereotypical Inferences" and Fischer et al., "Intuitive Inferences".

support a debunking explanation of intuitions at the root of arguments from hallucination. This explanation traces them back to contextually inappropriate stereotypical inferences from rare uses of perception-verbs, and thus exposes them as cognitive illusions.

Together with analogous work on the intuitions grounding arguments from illusion,[106] these studies contribute to showing that the problem of perception generated by these two related paradoxes is, first, ill-motivated and, second, formulated due to an automatic cognitive process thinkers cannot directly control, namely, stereotypical enrichment. This provides initial support for the empirical existence assumption (EA) on which the outlined therapeutic conception of philosophy relies: There are ill-motivated philosophical questions which are formulated due to cognitive (or other psychological) processes thinkers cannot directly control. This example also lets us understand how competent thinkers can come to raise such questions: The relevant cognitive process is generally reliable; but in the formulation of the paradoxical arguments that motivate the question, it operates under vitiating conditions—(i) and (ii) above. To what extent further philosophical problems fit this bill can be explored by combining analytic case-studies on philosophical texts (to identify relevant intuitions and their role in problem-genesis) with experimental work (testing explanations of those intuitions), in future research.

4. Cognitive Philosophical Therapy

In this chapter, we have seen how a key strand of experimental philosophy (the 'Sources Project') (Section 1.1), can facilitate diagnostic approaches to characteristically philosophical problems (Section 1.2) and provide a therapeutic conception of philosophy in Wittgenstein's wake (Section 2.1) with empirical foundations (Section 2.2). A case-study provided a first 'pudding proof' (Section 3). In closing, we now consider how the empirical findings reviewed can contribute not merely to establishing the need for therapeutic philosophy (Section 2) but also provide means for putting it into practice.

The aim of the diagnostic approach is to 'dissolve' particular philosophical problems by showing them ill-motivated.[107] The further aims of therapy are (a) to enable proponents of the 'problem' to rationally *and effectively* give up pursuing and worrying about it, and (b) to prevent them from falling for similar pseudo-problems in the future (Section 2.1).[108] A diagnostic analysis that succeeds in identifying fallacies in the motivating reasoning may fail to secure repudiation of the resulting problem, where automatic cognitive processes drive effortless inferences to intuitions that continue to

106 See Fischer et al., "Intuitive Inferences" and Fischer and Engelhardt, "Intuitions' Linguistic Sources".
107 cf. BT 421.
108 Cf. BT 421 and CV 50.

strike thinkers as plausible[109]—and their clash with background beliefs as worrying. In addition, such diagnostic analysis of one problem will not *per se* prevent a thinker from falling for other ill-motivated problems driven by the same cognitive processes. To achieve the goals of therapy, more than reconstruction of motivating reasoning and identification of fallacies appears to be required. But what more?

Cognitive behavioral therapy[110] works with a variety of therapeutic methods which can serve as useful models.[111] This frequently used 'talking cure' seeks to lastingly increase patients' rational autonomy to an extent sufficient to end their emotional and behavioral problems and to prevent relapse. The key idea is that rational autonomy can be enhanced through metacognitive insight: by coming to understand how automatic processes of which we are not aware shape our thoughts, feelings, and behaviors, including the behaviors and emotions constitutive of symptoms. This new self-understanding allows patients to grow aware of, and critically examine, dysfunctional judgments and beliefs they had previously just presupposed; it facilitates a new, more detached attitude towards them, which mitigates what distress and behavioral responses they otherwise occasion.

Accordingly, cognitive therapy systematically builds on findings from cognitive and social psychology, and cognitive neuroscience, to develop empirically supported models of how symptoms arise in different conditions (depression, anxiety, psychosis, etc.).[112] A key part of an individual therapy then consists in developing an understanding of how the model applies to the individual patient, and helping her to acquire this understanding.[113] This often involves identifying and mitigating psychological motivations like the need to defend against low self-esteem, which may help maintain problematic beliefs and inference-styles, and need to be mitigated, e.g., through behavioral confidence-building exercises, before the patient is willing and able to acquire a new self-understanding. However, most behavioral accretions that turn cognitive into cognitive

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109 Cf. PI§§ 109, 597. This situation is liable to recur, since automatic processes are not under our direct control, but highly fluent (i.e. effortless), and fluency acts as a metacognitive cue for assessing plausibility (See Thompson et al., "Metacognition".). Also, subsequent reflection may seek to justify rather than correct plausible (but wrong) intuitions (See Evans, *Thinking Twice*).

110 See J.S. Beck, *Cognitive Therapy: Basics and Beyond*. 2nd ed. (New York: Guilford, 2011).

111 cp. PI §133.

112 See R.P. Bentall, *Madness Explained* (London: Penguin, 2003) and A.T. Beck, N.A. Rector, N. Stolar, and P. Grant, *Schizophrenia: Cognitive Theory, Research, and Therapy* (New York: Guildford, 2008).

113 See Beck et al., *Schizophrenia* and H.E. Nelson, *Cognitive-Behavioural Therapy With Delusions and Hallucinations*, 2nd ed. (Cheltenham: Nelson Thornes, 2005).

behavioral therapy are ultimately geared towards the achievement of metacognitive insight.

For some health conditions, the therapeutic aims can be attained through insight into the underlying automatic processes, without changing their course or outputs. For example, cognitive therapists accept that they cannot put an end to auditory hallucinations (voices) in psychosis and rather seek to change patients' attitude towards their voices, so that they are no longer distressed by them or inclined to obey their commands. Key to this change of attitude is coming to understand how voices arise from inner speech, through failure of source monitoring, in response, e.g., to trauma, and that voices articulate own thoughts, not others' opinions or commands.[114]

I suggest that analogous metacognitive insight into how automatic processes shape intuitions and philosophical thought are what more is apparently required for therapeutic philosophy, in addition to the exposure of mistakes through the diagnostic approach.[115] The philosophical problem we considered was generated by unsound paradoxes driven by intuitions that are cognitive illusions. The analogy to cognitive therapy suggests that thinkers will come to effectively give up pursuing such a problem the moment they are not only aware of the fallacies involved in its motivating reasoning, but understand the automatic cognitive processes that generate the intuitions at its root, and how and why these processes had them commit those fallacies and find the intuitive conclusions plausible. Again, therapy need not change the course and outputs of relevant automatic processes which include fundamental comprehension processes. Rather, it needs to change thinkers' attitude towards the intuitions these processes deliver: replacing acceptance by detachment, as default, and by rejection, wherever vitiating circumstances obtain. Key to this is the acquisition of relevant metacognitive insight: of a shared understanding of what automatic processes drive our intuitive inferences and judgments and of precisely when and why they go awry.

Such understanding has benefits beyond the individual problem considered: It helps prevent falling for similar problems and devises measures to guard against them. For example, insight into the conditions under which stereotypical enrichment leads to contextually inappropriate inferences helps us identify such inferences in lines of thought that set up other problems and to formulate case-descriptions in ways that do not invite such inferences (e.g., explicitly marking rarefied uses and refraining from

114 See Bentall, *Madness Explained*, 347–377 and Nelson, *Cognitive Behavioural Therapy*, 228–247.
115 In fact, such metacognitive insight is required already to defend diagnostic accounts in the light of plausible principles of charity (e.g., Thagard and Nisbett 1983) (see Section 1.2).

giving special uses to words that already have clearly dominant uses in ordinary discourse).

The relevant metacognitive insight or enhanced self-understanding begins to be provided by experimental philosophy's Sources Project. Just as clinical psychologists have systematically built on findings from cognitive and social psychology and cognitive neuroscience to develop empirically supported models of how symptoms arise in different mental health conditions, so experimental philosophers are systematically building on findings from those very disciplines, to develop empirically supported models of how philosophically relevant intuitions arise—and, more generally, of how automatic cognition shapes philosophically relevant thought. Just as the former models provide the key input for cognitive behavioral therapy, so the latter models provide the key input for a therapeutic philosophy. In summary, the findings from experimental philosophy's Sources Project contribute to providing a fresh empirical rationale for therapeutic conceptions of philosophy in the wake of Wittgenstein and can give us precisely the kind of metacognitive insight that is necessary to put such conceptions into practice.[116]

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