2

The Benefits of Reverse-Engineering

Why should we bother to reverse-engineer the points of ideas? My aim in this chapter is to highlight some of the benefits that genealogy as conceptual reverse-engineering promises to deliver. After working through seven things that reverse-engineering can do for us, I focus on three benefits that reverse-engineering through genealogy is particularly well suited to delivering: far from issuing in the kind of reductively instrumental view of things often associated with naturalism, pragmatism, and genealogy, the method offers us *explanation without reduction*, combining naturalism and pragmatism into a non-reductive framework that can help us understand what led our ideas to shed the traces of their practical origins; far from being normatively inert in the way that genealogical explanations are commonly taken to be, pragmatic genealogy can *affect the space of reasons*, subverting or vindicating our ideas by weakening or strengthening our confidence in them; and far from being boringly conservative when its upshot is vindicatory, pragmatic genealogy can facilitate *responsible conceptual engineering* by alerting us to the multiplicity of functions we need to take into account as we revise our conceptual practices. Finally, I situate pragmatic genealogy in a broader methodological landscape before turning, in Chapter 3, to the question of when it is to be preferred over non-genealogical forms of reverse-engineering.

2.1 From a Practical Point of View

Looking at ideas from a practical point of view can induce a striking gestalt switch in the way we see them, because we often do not think of them in terms of their point. Part of the reason is the phenomenon familiar to designers and architects that while bad design has a way of calling attention to itself, the mark of good design is often its invisibility, leaving it at risk of remaining unappreciated. More generally, a prime manifestation of the fact that something *has* a point is that the question of its point does not arise. If anything leads the question 'What's the point?' to break into consciousness after all, it is typically the dim sense that it has ceased to have an answer.

But with ideas in particular, there is a tendency to think of them as *nothing but* ideas: as ethereal, causally inert things that have no effects, much less a point. Hence, those who trust in the power of ideas frequently encounter the suspicion that mere ideas have no real-world effects. These contrasting attitudes are

personified, for example, in the 1932 encounter between the young Isaiah Berlin, a philosopher and historian of ideas who strongly believed in their power to make a difference,[1] and the already well-established historian Lewis Namier, whose name became a byword for scepticism about the relevance of ideas, and who told Berlin that historians of ideas were 'the least useful kind of historian', because ideas were 'mere interpretations by the mind of deep-seated drives and motives' (Berlin 2014, 127). A scintillating riposte on behalf of ideas had been given a century earlier, when the Victorian writer and historian of the French Revolution Thomas Carlyle faced similar scepticism from a hard-headed businessman who exclaimed: 'Ideas, Mr. Carlyle, ideas, nothing but ideas!' Carlyle retorted: 'There was once a man called Rousseau who wrote a book containing nothing but ideas. The second edition was bound in the skins of those who laughed at the first'.[2]

As Carlyle reminds us, ideas have very real effects—indeed, often unsurveyably many. This is why talk of 'the point' or 'the function' of an idea can be helpful as a way of highlighting those among its effects that we care about for given purposes. The focus of the pragmatic genealogists I discuss lies on effects that are conducive to the satisfaction of human needs. In ascribing a *point* to an idea, they explicitly represent it as tying in with some need in virtue of its tendency to produce effects satisfying that need. This allows them to single out salient because much-needed practical effects of ideas on the lives of those who live by them (I elaborate on this 'need-satisfaction account' of pointfulness in Chapter 9).[3] Talk of '*the* point' of an idea is not meant to foreclose the possibility that it serves multiple points, but to draw attention to what, for given purposes, emerges as the *most salient useful difference* the idea makes, where usefulness, in the genealogies that will concern us, is cashed out primarily in terms of the tendency to satisfy genuine needs. To inquire into the point of an idea is to seek to understand what it *adds*, and consequently also what would be *lost* were the idea to be abandoned.

The telling of such a reverse-engineering story itself only has a point when the audience of the story lacks a clear grasp of whether an idea has a point at all, what needs give point to it, or what further and less obvious points it might serve. Some ideas, such as the revolutionary political ideas of Rousseau's *Social Contract* that Carlyle was alluding to, carry their ambition to have real-world effects on their sleeve to a greater degree than others, and while it can be worth asking whether an

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[1] Margalit (2013) highlights numerous facets of Berlin's work that illustrate his belief in the power of ideas. That belief also found expression in 'Two Concepts of Liberty': 'Over a hundred years ago, the German poet Heine warned the French not to underestimate the power of ideas: philosophical concepts nurtured in the stillness of a professor's study could destroy a civilisation' (2002, 167).

[2] MacIntyre (1998, 117).

[3] The phrase 'the point of a concept' is used in a variety of ways. My concern here is with the *practical* point: the salient useful difference that living by a concept makes to the lives of concept-users. In Queloz (2019), I distinguish the practical from three other types of points: the *evaluative* point, which is what one has to grasp in order to master a thick concept; the *animating* point, which is the aim or goal one has in mind in applying a concept; and the *inferential* point, which is a salient inferential consequence of the applicability of a concept.

idea really serves the point it *seems* to serve,[4] there are also ideas for which reverse-engineering must prove uninformative. Just as some ideas—*broom* or *screw-driver*—are transparently ideas *of* tools, some ideas are transparently *themselves* tools. Take the idea of a *meeting point*. Nothing beyond that idea needs to come into existence for it to serve its point. It is the idea itself that helps us coordinate by allowing us to think of some place *as* a meeting point. In this case, that observation is not terribly informative, since we likely already thought of that idea as a coordination tool.

For many ideas, however, awareness of their point clearly does not form part of what is involved in living by them. Some ideas even actively direct attention away from practical considerations: the realization that lofty ideas like *truth*, *knowledge*, or *justice* might have anything to do with something as mundane as human needs is one that these ideas themselves conceal by inviting us to think in altogether less instrumental terms. As a result, these are ideas we might need without knowing that we need them. Needs are not necessarily felt needs. Particularly where ideas discourage or even resist being understood in instrumental terms, therefore, reverse-engineering an idea's practical origins in certain needs can be informative, providing a fresh perspective on it and putting one in a position to ask further questions, such as: are these needs we now share? Whose needs exactly are they? Are they needs we endorse?

But what exactly is gained by having a sense of an idea's point and being in a position to ask these questions? There are a number of benefits, some of which are not exclusive to pragmatic genealogy, but are shared by non-genealogical forms of reverse-engineering. When reverse-engineering should be pursued genealogically will be the focus of Chapter 3. For now, let us look at why one might want to pursue it at all by considering seven general virtues of conceptual reverse-engineering.

2.2 Seven Virtues of Conceptual Reverse-Engineering

In spelling out what conceptual reverse-engineering can do for us, it will be useful to draw on some of the technical vocabulary that has sprung up around the notion of a 'concept'. But since different disciplines and subdisciplines have—no doubt for good practical reasons—come to understand rather different things by the term 'concept',[5] it may help to start with a working characterization of what I shall

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[4] This would turn pragmatic genealogy into an instrument of ideology critique. See Anghie (2007, 292), Moyn (2010), Srinivasan (2019, 142), and Queloz (2019, §5) for critiques along those lines. For accounts of the critical force of history in general, see Epstein (2010) and Cueni and Queloz (manuscript).
 [5] Concepts have variously been taken to be *mental representations* (Fodor 1998, 2004), *abstract entities* such as Fregean senses (Chalmers 2011; Peacocke 1992), or *abilities* (Brandom 1994; Dummett

mean by it. For the purposes of this book, I view concepts primarily as thinking techniques: as the norm-governed patterns according to which we move from perception to thought, from thought to thought, and from thought to action. In acquiring concepts, we learn to interpret and evaluate the world around us by forming bundles of dispositions to partition the world in certain ways and draw certain inferences about it, both in our minds and through our actions. To say that I have acquired the concept *tiger*, for example, is to say that I learned reliably to partition the world into tigers and non-tigers, and to infer from something's being a tiger that it is a carnivore and that if I bump into a free-roaming one, I had better run. What concepts I have is not just a matter of what I can articulate, but also of how my capacities for attention, categorization, interpretation, memory, and affect are marshalled and organized in response to different kinds of situations (Haslanger forthcoming, §2). Concepts can be more or less fine-grained and more or less contentful depending on how many partitions and inferences they involve. The bundles of dispositions involved in having a concept possess a normative dimension—they can be manifested correctly or incorrectly. This distinguishes them from *mere* differential dispositions, such as the disposition to laugh whenever tickled. A concept is thus a normative nexus between certain input and output conditions: its input conditions are the *criteria* guiding concept application—the circumstances whose presence licenses the application of the concept—and its output conditions are the *consequences* of concept application—the inferences that can properly be drawn when the concept applies. The norms of differential and inferential behaviour that concept possession involves being sensitive to are the grooves that guide our thoughts and actions by determining what counts as a reason for what—grooves along which our thoughts and actions *actually* run whenever we apply our concepts correctly.[6] Many concepts are dignified with dedicated words by which to express and refer to them, such as the word 'tiger'. But, importantly for the genealogical perspective on concepts, one can also have a concept *before* one has a dedicated word by which to express it.[7] Concepts and words will often enter the genealogical story at different stages: conceptual behaviour (i.e. behaviour structured by concepts) may precede the linguistic means of expressing it, which means may themselves derive their point from the antecedent ubiquity of the concepts they help express; conversely, the

1996; Millikan 2000, 2017), for example. For thorough overviews of the different accounts of concepts on offer, see Margolis and Laurence (1999, 2015, 2019). See also Glock (2006a, 2009, 2010) and Haslanger (2012a, 2019, 2020). I shall follow the abilities view in its emphasis on dispositions; unlike those who advocate that view over its main rivals, however, I am not here concerned to deny that these abilities are best explained by appeal to mental representations or abstract entities.

[6] Contrast this normative notion of concepts with the descriptive one, characteristic of work in psychology, on which concepts are 'the tracks our minds prefer to travel on' (Machery 2017, 222).

[7] Sawyer (2020) explores further rationales for distinguishing between thought and talk.

point of introducing a word may be to catalyse the emergence of conceptual behaviour that is as yet largely absent and that one would like to promote.

In asking after the points of concepts, then, we are asking after the points of particular bundles of differential and inferential dispositions. This puts the focus on what might be called the *business end* of concepts—not on the way in which concepts are encoded in the brain or represented in the mind, or on the norms or proprieties of use that a competent concept-user is sensitive to, but on what the *possession* of just these bundles of dispositions, sensitive to just these proprieties of use, allows us to *achieve*.[8] This focus on the practical side of things is reflected in the expression 'conceptual practice', where (as we saw in Chapter 1) a conceptual practice is defined as a community's practice of living by a given concept—of being engaged users of that concept who, in the conduct of their own affairs, prove sensitive to the distinctions encoded in the concept and responsive to the reasons that the concept's applicability generates. If we see a conceptual practice as a technique that renders concept-users sensitive to certain features of the world and links them in their minds with certain inferences in thought and action, we can ask: what is the point of living by a concept that tracks just these features and links them with just those inferences?

I take it that this working characterization of concepts and conceptual practices can ultimately be rendered compatible with most leading accounts of the nature of concepts, and that nothing in what follows depends on a prior commitment to a more specific account of concepts.[9] This is not to say that which ontological categories one uses in explicating the nature of concepts is irrelevant to their function. Abilities, mental representations, and abstract objects really are different things that will be recruited to human ends in subtly different ways for subtly different purposes. The reason no particular view is presupposed in this book is that it does not start from some preconceived view of what concepts are that is then imposed top-down on various subject matters, but rather lets the appropriate set of theoretical notions grow out of each inquiry into practical origins. It is left to the practical problem at hand to determine what kind of response is certainly called for—what one must minimally be able to *do* or *have* in order to solve the problem. Of course, understanding the practical difference made by a single concept often leads one to consider an entire *complex* of interrelated dispositions, concepts, evaluative attitudes, and practices, with each component contributing to

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[8] The same abilities may be realized in different individuals in different ways (Haslanger forthcoming, §2). How one then spells out the conditions of concept possession is a matter of some debate: see Boghossian (2003), Williamson (2003), Fodor (2004), Glock (2006a, 2009, 2010), Eklund (2007), and Scharp (2013, ch. 2).

[9] An account that seems at first particularly well suited to a genealogical approach is Sainsbury and Tye's (2012) originalist theory of concepts; but their focus lies on showing how various puzzles in the philosophy of language can be solved if we treat the reference of concepts as fixed by their original historical use and individuate concepts by those origins. Pragmatic genealogy, by contrast, focuses on practical rather than historical origins and invites us to individuate concepts by their point.

the overall efficacy of the bundle. But this does not bar us from telling apart the contributions of the various components. We can still distinguish between what the emergence of a discriminatory disposition adds and what the concept *of* that disposition adds, for example, or identify what is gained by turning an originally valuation-free concept into an evaluative concept, even if these elements have to arise together to make a difference.

With this working characterization of concepts in place, we can draw out the benefits of conceptual reverse-engineering by comparing it to the more traditional method of conceptual analysis. Conceptual analysis is commonly understood to aim to provide an explicit intension to be measured against the intuitive extension of a given concept.[10] The *extension* of a concept is the set of all cases to which the concept applies. We can determine what a concept's extension is by presenting competent speakers with actual or imagined situations and eliciting, for each situation, their intuitive response as to whether the concept applies in it or not. Using this method, one might in principle sort all imaginable cases into two kinds: those in which the concept applies, and those in which it does not. The first set of cases constitutes the concept's intuitive extension. This intuitive extension can then serve as a measure of success for the articulation of the concept's *intension*: if we have mastered a concept to the point where we can say, for most situations and with some assurance, whether the concept applies in it or not, then that in virtue of which we are able to do this is the concept's intension. The conceptual analyst's task is to render this implicit intension explicit, in the form, for instance, of a list of characteristics whose presence or absence guides our application of the concept. The most stringent form of conceptual analysis aims at a *strict* definition of the concept of X—a definition in terms of individually necessary and jointly sufficient conditions for something to be X.

Where this kind of stringent conceptual analysis runs into difficulty, however, is with conceptual practices that are *internally diverse*. When conceptual practices are held together by criss-crossing relations of family-resemblance rather than a common core (as Wittgenstein suggested was the case with our concept *game*), boiling them down to their highest common factor through conceptual analyses aiming at strict definitions is the wrong approach to take. It is likely to leave us either with a definition that is too thin to be informative, or with no definition at all. Any feature that is not strictly a necessary condition will eventually fall prey to counterexamples and drop out of the final analysis. Craig offers the example of the epistemologist who is at first impressed by the observation that those who *know* that *p* also *believe* that *p*, but then encounters a single counterexample and promptly strikes the belief-condition from the final analysis of knowledge. The observation that *nearly all* knowers are believers is cast aside as irrelevant. 'Of all

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[10] See Craig (1990, 5, 15–16; 1993).

its deep centrality', Craig laments, 'nothing whatever remains—it could be as incidental as the fact that nearly all knowers are less than 150 years old' (1990, 14). Yet surely the persistent association of knowledge with belief, if real,[11] should tell us something? And how can we be so sure that all and only instances of the concept in fact share a common set of features? The ambition of conceptual analysis has traditionally been to arrive at some necessitated universal generalization of the form: 'necessarily, all *F*s are *G*', such as 'knowledge is justified true belief'. But if the conceptual practice at issue is internally diverse, then that ambition is misplaced. Perhaps the concept just tracks a variety of conditions that are nearly always satisfied while flexibly accommodating the fact that any one condition may be missing under exceptional circumstances.

The tendency to treat counterexamples as decisive would then be equally misplaced. It is only as long as we take philosophy to aim at law-like generalizations that it makes sense to focus on coming up with real or imagined counterexamples: a possible scenario in which a necessitated universal generalization fails to hold can indeed suffice to falsify it. But as I suggested in Chapter 1, pragmatic genealogists are better thought of as model-builders. And if Timothy Williamson (2017, 2018a, b) is right and a lot of philosophy in fact aims to provide models rather than law-like generalizations, then we are underselling philosophy if we measure its success by the number of laws it succeeds in formulating, and we ought not to grant isolated counterexamples the decisive power they have been granted in the past.[12] As an economist once pointed out, Edmund Gettier's (1963) notorious counterexamples to the analysis of knowledge as justified true belief would never have been published in economics, because in a discipline that is self-consciously concerned with idealization and model-building, nobody expects a model to fit each and every case, and the existence of counterexamples would not be considered newsworthy (Williamson 2017, 168). The way to supersede a model is not to find a case where it does not hold, but to build a *better* model: a model that improves on the previous one along some dimension—by retaining past explanatory successes while adding new ones, for example.

Even where law-like generalizations and definitions in terms of necessary and sufficient conditions *are* available, moreover, the features that are illuminating for the purposes of philosophy may not all be among the necessary conditions.[13] Why

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[11] Some have maintained that knowing that *p* in fact *excludes* believing that *p*. See, e.g., Prichard (1950, 86–8).

[12] As Williamson argues, a method that encourages us to abandon a hypothesis already in the face of a single counterexample will be *error-fragile*: a single mistake—such as misidentifying something as a counterexample when it is in fact consistent with the hypothesis—can lead us astray. Philosophy as model-building 'is much less error-fragile, for it gives no such decisive power to a single judgment' (Williamson 2018b, 22).

[13] See Craig (1990, 5, 15–16) and Fricker (2016b, 166). Huddleston (2018) finds the point already in Nietzsche: even if a given concept were to prove definable in terms of a shared denominator, the shared denominator may not be very informative, and it is the variable aspects of concepts that reward attention.

something persists, how it functions, or what its value is are questions that may best be answered by drawing on features that—though characteristic, distinctive, or typical—are not invariably present. We will then profitably widen our gaze to consider the variety of conditions under which something *typically* serves its point. For such conditions—*typical conditions* for short—to possess explanatory value, the concept need not be functional whenever these conditions are given; nor need all or indeed any of the conditions be given whenever the concept is functional.

This is where conceptual reverse-engineering offers a welcome alternative. Its two outstanding virtues as a method are, first, that it is more tolerant of exceptions and counterexamples than explanations in terms of necessary conditions, so that it gets a grip on the diversity that frustrates attempts at conceptual analysis; and second, that it makes explanatory use of merely typical conditions, which in turn allows us to make sense of the diversity frustrating conceptual analysis by showing that this diversity itself serves a function: it reflects a corresponding diversity in the properties that are *typically worth tracking* if such-and-such needs are to be satisfied in the kind of world in which we operate.

Where successful, conceptual reverse-engineering can bring several further benefits. A third one is that organizing an internally diverse conceptual practice in the light of its overarching point *imposes order* on a seemingly messy or disunified practice: it presents some form of the practice as explanatorily basic and renders other forms intelligible as elaborations of that basic form. We may wonder, for instance, why such diametrically opposed phenomena as *earned* forgiveness and *gifted* forgiveness should both be forms of one and the same conceptual practice.[14] Reverse-engineering the point of forgiveness yields an ordering principle that reveals the functional unity underlying the heteroclitic practice. This turns apparent chaos into what Miranda Fricker calls an 'ordered pluralism' (forthcoming). This basic form acts as a beacon around which other forms can be arranged and in relation to which their own derivative point becomes apparent. Variety that was initially baffling is shown to be subservient to a single overarching point. The same overarching point also helps us individuate the concepts whose genealogies we want to trace. Instead of following words through history and relying on homonymy to individuate our object of investigation, we trace lines of genealogical descent in light of functions and functional differentiations. In Hume's phrase, we go by whether conceptual practices 'point all to a like end' (*EPM*, 3.2).

Fourth, by showing how a concept's internal diversity reflects the variety of properties worth tracking in order to serve concept-users' needs, conceptual reverse-engineering can also *resolve standoffs* in philosophical debates over how

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[14] See Fricker (forthcoming).

a concept should be understood. Where competing analyses of a concept are on offer, reverse-engineering the point of the concept can help us *assess* the different analyses according to whether they fit our functional hypothesis; but it also gives us the means to attempt a *synthesis* of competing analyses—resulting, at the limit, in the complete dissolution of the debate. In the light of a functional hypothesis about the concept's point, it may turn out that it makes most sense for the concept to track *all* the features variously singled out by the different analyses—in which case the mistake was to assume that we had to decide between those analyses.

Fifth, an explanation of why certain needs would naturally lead us to go in for certain conceptual practices can also perform a *demystifying* role: it can dispel the air of mystery about the entities referred to in those practices. By translating venerable but suspiciously empyrean ideas of justice or truth back into nature, reverse-engineering can rid us of the need for metaphysical explanations of the sort that philosophers from Hume through Nietzsche to Rorty and Huw Price take issue with as involving unnecessary ontological commitments or explanatory material. This is most explicit in Pettit's *The Birth of Ethics*. 'The idea', Pettit writes, 'is to demystify our ethical concepts naturalistically by explaining how corresponding concepts might have emerged in a naturalistically unproblematic way' (2018, 54). This demystifying effect of reverse-engineering can be targeted at two kinds of account. On the one hand, it can be targeted at *metaphysical* accounts which seek to make sense of some philosophically puzzling items by introducing special explanatory material. An example is F. P. Ramsey's reverse-engineering of probability statements in response to J. M. Keynes.[15] Puzzled about the nature of probability, Keynes suggested that probability was concerned with objective and unanalysable relations between propositions. Ramsey disarmingly objected that he did not perceive such relations, and suspected others did not perceive them either (1990, 57). Ramsey proposed to look instead at the point of probability statements, which he thought was to express one's confidence or degree of belief in the occurrence of events in order to align one's degrees of belief with those of others and with the frequencies of events so as to facilitate successful action. Probability, on this view, 'is a measurement of belief *qua* basis of action' (1990, 67). Ramsey demystified probability by relating it to human needs and actions rather than to mysterious objective relations.

On the other hand, the demystifying effect of reverse-engineering can be targeted at *eliminativist* accounts which seek to do away with items *because* they seem to demand special explanatory material. Demystification is then a form of rehabilitation in the face of eliminativist reactions to philosophical vexation. An example is Williams's response to Rorty (the topic of Chapter 7): Rorty suggests we do away with the naturalistically suspect intrinsic value of truth, and in

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[15] See Misak (2016, 175–8) for a fuller discussion.

response, Williams offers a practical derivation of the need to value the truth intrinsically from uncontroversial human needs. Valuing the truth intrinsically is shown to be naturalistically unexceptionable—neither fetish nor superstition, but a way of thinking that naturalists should be comfortable with, as it is firmly rooted in the soil of human concerns.

A sixth benefit or virtue of conceptual reverse-engineering is that it yields a holistic understanding of concepts as pragmatically situated by relating them to contingent facts about concept-users and their circumstances. It thereby exploits the Wittgensteinian insight that careful scrutiny of a concept alone is not going to tell us everything worth knowing about it, and that we must look beyond the concept to the contingent facts that explain its formation and give it its point. As Wittgenstein puts it, 'a natural foundation for the way [a] concept is formed is the complex nature and the variety of human contingencies' (1981, §439), and this suggests that we should be interested in

> the correspondence between concepts and very general facts of nature. (Such facts as mostly do not strike us because of their generality.) But our interest is not thereby thrown back on to these possible causes of concept formation; we are not doing natural science; nor yet natural history—since we can also invent fictitious natural history for our purposes.   (2009, II, §365)

A remarkably similar line is taken by P. F. Strawson when he describes the strand of philosophy that attempts to

> explain, not just how our concepts and types of discourse operate, but why it is that we have such concepts and types of discourse as we do; and what alternatives there might be. This is not an historical enquiry. It attempts to show the natural foundations of our logical, conceptual apparatus, in the way things happen in the world, and in our own natures....It might reasonably be maintained, or ruled, that full understanding of a concept is not achieved until this kind of enquiry is added to the activities of comparing, contrasting and distinguishing.
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> (1963, 515–16)[16]

Pursuing this line, conceptual reverse-engineering takes not only contingent facts about the extension into account, but also facts about the needs and capacities of concept-users and their environment in order to achieve a more *holistic* under-standing of why a concept with such an intension and extension is worth having. Where conceptual analysis *zooms in* on a concept and tries to analyse its intension

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[16] Strawson explicitly endorses the use of models to this end, for 'to understand the foundation of our concepts in natural facts, and to envisage alternative possibilities, it is not enough to have a sharp eye for linguistic actualities' (1963, 517).

into its basic constituents, reverse-engineering *zooms out* to bring into view the broader patterns and purposes of human behaviour and the weave of life in which they are embedded. We need a holistic understanding of what the context in which we put our concepts to use is actually like, and how this renders it more useful to operate with certain concepts rather than others, in order to see what our concepts do for us. By thus putting the dependence of concepts on contingent facts centre-stage, reverse-engineering displays what Huw Price calls 'sensitivity to the contingent dependencies of language' (2011, 12).

Finally, conceptual reverse-engineering, though itself a backward-looking enterprise, can serve as a guide and justification for the forward-looking enterprise of conceptual engineering. Even vindicatory genealogy is indicatory of what we can do to improve our concepts: most basically, it puts us in a position to ask how a concept might serve the same point better; but it can also help us see how a concept might need to be adapted in order to recreate the same functionality in a different context, thereby guiding the kind of conceptual innovation that hinges on maintaining continuity of function across very different contexts of application;[17] and it can even show us that a conceptual practice we lack would respond to a very basic and near-universal need we in fact have (see the discussion of Fricker's genealogy in Chapter 8). In all these ways, conceptual reverse-engineering can indicate in what respects and in which directions we have reason to alter our practices, thereby also providing a justification for altering them.

In sum, we have so far identified seven virtues of conceptual reverse-engineering: (i) it is more tolerant of exceptions and counterexamples than explanations in terms of necessary conditions, so that it gets a grip on the diversity that frustrates attempts at conceptual analysis; (ii) it makes explanatory use of typical conditions, which enables it to make sense of the diversity frustrating conceptual analysis by showing that this diversity serves a function, reflecting a corresponding diversity in the properties that are typically worth tracking; (iii) it imposes order on internally diverse practices by identifying certain forms as explanatorily basic and other forms as derivative or elaborative of these basic forms; (iv) it dissolves debates over which account of a concept is the correct one by presenting competing accounts as complementary descriptions of the variety of conditions in which a concept typically fulfils its function; (v) it plays a demystifying role by making us comfortable with puzzling notions that invite metaphysical or eliminativist treatment; (vi) it yields a holistic understanding of concepts as pragmatically situated by relating them to contingent facts

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[17] See Cueni (2020) for an application of this idea to public law analogies in international legal theory, and Queloz (forthcoming-a) for a discussion of Nietzsche's aspiration to recreate the functionality of Renaissance conceptions of virtue in the modern world.

about concept-users and their circumstances; and (vii) it can guide and justify conceptual engineering.[18]

All of these benefits arguably accrue to conceptual reverse-engineering in general, whether pursued genealogically or not. But there are three further benefits that pragmatic genealogy is particularly well suited to delivering. On the account I propose, pragmatic genealogy offers us explanation without reduction, it affects the space of reasons by weakening or strengthening our confidence in the ideas we live by, and it facilitates responsible conceptual engineering. Let us take them in turn.

2.3 Explanation Without Reduction

Pragmatic genealogy combines three approaches—genealogy, naturalism, and pragmatism—which, deservedly or not, share a reputation for being reductive in the sense of explaining *away* their object, unmasking the higher as really being an instance of the lower: selfishness masquerading as selflessness, instrumental value masquerading as intrinsic value, causes masquerading as reasons, or contingency masquerading as necessity.[19] There is no doubt that these approaches have sometimes been used to this effect, and it is these deflationary uses that Robert Brandom has in mind when he characterizes genealogy as 'the revenge of Enlightenment *naturalism* on Enlightenment *rationalism*', which dispels 'the pretensions of reason' (2015, 3).[20] Suitably understood, however, naturalism and pragmatism can be welded into a non-reductive genealogical method which does not seek to identify one thing with another, but rather helps us understand why a genuinely new thing would arise—it explains without explaining away.

2.3.1 Naturalism

The pragmatic genealogists discussed in this book are all committed to some form of *naturalism*, and this is no coincidence. Hume makes it a methodological precept of his to explain human behaviour wherever possible in terms of mechanisms that are applicable to the rest of the animal kingdom as well: 'When any

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[18] Hannon (2019, 14–15) highlights other benefits of the approach which I do not pursue here, such as the fact that it helps us adjudicate conflicts of intuitions, or avoid 'verbal disputes' in Chalmers's (2011) sense by clearly identifying the function that a term is to perform.

[19] See Saar (2007), Brandom (2015), and Brassier (2016) for an overview.

[20] See Brandom (2019b, ch. 15, §4) for a critical discussion of reductively naturalistic genealogical explanations as one-sidedly and, if applied globally, self-refutingly *niederträchtig*, debunking normative attitudes by exhaustively explaining them in terms of causes that do not provide reasons for them. In this Hegelian terminology, my concern is rather with genealogical explanations that are *edelmütig*, rationalizing their object instead of debunking it.

hypothesis ... is advanc'd to explain a mental operation, which is common to men and beasts, we must apply the same hypothesis to both' (*T*, 1.3.16.3). Accordingly, the concepts of sense impressions, ideas, associations, and habits that form the nuts and bolts of his project in the *Treatise* are drawn from the animal physiology of his time.[21] The same ambition 'to *naturalize* humanity' (*GS*, §109) is voiced by Nietzsche, albeit in a style that is inimitably his own, when he declares that he aims to

> translate humanity back into nature; ... to make sure that, from now on, humans will stand before humans just as they already stand before the *rest* of nature today, hardened by the discipline of science, with unflinching Oedipus eyes and sealed Odysseus ears, deaf to the lures of the old metaphysical bird catchers who have been whistling to them for far too long: 'You are more! You are higher! You are of different origin!'   (*BGE*, §230)[22]

Similarly, Craig makes a point of noting that his project 'can claim membership' of the 'tradition of naturalism, in which thinkers see man, his behaviour and institutions, as natural facts to be understood as the (broadly speaking causal) outcome of other natural facts' (1990, 8–9). Williams describes his genealogical inquiry as committed to a 'naturalistic outlook' (2002, 60) within which the guiding question is: 'how does the phenomenon in question intelligibly relate to the *rest* of nature, and how, in particular, might it have come about?' (2002, 60). If we can sketch some story—even an impossible story—that answers this question while managing to do without certain resources, this will 'suggest that there could be some actual and much less tidy account which also did without them, and called on no more input' (2000, 157). This is a form of naturalism which even Fricker, though contributing to debates in which 'to naturalize' tends to mean 'to treat as naturally given what is in fact socially constructed',[23] gives every indication of endorsing (Fricker 2007, 112, 118, 129).

   These five philosophers pursue a genealogical naturalism insofar as they try to determine whether we can explain ideas that seem to call for extra explanatory material (such as Divine Commands, Platonic Forms, special faculties of moral intuition, or innate sensitivities) in terms that are as far as possible antecedent to these ideas and the motives bound up with them, but not necessarily antecedent to other human motives of the kind that an experienced and unoptimistic interpreter would discern. This naturalistic stance, which I shall characterize in

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[21] See Kail (2007a, b, 203), Buckner (2013), and Wild (2014).

[22] Translations are my own, though I consulted the English-language editions listed in the Bibliography. Kail (2016) labels both Hume and Nietzsche 'genealogical naturalists'. See also Clark (1998, xxii), Leiter (2015), and Owen (2007, 6) for discussions of how Nietzsche's genealogical method serves his naturalistic aims.

[23] See Fricker (2007, 137).

more detail in Chapter 5, does not seek to identify the higher with the lower; but it does involve what Williams calls 'an appropriately suspicious rule of method' (1995d, 204), namely that we should never explain a phenomenon in terms of something special to it if we can explain it in terms that we have reason to use anyway elsewhere.

2.3.2 Pragmatism

Deeper even than the pragmatic genealogists' commitment to naturalism is their commitment to a certain form of *pragmatism*.[24] They are writing downstream of the advent of probabilistic explanation (of which Hume is a well-known pioneer within philosophy), and their pragmatism pursues the explanatory strategy of replacing strict *nomological necessity*, which obtains only if something *has* to happen because it is (conditionally) required by inviolable laws, with a more tolerant form of *practical necessity*, which obtains already if something is *highly likely* to happen because it is rendered nearly indispensable by practical pressures.[25] The pragmatic genealogists aim to identify a sense in which, for all their contingency, some concepts have grown out of necessity. In tracing the seemingly transcendent to its roots in human needs, pragmatic genealogy substitutes philosophical anthropology for metaphysics in a way that is characteristic of pragmatism: it reveals how, as William James put it, the trail of the human serpent lies over everything (1978, 37). The pragmatism at work in pragmatic genealogy is not pragmatism as a theory of meaning, however—precisely not: it is an *explanatory* pragmatism accounting for the fact that pragmatism largely fails as a theory of meaning.

The form of pragmatism at work in pragmatic genealogy is best captured by the label *Cambridge pragmatism*, which Cheryl Misak's (2016) book of the same title associates in particular with Peirce, Ramsey, and Wittgenstein.[26] Huw Price and

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[24] 'Pragmatism', a term first coined by Peirce, has gone through so many hands that it is in danger of losing its embossing. This was the case already in Peirce's lifetime. Seeing the term appropriated by William James, Peirce re-christened his own position 'pragmaticism' in 1905, a name he deemed 'ugly enough to be safe from kidnappers' (1931, 5.414). See Menand (2001) and Misak (2013, 2016) for historical overviews.

[25] See Brandom (2002, 2004, 2019a) for discussions of how this strategy comes to fruition in the 'statistical' nineteenth century, when accounts in terms of natural selection and statistical likelihood were offered to show 'how observed order can arise, contingently, but explicably, out of chaos—as the cumulative diachronic and synchronic result respectively of individually random occurrences' (Brandom 2004, 2); see also Strevens (2013).

[26] See Misak (2016) and Price (2017). See also Blackburn (2013b, 71; 2017), Glock (2017b), Lillehammer (2017), and M. Williams (2013, 128) for discussions of this form of pragmatism. Haslanger's (2012b) distinctive way of fusing pragmatist and genealogical insights is also germane to pragmatic genealogy. I discuss her proposal in Chapter 8.

Simon Blackburn offer characterizations of Cambridge pragmatism that point to its connection with genealogy:

> Pragmatism begins … with phenomena concerning the *use* of certain terms and concepts, rather than with things or properties of a non-linguistic nature. It begins with linguistic behavior, and asks broadly anthropological questions: How are we to understand the roles and functions of the behavior in question, in the lives of the creatures concerned? What is its practical significance? Whence its genealogy?   (Price 2011, 231–2)

> You will be a pragmatist about an area of discourse if you pose a Carnapian external question: how does it come about that we go in for this kind of discourse and thought? What is the explanation of this bit of our language game? … The explanation proceeds by talking in different terms of what is *done* by so talking. It offers a revelatory genealogy or anthropology or even a just-so story about how this mode of talking and thinking and practicing might come about, given in terms of the functions it serves.   (Blackburn 2013b, 75)

Three motifs characteristic of Cambridge pragmatism can be extracted from these passages. The first is Cambridge pragmatism's *agent-centredness*: in addressing philosophically puzzling topics, it does not start by asking about the *object* X, but instead centres on agents and their dispositions, attitudes, concepts, and words revolving around X.[27] The second motif concerns the type of explanation that is then sought: Cambridge pragmatism takes a *function-first approach* to the explanation of concepts or terms, relegating inquiries and explanations looking primarily at their content or meaning in favour of inquiries and explanations looking primarily at their point or function in practice. The third motif is the idea that pragmatism might be given a *genealogical* cast. Price and Blackburn say little about the distinction between synchronic and genealogical explanations of the functions of concepts. But when this third motif of a genealogical dimension is added to the preceding two, we arrive at the form of pragmatism that is at work in pragmatic genealogy:

$$
\text{Pragmatic Genealogy} \quad = \quad \begin{array}{l} \text{Agent-Centredness } + \\ \text{Function-First Approach } + \\ \text{Genealogical Dimension} \end{array}
$$

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[27] Price's wording might suggest that he is narrowly concerned with linguistic as opposed to conceptual behaviour more broadly conceived; but this impression is quickly dispelled by his application of the method in Price (2011, 2017, 2013). As he says, both terms and concepts are fair game for the Cambridge pragmatist, as are any other regularities and patterns in the agent's behaviour (such as dispositions or attitudes) whose function might shed light on philosophically puzzling topics.

As Blackburn's reference to Carnapian external questions reminds us, there is an internal and an external way to hear the question of why we came to think as we do. We can take an *internal* point of view and answer the question from *within* a given conceptual practice, pointing out, for example, that we think in terms of justice or cruelty because we are suitably sensitive to the justice and cruelty in the world. From the internal perspective in which we reason *from* or *with* the concept of X, the world appears to us full of X in a way that makes it seem inevitable that we came to think in terms of X—we think in terms of justice or cruelty because both plainly abound. But we can also step back from a given concept and take an *external* view of it, contemplating the world as including ourselves and our conceptual practice. And once we shift to this external perspective and reflect *about* the concept of X, we may find it harder to identify objects in the world that license our thinking in these terms: what is it that drives us to think in terms of justice or cruelty, or indeed in terms of values, duties, rights, possibilities, and probabilities?

It is here, as an answer to a Carnapian *external* question, that pragmatic genealogy enters the picture.[28] Of course, Carnap originally drew his distinction between internal and external questions to cast aspersions on external questions. But he had in mind external questions concerning the *existence* of the things referred to in a given area of discourse—questions like 'Do numbers exist?' For Carnap, such questions were either trivial (if heard as questions within that discourse) or meaningless (if heard as questions external to that discourse). Yet this does not bar us from asking external questions in a pragmatic rather than ontological key. We can still ask *what the point is* of using a certain type of discourse, such as discourse about numbers, while granting that the answer 'Because numbers exist' belongs with the internal perspective on that discourse and does not appear satisfactory from the external perspective. What we are looking for is a reflectively stable account capable of putting *enough* explanatory weight on the function of having a certain type of discourse to avoid putting *any* explanatory weight on the existence of the entities referred to in that discourse. This is not to deny the existence of those entities. On the contrary—when we find nothing from the outside that conflicts with the view of things we take from the inside, the pragmatic external explanation makes us comfortable with our conceptual practices, allowing us to relax into saying that 'there are values, duties, rights, possibilities, chances', and 'many statements concerning them are true' (Blackburn 2017, 63). Hence, as Blackburn also observes, it is not what pragmatists end up saying that distinguishes their position, but rather their explanatory story about *how we got there*.

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[28] Craig explicitly draws the connection to Carnap and sometimes uses the Carnapian label of 'practical explication' (1986). But as he notes, he uses it to refer to something considerably different from Carnap's method (1990, 8).

2.3.3 Non-Reductive Naturalism-cum-Pragmatism

It is a familiar worry that naturalistic explanations drag high-minded ideals through the mud, failing to do justice to lofty aspirations by reducing them to animal needs and urges. And it is an equally familiar worry that approaching human affairs from a pragmatist angle invites one to take an unduly austere view of them—what Nietzsche called 'that colour-blindness of the *Nützlichkeits-Menschen*' (*BGE*, §204),[29] which reduces human thought as far as possible to instrumental valuing and instrumental reasoning[30] or flattens human affairs by treating them as exhaustively explainable in terms of highly generic needs (as if a reader of Tolstoy insisted that every page of *War and Peace* was fully intelligible in terms of the needs of Pleistocene hominins).

What is needed is a naturalist-cum-pragmatist approach which is non-reductive—which does not reduce the higher to the lower, all thought to instrumental thought, or all needs to generic needs. When we inquire into the point of our concepts, what we want is some insight into their instrumental relation to 'other things that we know that we need and value, but an insight which does not reduce them to the merely instrumental' (Williams 2002, 90); we want to avoid 'going straight to our actual society with the apparatus of functional explanation' in a way that would 'distort our understanding of our own cultural situation, debar us from seeing what is peculiar to it as opposed to others, and lead us to a stupid reductionism' (Williams 2002, 35). Instead, we want to make sense of what seems unrelated to human needs *in terms* of its instrumental relation to such needs, but without getting involved in reduction. What we want, in other words, is *explanation without reduction*, and as Williams suggests, the aim of the genealogical method is precisely to help one get it.[31]

This is not to say that reverse-engineering must be reductive if it lacks a genealogical dimension; on a charitable reading, as we shall see in Chapter 3, ascribing a point to some actual conceptual practice of ours by highlighting its instrumental relation to some of our needs can in principle be done non-reductively. But pragmatic genealogy is better at assuaging fears about reductionism, because it starts by taking the reductionism worry entirely seriously, and then labours to show precisely why it is ill-founded.

If we say that the point of a venerable idea such as the intrinsic value of truth is to serve the need to share information, for example, the reductionism worry will

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[29] Roughly, 'the utility people'.
[30] Horkheimer's (2004, ch. 1) critique of instrumental reason, to the effect that reason degenerates into irrationality if it overemphasizes instrumental concerns, proved particularly influential in this regard. Arendt also criticizes 'the *homo faber* mentality' (1958, 82) for which human activity is paradigmatically technical and reasoning paradigmatically instrumental.
[31] Williams (2002, 35, 90); see also Williams (2006f, 137) and Craig (2007, 197–200).

be that this leaves us only with instrumental motives focused on the instrumental value of need-satisfaction, which amounts to a denial that there is such a thing as the intrinsic value of truth. This reductive tendency generalizes to other ideas, the worry goes, for if we view high-minded ideas as tools serving practical needs, our default assumption should really be that our conceptual relations to the world are purely technical or instrumental, transparently and single-mindedly geared towards need-satisfaction—that we think only in terms of resources to be exploited, and all our ideas are indexed to our needs.

Rather than having to deny that they meant anything as radical as that, as synchronic reverse-engineers would, pragmatic genealogists can grant that if we seek to explain ideas in terms of their tool-like character, this is an instructive place to start. Indeed, pragmatic genealogists typically set out from a state of nature in which all the worst fears about reductionism are realized: one in which there really is no intrinsic value of truth, for instance, and people's concern with truth really is merely instrumental. But then the genealogists spend much of their energy working through what approaches moving straight to our actual concepts neglect, namely the *instrumental inadequacy* of thinking in such purely instrumental terms. By setting out from thoroughly instrumentalized versions of ideas and showing *why* these would be instrumentally inadequate, pragmatic genealogies vividly bring out just why something genuinely new and distinct would have to arise, and why it would shed the connection to needs at the level of its conceptual content—by becoming a concept of something pursued for its own sake rather than as a means to an end, for example. The genealogical dimension brings out the *instrumental reasons for the de-instrumentalization of thought*. This is why the method is particularly good at highlighting the non-reductive nature of its explanation: it shows just why the reductive picture will not work and why pragmatic considerations themselves demand that concepts outgrow pure instrumentality. Similarly, the genealogical perspective avoids the reduction involved in explaining everything in terms of generic needs, because while it invites us to start from maximally generic needs—i.e. the most generic needs we can find that still illuminate our object—it then invites us to add more socio-historically *local* needs to make sense not just of the form our conceptual practices *would* have if we were as rough-hewn as the creatures initially depicted in the state of nature, but of the form they actually have, now and around here.

The explicitly fictional state of nature is thus uniquely useful in keeping apart the austere and thoroughly instrumentalizing descriptions that a good naturalistic and pragmatist explanation *starts out* from and the richer and far less instrumentalizing description that such an explanation *arrives* at once it has factored in various complexities. As long as the abstractions at the beginning of the genealogy are not mistaken for depictions of hominin prehistory, pursuing naturalistic and pragmatist explanation in different stages distributed along a genealogical axis avoids reductively distorting our understanding of our actual situation. Genealogy

keeps austere fictions and the rich outgrowths of history in their places, thereby preserving our right to refer without scare quotes to truth, knowledge, and justice.[32]

2.4 Weakening and Strengthening Confidence

Finding out whether a conceptual practice answers to needs, and what needs these are, is unlikely to leave everything as it was before the explanation was given. This is particularly true when we work not just one step back to the needs to which a practice immediately answers, as in simple forms of conceptual reverse-engineering, but many steps back to the needs that these needs them- selves derive from, as in pragmatic genealogies. In addition to their explanatory significance, pragmatic genealogies can therefore also possess normative signifi- cance, subverting or vindicating what they are about. Where pragmatic geneal- ogies are destabilizing or subversive, however, this is typically not a result of reducing the higher to the lower or the intrinsically valuable to the merely instrumentally valuable, but of relating conceptual practices to concerns we either fail to share or fail to endorse. And because pragmatic genealogies—like most functional explanations—initially identify respects in which something is somehow worthwhile for someone, they tend in the first instance not to prove destabilizing or subversive at all, but rather *vindicatory*.

The idea that genealogies can also be vindicatory is one that Williams in particular emphasizes, holding up Hume's genealogical explanation of justice as an example. One might 'accept Hume's account', Williams writes, 'and still give justice, its motivations and reasons for action, much the same respect as one did before one encountered the explanation—or perhaps more respect, if one had suspected that justice had to be a Platonically other-worldly idea if it was anything' (2002, 36). To determine whether and in what respects a genealogy is vindicatory or subversive, he adds in a note, we must ask 'whether a genealogical explanation of an outlook or set of values is such, when it comes to be understood, as to strengthen or weaken one's confidence in them' (2002, 283n19).

Taking up Williams's pointer, I maintain that pragmatic genealogies can affect our attitudes towards our conceptual practices by weakening or strengthening our confidence in them. A pragmatic genealogy will be vindicatory (or subversive) to the extent that it strengthens (or weakens) confidence in a conceptual practice by showing us the point of living by that conceptual practice, either *tout court* (e.g. by showing us the point of valuing the truth) or in certain contexts (e.g. by showing us the point of valuing the truth in talking about history). As I shall understand it, *confidence* is what binds us to conceptual practices where the chains

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[32] See Williams (2002, 35).

of reasons they articulate come to an end; it is the sense of indubitability with which we engage in conceptual practices, putting concepts to work and accepting the considerations that guide and flow from their application.

While pragmatic genealogies do not bear directly on the reasons for or against *tokens* of a conceptual practice—they are not justificatory of a particular application of a concept or a particular expression of a value or virtue—they can yield *reasons*, of a kind to which confidence is responsive, because in showing us whether and how certain types of conceptual practices respond to certain needs, pragmatic genealogies bear on whether we have reasons for or against *cultivating that type* of practice (I expand on this in Chapter 9). As I use the terms, then, pragmatic genealogies, though not justificatory in the sense of providing *reasons for concept application*, can nevertheless be vindicatory by providing *reasons for concept use*: reasons bearing on whether to organize one's life along the lines articulated by the concept at all rather than on whether to apply the concept in a particular case or to draw consequences following from its application. The difference is well illustrated by the trial of Oscar Wilde. Pressed by the cross-examiner to admit that a certain story was blasphemous, Wilde resisted. Yet he quite rightly did not dispute that the concept of blasphemy *applied* to the story. Instead, he found that given his needs and concerns, he had no reason to *use* the concept of blasphemy in the first place—'blasphemous', he remarked, 'is not a word of mine'.[33]

Moreover, relating concepts to needs not only gives us a sense of whether to cultivate a conceptual practice at all, but also of *when* it is pointfully applied. A pragmatic genealogy can 'colour-code' a practice according to how pointful each of its manifestations appears in light of our needs. Paradigmatically functional cases then become recognizable as such, as do cases where the practice becomes pointless or overreaches itself. As we shall see in Chapters 5 and 7, for example, the demand for truthfulness has its place, but a good thing is taken too far when that demand grows into the attitude of *fiat veritas pereat vita*—let truth prevail though life perish.

In the chapters that follow, my primary focus will lie on how genealogies can be vindicatory. This is partly because while critical genealogies have been the subject of much attention—recent book-length discussions of critical genealogy include Saar (2007), Koopman (2013), Sauer (2018), and Srinivasan (manuscript)—vindicatory genealogies have remained comparatively under-studied, no doubt on the presumption that they are boringly conservative.[34] And indeed, why should we care about vindication? This is itself an important methodological question if we are to understand the motivations of the pragmatic genealogists.

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[33] See Hyde (1973, 107).
[34] Though see Joas (2011), who draws on the work of Ernst Troeltsch to advocate what he calls 'affirmative genealogy'.

One thing that gives vindicatory genealogies their significance is the sense that many of our concepts may *not* fare well under genealogical reflection. Our modern condition is importantly different from the Aristotelian ideal of the *phronimos* who lives confidently within a unified and tensionless outlook. We have a strong sense of our outlook's being one among many, of its being the product of a tumultuous and tension-laden history, and of there being no guarantee that the concepts we ended up with actually help us to live. The picture is one on which we are *already* disturbed, and find ourselves in need of reassurance—reassurance that we do not need what we do not have, and that what we do have is worth having. I hope to show that there are truthful naturalistic genealogies to be told about many of our ideas which, even if they still appear offensive to the most Platonic or metaphysical sensibilities, will vindicate those ideas in the eyes of many and show them to be stable under genealogical reflection.

Taking a closer look at vindicatory genealogies will also show that the standard classification of genealogies into 'vindicatory' and 'subversive' soon reaches its limits. To say that there are two kinds of genealogies, subversive and vindicatory ones, obfuscates the respects in which even vindicatory genealogies have a critical edge. To say that something can be given a vindicatory genealogy is not to say that it is vindicated *tout court*; the vindication is relative to certain needs, and if these are needs that we either do not share or do not want to see satisfied, a vindicatory genealogy will be subversive in our eyes. Moreover, even when a concept serves more or less everybody's needs in unproblematic fashion, grasping what these needs are enables us to discriminate between situations in which a concept earns its keep, and situations in which the concept is applied pointlessly or overreaches itself. Thus, even a pragmatic genealogy that is in the first instance vindicatory already contains grounds for critique, for in revealing how a concept derives its point from a particular set of circumstances, it also calls applications beyond those circumstances into question. By understanding the rightful place of something in our lives, we gain a sense of when a good thing is taken too far.

It is worth differentiating the idea that pragmatic genealogies will in the first instance prove vindicatory from the superficially similar but far more conservative idea that we find the *wisdom of the ages* crystallized in the concepts we inherit. This Wisdom-of-the-Ages thesis has been associated with ordinary language philosophers such as J. L. Austin and the later Wittgenstein.[35] Both philosophers can give the impression of operating under a strong presumption that the battery of distinctions we find in our conceptual practices will be fundamentally sound— sounder, at any rate, than the distinctions philosophers are likely to dream up in an afternoon.

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[35] See Williams (1995d, 218; 1995g, 487; 2005h, 34–7; 2014f, 43–4). For representative passages, see Austin (1961, 130; 1962, 62–4) and Wittgenstein (2009, §124). See Queloz and Cueni (forthcoming) for a discussion of the conservatism charge in the context of Wittgenstein's later philosophy.

This rather optimistic view of our conceptual practices is just the opposite of that which animates vindicatory genealogies. Vindicatory genealogies draw part of their interest precisely from a strong *doubt* over whether our conceptual practices will stand up to genealogical scrutiny. If we trusted in the wisdom of the ages, there would be no need for genealogical reflection. It is therefore not at all odd that Williams, the pragmatic genealogist who offers the most explicitly vindicatory genealogy, should also be the one who most explicitly objects to this Wisdom-of-the-Ages thesis and the conservatism it encourages (2014f, 43–4).[36] Williams suspects the Wisdom-of-the-Ages thesis of being a '*myth*, a fanciful picture of the past designed to justify certain activities in the present' (2014f, 44). Far from being confident in the wisdom of our inherited concepts, he condemns the 'emptiness and cruel superficiality of everyday thought' (1995d, 218) and insists that we take seriously 'the idea not only that we are deceived, but that we are deceived by forces worth worrying about, such as…the effects of tradition' (1995d, 219). What genealogical inquiry aims to do is to look beyond the effects of tradition to *find out* whether and why our concepts merit confidence. Whether they do so is, on this picture, very much an open question, and it is because the question is open that there is a point to genealogical inquiry. It promises to put us in a position where we can more critically promote those forms of thought that *merit* our confidence and abandon those that do not. The mere fact that pragmatic genealogies will in the first instance be vindicatory in no way entails that they will prove vindicatory all things considered. A feminist critic like Catharine MacKinnon (1989, 1993) might well come to agree with Austin that 'our common stock of words embodies all the distinctions men have found worth drawing, and the connections they have found worth making' (1961, 130), but take this to speak against our common stock of words.

2.5 Responsible Conceptual Engineering

Even when a conceptual practice turns out to be problematic all things considered, genealogy in a vindicatory key can be just as important to the enterprise of improving our practices as genealogy in a critical key. We saw that reverse-engineering can guide and justify attempts to alter our concepts through conceptual

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[36] Williams duly notes that the charge of linguistic conservatism is often countered 'by reminding us that the study of existing uses was indeed a "begin-all"—after the investigation, then possibly reform'; but he still takes this to encourage conservatism, because it 'amounts to the proposal that no revolution or even reform can be mounted without a thorough sociological investigation of the *ancien régime*; and this is a proposal which in other contexts is rightly regarded as amounting to the proposal that there be no reform' (2014f, 43–4). Moreover, it is not least to the fact that hasty reformers of the past did not show such restraint that we owe the wealth of distinctions laid up in language: 'In language, as in politics, the conservative runs into the fact that the old is only what used to be new' (2014f, 44). See Krishna (2014) for further discussion.

engineering. But pragmatic genealogy is particularly good at showing us how we should *not* go about altering our conceptual practices by alerting us to what we stand to lose. As we shall see in more detail in Chapter 3, genealogy provides a more comprehensive view than a non-genealogical form of reverse-engineering would of the variety of ways in which, often unbeknownst to us, our conceptual practices perform a multiplicity of functions.

This is a third benefit characteristic of pragmatic genealogy: it facilitates *responsible* conceptual engineering.[37] It is one thing to realize that our conceptual practices are problematic and need to change, and quite another to secure the kind of understanding required to change them responsibly. Conceptual engineering as envisaged by Herman Cappelen in *Fixing Language* (2018, 34), for example, is *defect-based*: it encourages us to proceed by listing generic defects in concepts or words—emptiness, incoherence, inconsistency, vagueness, or objectionable effects on society, cognition, or theorizing—before going on to fix them across our conceptual repertoire. Conceptual engineering is then conceived primarily as a matter of fixing our concepts or words.

Yet responsible conceptual engineering requires one to understand not just what needs fixing or what is *bad* about our concepts, but also what is *good* about them—the variety of things they do for us when they function well. As Amie Thomasson also emphasizes: 'before removing a piece of a car engine, lines in a software program, or an organ from the body, it is always a good idea to begin with reverse engineering' (2020, 447). If we are blind to the panoply of respects in which our concepts are worth having, we risk wreaking havoc by abandoning them without grasping what is lost by doing so. Such caveats are not the preserve of Oakeshottian conservatism; Isaiah Berlin likewise argued that if revolutions have tended to issue in something entirely different from what they intended, it was because they are always at risk of seeing only the tip of the iceberg and producing unanticipated consequences by stirring up the depths (1996, 28–32). Pragmatic genealogy supports responsible conceptual engineering by systematically encouraging us to achieve a comprehensive view of the multiple layers of functions laid up in our conceptual practices—not to focus only on the functions that are particularly salient to us because they are historically recent or because they are in the spotlight of some ethical or political theory, but to step further back and ask what older, more familiar, and hence perhaps less striking functions our conceptual practices also perform.

Even when a conceptual practice clearly has objectionable effects, identifying the vindicatory aspects of its genealogy can help us distinguish between a situation in which we should abandon the practice wholesale and one in which we should aim to preserve the benefits of the practice while mitigating its disadvantages.

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[37] I am indebted to Damian Cueni for this framing. See Cueni (2020), where he advocates responsible conceptual engineering in international law.

If one accepts the upshot of Hume's genealogy as presented in Chapter 4, for example, namely that the distinction between mine and thine plays a crucial role in lowering the potential for conflict below the threshold required for social coexistence, then Rousseau, who was struck by the ills that elaborations of the institution of property brought in their wake, will appear sensible in recommending not that property be abolished, but that adjustments be made in other parts of our lives to mitigate its pernicious effects. Hume's vindicatory genealogy encourages us to think that Rousseau quite rightly does not turn into Marx.[38] There will doubtless also be cases where there is no straightforward way of remedying the downsides of a conceptual practice while preserving what is important and beneficial about it. But then the value of vindicatory genealogy will lie in making it clear that this is the bind we are in. Revisionary interventions or engineering efforts aiming to change what is dysfunctional should be guided and constrained by a grasp of what is functional. This is why responsible conceptual engineering requires conceptual reverse-engineering. Insights into what concepts we need and why we need them are useful not only for retrospective, explanatory purposes, but also for prospective, action-guiding purposes.

2.6 Genealogy's Place in the Methodological Landscape

Despite the manifold attractions of pragmatic genealogy as a method, I do not take it to be the One True Method of philosophy. It has its place, but this does not mean that it should displace all other methods—on the contrary, the different ways we have of approaching conceptual practices stand to profit from mutually informing each other. We just saw that pragmatic genealogy can inform conceptual engineering. But it also interacts fruitfully with less closely related approaches in philosophy. Hypotheses about the point of conceptual practices might be informed by and checked against experimental philosophy's findings about folk intuitions, for example.[39]

But some of the less obvious interactions between pragmatic genealogy and other approaches can be illustrated if we concentrate on approaches to concepts and organize them according to whether they focus first on the *intension*, the *extension*, or the *function* of a concept.[40]

Intension-first approaches are paradigmatically exemplified by conceptual analysis, which aims to provide an explicit intension to be measured against the

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[38] I am grateful to Damian Cueni for this way of putting it.

[39] According to Turri (2016), for instance, the findings of experimental philosophy suggest that folk intuition regards knowledge transmission as the point of assertion.

[40] A similar organization is proposed by Gardiner (2015), who distinguishes intension-first, extension-first, linguistic, and teleological approaches. Hannon (2019) advocates a function-first epistemology.

intuitive extension in the hope that the intension will explain why the extension has the boundaries it has. Here the guiding question is a version of the Socratic 'What is X?' question, namely: 'What are the conditions that are individually necessary and jointly sufficient for something to fall under the concept of X?' If successful, such an analysis yields a list of conditions or proprieties of use under which the concept picks out all and only the cases that form part of the intuitive extension. This kind of approach thus focuses first on identifying the concept's intension in order then to take it as a basis for explaining the concept's extension.

Extension-first approaches, meanwhile, make the extension rather than the intension their primary focus and seek to make sense of why the intension is as it is on the basis of a prior grasp of the nature of the extension. Despite this reversal in explanatory direction, the guiding question remains Socratic: 'What is X? What are the properties or unifying principles that make it X?' The intension might be the way it is, for instance, because it tracks natural kinds: objectively unified substances or clusters of properties that tend to appear together from one sighting to the next as a result of homeostatic mechanisms, shared chemical structures, or reproductive chains—as is the case, respectively, for the concepts *mama*, *milk*, and *mouse*.[41] The intensions of such concepts are as they are because this renders concept-users suitably sensitive to homeostatic clusters of properties which precede the concepts. This strategy is not restricted to natural-kind terms, however. It is pursued more generally by attempts to understand our concepts via metaphysical inquiries into the nature of the things we think or speak about. Such inquiries begin with, say, mathematical, modal, or moral statements we take to be true, and then ask what *makes* them true, or what their terms *refer to*. Mysterious truth-makers such as numbers, possibilities, or moral facts then come under metaphysical scrutiny aiming to discover what numbers, possibilities, or moral facts really are.[42]

Function-first approaches, by contrast, focus primarily on the *function of having* a concept with such an intension and extension. While intension- and extension-first approaches are guided by versions of the Socratic Question, function-first approaches are guided by some form of the Pragmatic Question: 'Why do we have the concept of X? What does it *do* for us? What is the practical value of living by a concept that delineates just *this* extension by means of just *that* intension?' Once identified, the concept's function can then serve as a basis for explaining why the concept has the intension and extension it has. In this schema, pragmatic genealogy is a species of conceptual reverse-engineering, because unlike other approaches within that genus, it does not simply reverse-engineer the

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[41] The examples are Millikan's (2000, 50). The conception of natural kinds as homeostatic clusters of properties is developed by Boyd (1991) and Kornblith (2002, 61; 2011).
[42] My fairly loose usage of the term 'metaphysical' follows that of Price (2011, 14), M. Williams (2013), and Blackburn (2013a). A more specific sense is given to it in Chapter 5.

concept's function synchronically, by looking at our present conceptual practice, but *via* the concept's genealogy; and conceptual reverse-engineering is in turn a species within the genus of function-first approaches, because it primarily seeks to identify the function of a concept in order thereby to explain why we have that concept (only a species, however, because there are also function-first approaches that do not reverse-engineer at all, either because they already know the function or because they focus on the function a concept *should* serve).

Intension-, extension-, and function-first approaches are not best understood as seeking to put each other out of business, and I certainly do not want to claim that the particular function-first approach that is pragmatic genealogy should simply replace all other methods. My point is rather that it is usefully incorporated into a pluralistic methodological repertoire in which one type of approach can be used to guide or pave the way for others. It is true that the three types of approach cannot be pursued simultaneously, since they bestow explanatory priority on the intension, extension, and function of concepts, respectively, and only one corner of that triangle can form the apex at any given time. Yet they are not mutually exclusive in the strong sense that would exclude their complementing, augmenting, or informing each other. As Peter Strawson insists, 'the kinds of concept we employ are not independent of the kinds of purpose for which we employ them' (1963, 506); nor, indeed, are the kinds of purpose for which we employ them independent of the kinds of concept we employ.

Before developing a pragmatic genealogy, therefore, one might profitably consult extant attempts to specify the intension of the concept at issue. Extant analyses of the concept may helpfully broaden or sharpen one's sense of the various properties that the concept might be tracking. The findings of extension-first approaches can similarly prove useful to pragmatic genealogy: understanding that a concept's extension is unified by certain natural principles might yield a clue as to what function the concept performs by giving one an independent grip on the projectability of its extension's properties from one sighting to the next.[43] And what we take ourselves to know about the intension or extension of a concept might not just inform the initial functional hypotheses that get the genealogy off the ground, but also offer an external validation of the genealogy once it is complete. To take the function of a concept as *explanans* is to treat its intension and extension as *explananda*. A good function-first approach to the concept of knowledge, for example, ought to be able to account for the intuitive appeal of the various definitions that have been proposed for that concept. If a pragmatic genealogy such as Craig's (see Chapter 6) can explain why competing conceptual analyses of the concept of knowledge have highlighted

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[43] See Millikan (2000, 2017).

just the features they have, and why each has some intuitive appeal, then that will count strongly in the genealogy's favour.

Function-first approaches can in turn inform and guide attempts to pin down the intension or extension of a concept by specifying the *task* that a concept with the sought intension or extension must live up to: by understanding what needs a concept answers to, we gain a sense of what its intension can be expected to look like, and which aspects of the world it can be expected to lock on to. Understanding what is worth talking about given our needs can be a good guide to the analysis of our concepts. For example, Laura and François Schroeter (2015, 428–36) argue that the manifold needs that give our concept of *water* its point— not just in the chemistry laboratory, but also in the kitchen, in religious rituals, and in symbolic and artistic contexts—should inform our analysis of the concept. Similarly, Georgi Gardiner (2015, 40) points out that looking at the needs a concept serves can tell us how precise or fine-grained we should expect the concept to be: if the concept *adult* serves legal needs that can only be satisfied by a relatively precise and sharply defined concept, we should expect it to have a correspondingly precise definition—which it turns out to possess. If, by contrast, the concept *adolescent* primarily serves needs of stereotyping, marketing, and the media, vaguer boundaries will do. They might even do better. Sharp edges can be a defect: if you asked me for a bread knife and I gave you a razor blade because it was sharper, you would complain.[44] Realizing that our needs are best served by a concept with vague boundaries would give us reason to look for a definition that preserves this vagueness.

Last but not least, a function-first approach to a concept can also inform intension- or extension-first approaches *negatively*. It might suggest that we should not look for a conceptual analysis of that concept in terms of necessary or sufficient condition, or that a metaphysical inquiry into the nature of its extension is unlikely to reveal much of substance. Here also Craig's genealogy offers the paradigmatic example: his account of the concept of knowledge suggests that there are good practical reasons why the concept does not admit of a strict definition in terms of necessary conditions. In this case, pragmatic genealogy can rightly be said to *displace* conceptual analysis—it not only gives us reason to doubt that the search for a strict definition could succeed, but completely obviates the need for it. It only does so on a case-by-case basis, however. Craig's account may lead us to question the presumption that the search for strict definitions will be successful in other cases, but it does not by itself imply that we should eschew conceptual analysis across the board and resort to pragmatic genealogy instead— though by revealing philosophers' decade-long chase after a strict definition of knowledge to have been mere tail chasing, a pointless going around in circles due

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[44] The example is Wittgenstein's (2000, MS 120, 142v).

to a failure to realize how the pieces they already had fit together, Craig can hardly avoid suggesting that conceptual analysis without pragmatic genealogy is blind.

Having motivated the project of conceptual reverse-engineering and situated it within the broader methodological landscape, it is time to take a closer look at the function-first approaches on offer within the genus of conceptual reverse-engineering, and in particular to compare pragmatic genealogy with a non-genealogical rival in order to understand the rationale for reverse-engineering through pragmatic genealogy.