Creativity, Skill, and Achievement

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Abstract

Creativity and creative products are generally understood to have a distinct value. Problems of creativity, or recognizable analogues, find discussions as early as Plato. Nevertheless, questions remain unresolved on the cross-situational, typically persisting creativity predicated of agents — particularly on its metaphysics, why it and its products command praise and esteem, and if it is aesthetically relevant in art appreciation.

This work approaches these topics by elaborating and developing the received philosophical account of agential creativity via the concept of skill. Accordingly, and after disposing several theories not placed to capture the concept at stake, Chapter 1 gives a detailed exposition of the received view of creativity as non-accidental generation of new and valuable material. It then highlights aspects of the account most needing elaboration, and prospects of doing so through appeal to skill. To that end, Chapter 2 despatches some unworkable theories of skill, then presenting its own detailed account. Chapter 3 establishes agential creativity fits the profile of a skill so described, and addresses worries over realizability.

With a more detailed account of creativity in hand, Chapter 4 turns to appreciation, rejecting Aesthetic Empiricism, an influential view by which the appreciation of art is closely circumscribed by direct experiential encounter of the art object to the exclusion of skill and creativity. The reply elaborates reasons to reject the Empiricist conception of art relevance, but sustains the thought all aesthetic qualities are experienced. Chapter 5 shows how skill and creativity can be aesthetically relevant within these constraints. Chapter 6 turns to value, arguing via the notion of achievement agential creativity and its products have conditional final value. Chapter 7 raises creativity as predicated of groups, proving this is not always reducible to the creativity of agents, before extending the metaphysical, normative and appreciative arguments to the group case.

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List of Abbreviations

BVSR: Blind Variation with Selective Retention

FVT: Final Value Thesis

0 Introduction

Creativity and creative products are widely esteemed and thought to have a distinct value. Moreover, to act or think creatively are common aims, while art critics draw attention to the creativity of works as a point of appreciation. This prefatory chapter first overviews why creativity, or more particularly the kind of cross-situational creativity commonly attributed to agents and regularly praised or esteemed, commands philosophical attention. It then previews the project pursued — briefly, it seeks to elaborate the received account of 'agential' creativity, understood as not purely accidental generation of new and valuable material, via the familiar notion of skill. More particularly, it seeks to show skill elucidates several conceptual riddles offered up by the agential notion. Discussion is subsumed under three framing heads: (1) the metaphysics of creativity; (2) the value of creativity; (3) the relevance of creativity in art appreciation.

1. Metaphysics of creativity

This thesis focusses on the kind of cross-situational creativity commonly attributed to agents and regularly praised or esteemed.[1] It is not only the central type of creativity predicated of agents, but the focal concern in discovering if an agent really is creative or merely different, lucky, or a complete charlatan. Paradigmatic possessors are diverse, but would have to include Austen, Bach, Curie, Darwin, Einstein, Feynman, Galois, Hokusai, Kahlo, Leonardo, Newton, Noether, Picasso, Rutherford, Shakespeare, Thelonious Monk, Van Gogh, von Neumann, and Woolf. Such a list should not encourage the idea creativity is necessarily something lofty. Even if more conspicuous in the arts and sciences, creativity also manifest in everyday tasks and pursuits. For instance, creativity can show in devising a new game, formulating a

[1] This is not to exclude the possibility a lack of creativity may sometimes be blameable, nor that other related meanings of 'creativity' are in use — some are touched on below. See especially Chapters 1, 3, 6, and 7. .

business plan, or through inventing of a new tool or policy. Framing a problem may count as creative as much as finding a solution.[2] Though perhaps not always so rarefied, creativity manifesting in these areas also wins esteem, and thought importantly different from happy accident.

In considering the metaphysics of agential creativity, a natural point of departure might be folk concepts, theories, and explanations pertaining to creativity.[3] The ground-level concepts in such treatments involve a trait or ability to generate novel material. Beyond this, however, folk conceptions are difficult to pin down. For one, the target is unclear — it is not always apparent whether creativity must issue in valuable novelty, or if novelty alone is sufficient. As concerns mechanisms, folk notions variously portend to explain almost nothing to almost everything. Though the obscurest views linking creativity to supernatural inspiration are now disfavoured, there are relatives in the thought creativity is wholly irrational. Other views suggest creativity is a trait some are lucky enough to be born with, some that it is a quality to be 'unleashed', else a natural talent in need of refinement. Contrastingly, creativity is sometimes presented as a skill like any other — creative writing and photography courses have a claim to impart something of value. Because of these differences alone, folk treatments seem defective or confused. However, the problems extend further. Folk approaches shed little light on the mechanisms behind creativity. Two ideas might have a chance; (1) creatives agents have fecund imaginations; (2) creatives find solutions to problems.[4] Neither is unproblematic. The thought creatives have fecund imaginations is the more plausible suggestion of the two, however even this is difficult to tie down in details. It does not seem creatives must set about *imagining* to be creative (consider the dancer or policymaker enjoying a spontaneous breakthrough), nor is it always clear what imagination would be in certain domains — e.g., the reaches of higher mathematics. Different problems upset the problem-solution model[5], which at least distorts the phenomena. Much creative art appears the result of something far freer than an attack on a problem. It is hard, for instance, to think of all the creative aspects of Fellini as solutions in this sense.[6] Substantiation of the problem-solution

[2] Boden (1994a), p.118

[3] Monseré (2016) invokes similar distinctions about projects to describe the art concept.

[4] Commentary in this section draws on Gaut (2010), pp.1038–9

[5] For instances where it does seem correct, consider Watson and Crick puzzling out how DNA was geometrically possible, or the sculptor tasked with carving a set subject from a specific block of marble.

[6] Compare Novitz (1999) on Matisse, discussed in Chapter 1.

model would need a very weak notion of a problem — but that voids the model of much content and theoretical power. In addition, putative counterexamples to the problem-solution model are not restricted to art — the scientist, mathematician, or programmer can have creative thoughts quite unconnected with a problem in the usual sense of a constrained question or project. Summarily, it is not clear there is a workable folk concept or theory in play. Given this, a philosophical ambition to formulate or clarify a folk theory in these areas — at least if this means a theory of a relatively coherent folk theory[7]— would appear misplaced.

Creditworthiness and responsibility

Moreover, folk concepts throw little light on the ties between agential creativity and creditworthiness. As was observed at the outset, individuals are often praised and esteemed for their creativity. However, it makes no sense to praise a bird that sings a new and valuable theme, nor a computer or artificial intelligence for creating a valuable novelty (though the programmer might be somewhat creditable). The point extends for theories tying creativity to natural capacities, at least insofar as they are unearned. Like reflexes and other brute natural capacities, innate abilities and are not usually correct objects of praise or credit even if useful or valuable. We do not praise people for being double-jointed or having tetrachromatic vision, and it would make little sense to praise someone for having incorruptible natural virtue. Approached in this light, a common way of explaining agential creativity looks incompatible with its creditworthiness.

There are other obstacles to any link to creditworthiness. Generally, praise and blame are connected to agential responsibility in virtue of the right relation to intention.[8] As such, luck often upsets creditworthiness — the arrow that meets its target only due to a lucky gust of wind is not a success creditable to the archer.[9] Normally agents are not credited for this kind of result, though they may be causally responsible. Yet luck cannot be summarily excluded from a satisfactory characterization of creativity. Seemingly at least some creative successes are compatible with luck, as with the serendipitous discovery of penicillin, or how Plato was no less creative for having had Socrates as a teacher.

Supposing such problems are resolved, further difficulties over creditworthiness could upset a straightforward link between creativity and creative products. Just

[7] Walton (2007)
[8] Not to exclude some habits may be praiseworthy or blameworthy, at least in some degree.
[9] Cases like this based on Pritchard (2009a) are discussed extensively in Chapter 2.

as the good individual and the good act might not perfectly align (good people can perform bad acts, bad people can do good things), so too there may seem some possibility of creative works without agential creativity. A philosophical treatment would do well to elucidate these questions.

2. Value of creativity

Turning to other questions, folk approaches speak imperfectly to the value of creativity and creative products. Clearly, creativity is of instrumental value in many circumstances, yet that does not appear to capture all of interest in agential creativity. For one, it is hard to explain the value of creativity solely in terms of its producing valuable material. Intuitively, an Einstein or Van Gogh is praiseworthy as more than a cause, and quite above the value of what is produced. In addition, the creativity of Van Gogh seems especially estimable given the challenging circumstances he faced in becoming creative.[10]

On the question of token products, if a copy of an artwork is intrinsically identical to the creative original, how could it be correct to value the latter above the former? They could be substituted without any appreciator becoming any the wiser. Even so, many hold the intuition the former has more value than the latter, and this is at least paradoxical. An epistemic analogue, the debate over the value of knowledge as compared with mere true belief, stands as a guide. It might be thought the original creative work is more valuable because it results from a suitably reliable process. But that is not an adequate response. As Zagzebski observes, a cup of coffee produced by a defective machine is just as good as one produced by a reliable machine.[11] Being the product of a reliable process does not explain the *distinctive* value of knowledge above true belief.[12] So too, adequate reliability in production does not seem to give the distinctive value of creative products.

Folk approaches might also hold the suggestion creativity is something demanding – however the thought is left unembellished. From the philosophical perspective, Kieran makes a case creativity can be an achievement in character, emphasizing the skill and trouble in developing and maintaining the trait.[13] Focussing more on something akin to exercise of creativity, Grant holds imaginativeness 'normally' has final value.[14] Both are promising proposals worth further consideration, and might give

[10] Kieran (2014a)
[11] 'Intellectual Motivation and the Good of Truth', pp.135–54 in DePaul and Zagzebski (2003).
[12] See discussion in Pritchard and Turri (2014).
[13] Kieran (2014a), Kieran (2014b)
[14] Grant (2017)

foundations to conclusions on the value of creative products. Nevertheless, that path is not without difficulty. A creative torturer might produce things that are new and valuable by his lights, but the suggestion this trait or its products have value is unpalatable. Whether or not such approaches can avoid the implication needs careful assessment.

3. Creativity and appreciation

The case for examining the link of creativity to art appreciation is easier to make. One way of arguing originals should be appreciated differently from intrinsic duplicates and later copies is via creativity — the former are products of creativity in ways the latter are not.[15] But this fits uneasily with other elements of aesthetic thought. Given a large tenet of post-Romanticist aesthetic theory holds art objects should be appreciated apart from the artist, it might be surmised the highlighted appreciation practices must rest on a mistake. More particularly, the aesthetic value of art seems rooted in the experiences works afford, but there is no clear mechanism by which *any* trait of an artist could make a difference to the experience of works, at least while staying strictly focused on the art. In arguing aesthetic appreciation should be closely tied to direct perceptual encounter with art objects, Aesthetic Empiricism classically formulated gives an influential voice to these worries. If proven, any creativity possessed by the artist might appear to have no bearing on how artworks should be appreciated or experienced. Nevertheless, much critical effort is spent discovering the creative details of artistic production and encouraging appreciators to approach art in their light. Common practice should not be dismissed without careful philosophical reflection.

Yet even if folk approaches are imprecise and somewhat confused, they do provide a starting point, and some elements may be preserved. The core of the received philosophical view disentangles and translates several useful elements offered in the folk approach into an outline of agential creativity as not purely accidental generation of new and valuable material, adding in some hints on the mechanisms by which this is possible. In preview, this thesis presses for further elaboration and development within the scope of the received view by appeal to the familiar notion of skill. It then further systemizes and extends the account to address the distinctive value of creativity and its relevance to the aesthetic appreciation of art, finally touching on the

[15] Not excluding some forgers may devise creative techniques in producing forgeries.

related group case. Pursued through reflection on test cases and further systemization of resulting intuitions, the aim is a coherent philosophical treatment of the whole.

Scepticism over creativity

Still, any approach to agential creativity must meet some general scepticism. Unrealized kinds seldom merit investigation or serious attention — phlogiston and sorcery do not concern us. Though serious argumentation would be necessary to deny persons like Picasso, Jane Austen, or Newton produced new and valuable material in a way distinctively different from chance, any evidence creativity cannot be a realized kind would cause concern.

Yet an influential line of argument proposes there cannot be character traits like creativity since dispositions are not sufficiently cross-situationally consistent.[16] This idea is familiar from social psychology. Several studies suggest irrelevant situational factors can influence action so agents do unexpected things. The students tasked as 'guards' in the Zimbardo experiment quickly changed their behaviours and attitudes to become sadistic, the 'prisoners' compliant. So too, alarmingly many Milgram subjects followed an authority to do what all evidence suggested was harmful. Taking this kind of phenomenon into account, it might look as though situational factors will swamp any trait explanation. It is not difficult to see how parallel worries could arise for creativity — if creative success is too dependent on specifics of a situation, it may seem any explanation in terms of a creative trait also risks swamping. If that is so, talk of creative traits is best eliminated or heavily revised.[17]

As a first response, there is a tendency for sceptics to assimilate traits to automatic inflexible responses that are invariably effective — as though in any situation the virtuous will offer help to an injured bystander. Rather than the courageous having a disposition to do the courageous thing in all situations (modulo relevant competing values), it may be they have a trait to do the courageous thing in some restricted kinds of situation. The general worry is situations must not be so narrowly specified they no longer target a recognizable trait (e.g., doing-A-one-Thursday-at-7.45p.m-in-the-presence-of-a-dollar-bribe).

Moreover, as several authors note, there is no reason to think character traits

[16] This is a problem for 'virtue-led' theories whether in ethics, epistemology, or elsewhere. See, for instance, the discussions in Doris (1998), Harman (2003), Harman (2009), and Prinz (2009).

Harman (2003), p.93 puts the point succinctly: "Aristotelian style virtue ethics shares with folk psychology a commitment to broad-based character traits of a sort that people simply do not have". A related epistemic argument suggests evidence for traits is too patchy to speak in terms of dispositions. This epistemic argument is put aside.

[17] See, for instance, Doris (2002).

are inflexible in the way the objection supposes. For instance, on the Aristotelian conception, virtue traits have a skill-like internal structure that involves developing the ability for action in the light of relevant reasons.[18] Generally, if skills can work like a reason-sensitive skill and not unthinking reflex, putative counterexamples must show relevant reasons are given improper weight. Yet under careful analysis of the cases offered, that may be lacking.[19] Departing from more traditional theories of virtue, the defender of traits may carefully separate traits from and specific motivational supports — agents can fail for motivational reasons, but that only indicates the trait is complex. To be compelling, however, such responses must dispel the worry such capacities involve esoteric or otherwise unrealistic mechanisms. Conceivably, however, creativity may be a skill-like trait, not an inflexible alignment of stimulus to response.

As such, the defender of creativity as predicated of agents has several defences in the face of general scepticism over traits — not all creatives are creative in wide areas, and they draw on other motivational supports. Even so, paradigm creativity would still need some degree of cross-situational consistency, at least to be distinguishable from narrow foibles and idiosyncrasies. That said, it might be doubted creativity *specifically* will find a mechanism that is plausibly realizable without making esoteric appeals. If that threat proves real, talk of creativity risks demands for elimination. However, if creativity is found to be skill-like trait, explanations of how skills can be realized should address how creativity can be realized.

Overview of chapters

This thesis examines agential creativity via an elaboration of the most workable philosophical account. Drawing on the everyday agential sense, it speaks to the three families of problems sketched above, but sensitivity to the general points of scepticism just highlighted.[20] More specifically, through detailed elaboration on this received philosophical view linking creativity to non-accidental production of new and valuable material from a relevant intention, this work aims to give a philosophical account of (i) the nature of creativity, the (ii) evaluative and (iii) appreciation practices dis-

[18] See, for instance, Annas (2005) and Fridland (2014).

[19] Notice if either of the responses hold creativity must satisfy a counterfactual test so that it secures the right kinds of outputs in the right kinds of circumstances and for the right reasons. In the very least, a philosophical analysis would explicate these factors.

[20] Compare the project of Lamarque and Olsen (1994). The concepts, conventions and rules constitutive of literary practice are examined, before considering the purposes and interests literature serves to establish its value. Lastly, the project connects literature with other philosophical concepts.

The method adopted in that work also helps dispose sceptical worries over variation in creativity attribution. Just as the canon of literature may be disputed, a significant practice is identifiable. Similarly for creativity, even if somewhat disputed, there is still a canon of agents with creative ability.

tinct to it. In this purpose it is not heavily revisionary, however it does not seek to define creativity by necessary and sufficient conditions on the classical model.

Here it may be objected any worthwhile philosophical treatment must work toward a classical definition of the central concept, or perhaps a cluster-concept if that is elusive.[21] However, not all philosophical projects need involve a definitional project. Aside from conceding different but related senses, one might hold the target agential concept is at least somewhat vague, but not too vague to be comprehensible.[22] Granting this, many philosophical projects are left open, not least of which is the detailed explication and development of a view capturing and explaining the central concepts and surrounding practices as far as possible.

Primarily, this thesis seeks to elaborate the received account of 'agential' creativity, understood as not purely accidental generation of new and valuable material, via the familiar notion of skill.[23] More specifically, this work argues creativity is partly constituted by a skill, this elucidating why creativity attracts credit for its successes, why creativity is valued and esteemed, and how creativity can be relevant to the aesthetic appreciation of art.

To outline, after dispensing of some other rival theories not placed to capture the agential sense, Chapter 1 presents a detailed exposition of the received view of creativity as not purely accidental generation of new and valuable material from ability. It then highlights those areas in most need of elaboration, and the prospects of doing this via skill. Chapter 2, by parallel, disposes of some unworkable theories of skill, before setting forth a more detailed account of skill principally via a counterfactually-sensitive success condition. Chapter 3 establishes agential creativity fits the profile of a skill as set down in the preceding chapter, so explaining why the creative can be creditable for their successes, before addressing worries over realizability.

With a more detailed account of the nature of creativity in hand, the next two chapters turn to appreciation. It first takes on Aesthetic Empiricism, an influential view by which the appreciation of art is closely circumscribed by direct experiential encounter with the art object, certainly not admitting the relevance of creativity. Accordingly, Chapter 4 rejects the Empiricist conception of art relevance, but preserves the motivating thought all aesthetic qualities are given in experience. The follow-

[21] See, for the art concept Gaut (2000). For scepticism over cluster concepts, together with an outline response, see Meskin (2007). The family resemblance approach, from which the cluster approach derives, inherits the problem of accounting for the specific resemblance involved.

[22] Stecker (2010), p.121 makes the parallel point for the art case.

[23] See especially Gaut (2009), Kieran (2014a), Kieran (2014b).

ing Chapter 5 shows how skilful and creative production can properly affect proper aesthetic appreciation of relevant works, deploying arguments for the cognitive penetrability of perception.

Chapter 6 turns to explain some central intuitions over value, arguing via the notion of achievement agential creativity and its products have conditional final value, this explaining why creativity and creative successes tend to attract esteem. Lastly, Chapter 7 raises group creativity, creativity as predicated of groups, demonstrating this is not always reducible to the creativity of agents, extending the metaphysical, normative and appreciation arguments to the group case.

Chapter 1

Existing Accounts of Creativity

Chapter introduction

This opening chapter has three main aims; to discuss some principal existing accounts bearing on agential creativity, present and motivate the received philosophical view, and set forth points for further development. Section 1.1 briefly attends to three recent treatments, each unsuited to theorizing the agential sense of creativity. In Section 1.2, attention turns to Kant's discussion of genius and scientific discovery in *The Critique of Judgment*, a prominent precursor to the received philosophical view. Section 1.3, the main section, then follows. It first evaluates Boden's influential account, before setting out the received view proper. Here discussion focusses on the theories of Stokes, Gaut, and Kieran. A closing Section 1.4 reviews ideas best preserved from the discussed accounts, then setting out several areas for clarification or expansion in subsequent chapters.

1.1 Three initial accounts

As a beginning, it is worth dispensing with three accounts from the recent creativity literature that do not capture the agential sense under consideration. After sketching each theory and considering what each might offer, summary reasons for rejection are offered.

1.1.1 Csikszentmihalyi

Csikszentmihalyi presents an influential account of creativity. The core is easily stated:

> [C]reativity is as much a cultural and social as it is a psychological event. Therefore what we call creativity is not the product of single individuals, but of social systems making judgements about individual's products.[1]

In fact, Csikszentmihalyi's view is radically social in two ways. First, society transmits rules to individuals via a culture or set of practices (the 'domain'), these giving a basis on which individuals make variations. Second, the 'field' — a smaller group within the wider culture or society — selects novel material from the individual to take into the domain.[2]

The notable aspect of this account is the selecting and preserving function played by wider society. Csikszentmihalyi motivates it via a conceptual claim individuals alone can be assured of no more than 'originality':

> Without some form of social valuation it would be impossible to distinguish ideas that are simply bizarre from those that are genuinely creative. But this social validation is usually seen as something that follows the individual's creative act and can be —at least conceptually— separated from it. The stronger claim made here is that there is no way, even in principle, to separate the reaction of society from the person's contribution. [...] If the idea or product has not been validated, we might have originality, but not creativity.[3]

For Csikszentmihalyi, a respectable theory of creativity *must* combine individual psychological mechanisms and wider societal selection and adoption of material. Creativity proper must be distinguished from originality, the latter no different to mere novelty.[4] Taking in Van Gogh's early works, we are to recall their early rejection as 'just the hallucinatory original works of a sociopathic recluse.'[5] Strikingly, Csikszentmihalyi proposes these works were *not* creative when Van Gogh produced them. Rather, they only became creative (above merely original) when others 'interpreted them in

[1] Csikszentmihalyi and Henry (2006), p.3
[2] Csikszentmihalyi and Henry (2006), p.3
[3] Csikszentmihalyi and Henry (2006), p.7
[4] Somewhat concessively, in subsequent work Csikszentmihalyi denotes the former mechanism 'Small-c creativity', the latter 'Big- C Creativity'.
[5] Csikszentmihalyi and Henry (2006), p.7

terms of new aesthetic criteria and transformed them from substandard efforts into masterpieces.'[6]

Although Csikszentmihalyi goes on to offer many persuasive lessons on how individuals generate novel material, in particular noting the need for focus, deliberate practice, motivation, internalization of domain rules,[7], the radically social view of creativity is alien to the sense targeted here. Centrally, the theory holds there is no objective way to tell originality from creativity without the social element.[8] Yet even if care is necessary to mark substantial creativity from mere originality, Csikszentmihalyi's treatment is an extreme way of addressing the problem. By all appearances, at least some individuals can confidently recognize the qualities of their own output as more than merely original. Here the Van Gogh case seems deceptive. Csikszentmihalyi may hit upon the thought Van Gogh was not creative because, if truly deranged, he was not in a position to judge the value of his work. But any implication some unrecognized Goya-equivalent would not be creative but merely original is perverse, at least if the object is to capture agential creativity normally understood.

This is not to deny creativity often relates to values nested in social practices, the difficulties of independent evaluation, nor even deny some sense of creativity may require social acceptance. The point is only this is not the normal agential sense under consideration. If that is the concern, the theory is deficient for another key reason. Csikszentmihalyi appears indifferent to how individuals generate novelties, and so silent if just any method the individual employs is compatible with their creativity. As shown more fully below, mere generation of new material relying on society to tell the valuable from the disvaluable is not plausibly *agential* creativity. Involvement of an external mechanism makes agential creativity fundamental incompatible with the Csikszentmihalyi approach.[9]

Despite these deficiencies, there are marked similarities between Csikszentmihalyi and better theories of the targeted sense described below. Csikszentmihalyi drives at the idea creativity is different from mere novelty, a point accepted by most theories since Kant.[10] Moreover, the BVSR approach discussed in the next section retains a generative element and a selecting element. Similarly, in the received account later elaborated, various kinds of generative process are admitted, provided some recogniz-

[6] Csikszentmihalyi and Henry (2006), p.7
[7] Csikszentmihalyi and Henry (2006), p.11 ff.
[8] Csikszentmihalyi and Henry (2006), p.11
[9] The agential sense further requires success should not rely on certain kinds of luck, another matter Csikszentmihalyi does not address.
[10] See subsequent discussion in this chapter.

ably agential evaluative component plays the selecting role.[11]

1.1.2 Blind Variation with Selective Retention (BVSR)

Contemporary discussions pertaining to creativity often give prominence to Blind Variation with Selective Retention (BVSR) theories. Commonly, BVSR models are presented to explain, or at least model, human creative processes.[12] A fully or partially 'blind' generation mechanism, one not internally controlled or directed toward a set end or goal, is combined with a filter selectively retaining more promising or 'fitter' candidates. These candidates are combined or further mutated in an iterative evolution-like mechanism until sufficient selecting filters are passed.

Merely instantiating a BVSR mechanism is not sufficient for creativity in the sense targeted. Broadly, evolution is a BVSR process. Nature combines random or quasi-random variation from reproduction and occasional mutation with a selecting environment. But such processes are not directly creative in the agential sense attributed to Euler or Picasso. This is so if only because nature neither intends, nor is creditable for new and valuable material it generates.

To foreclose another possibility, it cannot be just *any* BVSR mechanism linked to an agent makes for creativity in the targeted sense. An agent might generate new and valuable material but rely on exclusively environmental filters to select. Again, this is not creativity in the normal agential sense. A businessperson might generate many novel ideas, but if she relies entirely on the market to select better from worse products, that is not creativity in the target sense.[13] Similarly, not every agential implementation of a BVSR process is creative — a five-year-old equipped with a kaleidoscope and selection rules they do not understand is not creative, even if they arrive at a new and valuable pattern.

On the other hand, it could be suggested BVSR operations *governed by the mind of an agent* are sufficient to capture agential creativity.[14] This looks more plausible. It allows individuals can implement strategies employing blind variation with selective retention in meeting creative success. On these terms, BVSR approaches can

[11] See Gaut (2012) on the use of the 'irrational' in the generative process.

[12] The discussion here bases its characterization on the influential renditions given in Simonton (1999), Simonton (2000).

[13] More detailed cases like this are discussed in relation to Kieran (2013) later.

[14] 'Governed by' because requiring all creativity occurs within the mind of an agent could be too strong. For instance, a watercolourist may generate material on paper with some degree of randomization or blindness, filter out unsatisfactory material, then generate variations on the remaining material, and iterate until new and valuable material results. Nevertheless, it would be peculiar to insist the process is internal to the mind of the agent.

encompass partially blind mechanisms, meaning agents need not generate in complete blindness. Similarly, the formulation allows retention processes may be unconscious, provided they are recognizably governed by the mind of the agent.

Nonetheless, there are problems. Despite the promise of BVSR mechanisms, Gaut expresses worries over (i) creativity having success rates greater than blind variation and selective retention could make plausible; (ii) the risk of tautology.[15] To this may be added (iii) concerns about overly-lucky success and retention for the wrong sorts of reason.

As for (i), individuals are sometimes successful to a degree hard to square with simple BVSR operations. Entirely blind operations would fail remarkably often, making persistent creative success seem miraculous. But less than fully blind operations can still render persistent success remarkable — consider the improvising pianist or poet. BVSR explanations in such improvisatory or fluidly changing situations still seem a reach, if only for the speed of generation and retention required. Iteration presumably takes some time and cognitive resources, drawing the explanation into doubt. Even allowing for some standing selection mechanisms, it is hard to credit enough iterations of variation and selection could occur to explain the success some enjoy.

On (ii), Gaut's worry seems to derive from a problem affecting creative discovery. A tautology threatens if BVSR is used to explain creative discovery since what is discovered is necessarily unknown to the discovering agent prior to discovery. Selection undertaken in this context will meet the BVSR framework, but merely because of the logic of discovery.[16] Though Gaut does not wish to rule out repairs and amelioration, the pervading risk is weakening the theory to the extent BVSR is compatible with processes driven by ends sought or implicit from the start.[17]

Worries under (iii) take a different tack, suggesting BVSR alone will not be *sufficient* to account for agential creativity. Why? Cases can be constructed where a BVSR mechanism operates within an agent, produces new and valuable material, yet the agent falls short of creativity. If new and valuable material is simply a happy by-product of the processes, rather than something achieved non-accidentally because of

[15] Gaut (2010)

[16] Gaut (2010), p.1037: '[O]ne can discover only what one does not know before one has discovered it. If blind variation just means variation without knowing the result beforehand, and selection from these, the BVSR claim becomes tautological.'

[17] This would be the problem with an appeal to conditionally-deployed selection mechanisms to supplement the BVSR explanation. The more these mechanisms are allowed, the more it looks like a teleologically-governed capacity, or at least implicitly so.

it, it is hard to characterize the ability as one of creativity in the normal sense. In a similar vein, Boden raises parallel worries over computer programmes implementing BVSR-type approaches. A computer could use a BVSR type approach yet not recognize value aptly, easily iterating toward worse material. Hence it would not have the sensitivity to constraint and good reasons that marks creativity.[18]

Similarly, material can be retained for the wrong reason due to some incidental reason rather than the value of the result. This is at least one reason evolutionary processes in nature are distinguished from those creative agents undertake, even if they produce new and valuable material — nature does not understand or track value. Similarly, selective retention premised on unthinking implementation of rules or guides is not the selection associated with creativity since it does not involve understanding. An account targeting creativity should seek to ensure material is kept because of relevant reasons, not simply because it happens to be retained. As such, simply implementing a BVSR mechanism, or even simulating one in such ways, is not sufficient for creativity in the targeted sense.

Finally, observe not every BVSR mechanism implemented through agents will suffice for creativity. Much will turn on the specifics of the case, but a BVSR process that relies on applying rules without understanding, or can produce only trivially new and valuable material, is dissimilar to paradigm cases of agential creativity — the most marginal BVSR variation on a previously successful wallpaper is not creative in the target sense.

Taken in the round, and while possible precursors or components in agential creativity, BVSR-type processes are alone inadequate to capture the targeted sense. Rather, BVSR approaches best pick out a hypothesis on a general mechanism through which creativity may be realized. That is not to deny BVSR-implementing individuals could easily become creative, nor that there is not some close relation to the target concept, but merely to hold agential creativity is not necessarily present simply because an agent is closely contiguous to a BVSR mechanism.

1.1.3 The experiential view

Nanay's 'experiential' account of creativity is a striking contrast to the preceding two views. As might be guessed, the theory places a kind of experience at its core. Nanay finds one motivation for an experiential approach in the hesitance many feel in

[18] Boden (2004)

describing computer programmes as creative, however sophisticated such programmes might become. If creativity is fundamentally due to certain kinds of computational manipulation, anything implementing certain kinds of programme could be creative, a conclusion many seek to deny. Yet if a certain kind of experience is central to creativity, such worries subside given the assumption computers have no experiences. In this line, Nanay offers a first suggestion:

> At time t, the agent considered a number of possibilities. Later, at time t*, she comes up with a possibility that she experiences as something that is different from all the possibilities she considered at time t.[19]

This is not the final formulation, however, since the agent's experience of the idea or possibility as different from those previously entertained may not be veridical, i.e., they may falsely believe they have not reached the possibility before. An agent may be mistaken or simply forgetful. Therefore, the proposal is amended in favour of a 'rudimentary necessary and sufficient condition for creativity':

> [A] mental process is creative if and only if it produces an idea that is veridically experienced as something we have not thought to be possible before and as something we have not learned from someone else.[20]

However the account is motivated, it is open to very significant objection at least if the aim is to theorize agential creativity. Suppose a composer improvises completely intuitively. Further suppose the result is new and valuable, not learned from another, and achieves something not thought possible before. There is no reason to suppose the composer *must* have an experience of the kind Nanay describes — they may be completely 'blank' having no occurrent experience when generating the music. Even if experiences of the kind Nanay describes may be the norm, they do not seem necessary to a creative process.

Here it might be suggested the process can properly count as creative only if the artist *later* experiences the work in the manner described. But that does not seem correct. Suppose a sniper kills the composer on the spot the moment the music ends. Plainly, the process could be creative *despite* the composer never having an experience of the kind Nanay speaks, and having no possibility of having it.[21] A variation on the story of Russell waking with a new and valuable solution to a problem makes the

[19] Nanay (2014), p.23
[20] Nanay (2014), p.24
[21] To make the point more vivid, suppose the artist is Rachmaninoff.

same point for a non-aesthetic case. Suppose a counterpart Russell works long and hard at a problem and retires to bed with no success. He wakes in the morning with the solution in mind, and has just enough time to jot it down. Again, the sniper does his work, and counterpart Russell has no experience of the kind described, but this was surely a manifestation of creativity.

An objector might now make the case such products are insufficiently checked to count as creative in any sense whatsoever — the agent has no experience evidencing to themselves the new and valuable aspect in what they have done. This, however, does not seem decisive. It is unclear why more is required than that they *would* be justified in taking their thought or work to be novel and valuable.[22] Again, it may well be true agential creativity *oftentimes* or *usually* works around experiences of Nanay's type. Yet, for the reasons offered, it is clearly less than a necessary condition on the concept under examination.

1.2 Kant on artistic genius and scientific discovery

Perhaps the most important philosophical precursor to the received view is that of Kant. Though Kant does not offer an account of creativity *per se*, he is vexed by closely-related problems, and deploys solutions echoed and elaborated in later views. The relevant discussion derives from his treatment of artistic 'genius' as compared with scientific discovery beginning at §46 of the *Critique of the Power of Judgment*. Each is presented in turn, beginning with genius as the analogue of artistic creativity.

Kant introduces genius in §46 as follows:

> **Genius** is the talent (natural gift) that gives the rule to art. Since the talent, as an inborn productive faculty of the artist, itself belongs to nature, this could also be expressed thus: **Genius** is the inborn predisposition of the mind (ingenium) **through which** nature gives the rule to art.[23]

As introduced, Kant's meaning is difficult to discern, aside from the thought it is inborn, a quality possessed since birth. Yet from Kant's later comments, an assessable position is discoverable. It is presented here under six heads, departing from Kant's order to bring the relevant features into relief.[24]

[22] This point would not be true of those who are mistaken in most nearby worlds, hence why the examples use Russell or an experienced artist.

[23] Kant (2001), §46 p.186; parentheses and boldface in original.

[24] Kant (2001) §46; pp.185–6. See also the recapitulation in §49.

(i) Genius is not action in accordance with a learned rule

Kant holds genius is the talent for 'producing that for which no determinate rule can be given, not a predisposition of skill for that which can be learned in accordance with some rule'.[25] More colloquially, genius is an innate capacity for doing something unteachable, where what is teachable can be formulated in rules to be followed. Genius is therefore a natural ability to produce what no antecedently learnable rule could produce. For this reason, Kant suggests, genius is not a skill.[26]

(ii) Genius cannot account for itself, does not work at will

Relatedly, Kant holds genius cannot describe its workings, and its products are in some way not under full intentional control:

> [Genius] cannot itself describe or indicate scientifically how it brings its product into being, but rather that it gives the rule as **nature**, and hence the author of a product that he owes to his genius does not know himself how the ideas for it come to him, and also does not have it in his power to think up such things at will or according to plan, and to communicate to others precepts that would put them in a position to produce similar products.[27]

By 'scientifically' Kant appears to mean explanation through determinate rules. This passage also raises the difficult link to genius giving a rule as 'nature' returned to below.

(iii) Comparison with novel science and the great scientific mind

Following on, Kant introduces the distinction between the scientific mind and the artistic genius. Genius first contrasts with the 'spirit of imitation'.[28] Mere learning will not count as genius, presumably because it only requires comprehension of material others present. Yet even if someone 'invents' for science this is still held insufficient for the great scientific mind[29] because 'just this sort of thing could also have been learned, and thus still lies on the natural path of inquiry and reflection in accordance with rules, and is not specifically distinct from that which can be acquired with effort

[25]Kant (2001) §46, p.186
[26]Kant (2001) §46, p.186
[27]Kant (2001) §47, p.187
[28]Kant (2001) §47, p.187
[29]Kant (2001) §47, p.187

by means of imitation'.[30] This he immediately contrasts with 'inspired poetry' the rules for which are not discoverable or describable whatsoever. Kant explains:

> [...] Newton could make all the steps that he had to take, from the first elements of geometry to his great and profound discoveries, entirely intuitive not only to himself but also to everyone else, and thus set them out for posterity quite determinately; but no Homer or Wieland can indicate how his ideas, which are fantastic and yet at the same time rich in thought, arise and come together in his head, because he himself does not know it and thus cannot teach it to anyone else either.[31]

The combined thought seems to be of a discovering mind, yet one which can also give the steps through which discovery occurred from first principles and intuitively, drawing these into a scheme of determinate explanations. By contrast, the poet has no idea where their success originates. This he draws to a striking conclusion: '[T]he greatest discoverer differs only in degree from the most hard working imitator and apprentice, whereas he differs in kind from someone who is gifted by nature for beautiful art.'[32] The argumentation here is difficult to discern, however the key refrain suggests the scientific mind can account for its successes, at least through citing determinate rules, and rendering intuitive what was otherwise obscure.

(iv) Genius produces exemplary originality

Kant next finds novelty is insufficient for genius since there is 'original nonsense'. He explains the products of genius must also be 'exemplary':

> But since there can be original nonsense, [the] products [of genius] must at the same time be models, i.e., **exemplary,** hence, while not themselves the result of imitation, they must yet serve others in that way, i.e., as a standard or a rule for judging.[33]

This passage introduces the most valuable element in Kant's treatment of genius, offering the thought creativity is more than mere novelty. One could produce any series of novel effects by jumbling up words or clattering around in an orchestra, but a capacity for this alone is not the concept relevant for producing significant art. The simple capacity to produce novelties, however intentionally deployed, is not enough.

[30] Kant (2001) §47, p.187
[31] Kant (2001) §47, pp.187–8
[32] Kant (2001) §47, p.188
[33] Kant (2001) §46, p.186-7

Even so, Kant in some sense allows for production of novel and valuable work in both science and art, though 'exemplary originality' is specific to art.[34] The meaning of this term is not clear in the text, however Guyer offers one explanation by reference to the Kantian theory of artistic beauty:

> [S]uccessful art must always possess what Kant calls "exemplary originality": originality, because the successful work of art can never appear to have been produced in accordance with a rule but must always strike us with an element of contingency or novelty; yet exemplary, because it must at the same time strike us as pleasing in a way that should be valid for all.[35]

Here the *originality* derives from the art not appearing the product of a rule, yet nonetheless novel; *the exemplarity* comes from causing a pleasure that 'should be valid for all'.[36] The association of genius with universally valid pleasure fits with Kantian aesthetic psychology. Genius produces means for conveying aesthetic ideas — the latter being non-determinate mental representations, consideration of which would prove pleasurable to all agents with pertinent cognitive capacities.[37]

Yet Guyer observes Kant must mean something more in holding works of genius serve as exemplars.[38] In §46 Kant writes of beautiful artworks: '[T]he rule must be abstracted from the deed, i.e., from the product, against which others may test their own talent, letting it serve them as a model not for copying but for imitation'.[39] Presumably Kant means more than to exclude copying, given copying is patently unoriginal. Rather, Kant seems to think works of genius function as some kind of spur. These others seek to take from but also exceed. Consequently, the work of genius is exemplary in a twofold sense. For one, it sets a 'standard or a rule for judging' itself, i.e., it is something all properly equipped and situated observers ought to find satisfying. In addition, it sets a standard and spur for originality that other works and artists can satisfy only by departing from its model.[40]

[34] This is the rendering offered in Guyer (2007)
[35] Guyer (2007), p.128
[36] Notice 'originality' contrasts both with novelty and valuable novelty, requiring an appearance not to be a product of a rule. In this usage it differs from later meanings of the term, which tend to link originality with creativity, or at least the capacity to generate novel ideas.
[37] See Kant (2001) §49, p.192 ff., for commentary Guyer (2007), pp.127–8.
[38] Guyer (2007)
[39] Kant, quoted in Guyer (2007), p.130
[40] Guyer (2007), p.130

(v) The production of great art will involve the exercise of taste

The artist producing great art must exercise taste, which functions as a 'check' on genius. Without such a check, genius ranges into mere novelty, certainly not producing work of enduring merit.

> Taste, like the power of judgment in general, is the discipline (or corrective) of genius, clipping its wings and making it well behaved or polished; but at the same time it gives genius guidance as to where and how far it should extend itself if it is to remain purposive; and by introducing clarity and order into the abundance of thoughts it makes the ideas tenable, capable of an enduring and universal approval, of enjoying a posterity among others and in an ever progressing culture.[41]

In short, taste serves something like an evaluative function, serving to temper the flights of genius.[42]

(vi) Genius 'gives the rule' to art but not science, and strictly only for beautiful art

Returning to the earlier quotation, the meaning of Kant's somewhat cryptic claim genius 'gives the rule' now comes into view. Genius gives the rule by bringing forth novelties that others are inspired to emulate and exceed. The wider cost is original nonsense produced by those inspired who yet lack the innate 'dispensation of nature' to bring forth novel and valuable material.

1.2.1 Commentary on Kant

Here the ultimate purpose is to discuss what Kant can teach on agential creativity. Yet Kant notably offers different explanations of valuable novelty in art and science. Divergent explanations in art and science is not an automatic demerit since one might think importantly different processes are involved in each case.[43] Accordingly, the claims merit independent assessment — it might prove neither claim, only one, or both are correct. Though the Kantian account is ultimately rejected, this is not to

[41] Kant (2001), §50, p.197

[42] The point is emphasized in Stokes (2014b), p.249

[43] Notice Kant's theory would seem to need significant addition if the aim is a theory of creativity encompassing all domains. Creativity originating in applied engineering or sport (e.g., the Fosbury Flop, Cruyff Turn) do not fit the Kantian system at all. This critique is not pursued to focus on problems more specific to Kant's theory as stated.

reject wholesale Kant can teach on creativity. Indeed, several ideas are useful — most prominently the idea mere originality is not sufficient for genius.

However, other matters need address before raising these claims. This subsection aims first to show the weaknesses of the account: (A) Kant's account of how new science originates is, at best, incomplete; (B) Kant does not provide a satisfactory explanation of artistic genius. Beginning with (A), why think Kant cannot adequately account for the origination of new science? Recall Kant likens the scientist to an extreme form of 'imitator and apprentice'.[44] On Kant's terms, it seems the scientific discoverer finds intuitive and determinate rules and concepts to capture what already exists in nature, but in some sense imitates it. This understanding of scientific discovery is hard to accept. Leaving aside whether science must issue in determinate rules, it is difficult to interpret the thought a scientific mind makes progress through *imitation*. A charitable interpretation may suggest the scientific mind constructs a model which it then tests against reality. However, this is not a compelling response since the models compared must derive from somewhere, and no story follows on how they originate. In particular, there is no explanation of how this is possible without some antecedent creative act.

Worse, the Kantian approach sometimes presents the scientific process as too rational. To use the familiar distinction, it is often possible to distinguish 'context of discovery' of a scientific conception from the later 'context of justification' — the origination of a scientific idea is distinguishable from the methods involved in warranting it, or proving it false. The former may be irrational and in no way like imitation, though the latter is never irrational. The former mechanisms are at least awkward to fit with the Kantian belief scientific problems always yield to greater application and study.

Moreover, the idea great scientific minds must enjoy the ability to explain the origination of their ideas poses its own difficulties. Presumably, this idea derives from a picture of the scientist as engaged in a rational effort to capture reality through greater imitation by careful approximation. Though this might sometimes prove out, it is too much to require it of the great scientific mind.[45] It is not at all clear Curie, Darwin, or Einstein merely pressed a widely-shared capacity for imitation in this way, nor that they must be able to explain the origination of their ideas. Taken in the

[44]Kant (2001) §47, p.188: "[T]he greatest discoverer differs only in degree from the most hard working imitator and apprentice, whereas he differs in kind from someone who is gifted by nature for beautiful art."

[45]Stokes (2014b), p.249

round, there is not enough in Kant for a worked-out view of scientific discovery, at least for the purposes for understanding scientific creativity as predicated of agents.

Turning now to (B), the topic most directly related to artistic creativity. For one, great artistic success seems to encompass more than the narrow phenomena of Kant's concern, which is deeply structured by his account of aesthetic ideas. Accordingly, problems for the Kantian theory of aesthetic ideas and aesthetic pleasure feed through to problems for the account of genius. In the least, it is questionable if great artists must produce works that do not appear the product of a rule while also universally pleasurable (i.e., necessarily pleasurable when approached by those with certain rational capacities). The pleasure taken in some works is hard to square with Kant's notion of aesthetic pleasure. Consider *Guernica* and *The Disasters of War*; if these are aesthetically pleasurable, it is not obviously in a way Kant can capture in the theory as given. Kant's notion of genius seems blind to these and other qualities we find valuable in art.

Other problems manifest. Genius comes across as an opaque capacity. But why think genius is inexplicable in the way Kant suggests? There is no explanation what nature gifts, no clarity on whether the quality is *wholly* innate, or else allows some degree of cultivation. On the straightforward interpretation, linking genius to a natural gift rules out or downplays any role for cultivation or development. Yet, in fact, much practical advice can be given, and strategies learned.[46] Strictly, however, a natural gift is consistent with development and refinement. Nevertheless, it is constraining to require the capacity is always innate.

Moreover, it is possible to read Kant as verging on an inspiration view, since the origin of genius is so obscure — Kant tends to talk of genius as that 'through which' nature works. Genius looks like a conduit for nature, though what nature does is left unexplained.[47] Even if a specific inspiration reading can be avoided, Kant's holding to the thought genius is completely inexplicable seems false — it is not remarkable for creative artists to say something on how they succeed (even if not via fully-determinate rules). That aside, it might be thought Kant could allow explanations of genius from the third-person perspective, even if not from the first-person perspective. Nevertheless, it looks doubtful Kant can allow for explanation from a third-person perspective given the non-rule governed nature of aesthetic judgement. If that is so, any plausibly realizable account of creativity seems unavailable from the outset, an

[46] These are the topics of courses in, for instance, imaginative writing and creative composition.
[47] See Stokes (2014b), p.248. Consider, for instance the opening to §46 quoted above.

implication that is best avoided.

Similarly, Kant's claims on exemplarity are of small use in explaining creativity. Although genius may bring the idea of producing examples that inspire or spur others[48], such exemplarity is not core to an account of creativity *per se*.[49] Certainly, it is too strong to claim *all* cases of artistic creativity *must* inspire others, as Kant appears to suggest. Creative works might suffer destruction before others encounter them, or only find an unappreciative audience. Though a weaker claim could suggest creative works are *disposed* to inspire others, this is not clearly true to all cases of artistic creativity. The point holds even under the restriction genius must serve to inspire others *if appreciated properly.*[50] There might be new and valuable artistic work not disposed to spur others to further work — an artist's work might be most striking as the end to a particular creative avenue.

Several considerations therefore stand against the Kantian account as presented. Of course, Kant's notion of genius could be adopted as a primitive in explaining creativity in art, but this should be the last resort. If a preferable account is found, Kant's appeal to genius should not be adopted wholesale. However, the Kantian theory is not entirely without merit, even leaving aside the bifurcation of scientific and artistic cases.[51] Two points are to the fore. We receive the idea great art is a product of taste, at least insofar as taste clips and guides genius. The received view develops the thought creativity involves an evaluative capacity. Second, recall the idea a capacity for novelty is not sufficient for creativity. Dropping the framing in terms of genius, the plausible notion creative products must be set apart from mere novelties should be preserved, and an evaluative mechanism like taste is the plausible means to do it. Even so, mere novelty and avoidance of nonsense is not quite the right condition. An agent can produce novel material of trivial or marginal value. This does not look like creativity in the targeted sense, though it fits the Kantian requirement. A designer might generate novel but all too similar designs for a patterned wallpaper to be truly creative. They are not *nonsense*, merely not of any significant merit. To capture the target notion, therefore, the idea creativity produces the new and non-

[48]Gaut (2005) offers an instructive discussion of how such processes may work.

[49]I thank Aaron Meskin for emphasizing this point.

[50]I thank Matthew Kieran for raising this possibility.

[51]A bifurcated treatment is prima facie under-motivated from the modern perspective. The root thought may be creativity in art differs from its scientific relation insofar as art brings a new phenomenon into the world. Whereas scientific endeavour may create new theories and descriptions, these always aspire to track or relate the world as it exists prior to engagement with it. On these terms, the different story about artistic and scientific cases, begins to look more cogent. However, it is unclear if this is the correct interpretation of Kant's meaning. I thank Matthew Kieran for this suggestion.

trivially valuable is needed.[52] The following sections examine more recent attempts to capture the agential notion beyond these admissions.

1.3 Boden and the Received View

This section moves toward the received view of creativity via Boden's influential account. As the closest precursor of the received view, proposing an account in terms of novelty, value, and a specific mode of realization, Boden's account is presented first. In general, the received view takes on these conditions, but strengthens the agency condition[53] and elaborates the mode of realization. After Boden, the received view is discussed by attention to Stokes, Gaut, and Kieran.

1.3.1 Boden

Boden encapsulates her position quite concisely: 'Creativity is the ability to come up with ideas or artefacts that are *new, surprising and valuable'*.[54] The stand-out feature here is the tying of creativity to 'surprise'. A brief remark is necessary on the outline of Boden's theory before broaching the details.

The underpinning of Boden's theory are 'conceptual spaces' upon which various operations are performed. For humans, conceptual spaces are associated with mental representations:

> The limits, contours, pathways, and structure of a conceptual space can be mapped by mental representations of it. Such mental maps can be

[52] Consider, however, dissent from Stokes as discussed below.

[53] For views closely allied to the received views see Grant (2012) and the sense used in Friend (2016). Some views linking creativity to virtue closely follow the received view, others leave the position less developed, or have notable differences. For closely related views see Gaut (2005) and Kieran (2014a). Other authors concerned with virtue theory broach creativity more tangentially, for instance Zagzebski (1996), Baehr (2011), Roberts and Wood (2007).

For philosophical positions departing from the received view, consider Plato on poetic inspiration and Schopenhauer on genius. Salient material from Plato on inspiration (e.g., *Phaedrus* 245a ff.; *Ion* 532c, 533d, 535b, 536b, 541a) is not discussed here, firstly because the Platonic target is somewhat different, second because Plato's most salient observations figure by way of objections in the next chapter.

Schopenhauer links genius to something like periodic inspiration in *The World as Will and Representation*. In this work, genius issues in a capricious consciousness quite unlike everyday consciousness. It is thoroughly absorbed and results from an excess in a capacity all normal humans share in for seeing the inner nature of things (the universal in the particular). It is not clearly irrational in the way Plato suggests, but arises by detaching the framings of thought from practical purposes. Young (2013), p126 ff. For more broadly philosophical treatments of genius Kieran (2014b) cites John Dryden *Epistle to Congreve*, 1693 and Francis Galton *Hereditary Genius: An Inquiry Into Its Laws and Consequences* (London: Macmillan and Co., 1869). The former suggests genius is innate, the latter ties it to a hereditary quality.

[54] Boden (2004), p.1

> used (not necessarily consciously) to explore, and to change, the spaces concerned.[55]

To allow for results at surprising moments (the 'pop up' phenomenon), and creative processing when the task is not specifically attended to, it is important mental representations and associated operations can function unconsciously.

Returning now to 'surprise', Boden specifies it can result from novel material meeting one of three main criteria: (1) Being unfamiliar in going against the balance of probabilities or some statistical expectation; (2) Unexpected fittingness to a pre-existing scheme; (3) Causing astonishment at the apparently impossible.[56] Surprise is most pronounced in the latter 'impossibilist' cases. A brief explication is due for each.

(1) Improbable combination of ideas — Combinatorial Creativity

In these instances, surprise comes because the balance of probabilities makes a particular conjunction of existing ideas improbable, and correspondingly strikingly novel when brought together in the cognition of an agent. Poetic imagery offers many examples of this kind of creativity,[57] as might the juxtapositions of surrealist art. However, examples need not be artistic — making a lamp base from uncooked spaghetti involves a new and surprising thought of this kind.

(2) Exploration of a domain — Exploratory Creativity

For Boden, exploration of a domain means discovering the range and limits of a conceptual scheme. Surprise enters here from discovering something consistent with a scheme, but heretofore unnoticed. In particular, the *consistency* is the cause of surprise. Two kinds of example are central. In the first family of cases, exploration brings possibilities from the 'interior' of conceptual domain to our attention. Boden gives an example from Dickens:

> When Dickens described Scrooge as "a squeezing, wrenching, grasping, scraping, clutching, covetous old sinner," he was exploring the space of English grammar. He was reminding the reader (and himself) that the rules of grammar allow us to use seven adjectives before a noun. That

[55] Boden (1994b), p.521
[56] Boden (2004), pp.2–3 and throughout.
[57] Boden (1994b), p.520

> possibility already existed, although its existence may not have been realized by the reader.[58]

The second kind of case highlights exploration at the *limits* of a conceptual domain. Here the example draws attention to Western musicians working to find the limits of tonal music.[59] Here Mahler toying with the edges of tonality is an ideal example — as with the first kind of case, surprising consistencies were found. Exploratory creativity is perhaps the most prolific form of creativity, with most valuable scientific work falling within a scientific paradigm, or else proposing only minor tweaks.

(3) Transformation of a Domain — Transformational Creativity

The last form of surprise arises through astonishment at what was apparently impossible. In transformational creativity, a conceptual space is fundamentally remade and reconstructed.[60] Extending the musical example, Boden points to Schoenberg's abandoning reversion to the home key, so opening up an entirely new space of atonal music, a domain previously inconceivable. Abandoning constraints is a useful way for transforming conceptual spaces, as is negating a constraint. Non-Euclidean geometry resulted from abandoning Euclid's fifth axiom, while Kekulés discovery of the benzene ring rested on negating a supposition the molecule was open.[61]

In a given instance the various forms of surprise may be mixed. Yet within the surprise framework, Boden's account goes on to make two further main distinctions.

Distinction I: P-Creativity and H-Creativity

The first distinction separates 'Psychological-Creativity' or 'P-Creativity' from 'Historical-Creativity' or 'H-Creativity':

> P—creativity involves coming up with a surprising, valuable idea that's new *to the person who comes up with it.* It doesn't matter how many people have had that idea before. But if a new idea is H—creative, that means that (so far as we know) no one else has had it before: it has arisen for the first time in human history.[62]

More directly, P-Creativity captures novelty relative to the psychology of the agent having the thought. Two mathematicians working independently could discover the

[58] Boden (1994b), p.522
[59] Boden (1994b), p.522
[60] Boden (1994b), p.4
[61] Boden (1994b), p.522
[62] Boden (2004), p.2

same proof, but the fact A made the discovery before B does not impugn B's P-Creativity. H-creativity, in contrast, picks out instances of P-novelty where the valuable content is new relative to all history. Returning to the mathematicians, and assuming no other human has previously solved the problem, A will achieve H-Creativity, but B will not.

Notice Boden's H-Creativity is specifically indexed to humans. Newton was undoubtedly creative in discovering gravity, but (presumably) was not the first in the universe to discover the relevant laws, but nonetheless fits the H-Creativity descriptors. This is not to suggest there would be any problem extending for different classes of agent, but only to note H-Creativity is an indexed sub-class of P-Creativity. Other sub-classes might resolve to worlds, societies, historical epochs, or for other contextual considerations. Given H-Creative instances are a special class of P-Creative instances, the nuances in H-Creativity are largely suppressible in assessing Boden's position.

Distinction II: Improbabilist Creativity and Impossibilist Creativity

The second main distinction emphasizes the contrast of 'improbabilist' creativity and 'impossibilist' creativity.

> The deepest cases of creativity involve someone's thinking something which, with respect to the conceptual spaces in their minds, they *couldn't* have thought before.[63]

As reviewed above, 'improbabilist' combination is less radical than the 'impossibilist' since the latter cases involve a result that was unimaginable or conceptually unavailable. The richest form of creativity is tied to impossibilist feats as opposed to mere improbabilist feats.[64] Boden offers an illustrative case with the novel sentence "The deckchairs are on the top of the mountain, three miles from the artificial flowers."[65] Though such a sentence is novel, Boden contends it is not 'deeply' creative since it might have been devised by any competent English speaker following the rules of grammar.[66] On these grounds, Boden concludes, grammatical feats are generally not even P-creative but 'merely novel'.[67] Rather, the 'genuinely original' or 'radically

[63] Boden (2004), p.6
[64] Boden (1994b), p.520
[65] Boden (1994b), p.521
[66] Boden (1994b), p.521: 'Although the sentence about deckchairs is novel, there is a clear sense in which it could have occurred before, for it can be generated by any competent speaker of English, following the same rules that can generate other English sentences. To come up with a new sentence, in general, is not to do something P-creative.'
[67] Boden (1994b), p.521

creative' is associated with impossibilist creativity, and must involve transformation of a conceptual system.[68]

Constraints, depth of creativity

Even so, transformation cannot be a manifestation of sheer abandon:

> [C]onstraints— far from being opposed to creativity— make creativity possible. To throw away all constraints would be to destroy the capacity for creative thinking. Random processes alone, if they happen to produce anything interesting at all, can result only in first-time curiosities, not radical surprises.[69]

The context and phrasing obscures if Boden thinks all creativity involves constraint, or merely transformational creativity. Both views are plausible, since an undisciplined capacity for anomaly and oddity is unlike any core meaning of creativity. At the very least, Boden understands abandon to randomness to be incompatible with the kind of non-accidental efforts associated with domain transformation.

Intelligent guidance, evaluation

Marking the need for constraints, Boden takes pains to make creative processes (transformational or not) more tractable by sketching the power of simple operations combined with iteration and feedback. Importantly, however, all mechanisms must fall short of brute search strategies, which Boden argues are never properly creative. The motivating example is of a mathematical proof reached by intuition as compared with a brute search.[70] Unlike a brute search, creativity requires 'intelligent guidance' manifested in the intuitive process, or something very much like it. At the very least, this involves deploying methods and heuristics appropriate to the particularities of a problem or domain, and having the sense for when to drop or vary them.[71] These are not the kinds of things a computer is easily programmed to do, and, perhaps indicatively, often only somewhat articulable.

Intelligent guidance is closely tied to another important element of the Boden approach — the place of evaluation in genuinely creative success. New and valuable material produced without evaluation-led intelligent recognition or guidance is not properly creative — rather, creativity proper requires material to be generated or

[68] Boden (1994b), p.521
[69] Boden (1994b), p.521
[70] Boden (2004), p.121 ff.; Boden (1994b), p.524
[71] See especially Boden (2004), p.91 ff.

preserved for reason of its value. Again, the point comes out in discussing limitations on computer programmes to generate new and valuable material. A computer or other kind of process might generate new and valuable material via a random self-transformation. However, should it not recognize the importance or value of what it produces, just as easily passing over or moving away from the valuable material, it would not be fully creative.[72]

Serendipity, chance, and the prepared mind

Finally, Boden turns to creativity in the context of chance. Consonant with the above, the emphasis is on developing a prepared mind to exploit chance to a creative purpose. As such, it leaves a place for mechanisms to exploit 'serendipity' defined as 'the unexpected finding of something one was not specifically looking for.'[73] Again the argument proceeds from an example — Fleming's discovery of penicillin. Fleming's discovery relied on the chance exposure of an agar plate to air, nevertheless he was sufficiently prepared to realize the significance of what he saw, and as such the success was not mere happenstance.

The model has a more general application. Serendipitous opportunities can come from chance intrusions of memory, as well as the results of other skills interacting. The upshots are often unpredictable beforehand, and so in a sense lucky.[74] With enough preparation, these can be harnessed for truly creative success. Even so, Boden argues serendipity is not reducible to coincidence. Serendipity can involve coincidence, but need not — had Fleming's assistants been 'uniformly sloppy' an exposed agar would not be a coincidence, though it would underpin the serendipitous success.[75]

Moreover, serendipity is not mere improbability. Consider the improbability of several members of *The Beatles* attending the same school. It is very improbable (though fortuitous) that two very talented songwriters attended the same school.[76] Though lucky, it is not serendipitous in Boden's sense. In all cases, however, serendipitous success involves recognizing value and significance — a capacity for evaluative judgement. A mere happy accident is not creativity or serendipitous in itself. Hence

[72] See Boden (2009), p.245. Here Boden also mentions difficulties in having such programmes retain a useful 'style'. This is not to deny computers can assist agents in their creative projects.

[73] Boden (1994b), p.529. See also Boden (2004), p.234: '[I]n discussions about creativity, 'chance' often means not randomness so much as either serendipity or coincidence. Serendipity is the finding of something valuable without its being specifically sought.'

[74] Boden (2004), p.237. P-creativity is not always *completely* unforeseeable in such contexts, even if only 'very occasionally'. Boden uses the example of a parent leaving a new gadget on the dinner table. The parent might foresee the child's P-creative realization of how it works.

[75] Boden (2004), p.235

[76] Boden (2004), p.236

Boden summarizes: 'Chance with judgment can give us creativity; chance alone, certainly not.'[77]

1.3.2 Commentary on Boden

The central tenets of Boden's theory in place, summary discussion is now possible. Boden is most convincing on several fronts, specifically: (i) psychological novelty is fundamental in categorizing creativity; (ii) H-Creativity is a sub-set of P-Creativity, though other sub-divisions might have equal use; (iii) Constraints are integral to creativity; (iv) Exhaustive search procedures are not creative; (v) Creativity is compatible with at least some kinds of luck, though serendipity requires a prepared mind.

Even so, Boden's account of creativity must confront several objections. The following discussion considers those found in Novitz, before raising other criticisms.

Novitz on Boden

There are several strands to Novitz's critique[78], but the focus is a charge Boden introduces arbitrary constraints in her own theory, while also overlooking certain further social constraints. For one, Novitz contends it is far from clear creativity happens through reconfigurations in a *conceptual* domain: creativity might occur more directly through manipulations of techniques, objects, processes, and so forth. Novitz begins by trying to clarify what a conceptual space is for Boden. He charges a conceptual space is not only a cluster of ideas and techniques but something more structured — specifically 'unified and organised [...] by the basic rules, principles, conventions that are presupposed by the ideas or techniques in question'.[79] This kind of unification is, furthermore, essential to determining what is and is not possible relative to it, and so what a transformation of it would be. So far, this may be a reasonable interpretation, however Novitz then reads Boden to imply transformation of a domain can happen only after thorough exploration of a conceptual space, specifically after heeding its 'weaknesses and shortcomings'.[80] It is because of these constraints transformation creativity is never chance or irrational, but inextricably tied to a conceptual space.

The risk then, as Novitz assesses it, is for creativity to become a 'plodding, laboured and monumentally dull affair', quite contrary to the facts.[81] Creativity can

[77] Boden (2004), p.237
[78] Novitz (1999) critiques the First Edition of Boden's work, but the responses offered are given by Boden (1994b).
[79] Novitz (1999), p.70
[80] Novitz (1999), p.71
[81] Novitz (1999), p.71

happen without exploration, while exploration of conceptual domains may inhibit creativity, particularly when there is a weight of social expectations.[82] In full:

> Sometimes a chance remark, an image, a shape, a dream, encourage people to entertain new possibilities that cut across domains of knowledge and expertise that they have not fully explored; sometimes, too, the weight of those domains, the pressure of orthodoxy, prevent them from noticing new possibilities, new ways of doing and conceiving. Close acquaintance with conceptual spaces may actually inhibit P-creativity.[83]

Even so, the refrain idea is transformational creativity does not require full exploration of a domain. Novitz then broaches a related but distinct critique — deliberate transformation of a domain is not *necessary* for creativity. The proposed example here is Matisse. Novitz contends Matisse was not engaged in some effort to transform a conceptual space, or any form of problem-solving that might be a pre-cursor to it, but something more like 'play'.[84] In addition, Novitz contends conceptual spaces are not even necessary for creativity. Again, the case goes via a counterexample, in this case Edward Jenner's invention of inoculation.[85] Novitz contends Jenner was creative in this invention without a conceptual domain. According to the objection, there was no pertinent conceptual space for Jenner to work with (immunology, bacteriology, and so forth). His invention stemmed directly from the observation those who had suffered cowpox tended not to contract tuberculosis. Indeed, Jenner *could not* be manipulating a conceptual because Jenner was instrumental in laying the foundations for the domains in question.

Finally, Novitz holds Boden's theory will present some persons as far more creative they would appear to be. Given there was something like a conceptual space surrounding transforming one substance by adding other substances at the time of Goodyear's work, vulcanizing rubber through random trial of everything at hand should not count as creative.[86] Beliefs about rubber formed an interrelated whole, but Goodyear transformed this space by showing vulcanization, previously believed impossible, was indeed possible. As such, Novitz holds Boden is constrained to hold Goodyear was radically creative. But that seems false— 'Goodyear's invention, if

[82] Novitz (1999), p.71–2
[83] Novitz (1999), p.72
[84] Novitz (1999), p.73
[85] Novitz (1999), p.73
[86] Novitz (1999), p.75

invention it was, was pretty lacklustre, and required very little in the way of imagination, intelligence, or endeavour.'[87]

In view of these objections, Novitz defends a recombinatorial account of creativity via necessary and sufficient conditions.[88] It allows creativity to begin from an existing 'cluster of ideas or objects or techniques'[89], yet holds short of saying these must crystallize into conceptual spaces. He then offers three conditions:

> [C]reative acts require—
>
> (1) the intentional or chance recombination of such ideas, techniques, or objects — where this recombination is subsequently deliberately used or deployed
>
> (2) in ways that result in something that is (or would have been) surprising to —hence, not predicted by— a given population, and
>
> (3) in ways that are intended to be, and are potentially, of real value to some people.[90]

The final condition aims to address the problem of creativity in the service of bad ends, Novitz construing these cases as good to the mind of at least one person (usually the creator) — 'ingenious destruction'. If they are bad overall, having no possibility of being of some value to anybody, they are not creative but 'mayhem or mess'.[91]

Commentary on Novitz

Turning to commentary, first recall Novitz faults Boden for proposing transformational creativity is possible only after an agent fully explores a domain and notes its shortcomings. It is somewhat opaque why Novitz believes Boden holds this position. Of the passages cited, this is not the required reading, and Boden avoids giving this impression elsewhere. As such, the more plausible interpretation reads Boden to hold transformational creativity *tends* to follow thorough exploration of a domain. The next charge transformation of a domain is not sufficient for creativity is also somewhat misplaced since it looks like the Goodyear example relies on exhaustive search. Yet Boden takes care to exclude exhaustive search, as in the case of geometric proof given above.[92]

[87] Novitz (1999), p.76
[88] Novitz (1999), p.77
[89] Novitz (1999), p.77
[90] Novitz (1999), p.77. Novitz prefaces with the gloss "Allowing that the term 'object' may include sensations and qualities as well as physical objects".
[91] Novitz (1999), p.78
[92] The exclusion is not introduced with the Second Edition, but appears in each within the 'Concepts of Computation' chapter, p.121 ff. in Boden (2004). However, the thought brute search falls

Novitz's critique is most effective against conceptual spaces, but not every element convinces. The suggestion 'play' and not transformation explains Matisse's action is harder to accept. It could be transformation is simply subconscious, and the play aspect epiphenomenal. Against the critique creativity need not work via a conceptual space, but possibly through direct manipulations of techniques, objects, processes, and so forth, it must be noted Boden understands conceptualization as no more than the mental representation of a domain. Depending on what this means, Boden may simply hold conceptualization encompasses these kinds of direct creative activity.[93]

Even so, Novitz does point to a problematic aspect of Boden's theory. The objection to the Jenner case is well-made, and it is hard to make sense of the idea creativity always relates to a *conceptual* space, given there is creativity in physical domains (as in dance or the exercise of physical skill), perceptual domains (as in the sonic spaces of music), or the sensory in aesthetics more generally (most Impressionist creativity is sensory). As such, Boden's theory looks overly-intellectual, and reasons for a widened notion of the conceptual are far from compelling. This is not to deny some understanding of something like a domain or set of conventions is required to make sensible developments, only neither full exploration nor a distinctly conceptual space is necessary.

Turning to Novitz's positive account, the unclear relation to agency poses a problem. Though framed in terms of creative 'acts', and so presumably only relevant to agents, there is no detail on realization or the relation to luck. Furthermore, the positive account rules out some instances of P-Creativity in its denial creativity can be predicted. To re-use an example from Boden, a parent may predict the child will find out how to use the gadget, and so manifest P-Creativity. Lastly, it is not only unclear why creativity must be recombinatorial, Novitz argues for the recombinatorial approach only through failings he finds in Boden's theory. Since those objections are unpersuasive, and without a clear positive reason to think creative acts can only be recombinatorial, the theory is without good warrant.

Other objections to Boden

Moving back to Boden, a further difficulty is found in understanding the link to 'surprise'. Taking the position at face value, it is not evident why surprise is *essential* to creativity. Certainly, creativity is *often* surprising in the sense of causing feelings

short of creativity is clearer in Boden (1994b). See also the following discussion of Gaut on the insufficiency of brute search.

[93] See, for instance, Boden (1994b), pp.521–2

of surprise, yet there are cases where surprise would be misplaced. Some forms of creativity are rather mundane though not entirely trivial, meaning a conceptual link to surprise looks unwarranted in all cases (consider again predicting the child will figure out the gadget, or even combinatorial cases). Despite this, the link perhaps holds of the transformational mode, given the need for apparent impossibility.[94]

That aside, it is not always clear what Boden means by 'surprise'. As mentioned, it often reads as an affective state, but in other locations it would seem to mark nothing more than an unexpected result. As a symptom, Boden ends up downplaying the link to surprise by conceding there are grades of creativity. Accordingly, Boden's 'surprise' best fits the most profound transformational creative successes, but not more mundane instances. This is not a trouble-free shift, at least to the extent it confuses the account.

Lastly, there is a potential gap in Boden's account in respect of agency. Boden says little on how creative processes unfold in agents, aside from appeal to some quasi-computational mechanisms, and some accounting for serendipitous success. The difficulty here is aligning intention to lucky success, which Boden adverts to but does not address in detail.[95]

The analysis now turns to three representatives of the received view, all of which examine the relation to agency more closely. This begins with Stokes, the theory with the most striking affinities to Boden. Nevertheless, none of the above should suggest Boden does not hit upon an important and useful concept — only that it does not fully capture the target sense of agential creativity.

1.3.3 Stokes

Stokes offers an account of creativity that is, in the main, a refinement and restatement of Boden. Its principal concern is the creativity of thought or actions, however given its close concern with agency and intention, and the plausible chance of explaining agential creativity by a widening from creative thoughts or actions, it merits specific treatment. The presentation here combines several articles.

To begin, though not ruled out by Boden, Stokes explicitly acknowledges creativity in ends as well as means to ends[96]— finding new and valuable means to some purpose

[94] I am grateful to Matthew Kieran for pressing this point. Note the criticism would also affect Novitz's positive account.

[95] These topics are returned to in Chapter 3.

[96] In this, and in other respects, Stoke's discussion follows Gaut.

can be just as creative as devising the end itself, while both may naturally mix in a given instance. In further affinity with Boden, Stokes next offers a distinction between 'rich' and 'minimal creativity'.[97] 'Rich' creativity aims to capture creativity in more rarefied artistic and scientific cases. By contrast, 'minimal' creativity seeks to capture a minimum threshold for creativity, roughly some non-accidental deviation from a learned process.[98] Both rich and minimal creativity insist on the involvement of an agent and non-accidental processes in arriving at novelties. However, as discussed more fully below, Stokes differs from the previous analyses in hedging on the value condition.

With that précis in hand, the details may be set out. At its core, Stokes' account is triadic, formulated around an *Agency Condition*, a *Psychological Novelty Condition* and a *Modal Condition*. The Agency Condition is presented first:

> Agency Condition: an x is minimally creative only if x is the non-accidental result of agency.[99]

'Non-accidental' seeks to exclude cases of deviant causation, whereby the agent is responsible for the creative agency of A, but in the 'wrong way'. In such cases, the agent may be causally responsible for Φ in virtue of an intention to Φ, but succeed only because of a factor accidentally connecting with the intention to Φ. The Agency Condition is defended by an appeal to comparison cases:

> We may attribute beauty or other aesthetic properties, but we do not (properly) attribute creativity to an unusual array of cracks in a rock wall or to the image of a mythical creature in the clouds. If, however, we come upon an abandoned artefact of some sort, say a painting, we might attribute all of the same properties *plus* creativity.[100]

There is some infelicity in this formulation since creativity as predicated of thoughts, actions, or agents is not attributed to a canvas. Nonetheless, the root thought is sound. Artefacts as products of agency can be described as creative, but natural phenomena cannot be described as creative in any more than an extended or metaphoric sense. This is so even though they may share in other aesthetic qualities.

[97] Stokes (2011), p.666. Compare Kieran's definition, elaborated below, of 'minor' creativity as merely producing what is new and valuable.

[98] It is instructive to compare this with Gaut's notion of a routine discussed in a subsequent chapter.

[99] Stokes (2011), p.660

[100] Stokes (2011), pp.659–66

But an objection presents here. Might it not make sense to talk in terms of creativity where there is only the *appearance* of 'the marks of agency'? Stokes thinks, notwithstanding epistemic mistakes, we would not make a creativity attribution unless agency is in fact involved. The substantiation comes from appeal to what would be said of computers, Stokes arguing 'one does not properly attribute creativity to the computer until one properly attributes agency to that computer'.[101] Consider now the second condition, Psychological Novelty, or 'P-novelty':

> P-novelty: x is minimally creative only if x is psychologically novel.[102]

The psychological condition finds its justification in the idea what is creative to an agent must be novel relative to that agent (i.e., a novel thought or action). This condition closely parallels Boden, and prompts an intermediate attempt to define Minimal Creativity:

> MC* (Minimal Creativity): Some thought (or action) x is minimally creative only if, for some agent A, x is the non-accidental result of the agency of A and x is psychologically (or behaviourally) novel relative to A.[103]

This formulation is presented as necessary for creativity, but short of a full account. The owed sufficiency element is more conjectural, but one attempt to identify conditions jointly sufficient with MC* is offered.

> Modal: x is minimally creative only if x could not have been tokened by A before t_{i} when it actually was tokened.[104]

Expanded, the thought is the creative thought or action must not have been possible to the agent before t_{i} in some modal psychological sense. Stokes describes these as 'breakthroughs' in the sense they open up possibilities that were not open before. However, Stokes hedges on whether the modal condition is necessary in view of the obvious objection an artist might create their work slightly earlier (his example supposes Beethoven composing a particular symphony at a slightly different time). Though somewhat attracted by the idea the modal requirement is only nomological, there perhaps being a sense in which Beethoven could not have composed the Eighth sooner from some minor psychological factor, he concedes the point is not an uncontroversial intuition. Moreover, there is difficulty stipulating the modal details from

[101] Stokes (2011), p.660
[102] Stokes (2011), p.669
[103] Stokes (2014b), p.164
[104] Stokes (2011), p.669

'accessible' evidence, that which is available to inquirers as third parties. It might be queried what relevance *accessible* evidence has here — why an account of the metaphysical nature of creativity should turn on what can be known of other agents. That qualm aside, Stokes combines the above conditions into an 'enriched' account of 'minimal creativity':

> MC: Some thought x is minimally creative if, for some agent A, x is the non-accidental result of agency; x is psychologically novel; and x could not have been tokened by A before the time t_{i} when it actually was tokened by A.[105]

Before turning to evaluate Stokes's proposal, it is worth pausing to present Stokes's wider strategy for understanding creativity. In 'A Metaphysics for Creativity' this comes into view. Broadly, Stokes wishes to cast 'rich' creativity through extension of the account given for 'minimal creativity'.[106] The strategy locates the difference between rich and minimal creativity in a change of comparison classes. Rich creativity is defined via psychological novelty and an adjusted or expanded comparison class sensitive to purposes in play.[107] Elaborating on the theme:

> Even some mundane actions and thoughts are novel if the comparison class is an individual behavioural history. If the theoretical interest is in something richer, then the comparison class for novelty is broadened.[108]

This needs further specification. A comparison class might be broadened in many ways, some of which are inappropriate or deceptive in trying to judge an agent's creativity. For instance, if the class expands into attempts in very odd circumstances, any conclusions drawn are likely to mislead. Consequently, if rich creativity is modelled by an expanded comparison class, the make-up of that class must be specified carefully. For instance, consider how the bar for non-minimal creativity in most domains must have sensitivity to numerous circumstances and contingencies. A child, being less experienced and practiced in a domain, may show substantial creativity by doing something that would not be creative for the adult. Similarly, what counts as creativity may be relative to the technologies and tools at hand, or the history of some discipline or technique. To reconfigure a case from Levinson[109], Beethoven

[105] Stokes (2011), p.672
[106] As discussed in Stokes (2011).
[107] Stokes (2011)
[108] Stokes (2011), p.666
[109] See Levinson (1980). The original case uses the property of being Liszt-influenced, which a work prior to Liszt could not possibly have.

might count as creative by doing something novel that would not be creative if composed by a later Romantic. At the barest minimum, the relevant comparison for many cases will need sensitivity toward; (i) historical context; (ii) available technologies (iii) agential skill and capacity; (iv) stage in agential development.

However the account is fleshed-out, the claim rich creativity is derivable from minimal creativity (plus a change of comparison class) needs an underlying common mechanism. This Stokes sketches under the 'Cognitive manipulation thesis':

> Cognitive manipulation thesis: Creative thought and behaviour (rich or minimal) requires cognitive manipulation. Cognitive manipulation typically involves voluntarily thinking about the contents of some conceptual space in non-truthbound ways. In creative processes, this cognitive activity often causally interacts with affective, motivational, inferential, and free associative capacities.[110]

Here three terms require explanation; 'manipulation', 'voluntariness', and 'non-truthboundness'. Manipulation denotes an operation on the cognitive or broader psychological stock the agent enjoys pertinent to the relevant domain or problem. It has two typifying (but not necessary) features. First, 'voluntariness' excludes chance and inadvertent adaptations of a domain — for instance, out-of-the-blue thoughts following a bump on the head. Second, 'non-truthboundedness' proposes such operations are not governed, or not entirely governed, by a constraint to track the world accurately.

It will be noticed the Stokes account lodges no requirement on the value of the thought or action. On the question of value, Stokes first considers making value of the process from 'the perspective of the audience' determinative of creativity.[111] On this view 'F is creative only if F is valued or to be valued' where F is the 'process and/or product'.[112] Two qualms follow. First, the proposal is not specific since an audience may find many kinds of value in an object. There are not only questions over the kind of value (artistic, aesthetic, cognitive), but also more theoretical questions (are the Fs objectively valuable, or mind-dependently?).[113] Yet there is a second more general worry: that the account is not sufficiently specified, and has no descriptive advantage over an account without the value condition. Hence Stokes asks:

> What would one know about the nature of creative process that one did

[110]Stokes (2014b), p.171
[111]Stokes (2008), p.118
[112]Stokes (2008), p.118
[113]Stokes (2008), p.119

> not already know with the agency and novelty condition in hand? Knowing that something is valuable or to be valued does not by itself reveal why or how that thing is valuable [...] By analogy, being told that a carburator [sic] is useful provides no explanatory insight into the nature of a carburator: how it works and what it does. And it is the latter kind of story that is needed, at least for a start, in theorizing creativity.[114]

The first charge presses to know something about the kinds and nature of the value involved, if the value condition is agreed to. The second charge strikes at how much any such condition can reveal on the nature of creativity.

1.3.4 Commentary on Stokes

Turning to evaluation, an initial qualm concerns the 'voluntariness' term mentioned in the previous section. Although not central to Stokes's argument, it is questionable if, even typically, creativity (whether 'minimal' or 'rich') is voluntary in the sense Stokes seems to use the term. If 'voluntariness' means 'consciously intended', the claim is surely too strong. Agents need not have conscious creative intentions to be engaged creatively, and the intention is often inimical to success. Suppose a solution comes unbidden to the mathematician enjoying an afternoon walk following a morning working on a problem. We do not think this necessarily excludes that solution from being creative and being creditable to the mathematician, i.e., manifesting the creativity of the mathematician. To be convincing 'voluntariness' would have to mean something weaker, perhaps the product of some recognizable standing plan or aim. In other words, no occurrent or otherwise purposefully invoked intention is required for agential creativity, even if it did somehow bear out for thoughts and actions. That is not, however, a difficult concession[115], and would not fatally undercut the theory.

More damagingly, Stokes's modal condition is hard to render plausibly. Consider again the claim 'x could not have been tokened by A before the time t_i when it actually was tokened by A'. This looks too strong as a necessary condition on particular agential cases. It would seemingly exclude Beethoven from being creative in a given instance because he simply chose not to create sooner, even by some arbitrarily small amount. Again, though Stokes raises this kind of objection, retreating to a claim of nomological possibility, the modal condition is, as formulated, alien to the agential

[114] Stokes (2008), p.119
[115] Stokes (2007) enters some comments on processes of this kind.

sense under present examination. If it requires the belief an agent could not have tokened the success for some nomological reason, this is still implausibly strong.

There are, however, several plausible aspects to Stokes's theory. Something like the 'Agency Condition' looks correct for the present purpose, though in need of further specification. The relevant sense of agency is difficult to define given some connections to intention and agency might be too weak or tangential. Though deviant causation is excluded, it is not clear this is enough. Non-deviant results often do not look like creativity. For instance, an agent might hit themselves on the head, causing a neurological disturbance, and through this unlock new possibilities. That is not obviously creativity despite fitting Stokes' conditions, giving a hint the history of a given state is relevant to determining if there is creativity. Similarly, an agent could be causally responsible for a creative thought but not creditably so. Suppose, for instance, an external mechanisms does most of the work, as where an alien provides a device that at the simple press of a button unlocks new conceptual possibilities by electrical stimulation.

Lastly, it is not at all clear the value condition should be put aside. Stokes does not claim the value condition is mistaken, but means to introduce serious qualms along two lines. To review, there are questions not just over the kind of value (e.g., 'artistic', 'aesthetic', or 'cognitive'), and the nature of the value (mind-independently, mind-dependently, intrinsically, finally)[116], but a more fundamental question on what the value condition adds of determinate interest.

Despite Stokes's concern, it is important to preserve the value condition in some form if the target is the normal agential sense of creativity. Opening up new thoughts cannot be dismissed as valueless in the way nonsense is. However, making trivial or useless breakthroughs is not creative in the focal sense.[117] A scientist-manqué might raise many hypotheses, interesting in their own way, but all false. These are not valueless nonsense, but neither are they very valuable. Still, they are not creative in the sense under examination, even if the quality they result from may be a condition of creativity in the normal sense. Creativity requires something more than being simply productive or prolific. Again, however, a sense of creativity avoiding the value commitment may be allowed to Stokes — a person who non-accidentally produces or simply entertains new material is certainly doing something akin to creativity — the

[116]Stokes (2008), p.119

[117]Of course, care must be taken to exclude agents generating trivial novelties from processes that are creatively devised, but the point survives this concern.

point is merely they are not creative in the central agential sense under examination.

1.3.5 Gaut

Gaut develops variations on the received view through several discussions. Here they are summarized under the simplification of an earlier and later position. Since the next chapter examines material from Gaut in some detail, much is left in outline.

Earlier Gaut

The earlier Gaut adverts to 'flair' as a necessary condition of creativity, but remains staunchly within the template of the received account in requiring novelty, value, and a specific model of realization. In 'Creativity and Imagination' flair is understood to exclude success by 'chance or mechanical procedure'.[118] Just as mechanical search is not compatible with agential creativity, neither is pure luck. A kidnapped paint-covered agent flailing about aimlessly in a darkened room is not creative, no matter how new and valuable the pattern they produce is[119]— their success is purely due to chance. This line is presaged in Boden, but Gaut follows in several other respects. Creativity requires judgement if rules are applied, and an evaluative ability. This is now finessed a little — judgment over is introduced to counter unthinking reliance on guides, while requiring an evaluative ability possessed by the agent excludes both mechanical and external assessment mechanisms. The latter point is motivated through an example case:

> [C]onsider a chimp brushing paint boisterously onto paper: her trainer removes the paper at the point at which it is aesthetically pleasing, but left to their own devices chimps will keep adding more paint and simply end up with a mess [...]. The chimp has not been creative, since she lacks the evaluative capacity to assess her own work and thus to know when to stop.[120]

On the basis of this kind of case, we are to conclude humans without the ability to evaluate their own material fall short of creativity. The central tenet is still clear, however: 'creativity is the capacity to produce original and valuable items by flair'.[121]

[118] Gaut (2005), p.270
[119] Gaut (2009), p.85
[120] Gaut (2010), p.1040
[121] Gaut (2010), pp.1040–1041

In 'Creativity as Skill' Gaut attends more closely to the relation of skill and end-governed activity.[122] Recounting creativity implies success without mechanical search or through pure luck —and so flair— he adds flair 'involves' skill of a non-routinized type.[123] Nevertheless, Gaut does not hold a skill, even a non-routinized skill, is *sufficient* for creativity. The reason is quite straightforward: 'someone may have creative ability, but be poor at exercising the skill, because he or she is too timid to take the risks involved in being creative.'[124] We are to consider a rock-climber. The rock-climber may have the skill to scale a mountain, yet lack the auxiliary attitudes or dispositions to scale a mountain due to a fear of great heights.

Later Gaut

In Gaut's later position, the flair terminology is dropped, but its components further developed. The newer account frames in terms of a disposition, though such dispositions may exist only briefly.[125]

> Creativity is a kind of disposition: A creative person will, in suitable circumstances, produce creative things. Simply having the ability to create is not sufficient: When Rimbaud, disillusioned, abandoned writing poetry by the age of 21, he ceased to be creative, even though he presumably still possessed the ability to write creative poetry. An ability is a constituent of a disposition, but does not suffice for it: a person must also be motivated to act on that ability. So we can think of a disposition in an agent as a motivated ability. Teaching someone to be creative thus involves teaching both the motivation and the ability.[126]

However, Gaut emphasizes creativity is not *just* an ability. Dispositions are now 'motivated abilities', and so creativity too is a motivated ability — one requiring both ability and motivation.[127] Beyond setting down these ideas, Gaut adds some useful clarifications — creative ability is 'scalar' and newness must be salient.[128] Gradability marks the comparative aspect of creativity already remarked upon, the

[122] See Gaut (2009), p.92. In line with the above, no claim is entered on whether creativity is necessarily goal-directed.
[123] See Gaut (2009); p.86, p.89. This topic receives extensive discussion in the next chapter.
[124] Gaut (2009), p.98
[125] Gaut (2014b), p.193. Here Gaut appeals to the Platonic example of Tynnichus, who produced only one great work.
[126] Gaut (2014a), p.272
[127] Gaut (2014a), p.272. In the earlier position talk of dispositions is not foregrounded. Compare the earlier Gaut (2005), pp.270–271 where the only mention is in describing creativity as a trait 'disposing [persons] to engage in creative acts'.
[128] Gaut (2014a), p.272

second makes the important observation valued newness must be salient — there are ways of producing new and valuable material without having any connection to projects one is undertaking, as well as ways of being saliently new but of no salient worth.[129] A sculpture may be novel or valuable in an irrelevant respect. For instance, an artist may produce sculpture that is novel for being the first fixed with a certain kind of artistically irrelevant bolt. Equally, it may have novelty and value, but only for a non-salient reason — e.g., a trivially new sculpture valuable only to a foundry for exhibiting their best work.

Still, creativity excludes success by pure luck, requires purposiveness in producing or selecting valuable features (and *because of* those features), all while excluding exhaustive search. The argument may be reviewed briefly since it closely follows the earlier view:

> If my purpose is to leave the room and in doing so I accidentally spill the paint and that is all I do, I am still not creative. I must have aimed at producing (including selecting) at least some of the valuable features of the painting to count as creative.[130]

The overall reasoning parallels the earlier case, though Gaut clarifies the tie to credit — 'we do not give credit for pure luck (though we do give credit for the *use* of luck)'.[131] In addition, creativity must be purposive in the sense it produces or selects valuable features and because of the value in those features. On account of the latter, the creative person must have an understanding of the relevant values. In summary, Gaut characterizes the core of the kind of creativity agents are creditable for: a species of 'purposive production that involves the exercise of choice, evaluation, understanding, and judgment.'[132]

1.3.6 Commentary on Gaut

The shift between Gaut's earlier and later views is instructive in several respects — the flair shorthand goes, and several new notions are introduced. More directly, the latter position retains the plausible idea creativity is incompatible with pure luck (though can use chance[133]), adding newness should be salient. In addition, the latter

[129] Gaut (2010), p.1039
[130] Gaut (2014a), pp.272–3
[131] Gaut (2014a), p.273
[132] Gaut (2014a), pp.272–3
[133] Chapter 3 returns to this in detail.

position emphasizes selection for the right kinds of reason. Still, several points merit comment.

One general worry could be levelled against Gaut's later position that creativity is a disposition. Gaut holds a creative person will 'in suitable circumstances' produce creative things.[134] This means holding those who abandon creative pursuits are no longer creative (the Rimbaud example). However, there are seemingly cases where that line is not straightforward. Suppose an artist is in economic need with many willing patrons. He can produce new and valuable work. However, he has such a distaste for the patrons who offer support, he elects to abandon creative efforts for the time-being. Even so, this does not kill the motivation to produce material. Without further information, it would be hard to say he was not creative, even if this impasse persisted some time.[135] These are in some sense suitable circumstances for exercising their ability, the agent merely elects not to use it. Or now suppose Picasso or Dickens became depressed and currently unable to produce work — still it seems they were creative artists.

Much of the objection is undercut, however, once it is noticed other dispositions may outweigh the creative disposition. Even so, it may be objected a creative person need not produce valuable material even 'in suitable circumstances'. Suppose a close counterpart of Praxiteles aiming to bring about new and valuable work. Regrettably, however, each attempt is frustrated by a chance meteorite destroying his work. Again, it looks as if this Praxiteles is creative, merely very unlucky since the marble holds up in close possible worlds. As such, the Gaut picture at least requires further specification, most plausibly via a counterfactually sensitive test retaining some notion of suitable circumstances.

Consider now the link to teleology. The chimp example deployed to exclude alien agency present difficulties of its own. Although the chimp will ultimately make a mess, this might not disprove creativity in the process. The idea would be the chimp can be creative at least for a while, it simply makes a mess if left too long. If that is so, the case no longer seems decisive, and some replacement would be required.[136]

[134] In this vein, the later Gaut understands creativity as a 'polymorphous' concept, with different but related meanings, though united in being dispositions. In one of these senses creativity is a kind of virtue (though not a 'fully-fledged' variant) in view of allowing intrinsic or extrinsic motivation. This work does not pursue the Gaut line on this point, leading to a different account of why the trait is esteemed.

[135] Compare the case from Carr (1981a) where an agent knows how to change tyres, but elects not to change a tyre on the car they are using to attend an important event for the sake of preserving their clothing. A similar non-artistic case making the same point might present a scientist in an adverse regime.

[136] Further qualms might arise over what intentions the chimp has, what the success conditions for

Since related arguments are raised by Kieran below and again in a later material[137], this point is provisionally set aside.

Lastly, note Gaut goes no further than to claim creativity 'involves' skill. Aside from a few loose pointers, the nature of skill is not set out fully. In addition, it is unclear there is any more to the involvement of skill than the thought creativity is not compatible with pure luck, plus the requirement the agent must possess an evaluative capacity (however this is explicated). As such, a full assessment of the thought creativity involves skill is precluded.

1.3.7 Kieran

Kieran's central discussion of creativity serves as a final representative of the received view.[138] Centrally, the argument contends 'exemplary' creativity is more than a mere skill, but a virtue of character. It takes on the core of the received view, non-accidental success in producing new and valuable material, but extends into wider considerations of creativity as an achievement in character.

The lead is the Aristotelian conception of virtuous action as (i) done from knowledge; (ii) chosen for its own sake; (iii) from a fixed disposition of character.[139] To substantiate, Kieran first distinguishes 'exemplary' creativity from 'minimal creativity'. The contrast is approached through a hypothetical case. A recovering stroke victim is undergoing writing rehabilitation. In the course of doing so, they exclusively produce novel and aesthetically valuable patterns, though these are nothing like writing. There is a mismatch between what the patient intends and envisages, and what the hand produces. The patient has good vision, but this no longer meshes with their motor control. Moreover, if they had the intention to create abstract patterns, they would not succeed as the result would be a mess.[140]

Kieran claims the stroke victim is 'in a sense' creative, since they reliably produce new and valuable material. Despite this, Kieran claims, the stroke victim is creative only in a minimal sense (i.e., not fully or exemplarily so). Full creativity requires something like Gaut's criteria — relevant purpose (so not entirely accidental), at least a degree of understanding (so no mechanical search), and a degree of judgment in

chimp creativity are, whether aesthetic standards are the same, and so forth.

[137] See Chapters 3 and7.

[138] Kieran (2014a)

[139] Kieran (2014a), p.128

[140] Kieran (2014a), p.126

applying rules (if rules are involved), all expressing in a pertinent evaluative ability.[141] Compared to these criteria, the stroke victim's behaviour is not fulfilling an aim or purpose. Neither is the agent acting with understanding, or exercising judgement in applying rules. Finally, the stroke victim is not exercising a capacity for aesthetic valuation — the pleasing results are not realized or targeted by the patient. Hence the pleasing result is more like an unintended side effect than a manifestation of creativity proper.

Significantly, it would not make sense to praise the stroke victim for being creative (though their persistence may be praiseworthy). That kind of praise requires the absent features: creativity meriting praise turns on 'mastery, control and sensitivity to reasons in guiding how agents bring about what they aim to do'.[142] Specifically, it involves praise for the right kind of responsibility for 'imaginative' (i.e., not merely reliable) production of appreciable ideas or artefacts.[143]

Kieran's ultimate aim is to show exemplary creativity is a virtue, which is more than to show praiseworthy creativity implies acting in the light of appropriate reasons, but fulfils the motivational criteria of a virtue. For this purpose, it understands 'intrinsic motivation' as action out of the desire to realize things valuable to a domain, and for the reasons they are valuable in that domain.[144] To illustrate, suppose tiddlywinks only aims for there to be games of tiddlywinks (no instrumental, aesthetic, prudential or other values are in play). Someone with intrinsic motivation about tiddlywinks will act from a desire for games of tiddlywinks to exist, and not because, say, it is lucrative to play, or an easy way to dispose of celluloid discs.

This slightly technical definition of 'intrinsic motivation' side-steps several objections. The natural interpretation might equate it with motivation by intrinsic values. That is not Kieran's sense, since some domains have no concern with intrinsic values (trade and finance, for instance).[145] Put shortly, the interpretation provides a safeguard against motivation for reasons extraneous to the domain. Extrinsic motivations (for instance, those of recognition, wealth, social status), are perilous for many

[141] Kieran (2014a), p.127, citing Gaut (2010), p.1040.
[142] Kieran (2014a), p.128
[143] Kieran (2014a), p.128
[144] Kieran (2014a), p.129
[145] Kieran (2014a) pp.133–4: 'Creative achievements might concern values that are intrinsic (truth), extrinsic (making people happy), inherent (expressive of feeling), purely instrumental (achieving huge financial returns), or relational (one vacuum cleans better than another). Intrinsic motivation conceived as it is here, as motivation by the values and goals internal to some relevant domain, does not straightforwardly equate with directly aiming at the realization of intrinsic values. Intrinsic motivation conceived as it is here, as motivation by the values and goals internal to some relevant domain, does not straightforwardly equate with the direct realization of intrinsic values'.

reasons. Under the supposition motivation shapes attention and effort, extrinsic motivation plausibly leads to divided attention. Similarly, it can lead to moderation or compromise since extrinsic values exert a pull from realizing the values of a domain. In turn this explains why, excepting luck, robustly reliable success generally goes with intrinsic motivation. Van Gogh, who started out as a fairly mediocre artist, provides the instructive example. Through perseverance in the face of quite abysmal circumstances, he became creative. In part, this traces to his intrinsic motivation. Were he not intrinsically motivated, the suggestion goes, he would not have become creative because of the dire difficulties. Yet Van Gogh also appears praiseworthy because he sustained intrinsic motivation in the face of these circumstances to reach the creative end-point — indeed this is precisely what makes his creativity exemplary.

Emphatically, this is not to claim obtaining extrinsic goods is incompatible with exemplary creativity, Van Gogh is only an outlier. It is simply that sustaining intrinsic motivation across time and situations is 'itself a praiseworthy achievement of character.'[146] The point on intrinsic motivation is not restricted to art — it would be an achievement in a scientific or some other domain. Other qualities are not completely unrelated. Honesty and humility are often needed to sustain creativity — open-mindedness to recognize faults; persistence and fortitude to face set-backs and give an idea its due.[147] This is because human nature pulls in opposing directions, toward self-deception, compromise, grandiose ideas of the worth of one's work, or otherwise corrupted by extraneous judgement.[148]

The main thought now comes into view — exemplary creativity is not merely a skill since it involves excellence of motivation. Here the reasoning fall into two main strands. First, acquiring the mastery and insight necessary to bring about ends creatively typically involves excellent motivation. Without it, Kieran suggests agents will normally 'fail to live up to the requisite excellence required to be reliably creative (or at least as creative as they could be)'.[149] Second, as many examples attest, creativity resulting from excellent motivation is praised above that resulting through extrinsic motivation.[150] The thought appears to be contrastive — a difference in

[146]Kieran (2014a), p.131
[147]Kieran (2014a), p.131
[148]An objection enters here. There is considerable empirical evidence extrinsic motivation can support or enhance creativity. Several psychological studies suggest offering an extrinsic reward causes participants to be more creative. To this Kieran first responds exemplary creativity requires neither conscious aiming (people might not have the intrinsic values as their conscious aims), nor that creativity is the sole motivation by the ends internal to the domain.Kieran (2014a), p.135.
[149]Kieran (2014a), p.135
[150]Kieran (2014a), p.135

praise must mark a relevant difference between the differently motivated abilities, the most plausible explanation being that one is more worthy of admiration than the other.

Kieran highlights and considers several objections. First there is the possibility of an extrinsically motivated agent who non-accidentally tracks the domain-appropriate values. The motivating case is framed around Koons*:

> Koons* moves from trading into the art world by entering high profile art exhibitions, which makes sense given the external rewards that are targeted. [...] Koons* does not consider the values internal to art as such. Rather he carefully looks at and researches the background, track record and aesthetic preferences of the art prize panels. The judges, let us assume, are all good aesthetic evaluators and closely approximate the relevant criteria for being excellent critics [...] Thanks to thorough research, and a certain natural felicity, Koons* wins the art prizes and is reliably creative.[151]

Seemingly, even the most reliable creativity does not require intrinsic motivation, which might be taken as an indication creativity cannot be a virtue. The response has several strands. First, notice Koons* stands in a heteronomous relation to the creative insight — more colloquially, success does not depend on his own judgement, and so in a sense the results are not his own achievement.[152] Second, Koons* success relies on the judges properly relating to the values of the domain. The judges will only prove successful *if* they track appropriately. Yet what if Koons* becomes autonomous in the sense he can deliberate about aesthetic matters and justify his judgements? What matters here, Kieran claims, is the potential feedthrough from external motivation. To explain, a distinction is drawn between the judgement extrinsicalist and the motivation extrinsicalist:

> [A] judgement extrinsicalist [is] someone whose creative activity in some task is guided by judgements driven by goals and considerations external to the domain in question (e.g., in art — money, social status etc.). A motivation extrinsicalist, in contrast, is motivated by such considerations and goals but does not allow such to enter into or inappropriately drive her judgements in what is created [...][153]

[151] Kieran (2014a), pp.136–7
[152] Kieran (2014a), p.138 citing Kieran (2009b) with respect to vice.
[153] Kieran (2014a), p.139

A judgement extrinsicalist shall likely go wrong because their judgements are guided by external reasons. A motivation extrinsicalist has extrinsic aims but keeps them independent from the judgment, and consequently makes the right sort of judgement. As a matter of empirical psychology it is difficult to separate judgment and motivation. The important observation, however, is that the creative success of the motivational extrinsicalist will depend on a motivation for getting to the appropriate judgements (here for genuine aesthetic reasons). Should that be absent, the result is judgement extrinsicalism — the agent will be guided by values external to the domain.[154]

Nonetheless, creativity does not *require* intrinsic motivation — this makes it like at least some other virtues. One can be perfectly honest without being intrinsically motivated to tell the truth, though virtuous honesty, like exemplary creativity, requires appropriate action for the right kind of reasons. This helps to explain the robustness of the virtuous in the face of extrinsic temptations.[155] However, none of the above should be taken to support the thought creativity is necessitated by intrinsic motivation — Salieri might have exemplary motivation but never become Mozart. Proper motivation, following Aristotle, is not enough for virtue. Among other things, exemplary creativity depends on 'judgement, talent and opportunity'.[156] This, however, only suggests virtue is composed from (and assessable via) several kinds of feature.

Worries over 'natural talent' ground a final objection.[157] The thought is creativity cannot be a virtue since it often requires natural talents that are not equally shared. If that is the case, it might not be possible for all to become creative, and so it cannot be a virtue given the assumption virtues are available to all agents of the relevant kind.[158] Kieran retorts creativity, like other virtues, 'involves intricate skills, the basis and workings of which may depend upon and be enhanced or diminished by certain natural talents, temperaments and idiosyncrasies of character.'[159] Leaving aside queries whether virtues are always universally available, creativity would be no different to acknowledged virtues if it is simply of variable difficulty to acquire — just as some naturally tend toward honesty, others may tend toward creativity.

[154]Kieran (2014a), p.139
[155]Kieran (2014a), p.140
[156]Kieran (2014a), p.142
[157]Kieran (2014a), p.140 ff.
[158]Kieran (2014a), p.141
[159]Kieran (2014a), p.142

1.3.8 Commentary on Kieran

Kieran's account is valuable for providing hints on how creativity should track value via the Koons* case. In addition, the commentary on natural talent hints at a potentially valuable distinction of what is required to gain the trait of creativity from what is needed to maintain it. Kieran's account also sets out a respect in which creativity can count as a virtue where intrinsic motivation is in place.

Yet a concern arises over domains with internal aims and values that seem disvaluable from an external perspective. It is at least awkward to claim creativity in torturing is a virtue in any respect. Though this problem cannot be fully entered into here, a potential reply is mooted by Kieran in another place.[160] This position accepts exemplary creativity in the service of bad ends, the cost being any residual commitment to the unity of the virtues. To sustain this response, not every interdependence claim about the virtues need be denied, meaning exemplary creativity may require clusters of other virtues. It is only to deny creative virtue implies all the other virtues. Alternatively, one might say there is exemplary virtue *given the end* — if the end is bad the value is correspondingly diminished. Even so, one might ask whether the case is enough to establish exemplary creativity is a *virtue*. Virtue theorists may be persuaded by the idea, also found in Aristotle[161], that virtues are constituents (or possible constituents) of the life well-lived, a point Kieran does not argue for, though arguments against an inconsistency with well-being are raised elsewhere.[162]

Putting these points aside, it might be asked what intrinsic motivation requires in cases where the domain has multiple values. For instance, there are many and sometimes competing values in domains like farming (welfare of livestock, economic efficiency, commitments to a wider community or way of life). One mend characterizes some contextually-determined minimum condition for the relevant sense of intrinsic motivation, or else notes this is likely no different to other domains where values compete (e.g., the moral and epistemic).[163] Most notably, however, Kieran's treatment prompts further questions on relating creativity and achievement, though some links are sketched to other virtues and qualities (i.e., curiosity, resilience, perseverance, courage, self-honesty, humility)[164], and a gesture to skill.[165] Even so, it

[160] Kieran (2014b), pp.228–9
[161] Consider, for instance, the well-being point with respect to aesthetic virtues as mooted in Goldie (2008).
[162] Kieran (2014b)
[163] I am grateful to Matthew Kieran for raising this point.
[164] Kieran (2014b), in particular p.207 ff.
[165] Kieran (2014a), p.142

would be desirable to know more on how exemplary creativity can be an achievement of character, and how this ties to skill.

1.4 Appraisal of the Received View

Adopted aspects from Boden and the received view

The received view offers several key lessons. Boden offers five persuasive ideas: (i) Psychological novelty is fundamental in categorizing creativity; (ii) H-Creativity is a sub-set of P-Creativity, but scope may be made for other sub-divisions; (iii) Constraints are integral to creativity; (iv) Exhaustive search procedures are not creative; (v) Creativity is compatible with at least some kinds of luck, but serendipity requires a prepared mind.

Turning to the received view proper, the Agency Condition in Stokes should be detached from the condition of Minimal Creativity, since the latter was not substantiated. An adequate account of creativity will at least insist on successes being the non-accidental result of A's agency, which for Stokes is to say non-deviantly. It is also proper to retain the value condition, despite qualms Stokes raises. From Gaut, we again receive the idea creativity is not the result of pure chance (though can make use of it), along with a case creativity requires an evaluative capacity, all while avoiding exhaustive search strategies. Gaut also clarifies the value condition must be satisfied saliently, with the right connection between the value-making features and the reason for selection. Finally, Kieran offers more precision on how the creative should track relevant values, points to the place of motivation in the case creativity can be an exemplary virtue, and suggests creativity can be an achievement of character.

Unelaborated aspects of the received view

The general central tenet of the received view is the thought creativity requires novelty, value, and some appropriate mode of non-accidental realization. Even so, there are several gaps or silences in the received view.

To begin, discussion of the received view showed a need for improved specification of the standard of success creativity must meet. At minimum, a counterfactually-sensitive standard must be found, without falling afoul of compatibility with specific kinds of luck. Aside from the suggestion success should be non-accidental and non-deviant, the link was still found somewhat elusive.

Neither are the novelty and value conditions core to the received view entirely

immune from criticism. On the former, it is easy to construct cases where an agent does something P-Creative, forgets, and then does it afresh, leading to worries whether novelty is required for creativity.[166] Such cases challenge the received view, suggesting the same thing can be psychologically novel to the same agent on several occasions. A second set of challenges beset the value condition. Some seek more specificity. For instance, is value indexed to a specific time or society? What about products that *would* be valued, but never see the light of day? Or what if something would be valuable to a past society, but not now? Precisely how is non-trivial value to be separated from trivial value? There is also the problem of 'dark creativity', creativity in the service of bad ends. Novitz's response to the effect these are really cases of 'ingenious destruction' does not convince. Here the claim badly oriented creativity is destructive is obscure, while it is unclear how 'ingenious destruction' can accord with intuitions on the value of creativity.

Even so, it is far from clear these points are decisive. On the first group, the case for assuming identity may be challenged — it is not clear the same agent is involved multiple times, but some causally-connected agent resembling the forgetful agent. A related but distinguishable strategy approaches the cases with further indexing. Creativity attributions index to psychologies at different stages, quite apart from if they are stages of distinct persons.

Turning to the value question, aside from allowing value to be relatively minimal, it might be suggested creativity leads to products valuable *given* an end. This still leaves scope to argue creativity may be less valuable or of no value where it serves a bad end, but without invoking the purposes of the agent or appealing to 'ingenious destruction'.

On wider questions of value, greater specificity is needed to understand the claim creativity can constitute an 'achievement in character'. In addition, something must be said on how the proposal connects with the possibility of badly-oriented creativity, and the putative value of creative tokens. Furthermore, the received view does not discuss the potential relevance of creativity to the appreciation of art[167], and overlooks the possibility of creative groups. Given it seems at least some creatively produced works are highlighted for appreciation, and some groups are creative, development on these points would be desirable.

[166] See, for instance, Grant (2017).
[167] For passing mention of the idea in relation to conceptual art Kieran (2009a).

1.5 Chapter conclusion

Reviewing principal existing accounts of creativity, and in particular the received view, leads to several lessons for approaching agential creativity, further motivating a project. Despite some variation, the received view links creativity to non-accidental success, specifically the production of new and valuable material with a particular mode of realization. The success should be a non-accidental result of agency, but not achieved via some exhaustive search procedure. It becomes clear why creativity requires psychological novelty along with an evaluative capacity such that valuable items are achieved through a correct sensitivity to reasons. The relation of luck to creativity is broached, at least insofar as gesture toward serendipity (as distinct from coincidence), but this requires a mind prepared to recognize the significance.

Nonetheless, several areas where the received view may benefit from further elaboration were identified. A worthwhile elaboration to the received view would examine if creativity fits the detailed profile of a skill. The preceding showed the need for a counterfactually-sensitive elaboration, but nevertheless an account able to preserve some intuitively 'lucky' successes. It further showed the need to clarify what 'non-accidental' success requires, and whether creativity can be realized by commonly realizable mechanisms. Since skill is usually thought to be non-accidentally successful via realizable mechanisms, efforts to understand creativity in its terms have a clear motivation. Finally, taking up the thought creativity can be an achievement and appreciated in art, an analysis via skill has a further use. Skill in art is at least putatively a point for appreciation, while skills and skilled successes often seem valuable like achievements. In sum, a close relation of creativity to skill would putatively explain many features of the former concept.

To restate, this work pursues the project of elaborating the received view through connection to skill, giving further philosophical account of how creativity can be appreciated in art, and why creativity and creative tokens are valuable. Accordingly, Chapter 2 offers a clarified account of skill as intentional non-accidental success, sensitive to concerns over realizability. Chapter 3 turns to examine if creativity fits the profile of skill suggested.

Chapter 4 takes on Aesthetic Empiricism, an influential view by which the appreciation of art is closely circumscribed by direct experiential encounter with the art object, certainly not admitting the relevance of creativity, but preserves the motivating thought all aesthetic qualities are given in experience. Chapter 5 then argues

artistic skill deployed in the production of the artwork are at least sometimes relevant to the aesthetic appreciation of artworks, deploying arguments for the cognitive penetrability of perception.

Chapter 6 takes on the relation to value, pursuing the notion of achievement to show creativity and its products have conditional final value, this explaining why creativity and creative successes tend to attract esteem. Finally, Chapter 7 moots group creativity, drawing out parallels to the normative and appreciation points made for the agential case.

Chapter 2

Skill and Non-Accidental Success

Chapter introduction

The preceding chapter set out a preliminary case for understanding creativity via the concept of skill. To examine the possibility thoroughly, a worked-out account of skill is required.[1] Perhaps surprisingly, and although a link of skill to virtue has a long pedigree[2], skill specifically has received comparatively little philosophical attention. Even so, ostensive examples are easy to give — the impeccable serve of the grand-slam winner, the musician able to discern perfect pitch, and the chess grandmaster manifest skill if anyone does. But what is comprised by the concept of skill itself?

On a cursory analysis, some outlines of the concept can be gleaned. A skill is a type of ability to achieve results of specific kinds — an agent who has absolutely no facility with clay cannot be a skilled potter. What is more, skills seem to relate to agency and intention. An automatic response is not a skill, nor are hard-wired reflexes. Moreover, skills can be flexible to the demands of a situation — a surveyor or driver does not do the same thing in every case. As such, only persons and perhaps

[1] There is further interest for the philosophy of art. Appeals to skill, or concepts related to skill, are invoked in explaining artwork production, appreciation, and evaluation. Consider first artistic production. The skill of the artist is a natural explanation of how an artwork came to have the qualities it has. Appreciation also looks like a skill, an ability that must be trained and developed. As for evaluation, skill — or at least the perception of skill — is part of the story. A painter might receive praise for a technique that puts her work beyond that of her peers, or a composer esteemed for discerning choice of instrumentation. Finally, notice a lack of skill may also ground censure — 'A six-year-old could have done that!'.

[2] See discussion in Stichter (2007).

a few higher animals enjoy skills.[3] It does not appear simpler organisms, computers, or robots can have skills as compared with other kinds of ability, even where there is a complex process and result. An earthworm is not skilled though it may tunnel very effectively — the behaviour causing the result is too hard-wired.[4] Similarly, a robot following a programme to produce circuit boards is not skilled.

Notice also at least some skills allow their possessors to succeed in new and varied kinds of circumstance — the skilled mountaineer can climb in varied scenarios, facing challenges dissimilar to those encountered before. On such grounds, it may be tentatively inferred skills are a species of ability issuing in successful intentional behaviour, i.e., results somehow planned or directed by the agent. Though indicative, that formulation is gestural and lacks argued precision.

Overview

This chapter aims to bring the concept of skill into sharper focus. Section 2.1 prefaces the main discussion, outlining carefully several features of skill any acceptable account should accommodate. It then explores the limits of three existing analyses that might inform an analysis of skill, before shifting attention to more contemporary accounts. The principal Section 2.3 argues skill closely follows knowledge-how, implying non-accidental success to a counterfactually-sensitive standard. Next, in reply to sceptical worries, Section 2.4 considers how the skilled can arrive at appropriate and flexible intentions. Finally, Section 2.5 considers objections — a challenge if skill requires safety in the manner of some accounts of knowledge-how, in addition to several summary objections.

2.1 Characteristics of skill

As abilities of variable complexity

Firstly, it is clear skills are abilities of some kind. One cannot have a skill in something one could never do. Even so, some skills are more complex than others. At the lower bound, skills are differentiated from other bundles of ability. In normal cases, putting a coat on a hook is not thought skilful, whereas tying a bow, or judging the correct trajectory for throwing a ball into a low hoop might be. Yet skills can be far more complex. Riding a bike, or simple welding can exemplify intermediate skill. In the

[3] Skilled groups and skilled collaboration are briefly considered at the close of this chapter, and more closely examined in Chapter 7.

[4] Williams (2007), §1

higher ranges, skill encompasses abilities so complex as piloting a plane 'instruments-only', following an intricate proof, or composing a compelling sonnet.

Moreover, many skills lean on and integrate other skills, and work hierarchically. For instance, machining a tool by hand requires executing many sub-skills (these perhaps with their own further sub-skills). Similarly, portraiture relies on control of pen or brush, choosing appropriate shapes and tones, and planning of layers and textures. Rendering a sitter's physical and psychological likeness needs skilful perception and a capacity for presenting these in an artistic medium. Or, to take another example from aesthetics, producing a brief film might involve motor skills in operating and panning the camera, together with observation, memory, organization and general practical reasoning — all skills that may involve other skills. While the specifics of these hierarchies are debatable, and it is somewhat arbitrary where the lower bound of skill fades into mere bundles of ability, there is no reason to doubt skills are some compound of some primitive abilities. The variable complexity of skill may have many sources, but it appears more complex skills bring together and directs more subsidiary skills built up from these ultimate components.

Flexibility

Not all skills are fixed action sequences. Perhaps some complex inflexible abilities qualify as skills, as with performing a sophisticated but invariant motion, but flexibility typifies many skills. The skilled orator is not inflexible, but adapts to the topic and audience. The tennis player adjusts for wind speed, court material, surface conditions, as well as the strengths and weaknesses of her opponent. Generally, skills contain means to change and adapt to circumstances and purposes.

Skill flexibility ties with appropriate reaction to changed environments or purposes. Skilled drivers will usually react appropriately to unforeseeable changes of circumstance, and the orator will change with the sense of the crowd. Flexibility must underpin appropriate reaction given the implausibility of learning a set response for every aim and circumstance. An account of skill must therefore allow for capacities to compose action sequences, or at least substantially modifying stock action sequences.

These observations are not to suggest the skilled will do equally well in every case, not that they will succeed in any kind of circumstance. It is only to mark skill often brings some cross-situational competence.

Public action not necessary

Common examples of skill, such as driving a car or serving in tennis, could invite the idea skills necessarily issue in some public action. The inference skills always issue in a public action should be resisted. Skill can be a matter of discerning and identifying, of knowing the kinds or descriptions under which some particular falls. Perfect pitch and the ability to discern the forms of vocal resonance are unquestionably skills, though need not issue in any public action.[5] Concentration and the following of complex argumentation are also skills without an obvious public element.

Before continuing further, it is worth saying a little more on why discrimination can be skilled. For one, discrimination can be effected more or less well, which is to say more accurately or more completely. The geologist identifies the rock sample from difficult clues the less-skilled miss, the skilled barrister discriminates among the many ways a complex case might fall better than the pupil. This is one reason we think experts are worth attending to. Their skills make their discriminations and opinions worth considering — they discern what the less skilled miss, and then develop means to communicate this.

Notably, however, the preceding does *not* commit to the claim all forms of discrimination are skilled, at least in any interesting sense. It is implausible to hold those lacking a discriminative ability thereby lack a skill. The colour-blind do not lack a skill for that very fact, though they lack an ability to discern red and green.[6] Equally, there is no reason to hold all acquired or developed discriminating capacities are skills, if this would mean any non-innate ability counts as skill. Telling one is walking on carpet as compared with grass is not an innate capacity, yet being so straightforward it would be odd to characterize the ability as a skill.

Habituation and the ability to confer

Although a commonplace, skills are generally acquired through practice, and often quite gradually. It is not clear any skills come at birth, though it is common to believe many are born with talents and predispositions fitting them to gain certain skills. This prompts questions on how agents go from various degrees of haplessness to skill. Accordingly, Dreyfus and Dreyfus offer an empirically informed five-stage model of skill acquisition.[7] The proposed stages are; 'Novice', 'Advanced Beginner', 'Competency', 'Proficiency', and 'Expertise'. The suggested line of progress is intuitive.

[5] Howard (1982), pp.86, 93.
[6] Not to dispute the colour-blind may lack other skills because they cannot discern red and green.
[7] Adapted from Dreyfus and Dreyfus (2004)

Initially the learner focuses on applying explicit and specific rules, first consciously, and then by habit. From there the learner is encouraged to think about exceptions for the previously hard-and-fast rules. In time, a sense of reasons for action in the domain results, with rules retreating in significance as full skill emerges. Eventually the skilled individual acts more directly because of applicable reasons. This is not to imply skilled agents never invoke rules or other generalizations, but only to hold such rules become more like guides rather than fixed bounds to future action. However, it might be noted skill is not always acquired via rules introduced through an external teacher. An agent might, for instance, acquire a skill by trial and error. Even with this concession, however, tutored habituation and practice is typically the most effective way for humans to gain skills.

The place of habituation and practice comes out in one further way. Skills tend to degrade or deteriorate. As Annas observes, skill can quickly blunt through disuse or decay.[8] Though not all skills decay completely (people rarely forget how to ride a bicycle), or at the same rate, it is true skills decay. As a mark of this, surgeons take pains to keep their skills (e.g., concentration or dexterity) from slipping. Generally, skill maintenance requires effort, and practicing the skill is the best way to do this.

Lastly, the skilled can typically teach or otherwise help habituate others into their skill. Usually they can articulate some principles, or offer ostensive example. On occasion, or simple indication the pupil is erring may suffice. That is not to imply the skilled always enjoy this capacity, merely that it is often the case.

No implied relation to ethical worth

Skills *per se* stand in no fixed relation to ethical worth: knowing an agent is skilful in some respect tells us nothing definite from the moral point of view because the ethical valence of skills varies considerably. Torturing is a skill, but mostly, if not in every instance, morally disvaluable. Contrastingly, some skills appear to have a positive moral valence — being a 'good listener' or socially approachable have a skill element, and are always, or almost always, ethically commendable.[9]

In addition, many skills have no discernible valence in themselves, gaining worth only from the purpose to which they are put. Manual dexterity, verbal skill, and intellectual astuteness are neither good nor bad in and of themselves, instead their value is determined by the end to which they are put. For these reasons, agential skill

[8] Annas (2011)

[9] I owe examples of this kind to Aaron Meskin.

taken alone indicates nothing from the value perspective. To draw any substantive conclusions, the specific skill possessed — and perhaps the purpose for which it is invoked — needs to be known.[10] Even so, very frivolous skills have little or no value, if skill in tying one's shoelaces with spoons is any guide. Here the purpose is only to mark the prima facie variety in values, but caution against any quick policy of valuing all skills.

Not mere success

Brief reflection shows the skilled are not successful through mere luck. In turn, this implies skill is not just the ability to secure a result by just any means. No matter how many times an archer hits his target, they are not skilled if success comes only by chance gusts of wind (that is, unforeseen gusts of wind that are not calculated for).[11] The skilled can, however, can seek to control or exploit their environment and conditions.

Even so, it might be skill is always somewhat beholden to luck — an unforeseeable happening could frustrate even the most skilled in a given scenario.[12] Given much more follows on this topic, the relation between skill and success is set aside for the moment — the present point is only to emphasise skill is not manifested in just any success.

Success thresholds, gradability, and contextual sensitivity

In normal cases, actual performance above a certain level is *prima facie* evidence for skill, and actual performance below a certain level reasonable *prima facie* evidence to deny skill. Between lies a range in which skill attribution is debatable. Put differently, whether an individual has a skill is often hazy within a certain range. Additionally, comparisons of skill are possible below the level at which full attribution makes sense. Individual A may be more skilled than Individual B, but neither skilled *per se*. It is simply that A is closer to being skilled than B.

Once the skill threshold is met, attributions have a comparative aspect, allowing judgements agents are skilled in differing degrees. Being comparatively more skilled need not mean doing a specific task more frequently, or the same task more efficiently— other considerations are in play. One barrister could be more skilled than

[10] Despite this, it is clear some skills turn toward bad ends more readily than others. Surgery and engineering are more readily turned to bad ends than whittling and gardening. The point here is only to emphasize no conceptual link exists between skill as such and a moral valence.

[11] See, for instance, the discussion in Pritchard (2009b)

[12] Millikan (1997) offers an extended argument to this effect.

another for an ability to plead cases another cannot. That is not to imply an equal level of skill is always the same — two programmers might be thought of a comparable skill level, but their abilities are in distinct languages.[13]

In addition, skill attributions are often sensitive to contextual considerations. The standard relevant for a skill attribution depends on conversational circumstances, standing constraints on the meaning of terms, the aims and interests of the parties involved, the wider significance of what is at stake, and so forth. For example, consider the task of finding a skilled chess-player for a tournament. The contextually determined standard for skill would be very different if the other tournament players were grandmasters, as compared to local school champions.

More generally, the requirements for a skill attribution can tie to relative stages of development, whether of individual agents, a practice, or an entire field. An individual's age, contemporary technology, and place in the historical development of the practice can each play a role in judging whether they qualify as skilled. The comparison classes for judging skill differ similarly. Jonny at six may be a skilled tennis player compared to schoolmates, all his peers, or even all six-year-olds with similar level experience and sports gear. Nevertheless, he is not skilled by the standard of a sixteen-year-old. Likewise, while Fred Perry would probably not fare well in an average twenty-first century match, and so not count as remarkably skilled by modern standards, by the standards of pre-war technique, there is no question of his skill.

Combining the point on degrees of success and sensitivity to context, skill attributions follow a standard picture of gradable adjectives.[14]

2.2 Existing analyses related to skill

Some existing philosophical accounts might speak to the concept of skill — five are discussed here. The first three accounts are variations on the topic of *technē*.[15] Plato and Aristotle's influential developments of the notion are evaluated first. Next attention turns to R.G. Collingwood's related notion of craft in *The Principles of Art.* Finally, focus shifts to two instructive contemporary framings. Problems and limitations with these accounts of skill motivate a fresh account, though several useful

[13] Notice the efficiency of the more skilled can be quite subtle. For instance, whereas the novice golfer might aim for the pin on a particular par-three, the skilled professional sees this is not the optimum strategy, instead aiming for an intermediate point, and succeeding in two.

[14] Consider, for instance, the discussion in Glanzberg (2007).

[15] For ease of presentation the Latinized *technē*/*technai* is used for τέχνη/τέχναι, and other Greek.

insights are found.

2.2.1 Plato on *technē*

Plato develops a view on *technē* or 'craft' for several philosophical purposes, often specific to the dialogue in which the discussion occurs. This poses several interpretive difficulties. Combined with questions over the extent to which certain positions are those of the historical Socrates as opposed to a distinctive account, it is hard to present a definite Platonic treatment of the relevant topics. Nevertheless, several relevant claims and themes can be discovered. Each is presented summarily with discussion in sequence.

Contemplation of ends

Plato often argues the person with craft contemplates the end aimed for either as a form, *ergon* (i.e., the ideal 'work' or 'task'), or some other kind of paradigm copied or reasoned with. This theme occurs several places in Plato. For instance, at *Cratylus* 389a-b Socrates speaks of the carpenter looking to an ideal model for making shuttles:

> SOCRATES: [...] Where does a carpenter look in making a shuttle? Isn't it to that sort of thing whose nature is to weave?
>
> HERMOGENES: Certainly.
>
> SOCRATES: Suppose the shuttle breaks while he's making it. Will he make another looking to the broken one? Or will he look to the very form to which he looked in making the one he broke?
>
> HERMOGENES: In my view, he will look to the form.[16]

Again at *Republic* 484c the same idea appears where the Guardians fix on the forms to guide their efforts, just as the painter takes a subject as a model.

Success conditions, difference from 'rules of thumb'

There are also some suggested means to test for *technai*. In *Laches* Plato draws on the simple intuition the skilled should be able to show evidence of previous success.[17] However, in *Charmides* more attention is afforded to crafts. Socrates solicits Critias

[16] *Cratylus* 389a-b in Plato (1997)

[17] *Laches* 185e-186a in Plato (1997): 'SOCRATES: [Y]ou would not want to trust [a person] when they said they were good craftsmen unless they should have some well-executed product of their art to show you—and not just one but more than one.'

to agree a standard to discern if another has a craft by attending to what they say as well as what they do.

> SOCRATES: And he will look into the manner of [the putative craftspersons's] words and actions to see if what he says is truly spoken and what he does is correctly done?
>
> CRITIAS: Necessarily.[18]

The contrast is drawn to distinguish those in full possession of *technē* from those who use 'rules of thumb'. A passage in *Laws* brings out the differentiating factor most clearly — those with *technē* can give a rational account of their action.[19] For lawmakers this is reasons for the laws instituted. Those using 'rules of thumb', by contrast, cannot offer such an account.

Knacks and flattery, welfare

The Platonic requirement that those with *technē* can give a rational explanation develops in several directions. In *Gorgias* Socrates instructs Polus the cooking of tasty food is not a craft but a knack or 'habitude' for 'the production of gratification and pleasure'.[20] Certain practices do not qualify as *technē* because they are 'parts' of 'flattery'. The thought seems to be in cases of pleasure production such knowledge is not available since pleasure has no real and invariable cause — successes are merely good guesses. This is slightly different from the objection to rules of thumb since knowledge of pleasure as a target is not available.

> SOCRATES: Thus cookery assumes the form of medicine, and pretends to know what foods are best for the body; so that if a cook and a doctor had to contend before [the foolish] as to which of the two, the doctor or the cook, understands the question of sound and noxious foods, the doctor would starve to death. Flattery, however, is what I call it, and I say that this sort of thing is a disgrace [...] because it aims at the pleasant and

[18] *Charmides* 171b in Plato (1997)
[19] *Laws* 857d-e in Plato (1997)
[20] See *Gorgias* 462d-e:

> POLUS: Then I ask you, what art is cookery?
> SOCRATES: None at all, Polus.
> POLUS: Well, what is it? Tell me.
> SOCRATES: Then I reply, a certain habitude.
> POLUS: Of what? Tell me.
> SOCRATES: Then I reply, of production of gratification and pleasure, Polus.

For this dialogue Plato (1925) is used.

> ignores the best; and I say it is not an art, but a habitude, since it has no account to give of the real nature of the things it applies, and so cannot tell the cause of any of them.' Notice this also brings out the welfare point.[21]

Here as in other places Plato ties *technai* to doing the best for their proper object, or at least doing so insofar as the agent practicing is truly a craftsperson. For instance, in *Gorgias* Socrates argues:

> [The crafts of politics, legislation, medicine, gymnastics] always provide care, in the one case for the body, in the other for the soul, with a view to what's best.[22]

Medicine is the recurrent case, with *Republic* making a parallel case the philosopher looks to the welfare of the city as a whole.[23] In both cases the success is due to the agent knowing the good of its proper object. In all cases, however, the refrain is how *technē* implies understanding the nature its target.[24]

Theoretical and practical epistemai

Finally, Plato offers something of a distinction between practical skills and recognitional skills. At *Sophist* 253a the Visitor first has Theaetetus agree it takes the expert in grammar to know 'which kinds of letter can associate with which'. A similar case is made for musical notes — it takes the expert musician to tell the note concerned. More generally, the suggestion is a form of judgment for telling the 'kinds that run through all of them and link them together to make them capable of blending'[25] and similarly for the causes of 'division'. The knowledge of the philosopher as shown in dialectic typifies this judgment. Plato is gesturing at *technai* for discriminating kinds.

In the accompanying *Statesman,* however, there is a marked change. Rather than *technai*, practical and theoretical discriminating capacities are now described as *epistemai.* The theoretical stream divides into a purely discriminating form (not producing anything apart from the discrimination), and those like that of the 'master-builder' which also 'direct' others.

> VISITOR: So both all sorts of knowledge like [that of the master-builder] and all those that go along with the art of calculation are theoretical, but

[21] *Gorgias* 464d-465a in Plato (1925)
[22] *Gorgias* 464c in Plato (1997)
[23] *Republic* 342e in Plato (1997)
[24] See also *Gorgias* 500e-501a in Plato (1925)
[25] *Sophist* in Plato (1997)

> these two classes of knowledge differ from each other in so far as one makes judgments, while the other directs?
>
> YOUNG SOCRATES: They appear to do so.
>
> VISITOR: So if we divided off two parts of theoretical knowledge as a whole, referring to one as directive and the other as making judgments, would we say that it had been divided suitably?
>
> YOUNG SOCRATES: Yes, at least according to my view.[26]

Plato goes on to include interpreters, seers, retailers, heralds, boatswain, and kings in the category of those issuing directions, though the latter have a specifically self-directing expertise the others do not.

Commentary on Plato on *technē*

Platonic *technē* is not a satisfactory model for skill. For one, Plato cleaves closely to the natural idea actual success is the mark of the craftsperson. As explained more fully below, actual success is an indicative but not perfect way to judge skill. In a close possible world counterpart-Michelangelo never meets success in producing any sculpture because his marble always shatters — he unluckily hits rare but visually indiscernible seams in just the wrong way.[27] Nevertheless, he would still have the skill of a sculptor.

Second, consider again how craftspersons know and reason with the ideal form, *ergon*, or some other paradigm of what they are trying to produce. It is implausible the craftsperson must always have an end in mind, at least if this means copying or consciously reasoning with it. Someone skilled in making abstract patterns need not entertain or reason about a paradigm to produce their work. More fundamentally, it is unclear what sense it makes to cast certain skills within the *technē* framework. Consider the skilled running of top athletes. It is not clear skilled runners reason back from some ideal runner or running condition to succeed in their skill.

Third, Plato occasionally writes as though crafts are always concerned with the welfare of their object. This is difficult to maintain. Why say the medic will have the good of the patient in mind insofar as they have medical skill? H.H. Holmes was a skilful medic, however he did not have the good of his patients in mind, and did not use his skill to benefit them but to become a successful serial killer.

[26] *Statesman* 260a-b in Plato (1997)

[27] Or, alternatively, the sculptures are destroyed by freak lightning bolts or meteorites.

Other elements in Plato have promise, but are ultimately too obscure to give a compelling account of skill. For one, Plato wishes to discriminate 'knacks' from *technai* proper. There is something right in this insofar as guesswork, or at least efforts not relating to success in the right kind of way, are incompatible with skilled success. However, Plato extends the thought in implausible ways. Plato complains pastry-making cannot be a proper *technē* because it can only guess at what causes pleasure. Yet it seems reasonable to believe some people are skilled in producing pleasure (great chefs, for instance). Equally, other abilities Plato reduces to 'knacks' should rather be classified as skills. The sophist need not be doing something laudable in making falsity appear as truth, but they appear to have a skill of some kind, even if it is not directed toward a good end.

For another, Plato hints at a distinction between discriminating skills and productive skills, but again the presentation is unclear. As noted, the distinction first appears in the *Sophist*, however in the accompanying *Statesman* the framing in terms of *technai* is withdrawn in favour of theoretical and practical *epistemai.* That is, Plato switches to a view with two ultimate species of theoretical knowledge, and gives no explanation of whether this complements or replaces the *technē* account.

In view of these difficulties and limitations, the picture of *technē* presented in Plato proves unsuited to analyse skill, though several distinctions and themes inform the account ultimately offered.

2.2.2 Aristotle on *technē*

Aristotle offers remarks on *technē* at several points in *Nicomachean Ethics.*[28] Although there are several parallels with Plato's theory, the account is distinct and merits separate attention. Near the beginning of Book I, Aristotle marks a difference between ends. On the one hand, there are ends issuing in nothing but activity, while others yield a separate 'product'. In Aristotle's own terms:

> [A] certain difference is found among ends; some are activities, others are products apart from the activities that produce them.[29]

Aristotle goes on to link *technē* —which Ross translates as 'art'— with action toward ends having products distinct from agential activity. However, 'products' must be understood in a specific way. Not only shipbuilding and carpentry are presented

[28] All *Nicomachean Ethics* excerpts are from the Ross translation; Aristotle (1954).
[29] Aristotle (1954) *Nicomachean Ethic*s, Book I §1

in terms of *technē*, but medicine and generalship too. Hence, for Aristotle, *technē* products are a wider class than physical artefacts (e.g., ships and tables), but includes things like health and victorious battles. Yet *technē* does not encompass all end-driven successful activity, not because he wishes to distinguish *technē* and virtue. Still, the picture is one of productive behaviour, if in a sense somewhat different from our own.

All deliberation, Aristotle holds, has its end in choice in action.[30] Yet the ends of arts are fixed independently, meaning any deliberation involved in *technē* is from set ends to a means they can effect:

> [The practitioners of *technē*] assume the end and consider how and by what means it is to be attained; and if it seems to be produced by several means they consider by which it is most easily and best produced, while if it is achieved by one only they consider how it will be achieved by this and by what means this will be achieved, till they come to the first cause, which in the order of discovery is last.[31]

Yet in saying ends are set prior to *technē* Aristotle is not necessarily saying the end is *fully* known to each practitioner. Mastery comes by knowing the corresponding universal 'as well as possible':

> [I]f a man does wish to become master of an art or science he must go to the universal, and come to know it as well as possible[.][32]

In review, Aristotle correspondingly presents *technē* in terms of capacities bringing about their respective products via reasoned means. The case of architecture drives the point home:

> Now since architecture is an art and is essentially a reasoned state of capacity to make, and there is neither any art that is not such a state nor any such state that is not an art, art is identical with a state of capacity to make, involving a true course of reasoning.[33]

In this and like passages Aristotle is not best interpreted to mean agents *consciously* reason from set ends to means in every case, more likely the adept *could* retrace their

[30] Aristotle (1954) *Nicomachean Ethics*, Book III §3. This is a corollary of the claim 'every class of men deliberates about the things that can be done by their own efforts.'

[31] Aristotle (1954) *Nicomachean Ethics*, Book III §3

[32] Aristotle (1954) *Nicomachean Ethics*, Book X §9

[33] Aristotle (1954) *Nicomachean Ethics*, Book VI §4. The same section continues by way of an instructive summary: 'Art, then, as has been is a state concerned with making, involving a true course of reasoning, and lack of art on the contrary is a state concerned with making, involving a false course of reasoning; both are concerned with the variable.'

actions to some reasoned and appropriate method. Indeed, Aristotle's commentaries on habituation in *technē* and virtue hint at just such an explanation.[34]

Commentary on Aristotle on *technē*

Aristotle's analysis of *technē* provides several useful insights for analysing skill. Aside from habituation, we receive the idea success does not imply skill or craft. This appears in Aristotle insofar as *technē* requires production following rational means. Something produced with other than rational means will not count as the product of *technē*, and this requirement alone implies craft will not work via several kinds of chance. Additionally, there are clues on how skills might be flexible — thorough knowledge of x is one plausible means to reach flexible skilled behaviour with respect to x. It is also relatively easy to put aside several doubts over formulating skill via *technē*. As has been observed, it may seem some skilled behaviour goes on without reasoning backward from ends to means. A reply was noted— the reasoning need not be conscious, and may become habituated.

Nevertheless, there are problems. Improving or maintaining skill suggests a snag. For instance, an archer might improve strength and control in her hands by manipulating a rubber ball, but may not have any specific manipulation in view as she is doing it.[35] Cases like this would be a problem for Aristotle if all skilled behaviour involves reasoning back from a set end, given the apparent lack of a determinate end-in-view to reason back from, and any corresponding universal. The Aristotelian could accommodate this kind of case; the behaviour is driven from a deeper aim to build or maintain capacities useful to the skill — for the archer, strength, dexterity, bodily awareness and so forth. Apprised of this wider context, the relationship of means to ends is discernible, it is just not done overtly.[36]

Even so, Aristotle's comments on success through rational means would seem appear too demanding for an account of skill. By appearances, an Aristotelian notion of skill could not allow deviation from means inferred back from an end. But a painter's stroke need not always match that envisaged perfectly to be masterly. Perhaps, however, 'rational means' should not exclude all unenvisaged or deviant means, meaning this objection does not prove decisive. Nevertheless, other concerns cumulatively undercut Aristotelian *technē* as a model for skill.

[34] See especially Aristotle (1954), *Nicomachean Ethics,* Book II.

[35] I owe the example and outline response to Matthew Kieran.

[36] As an indication, the agent seeking to use or maintain the skill would recognize certain outcomes as a failure.

For one, to the extent Aristotle's view on universals is doubtful, so too is the theory of *technē* resting on it. Not least, it is unclear how it can fit with many skills. What sense does it make to talk of the universal for the skilful runner? Must the runner reason back from something common to every instance of their best running condition? The idea is at best obscure, if it can be fathomed at all. What is more, there is no clear need for these or similar abstract objects to explain how the skilled intend and act effectively. This point is returned to in sequence.

Second, there are skills with no separable product in Aristotle's sense. Some clear skills, like that of discerning pitch, telling the right spice for a dish, or even riding a bike, yield nothing like a separable product. Awkward constructions such as 'accurate judgments of pitch' or 'correct judgments of agreeableness', or 'successful bike rides' are not very compelling. To make matters worse, it is hard to drop this commitment on Aristotelian terms given a strong divergence between productive and non-productive ends is central to his way of distinguishing *technē* from virtue.

Finally, it is unclear Aristotle can be open to skills having value apart from the instrumental part they play in a eudaimonic life. Suppose with Aristotle that the final good just is to experience *eudaimonia*, so far as possible. All ends are choice-worthy insofar as they help an individual achieve that final end. This is unattractive for not clearly allowing skills might have value apart from any connection to the eudaemonic life. At minimum, one might think skills can have value (and are in some sense choice-worthy) even if they do not tend to improve the life of the agent who possesses them. Titian's skill might have some value even if it happened to make him utterly miserable. Considering this aggregate of problems, Aristotle's notion of *technē* is not an adequate model for skill.

2.2.3 Collingwood on craft

Collingwood's notion of craft parallels Aristotle's notion of *technē* in some regards, yet has distinct merits and demerits. Many points of evaluation parallel those already met, but are worth reviewing.

In challenging the idea art is merely craft,[37] Collingwood offers six characteristics:

[37]Briefly, Collingwood (1958) ultimately associates art proper with finding a means to articulate previously confused emotional states via a public medium — 'imaginative expression'. In arriving at this position Collingwood argues 'art proper' cannot be craft (or the expression or arousal of a previously clear emotion via craft) since there are artworks that do not manifest the end-directed characteristics of craft enumerated below. The most persuasive cases involve moments of artistic inspiration. Though Collingwood allows craft can play a role once an articulation is imagined, it is not safe to conclude art is never craft from the premise it is sometimes not. Moreover, it is not clear

(i) Craft always involves a distinction between means and end, each clearly conceived as something distinct from the other but related to it; (ii) It involves a distinction between planning and execution; (iii) Means and end relate in one way in planning; in the opposite way in execution; (iv) There is a distinction between raw material and finished product or artifact; (v) There is a distinction between form and matter; (vi) There is a hierarchical relation between various crafts, one supplying what another needs, one using what another provides.[38]

Taking (vi) as a commonplace, the claims relevant to current purposes are (i), (ii), and (iii). The most instructive explanation comes under (ii):

> The craftsman knows what he wants to make before he makes it. This foreknowledge is absolutely indispensable to craft: if something, for example stainless steel, is made without such foreknowledge, the making of it is not a case of craft but an accident. Moreover, this foreknowledge is not vague but precise. If a person sets out to make a table, but conceives the table only vaguely, as somewhere between two by four feet and three by six, and between two and three feet high, and so forth, he is no craftsman.[39]

In combination with remarks on the craftsman having mastered the means of their craft, a trio of ideas present:

1. The craftsperson, when acting as a craftsperson, always has a pre-determined end that is precise.

2. The craftsperson establishes the means to these precise ends.

3. The craftsperson executes the means to these ends.

Commentary on Collingwood on craft

The great merit of Collingwood's notion of craft is its close fit with our everyday notion of skill, at least insofar as producing external objects is concerned.[40] Collingwood's account centres on execution, which means competent production from executing a

an unchecked moment of inspiration would really be art as compared to a happy accident. Finally, for reasons set out in the next chapter, even creative inspiration can be the product of skill. As such, aside from later revisiting an argument against understanding creative success via end-directed action, Collingwood's wider approach is put aside.

[38] Collingwood (1958), pp.15–17

[39] Collingwood (1958), pp.15–16

[40] A further merit is his discussion of skills working hierarchically. See Collingwood (1958), p.16 ff.

precise plan. Seeing if someone *actually* plans and executes an object is a natural test for skill in that regard. However, while fit with our everyday notions should be preserved so far as possible, Collingwood introduces several distortions.

First, note that for Collingwood craft excludes imprecision about what it aims to produce. Undoubtedly, skilled action *sometimes* works with a very precise conception of an end, but why suppose all skill has a precise end in mind? Carpenters do not lack skill if they work without a fully determinate conception of the table to be produced, and need not even have a relatively precise one. Similarly, an author may be skilled in her writing despite lacking a clear idea of the finished work.

In sympathy with Collingwood, a revision might be proposed. Rather than saying the skilled need a *precise* conception of their end, it is enough to have a reasonably definite one. Can Collingwood's account of craft work for skill with this change? In other words, does skill imply only a *reasonably definite* conception of its end? Initial cases are encouraging. As mentioned above, a carpenter does not need to execute a *fully* determinate plan to be skilled — some leeway is tolerable. However, do all skills imply even a reasonably pre-determinate conception?

Looking at the universal claim, the evidence is toward 'no'. A potter can work at her wheel, and do so skilfully, without a reasonably definite end in view. Skilled behaviour does not invariably require finding and executing means to a determinate end. Moreover, consider cases of skilled discrimination. For this kind of skill, the end can only be known beforehand under a very broad description. The end of musical discrimination is something like 'The correct judgment of qualities x, y, z' (e.g., pitch, timbre, duration) or 'A state allowing for the correct judgment of qualities x, y, z', but it is hard to see how these count as precise. Moreover, it is unclear if the skilled invariably seek and execute means to this kind of end — some skilled discrimination seems to happen without that kind of preparation.

Finally, it is not obvious Collingwood allows for a plausible interaction between craft and creativity. On Collingwood's picture, ends are set before craft sets to work; the craftsman merely determines and executes the means to determined ends. The effect is at least an implausibly rigorous and intellect-dependent view of productive processes; many unfold and develop much more freely and organically. To hold an agent can have skill or craft only insofar as they serve a determinate end seems false — the sculptor may work skilfully with clay even without a fully determinate end in mind.

Similarly, the account forces awkward commitments on creative processes — at minimum it looks as though creativity never manifests in anything craft-like. Consider the art case. Collingwood must locate all creativity in the process by which the end is set — creativity never manifest during the manifestation of craft proper. This is because what is creative is new, at least to the agent in question, so the creative result cannot be known in full beforehand. A friendly amendment to Collingwood might allow creativity to enter to the extent pre-determined craft is not in play. However, this is not instructive on the way in which imagination must work, and still forbids creativity ever manifests in craft proper. Summarily, any more subtle relation of creativity and skill is debarred on this view since craft requires a determinate end, whereas creativity is incompatible with it.[41] For these reasons, Collingwood's craft does not offer a good model for skill, despite its instructive elements. This being so, the next subsection turns to a more contemporary framework for theorizing skill.

2.2.4 Maier on ability and skill

In a wider discussion of the 'agentive modalities', Maier proposes an account of skill. Much of the framing discussion concerns the general ability concept. Maier first suggests abilities are a species of disposition implying success, and offers some general observations on gradability.[42] However, the central argument holds general abilities are 'robust'. On this conception, present circumstances are not sufficient to show whether an agent has a general ability. An agent might have the 'option' to Φ in present circumstances — i.e., can choose to make Φ happen now, yet not have a general ability.[43] This would be the case if their current success is not representative. Robustness captures the idea an agent will be successful in a wider class of circumstances than those present.

To clarify, Maier holds an ability need not show in just any circumstance the agent finds themselves in— there is a sense in which an agent retains a general ability to speak Mandarin even when anaesthetized.[44] Yet for a 'general ability' it is not sufficient to have the option to Φ 'under some circumstances or other'.[45] Unless lacking an ability is necessary for an agent, there are conceivable circumstances under which

[41] Given the extended treatment in Chapter 3, this topic is treated summarily here.
[42] For clarity, Maier's discussion is presented in a changed order. The argument establishing abilities imply compossibility of earlier and later states of affairs is omitted.
[43] For consistency 'Φ' is substituted for 'A' throughout.
[44] Maier (2013), p.11
[45] Maier (2013), p.13

the agent will have the option to Φ. The proposed restriction invokes circumstances 'similar' to actuality, where similarity is defined pragmatically by the context of inquiry.[46] This is motivated by the fact not all possible circumstances are relevant, but not only actual circumstances either. However, the anaesthetization already case shows an agent need not have the ability in all circumstances similar to actuality. Correspondingly, Maier makes the following proposal:

> Ability: S has the general ability to Φ just in case S has, in a suitable proportion of similar circumstances, the option of Φ-ing.[47]

Maier adds the 'suitable proportion' must be understood as a 'flexible metric, sensitive [...] to the task under consideration'. In this it is like any other contextually-sensitive metric, the example being similarity. On this basis, Maier offers a definition of skill as a species of general ability:

> Skill: S has the skill to Φ just in case S has the general ability to Φ partly in virtue of what she knows.[48]

Commentary on Maier on skill

Maier's account covers much of what an acceptable account of skill must do. An ability successful in some proportion of normal cases (selected from an adequate modal range) suggests a promising path, and the account could readily avert qualms over 'masking' and 'finking' by finessing 'similar circumstances' around normal conditions.[49] Equally, Maier builds in the gradable aspect of skill: Y is more skilled than X if Y enjoys success in a greater proportion of cases than X.

Even so, Maier does not provide a compelling model for skill. Consider first the insistence on judging skill by success in a proportion of circumstance. Here it is not clear why a *proportion* of cases is the correct measure, even read with the caveats Maier offers. 'Proportion' suggest a clear lower boundary for success, captured in quantitative terms. But why suppose quantitative measures accommodate skill best?[50] Without substantial argument that is not forthcoming, an insistence skills

[46] Maier (2013), p.13
[47] Adapted from Maier (2013), p.15
[48] Maier (2013), p.19
[49] 'Masking' and 'finking' are each obstacles to conditionalist understandings of ability. In the 'finking' case the world obtains so that X would never be allowed not to Φ, but happens never to intend not to Φ meaning there is no question of failure. In 'masking', a capacity is blocked from having its normal causal effect, as when the disposition of a glass to break if struck is inhibited by a protective packing. For further see *Maier (2014)*.
[50] I owe this objection to Matthew Kieran.

turn on something so definite as success in a *proportion* of cases, even if the proportion varies with context, would appear misplaced.

Furthermore, even though the proposal correctly allows skill to fail in at least some instances, it says little on excluding 'flukey' success since both are formulated as biconditionals.[51] Success in a proportion of circumstances like actuality does not obviously rule out regular but flukey success when it is 'a general ability partly in virtue of what [the agent] knows'. Here, it is not clear what Maier intends in claiming skill partly turns on what an agent *knows*. There is at least the difference between knowledge-how and knowledge that, and the prospects of the account might depend on the analysis invoked. For these reasons, the account is at least incomplete. Yet the account has other deficiencies. Presumably, abilities that work because of fantastical, delusional, or radically disconnected beliefs will not count as skilful, but it is unclear if 'partly in virtue of what [the agent] knows' does enough to deal with them. An agent might know there is a baton in his hand, meaning any success he has with it is partly in virtue of what he knows, yet entertain so many other false beliefs the success would not be skilful.[52] Hence Maier elides an important dimension of skill. More generally, it is not clear how far this kind of luck and deviant causation is excluded. As argued more fully below, skilled action is controlled, at least in requiring non-accidental success to follow from a relevant intention.

Though Maier's proposal seems on better lines than the other attempts reviewed, it is still deficient in several respects. This motivates a fresh consideration of skill. In the spirit of Maier, it proves fruitful to cast skill as a general ability related to knowledge in a certain way. Specifically, it makes sense to relate skill and 'knowledge-how'. The positive account takes this lead.

2.2.5 Stanley and Williamson on skill

One final discussion merits comment. In a recent treatment, Stanley and Williamson characterize several features of skill.[53] The account is consonant with many points entered at the open of this chapter. For one, it observes skills improve with training, this improvement is reflected in the gradability of attributions, while an account of skill should do something to explain how they succeed in novel situations. Stanley and

[51] Reading 'iff' for 'just in case'.

[52] Alternatively, imagine a guardian angel ensures the agent succeeds on any attempt *whatever* the agent believes on how to succeed. This kind of case is returned to below.

[53] Stanley and Williamson (2016)

Williamson's account also endorses an observation on the nature of skill — the same technique or skill can underpin different abilities in virtue of a difference in other capacities. The example concerns technique in lifting a heavy weight. An agent's technique in lifting a 100 lb weight is the same as lifting a 150 lb weight, but doing the former does not imply one can do the latter. All these points may be accepted without difficulty.

Stanley and Williamson propose an extension of the propositionalist or 'intellectualist' understanding of knowledge-how to skill and intelligent behaviour more generally. As such, it frames skill in terms of *knowing truths*. The aim is to avoid a regress argument that threatens certain account of knowledge-how by associating skills with dispositions.[54]

> [S]kills are dispositions. The view is not well-expressed by saying that "skills are competences", because "competence" is easily read as involving skill. In such a sense of competence, the view that skills are competences to know is in danger of a regress, since competences would involve skills. Thus in effect it says, unpromisingly, that skill in φ-ing involves skill in acquiring knowledge relevant to φ-ing. By the same token, skill in acquiring knowledge relevant to φ-ing involves skill in acquiring knowledge relevant to acquiring knowledge relevant to φ-ing, and so on. By contrast, on our view, although skill in φ-ing is the disposition to have knowledge appropriate to guiding φ-ing, it is not in general skill in having or acquiring such knowledge.

In the interest of clarity, and to avoid undue repetition, a fuller treatment of whether the correct account of skill is intellectualist and the relevant reductions succeed is given after the positive account, and approached as an objection.

Commentary on Stanley and Williamson on skill

By way of a preliminary discussion, it is enough to raise two summary points. For one, even if the account avoids the regress objection, the approach appears vulnerable to a supervenience objection — for any amount of propositional knowledge appropriate to guiding φ-ing, it is conceivable an agent might act unskilfully even across a representative range of cases (e.g., they may not be able to actuate it). But that

[54] It should be observed Stanley and Williamson intend no specific understanding of dispositions for neutrality, accepting it may be unanalysable.

means skill cannot be just *any* disposition for having the knowledge in question.[55] Consequently the dispositional analysis is not compelling, at least as it stands.

For another, the account does not provide specifics on how knowledge of truths guides skilled action, other than presenting the latter as something through which the former manifests. There is no detail, for instance, on how success should follow from intention or agency, or any address to the kinds of lucky success adverted to above. This might find remedy, but the account stands in need of supplementation to reach a full account of skill — the Stanley and Williamson focus is very much relating knowledge-how to the knowledge of truths.

2.3 Skill as non-accidental success from ability

The preceding sections sketched some pre-theoretical bounds of skill before evaluating five existing philosophical theories that might inform an account of skill. Given none of these adequately captured the skill concept, the present section aims for a more adequate account. Importantly, it does not seek a full definition of skill in terms of necessary and sufficient conditions, instead relating the concept to recent discussions of 'knowledge-how'.

Carr suggests skills and knowledge-how are connected conceptually:

> [T]he problem of understanding skill is tantamount to that of grasping the notion of knowing how. To ask what a person knows how to do amounts to asking what skills he possesses and to enquire how one might master a given skill is essentially to enquire how one might come to know how to perform it.[56]

He proceeds to make several plausible claims about knowledge-how. First, he argues knowledge-how is not *mere* ability with an instructive example.[57] Consider a learner who succeeds in performing a difficult somersault. If their success comes only by chance it is not a matter of knowledge-how, but beginner's luck. Though obviously *able* to perform the somersault, i.e., having done it in at least one instance, they do not enjoy knowledge-how. Failing to understand how they succeeded, and with no

[55] On the on supervenience point see Fantl (2008), pp.454–5. The proponent of the Stanley and Williamson position may appeal to the thought such a disposition also requires the propositions to be understood in a certain way, a practical mode of presentation, but the nature of this ability is obscure.

[56] Carr (1981b), p.87

[57] Carr (1981b), p.94

real idea how to do it again, knowledge-how is not in place.

Nevertheless, knowledge-how is not a disposition that manifests in all cases where external circumstances and desires align. We are to imagine a person who knows how to change a tyre. They have changed tyres on numerous occasions, in a variety of circumstances, and show understanding of the process. Be this as it may, if a tyre needs replacing on the way to a formal dinner, they might choose not to change the tyre in order preserve their clothing. Clearly the agent desires the tyre changed, and he or she can change the tyre, yet chooses not to use their knowledge-how.[58] At the very least, further dispositions of the agent will matter for the use of knowledge-how.

Carr's observations for relating skill to knowledge-how are promising. However, it is still not clear the problem of skill is *tantamount* to the problem of knowledge-how. This is for two types of reason: (1) Not all instances of knowledge-how are clear instances of skill; (2) There is no available and informative argument skill always implies knowledge-how.

(1) Not all instances of knowledge-how are clear instances of skill

It is clear 'knowledge-how' and 'skill' are not perfect substitutes for each other. For one, not all instances of knowledge-how are clear instances of skill. While it might be reasonable to describe a person instructed on how to change a tyre as having relevant knowledge-how, they are not skilled because of that fact alone. Skill in changing a tyre requires much more than the bare ability to do it, however clumsily and lengthily. In the least, an ability to adapt to difficulties in the tyre-changing process would be expected.

Secondly, not all instances of knowledge-how are instances of skill, at least if this means the ability to fully deploy relevant knowledge-how. Agents can have know-how with respect to Φ-ing without having the current possibility of Φ-ing.[59] For instance, a professional golfer who lost an arm seems to have knowledge-how with respect to playing putt shots. Nevertheless, it would be peculiar to hold they enjoyed the skill of playing putt shots.[60] Similarly, a trumpeter may know how to achieve an effect with a trumpet, but have an untreatable lung condition preventing their performing it. Calling this person skilled in the fullest sense, unless serving to mark their past ability, is not clearly correct or motivated.

[58] Carr (1981a), pp.56–57. Compare Annas (2011) on skill being an 'active disposition'.
[59] Fridland (2014)
[60] Stanley and Williamson (2001), p.416 offers an analogous case for an amputee pianist.

Note, however, this does not serve to undermine a close link between skill and knowledge-how. The amputated golfer and arthritic painter are still quite close to having the skill. If medical treatment advanced to provide a prosthesis for the golfer, or a medication to the trumpeter, they could 'pick up where they left off'. Similarly, if seeking advice on how to improve a golf swing, or achieve the trumpet effect, it would be reasonable to seek the advice of these individuals, though they cannot manifest the full skill now. In summary, while those with knowledge-how are not necessarily like those with complete skill, they can still have something near skill.

(2) There is no available and informative argument skill always implies knowledge-how.

What of the other direction? Do all instances of skill involve knowledge-how? Clearly, skill sometimes requires knowledge-how. To be a skilled pianist one must know how to perform certain actions — for example, certain arpeggios. But do all skills require knowledge-how, and in every instance? A simple argument could seem to establish the point — skilled action implies knowledge-how because the only way to bring about Φ-ing to a given standard of success is through knowledge-how with respect to Φ-ing. But this argument is problematic. It does not clearly exclude Φ-ing successfully because of an intention but 'in the wrong way', as by reliable accident or improper causal route.[61] A closely related argument could seem more compelling. It may be maintained the only way to bring about the relevant successes via *controlled* means is through knowledge-how. To say X performed a controlled back-flip but did not know how to perform backflips scarcely makes sense, for there is no credible explanation of how the control could work other than through knowledge-how. The fault, however, is introducing 'control'. Control can look like a matter of skill or knowledge-how in itself, and so the account may seem circular. In sum, even if skill and knowledge-how are intimately related, an account of skill should proceed carefully.

2.3.1 A positive account of skill

This section takes up the careful analysis motivated in the last section, surveying the relation of skill to relevant success, drawing principally on Hawley's recent account of knowledge-how. It examines if an elaboration on those conditions applies to skill, before turning to further refinements.[62]

[61] A fuller case is presented in sequence.

[62] Hawley (2003) presents five core claims: (i) Knowledge-how employs families of tasks; (ii) Knowledge-how is specified via 'normal circumstances'; (iii) Knowledge-how is something attempted

Skill is intentional

Firstly, skilled behaviour is a form of intentional behaviour. An agent is not skilled in what it makes no sense to intend or attempt, even if it is an ability they have. Consider digestion — digestion and peristaltic action are not skills, nor things in which an agent has knowledge-how. Despite this, they are abilities an agent in some sense possesses. This is not to suggest skilled behaviour must be consciously intended or attempted, only to hold it is attempted at some level (perhaps via an unconscious mechanism).[63] As this point raises several complexities, the *Intentional Component*, understood as the ability to arrive at relevant intentions, is analysed separately below.

Skill and families of tasks

Like in the case of knowledge-how, there is often no single way to show skill in a domain as there are multiple routes to complete the relevant tasks successfully. For instance, there may be no single way to sail a boat skilfully. Correspondingly, a satisfactory account of skill should allow for success via 'families of tasks' capturing the idea there may be many ways to implement a skill. This is not, however, to insist they are always needed. There could, for instance, only be one way to do an Olympic lift skilfully.

Skill meets a success condition

Any satisfactory analysis of skill must capture its relation to success. A first effort at constructing an account of skill begins simply:

SC1: X is a skilled Φ-er only if when X attempts Φ-ing, X is successful.[64]

Despite its simplicity, this first formulation is inadequate. Even the most skilled are less than *perfectly* successful when they attempt to Φ. Sometimes the engraver fumbles, and the cellist misses a note. In addition, equipment can malfunction or freak circumstances take hold. A less stringent condition could be suggested:

SC2: X is a skilled Φ-er only if when X attempts Φ-ing, X succeeds reliably.

or intended; (iv) Knowledge-how has a standard of success; (v) Knowledge-how implies the group has suitable epistemic relation to the method employed; **&** (vi) Knowledge-how implies a suitable connection of method and result. To aid discussion the order is modified.

[63] This is slightly complicated by symptoms of skill discussed later in this chapter.

[64] Where X is an agent, Φ is an object, action, or state or affairs to be produced, and 'attempts' is glossed to mean something near 'intentionally instigates'. As will become clear, intentional behaviour should be construed broadly, including the result of an agent's plan or policy, though not one necessarily occurrent to the agent. Note also the following formulations can be restated in terms of production of Φ (construed as a result or state of affairs) if the given formulation is not preferred.

Again, there are problems. Reliability, at a bare minimum, requires success more than half the time.[65] However, some clear skills prove less than reliable by this measure. Consider baseball.[66] Professional batsmen at the peak of their game meet with success about thirty percent of the time, the record seasonal average below forty percent.[67] Despite this, these players are unquestionably skilled at hitting professionally pitched baseballs. Consequently, skilled success does not require reliable success where this means success over half the time.

Of course, this point does not deny *some* skills might require success above plain reliability. Skill in catching a gently thrown basketball would normally require success exceeding ninety percent. Consider therefore SC3:

> SC3: X is a skilled Φ-er only if when X attempts Φ-ing, X succeeds in n% of those cases.

While a formulation with percentage-accuracy might be aspired to, and could vary contextually[68], it would lend the success condition an artificially precise cut-off, whilst also assuming an easily quantifiable measure of success.[69] Some advantage is gained over SC3 by framing the condition more neutrally:

> SC4: X is a skilled Φ-er only if when X attempts Φ-ing, X's successes exceed some minimum standard.

SC4 specifies of the standard of success without a hard percentage, and can embrace qualitative, multi-conditional, disjunctive, or otherwise varied thresholds. Furthermore, such a condition readily adjusts to theorize the levels and nuances of skill attribution. For instance, should one believe there are temporal requirements on skill, so that a blacksmith cannot be skilled if he takes a week to make a single horseshoe, these are easily accommodated on the terms of SC4. In like manner, the condition readily adapts to capture the gradable aspect of skill.

Though SC4 proves a significant improvement, complexities may still arise in fleshing out the minimum standard. For present purposes, it is unnecessary to decide the full details — the opinion of fair-minded individuals familiar with many examples of success and failure in each particular field is a reasonable suggestion. Still, SC4 is still deficient for leaving out contextual considerations.

[65] See, for instance, Turri (2015)
[66] See Greco (2010)
[67] I owe this point to Aaron Meskin.
[68] Turri (2015) invokes percentages in this way. The limits of invoking proportions also apply to discussed above in connection with Maier (2013).
[69] I owe this objection to Matthew Kieran. Poston (2009) uses 'with some regularity' similarly.

The standard should be context-sensitive

Just as the measure of tallness will differ given an instruction to find a tall basketball player will differ from that assumed in finding a tall jockey[70], what counts as skill in one context might not count as such in another. For instance, the question 'Are there any skilled painters here?' implies markedly different standards when invoked at a school art exhibition, a university graduation exhibition, and the Royal Academy Summer Exhibition. In addition, standards of success may also require indexing to levels of available technology, or the historical development of a particular activity. Just as Fred Perry must not fall out of our account as unskilled through presuming modern levels of sporting practice, Perugino should count as a skilled painter of perspective though falling short by the canons of modern artistic methods. These kinds of contextual considerations are not explicitly captured by the preceding formulation, mandating an amendment:

> SC5: X is a skilled Φ-er only if when X attempted Φ-ing, X's successes exceed some contextually determined minimum standard.

The standard should be sensitive to counterfactual attempts

At this juncture, it is necessary to address an ambiguity. As formulated, the success condition admits of a narrow factual and a counterfactually-sensitive reading:

> *Factual Reading of SC5*: X is a skilled Φ-er only if over some set of actual cases of X's attempted Φ-ing, X's successes exceeds some contextually determined minimum standard.
>
> *Counterfactually-Sensitive Reading of SC5*: X is a skilled Φ-er only if over some set of actual and counterfactual cases of X's attempted Φ-ing, X's successes exceeds some contextually determined minimum standard.

The factual reading is not right for our purposes. Though actual success builds our confidence that a person is skilled, it is not a definitive proof of skill. Actual success is compatible with lucky or super-lucky agents successful through luck, meaning actual success alone is not sufficient for skill. Additionally, actual success does not seem *necessary* for skill. For instance, in a world very like our own, counterpart-Michelangelo never successfully completes a sculpture because each block of marble fractures at a rare but visually indistinguishable seam, destroying his work in the process. Though

[70] Glanzberg (2007)

counterpart-Michelangelo never finishes a sculpture, he has skill in sculpting, as proof of which he succeeds in the overwhelming majority of close possible worlds.[71] A counterfactually-sensitive success condition is needed — call the next proposal SC6:

> SC6: X is a skilled Φ-er only if over some set of actual and counterfactual cases of X's attempted Φ-ing, X's successes exceed some contextually determined minimum standard.

As opposed to the previous analysis, SC6 quantifies over both actual attempts at Φ-ing, and counterfactual attempts at Φ-ing. Note also counterfactual sensitivity allows the right result in cases where the skilled are outdone by the unskilled, or lesser skilled. For the sake of example, suppose the inferior football team defeats the superior, the unskilled outdo the lesser skilled, even over an extended period.[72] This is difficult to explain on an account tracking *actual* success. Furnished with a counterfactually-sensitive measure of success, however, and taking in a reasonably broad sweep of cases, one can explain how actual failure need not undercut greater skill. The skilled can have a bad day, even a bad spell, but over a suitable sample of actual and counterfactual cases, they are the better more skilled.

However, a related worry could now arise. It seems learning skill sometimes leads to a temporary *diminishing* of success. The upshot is an objection greater skill does not uniformly imply greater success. Does this kind of case jeopardize the preceding account of skill? Not clearly — the objection pictures skill learning as linear. Yet there is no reason to suppose the process of skill acquisition is always linear. No logical reason demands that improving a skill must preserve previous levels of success during improvement. It could be that a gain in skill requires a sacrifice of short-term success.

Selection of attempts

Something must now be said on the selection of actual and counterfactual cases drawn into the success condition. The actual and counterfactual conditions for judging the skill in question need selecting with considerable care.[73] For instance, it would be wrong to deny skill by expanding the counterfactuals into unrealistically adverse circumstances— as in denying someone was a skilled ace-server by including mostly worlds with local hurricanes. Yet neither should an agent be made to look skilled by

[71] Or again, alternatively, by freak lightning bolts or meteorites.
[72] I owe this objection to Aaron Meskin.
[73] Turri (2015); Shepherd (2013) offer similar provisions.

restricting the counterfactual worlds to favour success. Roughly, the possible worlds selected must give a fair representation of the environment, and be careful to neither overemphasize nor underemphasize luck and chance. Abstracting from details, an added proviso stipulates attempts are 'well-selected':

> SC7: X is a skilled Φ-er only if over some well-selected set of X's actual and counterfactual attempted Φ-ing, X's successes exceed some contextually-determined minimum standard.

What more can be said to forestall gerrymandering? Physical laws should be held fixed. Equally, the causal histories of counterpart agents should be as similar as possible. Judgments based on counterparts with very different histories of skill development will be distorted. For the same reasons, selection of comparison worlds must closely preserve the beliefs, intentional states, and perceptual capacities of agents. Care in selecting close worlds must extend to contextual considerations — Fred Perry must play using contemporary equipment. Naturally, it could be that no formula selects just those worlds appropriate to a skill measure. If this is so, there will be an eliminable element of judgment involved in world selection. However, this indeterminacy is not itself a reason for rejecting the measure, only an allowance for the complexity of skill judgments.

Skill is determined by reference to 'normal circumstances'

Yet the measure is still in need of further clarification. Consider a violinist playing in a room that floods in most nearby possible worlds — it is wrong to deny the pianist playing in a glass room is skilled even though it floods in most nearby possible worlds.[74] The circumstances are not normal. This is useful where the local situation is peculiar, for instance where a tennis player is playing in a gale. It would be mistaken to deny they lacked skill because they failed in such a case. Consider therefore SC8:

> SC8: X is a skilled Φ-er only if, taking a well-selected sample of the closest worlds in which X attempts Φ-ing in normal circumstances, X's successes exceed some contextually determined minimum standard.

This does not imply skilled agents are unskilled in abnormal or unfriendly environments, that any performance is equivalent to that of the unskilled. The point is only to bring out the context for correct determination of the skill.

[74] McKinnon (2014), p.570

Hawley extends the point to capacities. Agents should consequently be restored the underlying capacities and circumstances normal for the exercise of the tasks in question. So, for instance, a tennis player should be restored severed nerves, and placed in circumstances of a court in fair condition with normal-bounded weather conditions.

The treatment here differs a little from Hawley on this point. An account of skill should allow it to be lost permanently, but it is unclear whether 'restoring' underlying capacities allows this only when it should. Nevertheless, the skill is not lost through just any inability. Tiger Woods does not become unskilled because of a temporary minor injury, though this means he cannot currently play golf successfully. Still, worlds without the injury are reasonably close. Consider now worlds where an arm is lost, meaning 'healthy' worlds are quite far away. In this kind of case, it would be difficult to say skill remains, though it is true something skill-like remains, potentially exploitable by some future prosthesis or restitution of the limb.[75] Notice, furthermore, this condition allows for skills lost through lack of practice or disuse — an account of skill (or knowledge-how) should not make it so skill can never be lost though the primitive capacities remain.

Counterfactually-sensitive success insufficient for skill

Success to a counterfactual standard is not sufficient for skill. Hawley's discussion of knowledge-how indicates several ways success to a counterfactually-sensitive standard may fall short of skill.[76] Three kinds of case are presented:

- (A): *Success despite offset ignorance*— if an individual succeeds only via some luckily coincidental factor this indicates against skill.

  > Sally: Sally finds herself caught in an avalanche. She does not know how to successfully escape from an avalanche, but due to a psychological reflex believes herself to be drowning. Correspondingly, she begins to make a swimming motion to save herself. Happily, a swimming motion happens to be the correct way to escape from an avalanche, and so she succeeds in saving herself.

- (B): *Misapprehension*— if success happens from certain kinds of misapprehension, any successes will not show skill. Hawley's example concerns Susie:

[75] Stanley and Williamson (2001), p.416 consider an analogous case where a pianist retains 'knowledge-how' despite losing her arms in a car accident.

[76] Hawley (2003)

> SUSIE: Susie is attempting to annoy Joe, and believes she does so by smoking in his presence. Indeed, she successfully annoys Joe whenever she smokes, however this is not because of her smoking, but because she unthinkingly taps the cigarette box on the table whenever she smokes.

In this case, there is another kind of misapprehension that makes her success lucky. Susie succeeds in successfully annoying Joe, but this happens through a lucky meeting of means and end (A has a lucky misconception of believing p annoys Joe when it is in fact q, where happily q accompanies p).

- (C): *Guesswork*— if a success arises *purely* by guesswork, this will not count as creativity. A pure lucky guess (i.e., the stab in the dark) is not a skilful method (though this does not exclude the possibility the skilled may make use of random processes).

> SHELLEY: In this case, Shelley is attempting to bake a cake, but has no real idea how to do so. She tries mixing together and baking whatever she finds in the cupboard, which so happen to be the ingredients for a passable cake.

Shelley meets with initial success through guesswork. However, though a cake is produced successfully, it is only because she luckily happened to have the means for success at hand.

Intuition seems to support cases (B) and (C). The (A) case is more difficult since one might simply say Sally is learning of a skill she was previously ignorant of. Still, the fundamental point can be made with (B) and (C).

In all these cases success depends on luck, and knowledge-how is intuitively denied. Hawley brings the faults under two heads[77]:

(1) *Deficient understanding of method employed*— where the subject does not comprehend how to get success in the relevant circumstances due to misapprehension or by guesswork.

(2) *Fortuitous or accidental success*— here there is success but an 'absence of a suitable connection between the goodness of the method and the subject's use of that method'. Hawley explains:

[77] Hawley (2003), p.28

> [T]he subject does not act as she does because that's a good way of achieving her goal, each would have behaved in a similar way even had that not been a good way of achieving their goal, and each obtained her method from a source (guesswork, misconstrual of the situation) which is an unreliable source of successful methods.[78]

Where success happens due to a deficient understanding of the method or is impermissibly fortuitous, knowledge-how is denied. Returning to the motivating cases, Sally and Susie do not meet the requirements of knowledge-how, being good examples of worries Hawley expresses under (1), deficient understanding of how their success works. Shelley's success better exemplifies the worries Hawley expresses under (2). Whereas Susie and Sally had a deficient understanding of how their success worked, it was not wholly accidental, but relied on an incidental but reliable link each was ignorant of. Contrast Shelley. Her success in baking did not rest on any reliable link. Her first success was entirely through luck — conceding, of course, she may from this success gain knowledge-how about cake-making.

Even though skilful success cannot tolerate certain kinds of accidental connection of agent to result, care is needed not to rule out every case where a success trades on misconception. Nevertheless, it is important not to exclude too much. Consider PHYSICIAN:

> PHYSICIAN: a physician works in the early middle ages. Many patients with diverse illnesses consult the physician, including some with what would receive a depression diagnosis. Through observation of effects he finds a tincture of St John's Wort lifts the symptoms, and uses this information to prescribe in future cases. However, rather than correctly identifying the reason the tincture works, he attributes it to a modified humoral theory.

Though the physician's efforts in these case trade on a very mistaken theory, the resulting healing might still appear skilful. The matter is important if only because our current best theories may be false in significant respects, and there is evidence of the skilled confabulating how they succeed.[79] What is the condition? It is significant the agent in PHYSICIAN looks to be epistemically responsible — we suppose the agent is forming a reasonable induction on the causal effect of the potion. Where epistemic

[78] Hawley (2003), p.28

[79] See, for instance, discussion in Bermúdez (2017).

responsibility is relaxed, the skill attribution is correspondingly weaker. Notice, for another tack, some may be skilled but not in the way they imagine. Astrologers cannot be skilled in divining things from celestial movements since there is nothing in nature admitting underpinning the relations posited, and in consequence there could be no basis for warrant. Yet astrologers might be skilled in a different way — filling a psychological want for fun or profit, engaging in a form of make-believe, or so forth.

Reviewing the above, the success condition on skill should be interpreted to exclude cases where success relies on a deficient understanding of the method, as well as cases where success is impermissibly fortuitous or accidental. SC9 rules these out by specifying successes must be 'non-accidental':

> SC9: X is a skilled Φ-er only if, taking a well-selected sample of the closest worlds in which X attempts Φ-ing in normal circumstances, X's non-accidental successes exceed some contextually determined minimum standard.

These points exhaust the points gleaned via Hawley. Nevertheless, some further exclusions are needed.

Further refinements

Successes due to intervening luck

For one, it is worth specifying successes from intervening luck should be excluded. An arrow reaching its target only due to chance gusts of wind is not a success manifesting skill.[80] More generally, skilled successes do not rely on lucky interposing factors between the agential ability and the result. These are not factors the agent can control or compensate for, and so any success does not accrue to their ability.[81]

Successes and external mechanisms

An intended result might be causally connected to an agent's intention in another way short of skill. In a discussion of aesthetic artefact production, Zangwill seeks to bar improper successes by excluding 'alien agency' from skilled success.[82] If A brings about an effect from an intention to bring about that effect, but this is due to B detecting A's intention and carrying out the effect, this is not a skill belonging to A.

[80] Consider Pritchard (2009a,b).

[81] Notice intervening luck might be one way to cast the Sally case, but this is not entirely clear, hence the separate presentation here.

[82] Zangwill (2012)

If the sculptor intends to bring about an effect but succeeds only because he instructs another to do the work, sculpting is not a skill belonging to A.

However, a blanket exclusion of alien agency appears too strong if it excludes skills where there is interaction with other agents. But it also appears possible for the A's skilful successes to depend on the agency of another. Some skills involve control, direction, or collaboration with other agents. The success of a skill possessed by A might rely on compliant agents just as that of a bus driver could rely on functional machinery. The success of a portrait painter may depend on finding a sitter who will remain posed, whereas skilful leadership might rely on getting others to work toward some end.[83] Notice also the problem is not just with external agency but external mechanisms of other kinds. The successes might be solely due to the malfunctioning of a futuristic machine. Again, these kinds of success will not count toward A's skill.

In addition, skill is compatible with some external aids to success. External equipment can make things easier, but that alone does not mean the agent is not skilled. Even so, certain kinds of external mechanism will not count as skilled successes (and so do not exhibit agential skill). Successes that arise *merely* from an intention to succeed are not skilful because success is 'too easy'. To make the point, suppose an agent trying to hit a target is given a guardian angel.[84] The guardian angel is inscrutable, and not the kind of thing that can be understood and adjusted to. However, the guardian angel can adjust the world at will, and brings about A's intention (e.g., for the arrow to hit the bullseye) merely from that intention.

It would seem the agent has archery skill only if they could succeed to the right threshold over well-selected counterfactual attempts *without* the guardian angel rearranging around the world on the mere fact of the agent's intention. Notice, however, presence and intervention of the guardian angel does not itself show the agent does not have skill. The guardian angel might help the agent do better than they would otherwise have done, even though they would succeed above the archery standard unaided. Or, conversely, a malicious angel might cause an agent to do *worse* in hitting the target than they otherwise would have done in those circumstances. That, however, does not mean the agent does not have the skill, only that the demon blocks their skill. In sum, the agent will still have the skill even if the guardian brings around success better or worse than might have occurred otherwise across the range of worlds, or could intervene but elects not to. Naturally, there may be skill in doing something in

[83] Similarly, a solution must allow for skills reliant on machines and other mediating instruments.
[84] The model here is a problem case for virtue epistemology. See, for instance, Greco (2012), p.11.

conjunction with the guardian angel, assuming the angel will not rearrange the world to allow just about any relevant attempt to succeed. However, this is the separate skill of adjusting to the angel and getting it to assist.

Finally, external mechanisms can mean success is not due to the agent in another way. Consider skilful discriminations. A computer programmer is not skilled (or at least not fully so) if they output all kinds of algorithms but need someone else to pick the good from the bad. Likewise, if external mechanisms such as the market are the *only* method the agent has to separate successes from failures, the agent is not skilful in evaluating their output, though they are deploying a process that yields the desired result.[85]

Lucky successes compatible with skill

It should not be thought skill is completely incompatible with luck.[86] Indeed, some measure of luck may be involved in every success if only because control cannot exclude every possible point of failure.[87]

Certain forms of constitutive luck are compatible with knowledge-how. A neurological quirk underpinning acute pitch might be the result of significant luck, but this does not itself undercut the skill provided it is something cultivated. Some happy accident are also compatible with skilled success— it might be astronomically unlikely a spy overhears a particular conversation, but this does not mean realizing its significance is unskilled.[88] Or, to take another example, it might be very improbable a bolt of lightning strikes at just the moment needed for the anti-aircraft gunner to get sight of the plane, but this does not prevent any strike from being skilful. Similarly, a skilful spy may succeed by luckily overhearing a particular conversation. Summarising the above, consider SC10:

> SC10: X is a skilled Φ-er only if, taking a well-selected sample of the closest worlds in which X attempts Φ-ing in normal circumstances, X's non-accidental successes exceed some contextually determined minimum standard AND these successes are not due to an impermissible causal process.[89]

[85] This kind of case resembles those mentioned in Kieran (2014a).

[86] And *mutatis mutandis*, knowledge-how.

[87] See, for instance, Millikan (1997). The perennial possibility of a freak effect means all action seems at least somewhat beholden to luck.

[88] Pritchard (2015) discusses this kind of case with respect to knowledge-how.

[89] The specification of a counterfactual success condition on attempts gives some scope to address worries over the generality problem as applied to skill. In the epistemic case, the challenge is to

With the success condition now characterized, the intentional component may now be considered.

2.4 Skill and intention

The previous section began by arguing skilled action is intentional — skills are not like nervous tics, digestion, or unforeseen side-effects of other behaviours. This is not to say, however, that skilled action needs a *conscious* intention to be Φ-ing. Summarily, skilled action used a wider notion of the intentional, allowing standing plans or policies along with some present-directed commitment to those plans.

However, a large part of skill is non-accidentally finding the correct intention to begin with; determining if and when Φ-ing is appropriate, or which way of Φ-ing is appropriate in a given scenario. The issue has several complexities. Firstly, scenarios are commonly of a type never encountered before, and the skilled must arrive at an appropriate action 'on the fly'. Additionally, the skilled often want to vary what they do for some further purpose. The chess-player may wish to win using a defence she has not tried before, or the batsman demonstrate to the novice how *not* to hit the ball by exaggerating the novice's mistake.[90] Lastly, skilled behaviour has self-correcting aspects, compensating for mistakes and changes of circumstance. Above these points were broached under the idea skills are 'flexible'.

How does skill have these characteristics? It is implausible the skilled learn or acquire fixed routines for every eventuality, hence other mechanisms must play a role. To reinforce this idea, imagine John is a skilled playwright with the flexibility to compose an indefinite number of plays. Quite clearly, so many plays are not stored within his mind and retrieved piecewise. Rather, John shows flexibility as a skilled playwright because he understands, if only implicitly, the reasons for making certain compositional decisions. More colloquially, John comprehends the principles of writing a play, or has know-how with respect to writing plays.[91] Furthermore, given that John can achieve and vary his aims over a range of circumstances and 'on the fly', he solves intentional problems by drawing on capacities or dispositions of

specify the process that is suitably reliable to generate knowledge. Eyesight without restriction may be epistemically unreliable, but the circumstances in which eyesight is invoked must not be so closely specified that truth is guaranteed. More generally, what is suitably reliable at one level need not be at another. In the skill case, the challenge presses for the process by which the success is suitably reliable. To meet these worries, the counterfactual test on attempts requires intending to Φ and having suitable connection of means to ends. Beyond this, however, the account does not commit.

[90] Fridland (2014)

[91] Or at least John knows how to produce an indefinite number of plays of certain kinds.

wide applicability.[92]

But there is still a thorny puzzle over how intentions are formulated. Generally, how do the skilled reliably and non-accidentally work out what is appropriate action from the mix of circumstances, principles, and other variables they are apprised of? Moreover, how does this happen without populating the mind with too many intentions and intermediary intentions?[93]

2.4.1 Sketch of a realizable intentional ability

One suggestion, that skilled agents somehow perceive reasons for action directly, should not be preferred without good reason. That model, built closely on the model of direct secondary-quality perception, is advocated in the moral context by authors like McDowell.[94] This kind of theory makes very demanding metaphysical and epistemic assumptions, and should be accepted only if there are no viable alternatives.[95] Instead, this section sketches a different way to explain how the skilled arrive at appropriate intentions through simple and more plausibly realizable psychological mechanisms.

Finding appropriate intentions does not require mysterious faculties, but can be traced to more workaday mechanisms. As a beginning, it appears some intentions arise from given aims, perceptions, and beliefs via mechanisms that are innate. The question is how the right kinds of intentions form in more complex scenarios — for example, how the golfer judges the right shot to take given a specific scenario, or how a tennis player varies to some specific purpose.[96] The key idea is the controlled knitting together of learned actions toward new intentions, with further penetrability by new or changed intentions.[97] In the case of more sophisticated skills, such control plausibly extends to factoring out environmental distractions.[98]

Such capacities are acquirable, though often long habituation is necessary. The current concern is to say something on how such sophisticated abilities might arise

[92] This is not to deny there are 'rules of thumb'.

[93] Clarke (2010) raises this kind of problem for a causal theory of intention.

[94] McDowell (1979, 1984)

[95] McDowell (1984) argues against anti-realist worries familiar from Mackie. In addition to the metaphysical demands mentioned, further problems beset the details. Most significantly, even if a picture of reasons or values as somehow akin to secondary properties is admitted, it remains mysterious how agents weigh competing claims without generating a regress.

[96] Fridland (2014), pp.2744–5.

[97] Fridland (2014) calls these 'strategic control' and 'motor control' respectively, pp.2744–5; p.2748. The emphasis of 'motor' control fits the tennis case, but the claims made for specific control generalizes.

[98] Bermúdez (2017)

from simpler mechanisms. The next two subsections consider two prominent strategies.

Simplification, specialization, automaticity

Intentional problems can often be simplified and made more efficient, or at least disaggregated into easier components. For one, agents may exploit sub-skills and other specializations in serving a further skill. The golfer choosing the optimal shot may consider judge the lay of the course, current weather conditions, their own form. Moreover, learned heuristics and 'rules of thumb', perhaps deployed iteratively, can work to simplify.

Sub-mechanisms may exploit automaticity.[99] Moreover, since some elements in controlled action can become automatic, skilled action can lean on component automatic behaviours to reduce the need for intermediate target-setting — so-called 'chunking'.[100] Where there is automation there is less need for deliberation freeing cognitive resources to work on atypical aspects of a scenario, reducing the problem to more attainable levels.

Observation, comparison, attention, self-correction

It is plausible simple methods of observation and comparison underpin forming appropriate intentions. Consciously or subconsciously, current progress is compared to a target state, and intention progressively modified. Deviation slowly falls until the end is reached. Such self-correction can also apply dynamically to changes in circumstance.

Evidence the skilled perceive their environment differently from the unskilled corroborates the point. Fridland discusses evidence skilled agents differ from novices in attending to their environments.[101] Most relevant here is 'Selective, Top-Down, Automatic Attention'. Attention of this kind picks up relevant cues and features in an environment that the skilled can usefully respond to, given her goals, plans, and strategies. Attention of this kind may inform action directly, or else prompt further information gathering. The idea is brought out in respect of motor skill in a passage drawn from Christensen (et al.):

> [L]earning a motor skill requires more than learning how to control one's body, it also requires learning how to control one's attention. That is,

[99] Fridland (2014)
[100] Bermúdez (2017), p.6 ff.
[101] Fridland (2014)

> learning to attend to the right things at the right times.[102]

Attention of this kind improves with training, is automatic, and can be sensitive to the content of an agent's intentional states.[103] Yet practice does not merely make skills more efficient to exercise, but can increase their flexibility.[104] Such habits of attention make formation of appropriate intentions a tractable problem, either directly or by reducing live options.[105]

More generally, these well-accepted mechanisms can simplify intentional processes substantially. Combined with evidence these and governable by higher-order beliefs and intentions, there is no need for esoteric mechanisms to explain how skills operate.[106] In addition, the programme of explanation can appeal to numerous mechanisms, strategies, and mixes thereof. It may include, for instance, further mechanisms of classification, prediction, general reinforcement. The general point in place, discussion shifts to general objections.

2.5 Objections

These points made, it remains to consider challenges and objections to the account presented. A first group queries if knowledge-how, and correspondingly skill, requires safety. Further objections and challenges are discussed in sequence.

2.5.1 Safe acquisition

This section considers if skill has a certain kind of safety condition. Why raise this debate? The account of skill offered drew heavily on the analysis of knowledge-how. Yet some analyses of knowledge-how require knowledge-how is safely acquired.[107] On this view, an unsafely acquired ability cannot count as knowledge-how, just like

[102] Cited in Fridland (2014), p.2746

[103] Fridland (2014), p.2747 gives empirical evidence of penetrability of attention by intentions and aims — a core example is patterning of visual attention by the type of object searched for.

[104] Fridland (2015a)

[105] Fridland cites several studies to the effect that cognition by those skilled in a task is very different from that of the unskilled, and not just for speed. Rather, there is also a difference in the kind of cognition taking place. The central studies are Cheng (1985); Ericsson and Charness (1994); LaBerge and Samuels (1974); Saling and Phillips (2007).

[106] Teufel and Nanay (2017) reviews some more general literature.

[107] The terms 'knowledge-how' and 'knowledge-that' mark the intuitive difference between clearly propositional knowledge, such as 'Barack Obama was first elected President in 2008', and the ability to perform certain tasks or actions 'Roger Federer knows how to serve a tennis ball'. Knowledge-that is the focus of most epistemological analyses, which generally argue for justified true belief plus some further condition to exclude easily false 'unsafe' beliefs — typically understood as a belief false in a close possible world.

knowledge-that. Why would it be a problem to rule out unsafe acquisition in an account of skill? At the very least, apparent cases of skill would not really be skilled, but more like an analogue of true belief. Since the best argument for a safety condition on knowledge-how is mounted by proponents of intellectualism — the claim knowledge-how reduces to propositions and attitudes to propositions — the focus here is on an influential rendition offered by Stanley and Williamson.[108]

Below, the intellectualist approach is sketched with an emphasis on its affinity for safe acquisition, the main motivation for safety on knowledge-how. Given this, though the intellectualist case is not disproven, doubts are highlighted. Without a proof either way, the safety question is considered neutrally. It concludes safety is not a requirement on knowledge-how, whether or not intellectualism is true.

Intellectualism and safety

The intellectualist seeks to reduce knowledge-how to propositions and attitudes to propositions. On this view, knowledge-how is a form of propositional knowledge. Since safety is a widely-accepted requirement of propositional knowledge[109], there is pressure to accept knowledge-how also needs safety — propositions deployed in knowledge-how must be safely acquired, no different to knowledge-that. To discuss this point adequately a little background on the intellectualist position is needed.

A sketch of intellectualist knowledge-how, the pilot case

Though the problem will affect any account of knowledge-how involving a safety-like condition, it is approached here via Stanley and Williamson's intellectualism[110], their discussion throwing the issue in great relief.[111] Condensed, and transposed into the terminology previously used, they claim:

> X knows how with respect to Φ-ing if there is some w such that X knows that w is a way for X to be Φ-ing, and X entertains this proposition under a practical mode of presentation.[112]

This needs some explanation. Requiring the proposition must be 'entertained under a practical mode of presentation' aims to exclude knowledge-how in ostensive scenarios,

[108] Stanley and Williamson (2001)
[109] Following Pritchard (2009a) p.253, safety is the most workable anti-luck condition on knowledge: '*Safety Principle*: If S knows that p then S's true belief that p could not have easily been false.'
[110] Stanley and Williamson (2001)
[111] Stanley and Williamson's intellectualism formulates around motor-dependent skills, but this does not affect the objection as formulated.
[112] Adapted from Hawley (2010), p.400

as when an unskilled agent points and says *'That* is how to ride a bike'.[113] The agent who points does *not* know how to ride a bike in virtue of this identification. Rather, the claim is knowledge-how with respect to Φ-ing turns on knowing, for some agent, that some specific course of action is *for that agent* a way to go about Φ-ing.

The problem of 'overly-lucky' knowledge-how now comes into view. Consider Bob, a learner pilot:

> Pilot Case: Bob wants to learn how to fly in a flight simulator. He is instructed by Henry. Unknown to Bob, Henry is a malicious imposter who has inserted a randomizing device in the simulator's controls and intends to give all kinds of incorrect advice. Fortunately, by sheer chance the randomizing device causes exactly the same results in the simulator as would have occurred without it, and by incompetence Henry gives precisely the same advice, as a proper instructor would have done. Bob passes the course with flying colors. He has still not flown a real plane. Bob has a justified true belief about how to fly. But there is a good sense in which he does not know how to fly.[114]

Stanley and Williamson hold Bob does *not* know how to fly a plane because Bob is too lucky in gaining his true beliefs. That is, Bob's beliefs about flying are unsafe in the sense they could easily have been false. In the overwhelming number of close worlds where Bob consults Henry, he does not gain true beliefs sufficient to fly the plane, and so Bob's true beliefs could very easily have been false. Given most epistemologists favour the idea propositional knowledge must be safe, there is pressure to deny Bob has knowledge-how.[115]

[113] Hawley (2010), pp.400–401

[114] Stanley and Williamson (2001), p.435

[115] One strategy for defusing the Pilot Case could suggest safety (or some other anti-luck condition) is a requirement neither of propositional knowledge nor knowledge-how. Instead, simple reliability from relevant capacities does the work. Rather than emphasizing a counterfactual measure to explain what differentiates propositional knowledge from true belief, the capacity through which the agent arrived at the true belief, whether from their own efforts, or via other is central.

But as Pritchard (2011) observes, barn-spotting cases prove capacities are insufficient substitutes for an anti-luck condition on knowledge-that. Grant the barn-spotter the best capacities that could be hoped for, it is always possible to imagine an environment that makes his knowledge-how too lucky. Though Pritchard does not use this to reject capacities outright, instead holding safety and an adequately specified capacity are each necessary for propositional knowledge, the point here is only that an anti-luck condition on propositional knowledge cannot be abandoned. But if this is so, this quick strategy for defusing the safety objection cannot work.

Arguments against knowledge-how with safety

Yet as many have observed[116], there appears to be an important sense by which Bob *does* know to fly a plane. If Bob were to attempt to fly a plane he would perform as well as any other fully trained pilot. Questioned on the methods of piloting he would answer appropriately, and challenged to perform various feats he would perform them successfully (including on any an appropriate counterfactually-sensitive test of skill). Indeed, it would be natural to say Bob has a *skill* in flying, even though he was very lucky in acquiring it.

Cases of interest to the philosophy of art are easily constructed. Michael consults a copy of a generally reliable encyclopaedia to learn about sonnet writing, but happens upon the one copy in which a printing error overrides a typesetting error. It instructs a Shakespearean sonnet has ten syllables per line in ABAB CDCD EFEF GG formation.[117] Relying on this information, Michael pens compelling sonnets at will, and is acclaimed as a skilful sonnet-writer. Yet if safety or some similar anti-luck condition applies to knowledge-how, it looks like Michael does *not* know how to write Shakespearean sonnets. Indeed, Michael does not know Shakespearean sonnets have ten syllables per line, given his true belief is so lucky.

The problem for the intuitive link of skill and knowing-how is now plain. If Stanley and Williamson are correct Bob, Michael, and those in similar scenarios do *not* have knowledge-how. Plainly, this contradicts the intuition they are skilled (and the intuitive relation between skill and knowledge-how with it). Does knowledge-how require safety, and hence imperil the account of skill given?

Of course, blunt disagreement with Stanley and Williamson would allow numerous *reductio* arguments against a safety condition on knowledge-how acquisition, so sidestepping the problem. However, it would be too quick to do this without considering the options. Four positions are imaginable by way of reply:

1. *Bob has no skill, but does have knowledge-how*

   This response can be ruled out immediately. Bob would have to know how to fly successfully, but not have skill in this regard. But there would be no clear reason for saying this. Consequently, this possibility is set aside.

2. *Bob has neither skill nor knowledge-how*

[116] See Poston (2009) for elaboration.

[117] Alternatively, one may substitute a convincing imposter poetry instructor who accidentally speaks the truth.

Given it would be churlish to deny Bob has some form of learned ability, this position might be more palatable if Bob is granted a reliable ability or capacity, but neither skill nor knowledge-how. The trouble is to motivate such a position. Bob does what any uncontroversially skilled agent would do in any situation he confronts, and is just as successful as had Henry had not been an imposter.

Furthermore, it is difficult to fix on what an adequately successful intentional capacity could be if it is not skill or knowledge-how. Consequently, this reply is set aside.

3. *Bob has skill, but does not have knowledge-how*

   The most plausible route for maintaining this option conceives skill as a capacity less stringent than knowledge-how. Undeniably Bob has some useful complex of capacities and dispositions. However, knowledge-how should be denied only if this does no violence to the concepts. This response is considered below.

4. *Bob has both skill and knowledge-how*

   The intuitive connection of skill and knowledge-how requires this response. Instead of looking for a knock-down argument, the following outlines several ways of strengthening the intuition Bob *does* have knowledge-how, while also demonstrating the burden of proof sits firmly with the opposition

To review, Stanley and Williamson hold knowledge-how with respect to Φ-ing turns on the agent knowing that some specific course of action is, for that agent, a way to be Φ-ing. They add an anti-luck condition parallel to propositional knowledge.

This is hard to accept. Consider again Michael, who gained true beliefs on Shakespearean sonnets from his encyclopaedia. Though Stanley and Williamson want to deny Michael knowledge-how, it seems more natural to say he does know how to write a Shakespearean sonnet. Furthermore, suppose Michael has acquired all sorts of false beliefs about other kinds of poetry. It seems one might still say 'Michael only knows how to write Shakespearean sonnets'. Aside from countervailing intuitions, what substantive arguments can be offered?

Arguments for knowledge-how without safety

This section turns to consider support for knowledge-how without safety. No decisive proof is offered a safety condition on knowledge-how is mistaken, only an argument shifting the terms of argument against the proponent of knowledge-how with safety.

The case for intellectualism is unproven

To begin, the proponent of safety on knowledge-how might seem to gain some support if knowledge-how was propositional. However, there is no decisive reason to think it is so, or at least always so. To the extent the drive for safety relies on intellectualism, it is by no means established. The main positive case for intellectualism is semantic. Paralleling standard analyses of 'knowledge-wh'[118] in terms of relations to propositions, a natural analysis of knowledge-how follows — A knows of p that p is way to Φ.

Though linguistic parallels might give some *prima facie* evidence, the details are hard to work out. Recall the intellectualist must say knowledge-how involves propositions entertained under 'practical modes of presentation' (or some analogous notion), to prevent knowledge-how by ostension — one does not know how to Φ simply by indicating someone Φ-ing. At the very least, practical modes of presentation are obscure, while it looks like generating a practical mode of presentation might itself be a matter of non-propositional knowledge-how, imperilling reduction of knowledge-how to propositional knowledge.

The anti-intellectualist case is not defused

Moreover, support for the intellectualist case is drawn from critique originating in Ryle. However, the most well-known Rylean argument is problematic. The suggestion was skills cannot all be routines since rules require interpretation. But, so the argument goes, not every rule can be interpreted by a further following of a rule since then there would be an infinite regress. Ryle offers a version of this argument in defending anti-intellectualism on knowledge-how, the details of which have received recent scrutiny.[119]

Yet the regress works only on the assumption all elements further back in the regress must themselves have the regress-vulnerable quality. Take chess, something one might know how to perform intelligently through the learning of several rules-of-

[118] That is, knowledge where, who, why, when.
[119] As reviewed in Fantl (2008), p.454 ff.

thumb, openings, strategies and so on. The regress works only if everything done in deploying those rules must be done intelligently. But there are no clear grounds to suppose this, and so the threat of regress dissipates.

To assess this point, a wider attention is needed to the more general framing of the dispute. The main dispute on knowledge-how runs between intellectualists and anti-intellectualist. The intellectualist makes ultimate appeal to propositions and propositional attitudes in explaining knowledge-how; the anti-intellectualist instead makes final appeal to abilities or dispositions

It might appear if the regress argument fails the victory must go to the intellectualist, given cases of amputated chefs and incapacitated teachers. Nevertheless, there are anti-intellectualist defences. In such cases just mentioned, the imagined persons could be thought to retain the relevant capacities, but not the further attributes to manifest them. Nevertheless, the anti-intellectualist has further positive arguments to bolster her position. A supervenience argument may be made.[120] In rough terms, the idea may be stated as follows; for any amount of intellectualist knowledge concerning how to Φ it seems possible know-how might be absent. So, with any amount of knowledge on how to Φ, X still may not be able to Φ. Put differently, knowledge-how does not supervene on any amount of propositional knowledge if only because they might not be able to deploy the propositional knowledge intelligently toward the target result.[121] Consequently, though the regress argument is questionable, the anti-intellectualist can appeal to a plausible supervenience argument.

Different anti-luck requirements

Lastly, note even if knowledge-how proved propositional, it might just be knowledge-how has notably *different* anti-luck requirements to knowledge-that rather than *no* anti-luck requirements. Poston makes such a case[122] — while true propositional belief derived from an unreliable source is not counted as knowledge, knowledge-how based on luckily true beliefs is not problematic provided the ways those beliefs are deployed is not too lucky. In sum, there is no firm reason to think knowledge-how follows knowledge-that in requiring safety in acquisition.

[120] A trace of this is found in Ryle (2009), for instance, p.37: 'Even where efficient practice is the deliberate application of considered prescriptions, the intelligence involved in putting the prescriptions into practice is not identical with that involved in intellectually grasping the prescriptions. There is no contradiction, or even paradox, in describing someone as bad at practising what he is good at preaching.'

[121] See Fantl (2008), p.444 ff. for further discussion.

[122] Poston (2009)

A neutral position

Without a proof of intellectualism or anti-intellectualism, it is appropriate to consider knowledge-how without safety as the most neutral candidate. Leaving aside worries about practical modes of presentation, Hawley's framework can be adapted to include the intellectualist possibility parenthetically.

> SC10: X is a skilled Φ-er only if, taking a well-selected sample of the closest worlds in which X attempts Φ-ing in normal circumstances, X's non-accidental successes exceed some contextually determined minimum standard [via propositions entertained under a practical mode of presentation] AND these successes are not due to an impermissible causal process.

How to make sense of unsafe knowledge-how? As a beginning, it is useful to observe knowledge-how gained via others does *not* parallel that of propositional testimony. Though some knowledge-how is due exclusively to our own efforts, as when playing around with the paintbrush can lead to mastery, this is not always the case. Often knowledge-how relies on others. True, this sometimes requires getting information from others. Suppose someone enquires of the calligrapher how a certain kind of line variation is achieved, and is told 'With the elbow loose, hold the pen around 40^{o} from horizontal; increase then decrease pressure through the stroke'. Given this information the enquiring individual might gain knowledge-how with respect to drawing the desired stroke, at least when they relate it to their pre-existing abilities.

However, not all knowledge-how gained via others is quite like this. As Hawley observes, knowledge-how gained via others is sometimes acquired through observation.[123] To take Hawley's own example, suppose A observes B slicing a tomato into a fancy shape. It seems A can gain knowledge-how about this kind of tomato slicing from observing B. Why so? Roughly, A observes B's actions and converts these into a way of cutting tomatoes like she herself can perform. This is less like receiving a piece of testimony and uncritically accepting it, than recognizing or realizing a task can be done in a particular way. An agent might even gain knowledge-how through observing *unsuccessful* attempts at Φ-ing. One sees where the mistake creeps in, and figures out how to avoid it. Like the foregoing case, there is a reconceptualization, involving beliefs and practical conceptions; the agent understands how the actions fit together, and the routine 'clicks' as a way of Φ-ing.

[123] Hawley (2010), p.402

These cases are indicative. Knowledge-how is compatible with lucky acquisition. Indeed, one can gain knowledge-how from observing those without knowledge-how as much as those with it. As such, the Stanley and Williamson intuition on the Pilot Case can be put aside.

Objections to the neutral position

Several objections to the neutral position must be considered.

Acquisition in the pilot case is still responsible

On the terms of the first objection, Bob only appears to have knowledge-how because he is epistemically responsible, using a generally reliable, credit-worthy process for gaining the relevant beliefs. Bob has sought out a flight instructor, the kind of person it is usually best to learn from through observation or direct testimony. Similarly, if Henry were to feed Bob complete nonsense, we imagine Bob would not form any belief about flying. Stated differently, Bob was responsible in gaining these beliefs, they are not completely lucky, and that is why he appears to have knowledge-how. But now consider Lottie:

> Lottie: Lottie bases a pivotal belief about Φ-ing on a randomized process. As it happens, the belief is true, and Lottie becomes capable of Φ-ing reliably due to her lucky belief.

If safety holds of knowledge-how, Lottie does not enjoy knowledge-how with respect to Φ-ing. Though greater qualms might arise over attributing knowledge-how to Lottie in comparison with Bob, on first pass it is not clear they are decisive. Someone familiar with Lottie's belief forming methods might still reasonably say, 'Lottie believed all kinds of rubbish from using that randomizing device, nevertheless she now knows how to Φ.'[124]

We must not confuse the fact there is something at fault in Lottie belief-gathering methods with a lack of knowledge-how. True, Lottie could be faulted because her way of discovering ways of Φ-ing is *inappropriat*e or at least not ideal — it is not a smart or dependable way to go about forming true beliefs, but she still performs well enough, and her performance from integrating that true belief is not itself lucky.

On the strength of this reasoning, it seems lucky acquisition does *not* undercut knowledge-how. Returning to Bob, the fact he is not an entirely passive receiver of

[124] For instance, to tie a reef-knot. Compare Carter and Pritchard (2015a), p.196.

beliefs is irrelevant to his knowledge-how. He gets the practical ability right, which is what matters.

There is no principled explanation why knowledge-how would be different

A related objection now charges there is no principled explanation why safety would be absent from knowledge-how, with a follow-on problem for skill. Quite reasonably, it might appear 'knowledge-how' gains its name because of some conceptual analogy — non-accidental justification is just as important as in knowledge-that. Although the concepts should be determinative rather than the language, there is nonetheless pause for thought. For propositional knowledge, justification must prevent beliefs coming about in the 'wrong way'. A true belief got by reading tealeaves is manifestly not knowledge. By analogy, why should knowledge-how be any different? Quite plausibly, success reliant on luckily true beliefs should not count as knowledge-how.

Poston inclines to leave the matter at the level of intuition.[125] On inspection it happens that ascriptions of knowledge-that are backward-looking; the agent must not have been too lucky in acquiring his or her true belief. Moreover, on inspection happens ascriptions of knowledge-how are forward-looking. The relevant anti-luck intuition is between the beliefs (however acquired) and the ability — so long as the agent has some stable and true conception of how to bring about Φ-ing so that success is not lucky relative to this base, knowledge-how is in place.

Is there enough to support a distinction between the anti-luck status of 'knowledge-how' and 'knowledge-that'? The fact analogy to knowledge-that might lead us to *expect* knowledge-how to turn on safe beliefs does not mean it will be there when tested against reflective practice. Craig offers a useful line of argument in this regard.[126] The suggestion is knowledge-how and knowledge-that diverge because the concepts serve different purposes, and correspondingly have different genealogies. In short, the purpose of knowledge-how is to locate persons who can Φ or show how to Φ effectively. The purpose of knowledge-that is to locate reliable informants. However, it so happens those who can Φ effectively are usually good at informing on how to Φ effectively, i.e., those who have knowledge-how with respect to Φ-ing have knowledge-that with respect to Φ-ing. Such a strategy fills out why the concepts are linked.

[125] Poston (2009)
[126] Craig (1990)

Threatened reductio

Imagine now Peter looks at an accurate diagram in the unreliable encyclopaedia, and so figures out how to identify and tie reef knots. One might say Peter has 'knowledge-how' with respect to tying reef knots — asked to tie a reef-knot he does so proficiently, and he differentiates reef-knots from other knots. However, if Peter is shown a card and goes on to express the true belief 'The card shows a reef-knot', it does *not* seem to express knowledge since the encyclopaedia is unreliable. Paradoxically, it looks like Peter can know how to tie reef knots, indeed be skilled in it, and yet not know the proposition that some token reef knot is in fact a reef knot. With these implications, a *reductio* is not far away.

It is not clear the objection represents anything more than a linguistic mirage. Peter may not know the proposition that the name 'reef-knot' applies to a class of objects, but he can still discriminate reef knots from others. It is not as if he cannot tell the things he unsafely believes are called reef-knots from others of the same kind. Rather, he does not know that a certain item he can create has the name 'reef-knot' in English (compare how Peter might not know they are called "Kreuzknoten" in German).

2.5.2 General summary objections

Before concluding, discussion focusses on five summary objections to the preceding analysis.

Abilities grounded in falsity or misconception

The account derived from Hawley excluded many accidental alignments and misconceptions from counting as manifestations of skill or knowledge-how. But an objector might press this response is too strong. Investigation shows cricketers batting at the wicket are not following the ball with their eyes despite their firm belief that this is the case.[127] On the account offered, it appears cricketers cannot have skill (or knowledge-how) on the account offered, a clearly inadmissible consequence.

However, since skill and knowledge-how requires only Φ-ing to the appropriate standards of accidental counterfactual success, the objection is not decisive as it stands. Nothing demanded *every* belief about how the skill operates is true; it need only be some core sufficient to bring about Φ-ing non-accidentally holds. Some false

[127] I owe this objection to Matthew Kieran.

theories of how success is achieved were admissible.[128] Marking this, some misconception over how the skill succeeds is tolerable.

Chicken-sexing and the 'just is' phenomenon

Trained chicken-sexers determine the sex of a chick with a high degree of accuracy, and at high speed. The interest of chicken-sexers is their avowed inability to say how they do so. Indeed, some chicken-sexers go as far as to say they have no conception of how they make discriminations. It would be implausible to hold the chicken-sexers are not skilled, but how is non-accidental success on the above terms possible in such instances?

Parallel worries arise over the 'just is' phenomenon. Experienced ornithologists can identify a bird genus, and often species, from the briefest impression. But at least in terms of conscious representation, they avow there is not enough to categorize so accurately. Put another way, the ornithologist will say the consciously representation was insufficient for making a reliable categorization. Here again is a phenomenon hard to square with the account described above.

At least two points form a defence. First, even if knowledge-how proves propositional, there is a difference between believing a proposition and being able to express it. The expression 'I do not know how I do it' does not necessarily suggest success is due to luck, or that any false belief is in play. Moreover, the expression 'I do not know how I do it' could simply mean 'I cannot express how I do it' with no suggestion false beliefs are in play.[129] The true propositions believed by the skilled may be very complex, both semantically and syntactically. As such, it is quite possible no snappy linguistic formulation is available for them.

Knowing what to do can itself be a skill

A penultimate qualm may be considered briefly. This objection holds the processes of setting intentions reviewed under 'Skill and Intention' could be skills in themselves. For instance, arriving at the optimum play in golf looks very much like a skill. But if this is so, the general account appears somewhat circular, and to this extent defective.

In response, it must be conceded intention-setting is sometimes a matter of skill. This is because finding the right intention has success conditions and often learned through habituation out of innate abilities. However, that is not to fall into a deep circularity — the intentional component was distinguished only to bring out how

[128] Consider the Physician case above.
[129] Williams (2007), especially §10.

intentions can be built from more fundamental mechanisms and abilities. If intention-setting is a skill, it would fit the model of non-accidental success from ability. The only required concession is some skills have intention-setting as a sub-skill.

Is all skilled behaviour intentional?

Objections may now enter over skills that appear to work 'unbidden', apparently without any intention to deploy them. This comes out markedly with some discriminative skills. For instance, a musician may not be intending to judge pitch, however on hearing a shop bell correctly thinks — 'That is C#'. To all appearances this is a skilled discrimination. But the point also comes out in non-discriminative cases, as when a sportsman instinctively catches a stray tennis ball. There is a problem for the preceding analysis here insofar as there is nothing readily identifiable as an *intention* to be Φ-ing. Since intention was a necessary condition of skill, there is a threat to the account presented.

Are such cases conclusive counterexamples? Perhaps on closer inspection some level of intention is present in such cases, given how habituation can make some tendencies second-nature. Despite being the easiest rebuttal, refining the case so the agent is focussed on something else dilutes the intuition. A less demanding and therefore preferable response is to conceive unbidden discriminations as *symptoms* of skill, rather than full manifestations of skill themselves.[130] In brief, the capacities or dispositions underpinning the skill lead to unintentional reactions paralleling the skill. Of course, there might be agents who, on hearing C#, reliably think 'That is C#', but only because of some accidental regularity. But this does not revive the objection. One could understand 'symptoms' of a skill as sharing capacities with a history of acquisition the same as the full skill and for this reason not just lucky.

Collaboration and groups

In closing, it may be noticed many projects, including artistic projects, are collaborative. In these kinds of case, success can depend on what others are doing. However, the account offered makes no mention of skills involving others.

The nature of collaboration and skill is more fully examined in a later chapter in view of several complexities.[131] However, a simple adjustment of the account offered works for many collaborative cases. Simply put, collaboration within different domains is cast as a separate skill. The move is from 'X is a skilled Φ-er only if...'

[130] For related proposals see Hyman (2013).
[131] See Chapter 7.

to 'X is a skilled *collaborative* Φ-er only if...', tailoring the success condition to the specifics of the collaborative skill in question.

2.6 Chapter conclusion

This chapter aimed for a clearer understanding of skill, a mainstay of the argument to follow. After prefacing with some general features of skill and how it is typically acquired, lessons and limitations of related historical conceptions were presented. The principal argument then clarified skill under two main heads. First, it argued for and elaborated a counterfactually-sensitive success condition on skill. Second, attention shifted to consider how the skilled can arrive at appropriate and flexible intentions via mechanisms plausibly realizable by humans. Finally, responses were offered to summary objections. Building on this chapter, the next chapter argues agential creativity is partially constituted by a skill.

Chapter 3

Skill and Creativity

Chapter introduction

Following the account of the first chapter, all agential creativity implies an ability to produce new and non-trivially valuable material to the exclusion of certain kinds of luck.[1] At minimum, this non-accidentally successful element must be expressed in an evaluative capacity by which material is retained. This chapter elaborates the received view of creativity by relating it to the account of skill as set out in the preceding chapter. It seeks to show creativity implies a skill, and more specifically that creativity is partly constituted by a skill.

Several points follow if creativity is closely tied to skill. If agential creativity is explicable via skill, a rational basis for esteeming creativity becomes clearer. The use of skills can be praiseworthy or blameworthy as a species of intentional action. Hence, if assimilated to skill, the beginning of an explanation of the creativity case comes into view. Moreover, if the relation to skill proves viable, creativity might not be some esoteric ability, but something realized through familiar psychologically plausible mechanisms.

Yet creativity might link to skill in stronger or weaker ways. On a weaker construal, the thought is only skills are *sometimes* involved in creative successes. The weaker claim should go uncontested — skills of various kinds are plainly involved in at least some creative successes. Turner's creative abilities involved skill in controlled movements with paint brushes, quite apart from wider artistic intentions. Or consider Shakespeare and Darwin. Both deployed skilled observation as part of

[1] For ease of presentation the requirement value be 'non-trivial' is suppressed hereafter.

creating their work. The weaker claim aside, a stronger claim worth consideration contends creativity *implies* a skill. Drawing on the preceding two chapters, the idea elaborated is roughly this: creativity is partially constituted by a skill in producing new and valuable material non-accidentally, from an appropriate intention, and to a counterfactually-sensitive standard.

A mixed outlook

Why think creativity implies a skill? Creativity must involve an ability — if agents generate new and valuable material it must have been possible for an agent to do those things involved in bringing about the material. Yet not all abilities are skills. Hearing loud noises is an ability, something agents can do, but hearing loud noises is not a skill. Consequently, maintaining is partially constituted by a skill requires showing it accords with the additional features of skills. The second chapter elaborated several necessary conditions on skill, and consequently creativity must fit these conditions if it is partly constituted by skill. Prior to detailed examination, the prospects for fitting creativity to skill are somewhat mixed.

Some indicators are more promising. Like a skill, agential creativity will yield new and valuable material across some appropriate range of circumstances. However, creativity is not a matter of executing *precisely* the same intention in different contexts since it would no longer be novel after the first instance. Moreover, a creative agent should be able to succeed in more than a very narrow kind of circumstance. An agent who could only generate one new and valuable thing on a particular Thursday at 3:53 p.m. is not creative. Yet promisingly for linking creativity to skill, the latter need not imply following a fixed programme, and may build in a requirement for success across some scope of circumstances. As described in a previous chapter, a flexible skill succeeds in an appropriate range of circumstances and purposes without any need to suppose fixed action sequences.

In addition, and like many skills, creativity is gradable. Just as agents can be more or less proficient in other skills, agents may be creative in varying degrees. The greater skier is the one who succeeds (or could succeed) through challenging and varied circumstances. A similar point is true of creativity. Generating differently new and valuable material in non-trivially distinct kinds of circumstances marks comparatively greater creativity. Picasso is a paragon of creativity for precisely this reason — he was regularly and deeply creative in many and varied ways in the service of diverse artistic projects.

However, not all indicators for linking creativity and skill are so promising. One challenge is to locate the dividing line between skills and mere abilities. It is often thought skills involve some development above those abilities an agent is born with or would naturally develop (e.g., sight, hearing, the capacity to gain language, basic bodily movements, and so on). In comparison to these 'ground-level' abilities, skills are more refined, more complex, or involve a difficult composition — through discipline, learning, or some other kind of structured practice, there is a significant and new ability. Yet a common folk conception ascribes creativity to an innate capacity. If creativity must be ascribed to innate ability, there is a substantial challenge to casting creativity as an acquired skill.

Second, skills often involve sensitivity to relevant reasons. They often show higher-order processing, up to a reflective capacity on the skill itself, or an understanding of how the skill works. Without at least the former, the ability is more like an undisciplined knack or fragile talent than a fully-fledged skill.[2] Relatedly, skills typically imply an ability to make relevant adjustments, and so work responsively and intelligently. Both, however, are hard to square with common conceptions of creativity — creative agents often contend they do not know how they do what they do, or are unable to express why they proceed in one way rather than another. The kind of intelligent or responsive behaviour associated with skill looks incompatible with each of these points.

Finally, luck objections provide a third focus of theoretical difficulty in relating creativity to skill. By appearances, some creative successes are lucky, causally depending on chance happenings or accidents. Yet successful accidents are not generally things agents are properly credited for — the arrow finding its target due to chance is not a manifestation of skill.[3] If creativity yields creditworthy successes, some explanation of these cases is needed.

Outline

The prospects for a strong link between creativity and skill are less than straightforward, and further careful examination is merited. Yet to argue creativity is partially constituted by a skill requires addressing one further large philosophical worry — that creativity cannot conform to the teleological pattern of skill, and so will not imply

[2] Consider Plato and Annas (2011) on this point.
[3] Pritchard (2009a)

or be otherwise constituted by a skill. To that end, Section 3.1 begins by attending to Gaut's influential disposal of this objection. Following this, Section 3.2 turns to the detailed prospects of analysing creativity in terms of skill, taking as a model of skill the account set down in the second chapter. The concluding Section 3.3 meets remaining objections with summary responses.

3.1 Creativity and teleology

Discussion of the received view showed creativity does not manifest in executing a routine for a determinate end, but neither is it compatible with certain forms of luck. Yet as shown in a previous chapter, skilful behaviour is governed by the intention to achieve an end. This suggests a problem for relating creativity to skill since, as a point of logic, creative ends are never fully known beforehand. In addition, there is a further complexity — without enough specification of an end results may seem too lucky.

Here discussion focusses on Gaut's treatment of this objection in 'Creativity and Skill'.[4] Summarily, Gaut considers the objection creativity cannot be structured and directed by pursuit of an end, and is consequently anti-teleological in character. Though Gaut stops short of saying creativity is necessarily goal-directed, he offers several responses to the main concern.[5] After setting out Gaut's responses, possible rejoinders and counterarguments are presented. Though the teleological objection is rejected, it is not precisely on account of the reasoning Gaut offers.

3.1.1 Gaut on the teleology objection

Arguments creativity is anti-teleological

Gaut begins by examining arguments creativity is not analysable as a skill since it is 'anti-teleological'.[6] The idea creativity is an ability of a non-teleological kind has a

[4] Gaut (2009)

[5] Gaut (2009), p.92: 'I do not maintain that creativity is necessarily a goal-directed process. My point is that it can be teleological, and indeed, that is almost always how it is.[...] [T]here must be *some* psychological process that produces the moment of inspiration, and since it is a process, it can be teleological.'

[6] Reflection finds several natural meanings for the claim creativity is 'anti-teleological': (A) the idea skill excludes creativity; (B) the idea skill works against creativity; (C) the idea creativity is not 'organized around an end'. (A) and (B) are relatively self-explanatory. The meaning of (C) is hardest to pin down. Behaviours symptomatic of various mental illnesses perhaps fit this notion best, being side-effects rather than intentionally directed. Consequently, the idea might be this: something anti-teleological if it is outside the control of an agent but for which they as an agent are causally responsible. The following discussion eventually broaches all three meanings.

long history.[7] Several arguments trace to Plato, who offers the point in commentaries on rhapsodic inspiration, a recognizable analogue of creativity. Principal discussion is found in the dialogues *Phaedrus* and *Ion*,[8] where two not decidedly separated claims on the origination of rhapsodic inspiration are identifiable; (i) 'divine inspiration' and (ii) 'madness' or 'irrationality'.

(i) Divine Inspiration — the rhapsode hears and follows the whisperings of the muses, with contents and origin he cannot explain.

(ii) Madness or Irrationality — the rhapsode goes 'out of himself' when caught up in performance, such that he is not fully patterning his behaviour.

Both claims point to putatively non-teleological processes. If divine inspiration is the origin of creativity, there is the bind of appealing to obscure supernatural entities and operations, seemingly wholly beyond the rhapsode's control or influence. These do not plausibly fit with processes over which the agent has teleological control. Again, if outright irrationality is the origin of poetic inspiration, the agent cannot be working rationally toward an end — there is no coherent process or end governing, directing, or patterning their action.[9]

In addition to (i) and (ii), Plato argues the rhapsode cannot know what he is doing, since otherwise he would know how rhapsodes succeed in all cases. Plato gives three lines of argument the rhapsode does *not* have such knowledge:

(1) Inarticulacy — the rhapsode is inarticulate with respect to the workings of his ability. For Plato this is damning — those with *technē* can offer a rational account of the art in question. By parallel, those without such a capacity have no more than an unstable knack.[10] Given the rhapsode cannot account for his performances, they are not engaged in rational end-directed *technē*.

[7] Gaut (2009), p.85 observes the 'product-oriented' view is a natural ally to the anti-teleological position since 'it places no constraints on the process that results in the creative output.'

[8] See, in particular, *Phaedrus* 245a ff.; *Ion* 532c, 533d, 535b, 536b, 541a in Plato (1997).

[9] A complication enters here. There are different understandings of 'ends' when discussing teleology. As well as ends intended by the agent, there are possibly ends agents are working toward without knowing it. For instance, one might think God sets up the world so one's actions work toward a certain end or ends, despite acting without knowledge of that end. Consequently, someone might hold creativity is teleological, but merely governed by ends unknown to the agent. These possibilities can be set aside. If the end is both unknown and unknowable it is inscrutable. If the end is knowable but as yet unknown, then there is no reason to heed the possibility unless there is independent reason to suspect it is operative. So, while it seems reasonable to admit unknown drives, aims, and motivations, we should stop short of positing unknowable ends toward which our action tends when this is either inscrutable, or where there is no good reason to suppose such an end. For such reasons, only humanly knowable ends are considered here. I owe the origin of this line of thought to Matthew Kieran.

[10] Chapter 2 discusses these arguments in more detail.

Plato is unconvincing on this point. The fact an agent cannot articulate how to succeed in an area is not proof an agent cannot undertake rational end-directed action in that area. An agent might be unable to describe how they time a shuttlecock, but still perform faultlessly in every relevant test. Human linguistic abilities are not guaranteed sufficient to give such explanations — the explanations may simply be too complex. As such, a requirement teleological behaviour is articulate seems unmotivated.

(2) Excellences have wide scope — the second theme relates closely to the first. Platonic metaphysics and epistemology requires an agent must be able to account for the excellence as a whole, including all instances in which it may be found and exercised.

Once more, there is little reason to accept this requirement. Gaut adverts to counterexamples.[11] The fact one cannot exercise discernment in one sub-area does not rule out having it in another closely related area: there is skill and expertise in relatively narrow areas. Consider musical expertise — is not incoherent or impossible to have excellent judgement and expertise for blues-rock, but no ear for punk-rock. Neither is it incoherent to have the skill of generalship in infantry battles, but not those involving cavalry or artillery. Without question, one might suspect those with a strength in one area will have greater facility in related areas, but that is not to the point.

Here, however, it could be suggested a purported skier who cannot explain how another skier performed a particular jump does not have the art or skill of skiing. How could their deficiency be explained without highlighting a fault in their skill? To reply, having a skill does not require holding it *unqualifiedly.* A skier might do better or be more exemplary in their skilfulness when able to explain how other skiers succeed or fail. Yet this does not undercut those with an imperfect ability having skill provided *some* relevant threshold is met. Skill does not require perfection in a particular domain, or success across an entire domain, but success to a sufficient threshold.

(3) Rational Making — on the Platonic understanding of *technē,* 'rational making' means the achievement of a set end by suitable means.[12] For the rhapsode, however, there is no set pre-determined end. The rhapsode does not know how they will perform, and so cannot go about finding the means to it through any rational process.

[11] Gaut (2009), p.86

[12] This model was reviewed in Chapter 2.

For Plato, this means the rhapsode is not engaged in *technē*, but it also raises a natural related doubt for linking creativity and skill. Gaut devotes most attention to this last objection, since the point survives when narrow Platonic suppositions are relaxed.

On the terms of the wider objection, creativity cannot be a skill for there is necessarily no set or 'pre-conceived' end toward which suitable means are found and followed.[13] More fully, since the final creative product is not known determinately beforehand, it cannot form the end of a rationally governed, teleologically organized process.[14] This is because a teleological must be organized around a known set end, aim, or purpose — the whole endeavour gears toward achieving that end. Yet if skills are teleological, and creativity cannot have a pre-known end in view of requiring novelty, it appears an analysis of creativity in terms of skill must fail.[15]

Replies from Gaut

Gaut first faults the supposition the creative agent can have nothing of a pre-conceived end toward which rational action can be directed. The creative agent can have an implicit conception of their aim, or at least constraints on a solution sufficient to guide action. That creatives can have some conception of erring shows their ends may have at least some content[16], however implicit and poorly articulated. But an implicit end still fits the teleological model — there is skilful manipulation around implied constraints.

Nevertheless, a new worry may enter. Are there not cases of creativity where the goal is so unclear that it cannot form part of a teleological process — e.g., in the early stages of radically creative projects at the *avant-garde*? Picasso and Braque might have set out with only the vaguest notion of the Cubist project. That kind of project is not, the objection poses, realistically framed within the theory sketched above; it is inadequately constrained to count as teleological. The teleology objection will work if there are only *some* cases of this kind.

The problem is locating such a counterexample case if the full gamut of teleologically governed projects is considered. For one, there is no clear reason to think constraints and intentions are never simply things for a teleological project to work around. One can have a contentful aim to do something different, to go beyond exist-

[13] Gaut (2009), p.89

[14] Collingwood (1958) makes a similar case. See discussion in Chapter 2.

[15] Gaut (2009), p.87: 'According to several influential writers, the creative process is not goal-directed, that is, it is not teleological. In being creative, I do not adopt the means to some already pre-determined end.'

[16] Gaut (2009), p.89

ing artistic practices. Such constraints are both loose and negatively framed, yet still make a project end-governed. Compare how a plan for a day trip to a new location may begin with no positive conception of where to go. Nevertheless, there may be constraints — that the destination should have characteristics x and y, but not z. Furthermore, these may unarticulated, implicit, or entirely unconscious. Since intentions generally need not be occurrent or conscious, there is no motivation to hold creativity to a higher standard.[17]

Creativity, 'routine' and 'non-routine' skills

Gaut next faults the teleological objection for failing to notice there are both 'routinized' and 'non-routinized' skills.[18] Routinized skills consist in a programme of set actions or behaviours resulting in a pre-defined end.[19] Non-routinized skills, by contrast, are more open-ended, admitting flexibility. Everyday life offers examples of both types. A factory worker following fixed assembly processes, or a car mechanic or plumber diagnosing and fixing a fault are everyday examples of routinized skill.[20] Non-routinized skill is found wherever successful action goes beyond a pre-determined process or procedure to reach the right kind of result. Think of a solicitor preparing a knotty brief, an architect planning-out a multi-use building on a difficult plot, or a doctor devising a complex treatment plan. Routinized and non-routinized skills can of course stand in various combinations and hierarchies, and routinized skills regularly provide the building blocks of non-routinized skills. The point is simply skilled action does not require following a set of known and determinate procedures.[21] Accordingly, Gaut holds out the possibility of analysing creativity via non-routinized skill.[22] This is how to understand the thought creativity implies the quality of 'flair' met previously — creativity may be associated with a non-routinized skill without resorting to pure luck.[23]

In developing creativity via non-routinized skill, we are to consider how one might

[17] No objection should be made creativity cannot be closely associated with skill since, at least in some cases, there may be very few guides to work by. That would be no different to many other cases — the early pioneers of many fields have few guides, but that only makes their achievement all the more impressive. This point is returned to in Chapter 6, *infra* 191.

[18] Gaut (2009), p.83

[19] Gaut (2009), p.90: 'A routine is a set of rules, which if followed competently, will produce some pre-determined result'.

[20] The latter examples are Gaut's own. Gaut (2009), p.90

[21] Here Gaut argues from the Goodyear example, as presented in Chapter 1.

[22] This is not to suggest there is no place for other skills in creativity, whether routinized or not.

[23] The account following departs from cursory description of skill given in Gaut (2009), p.95 ff. It relies instead on the detailed account of skill given in Chapter 2. However, it retains in the routinized/non-routinized distinction Gaut's core response to the teleology objection.

come to bake a new and valuable cake. Following a recipe would not be creative but routine, yet neither is a blind 'try-then-check' strategy toward a fully-known target cake (a lesson of the Goodyear case).[24] The natural suggestion is the genuinely creative agent would remain within a teleological project by experimentation based on relevant *knowledge*. Such a person might call to mind the qualities of the cake specified in a recipe, before considering potential complementary ingredients and processes to enhance its relevant qualities. Though this productive process has open elements, and the goal is not fully-specified, it is still recognizably goal-directed. There are conditions of success and failure, and intelligent selection proceeds with the aim of a better cake. It is also not successful *purely* due to luck, but guided by knowledge that helps bring about the desired end. The lesson of the creative cakemaker illustrates one way new and valuable material can be generated non-luckily while avoiding exhaustive search — experimentation based on knowledge. Other strategies provide useful supplements to such a framework, as with refinement of the goal, or further specification of the goal through trying out possibilities.[25] Gaut's example draws on painting:

> A painter, for instance, can be creative by virtue of starting out with a rough idea of the sort of painting he wishes to make, and then get his goal more precise as he tries out various options. So creativity can involve teleological reasoning because one aspect of this reasoning is a more detailed specification of one's goal [.][26]

Similar strategies figure where the end is determined but the suitable means are not.[27] Options are tried out in a controlled and end-adjusted way until the decided result is settled upon. Again, this avoids routine search, but will not be successful wholly because of luck — skilful intelligent selection is in play. As such, Gaut offers a plausible outline for explaining creativity as a teleological process, having marked explanatory advantages over the obscure anti-teleological view.

3.1.2 Objections posited by Gaut

Gaut presents and considers three objections urging a teleological explanation must fail to explain creativity. The first concerns creative ideas 'popping' into an agent's

[24] As discussed in Chapter 1.
[25] This is of course different from taking time to decide between ends.
[26] Gaut (2009), p.91
[27] Gaut (2009), p.91

mind.[28] If creative ideas occur in this way, a teleological theory may appear at risk since sudden ideas look unlike results of an end-governed process. The response to this objection is the most straightforward, emphasizing the well-accepted psychological fact intentional processes need not be conscious, meaning the sudden thoughts need not be unintended.

A similar response holds against a worry over creative noticing. Intuitively, there is creativity in noticing significance in a result or phenomenon. Problematically, these cases do not seem to fit the teleological model because the result may be unexpected, and perhaps not meaningfully planned for. Gaut encompasses these cases as products or parts of processes or projects that are teleological as a whole, where necessary by appeal to backgrounded intentions of the type mentioned above. The artist or scientist who notices a new and unexpected result counts as creative because there is a wider goal-seeking project or process to notice things having certain features or meeting certain criteria. Again, these processes may work unconsciously.

The final mooted objection now comes into view: routines and skills are the same thing, or at least there is no such thing as a non-routinized skill.[29] If this worry is substantiated, the appeal to non-routinized skill in meeting the teleological objection is unavailable. The reply has two chief strands.

The metaphysical argument

The first strand of reply suggests a metaphysical contrast:

> A routine is a set of rules, which if followed competently, will produce some pre-determined result; a rule is an abstract propositional structure. A skill, in constant, is a kind of capacity, and ability to do something.[30]

Though it might be true that rules have a propositional structure, and skills are a kind of ability, this is not enough to show skills are not merely abilities to follow known rules. As such, the metaphysical argument does not compel as stated. Even so, Gaut goes on to offer a second argument from rule interpretation to conclude skills do not reduce to routines.

[28] Gaut (2009), p.92 reports the term originates with Kivy.
[29] Gaut (2009), p.94
[30] Gaut (2009), p.94

The regress argument

By this argument, routines cannot form the basis of all skills, since rules stand in need of application.[31] In essence, it argues there cannot be indefinite further application of rules by other rules for fear of infinite regress, hence there must be non-routinized skills of application. Consequently, routines cannot be the basis of all skills.

Again, this is a difficult argument to accept as it stands. As related in a previous chapter, Ryle offers an influential version in defending anti-intellectualism on knowledge-how, however the argumentation has met considerable recent criticism.[32] The critic notices the regress goes through only on the assumption all earlier elements in the regress must themselves have the regress-vulnerable quality. Consider again chess as something an agent might know how to perform intelligently. The agent might come to play chess intelligently through learning openings, mid-game strategies, and other rules-of-thumb. Again, however, the regress works only on supposition everything done in deploying a rule is also done intelligently, and for every instance in the regress. Yet, so the objection goes, there are no clear grounds to suppose this when reflecting on a concrete case like chess. Perhaps it makes sense to speak of intelligence for *some* iterations in the regress, but at some point brute dispositions come into play. If this is correct, it does not look as if non-routinized skills are provenly ineliminable.

There might be a problem if the regress argument was the only available, however this is not the case. Consider again the supervenience argument, met previously and also discoverable in Ryle.[33] Recall that for any degree of propositional knowledge on how to Φ, intelligent deployment of the knowledge may still be absent. Even with all available intellectual knowledge on how to Φ, X still may not be able to Φ adequately. Yet if that is so, knowledge-how does not supervene on propositional knowledge.[34]

A parallel argument may run for routines as sets of rules. Suppose routines as a set of rules underpinned every skill. Application of rules is something that could be done more or less successfully. In fact, possessing a wholly complete set of rules does not mean the possessor will necessarily deploy them intelligently or skilfully, even where they intend to do so. Chess once again provides an example; merely learning rules

[31] Gaut (2009), p.94

[32] As reviewed in Fantl (2008), p.454 ff.

[33] 'Knowing How and Knowing That', Chapter II in Ryle (2009), especially pp.29–30: 'It is not what he does in his head or with his tongue, but what he does on the board that shows whether or not he knows the rules in the executive way of being able to apply them. Similarly a foreign scholar might not know how to speak grammatical English as well as an English child, for all that he had mastered the theory of English grammar.'

[34] See Fantl (2008), p.444 ff. for further discussion.

does not guarantee they are used intelligently or constructively, though knowledge of the rules is part of success. Similarly, possessing any number of routines as sets of rules does not necessarily mean they will be deployed skilfully. As such, skills do not supervene on routines. Compared with the regress argument, an appeal to supervenience provides a better defence for the non-reduction of skills to routines.

Non-routinized skills collapse into routinized skills

Despite the above, it could be suggested *implicit* routines codified in dispositions explain the appearance of non-routinized skill. If this proves out, a link of creativity to skill will be imperilled since creativity is incompatible with wholly routine-like operations.

Without denying non-routinized skills can draw on routinized skills, the relevant objection can be set aside. The problem is to characterize the view credibly. For one, it raises many questions on how so many routines could be acquired — there would have to be a routine encoded for a sufficient number of aims so the agent is not accidentally successful over an adequate range of circumstances. But that is not credible as a way to capture skill flexibility. Furthermore, the suggestion of implicit routines mischaracterizes flexible work at the edge of skill. Consider a domain in which an agent is skilled, and an instance where an unusual problem unfolds. The agent recognizes some compensation is needed, and then executes it. As a whole, the process is unlike executing a routine however sophisticated or implicit: there is deliberate reflection and adjustment, and not unusually trial-and-error correction. Furthermore, mistakes are made, recognized, and backtracked. Although the skilled may draw on learned dispositions and sundry rules-of-thumb, all this is quite unlike execution of exclusively routine-like operations. As such, Gaut's appeal to non-routinized skill withstands the objection.

3.1.3 Gaut, creativity, teleology, and motivation

Nevertheless, recall Gaut does not hold a skill, even a non-routinized skill, is *sufficient* for creativity. The point comes out as follows:

> [S]omeone may have creative ability, but be poor at exercising the [creative] skill, because he or she is too timid to take the risks involved in being creative.'[35]

[35] Gaut (2009), p.98

A rock-climber may have the skill to scale a mountain (say they are excellent on indoor walls and comparable inclines in foothills), yet lack the auxiliary overall disposition to scale a mountain as they fear great heights. On these terms, it looks like the nervous rock-climber, along with their creative analogues, have abilities only restrictedly given the reliance on a motivational support.

A problem for the teleological view may enter here. The thought is that if an agent cannot sustain success in particular relevant environments due to a motivational reason, their ability is not a skill since it relies on a psychological contingency. If creativity at least sometimes relies on extrinsic motivational requirements, it looks like it is not wholly and constitutively a skill.

To reply, allowing extrinsic motivational requirements is fully compatible with the claim creativity is at least *in part* constituted by a skill. Further skill individuation may also be employed — to take the mountaineering example, the climber in skilled in certain kinds of environment but not others. Put another way, one could reply skills are tied to particular environment or motivational conditions *at least for individual agents*.

Turning back to creativity, the result creativity is partly constituted by a skill and explicable in its terms, though some agents must lean on additional motivational supports (or in need of further individuation) is interesting enough. The nature and scope for such supports will largely be a matter of empirical psychology, nevertheless some factors are clear.[36] To take one example, imagine Titian painting the altarpiece in the Church of the Frari. The Friars see the cartoons and express grave reservations. Since future preferment turns on their connections, any usual person would require courage, or at least a special resolve in this case, to continue without changes. Generally, if one must confront hardship, alienation, professional and private scorn, one is very unlikely to succeed without resolve or other allied qualities of character, themselves in need of deliberate cultivation and preservation.[37] Though some might have the strength to proceed regardless, for most the motivation will need cultivation, at least for success to stand up with some stability across a range of actual and counterfactual cases. Moreover, to take another example, since creativity means going on in an unfamiliar way, one will often have to entertain difficult new ideas, possibilities, and challenges with great stamina. Again, this makes it likely creativity will need motivational supports in many instances. However, accepting this does not

[36]The previous chapter raised several related points drawing on Kieran (2014a), Kieran (2014b).
[37]Kieran (2014a)

justify making a motivational component constitutive of creativity, or undercut the thought creativity is partly constituted by a skill — extrinsic motivation is just as well understood as an auxiliary motivation only required by some agents.

3.2 Elaborating creativity and skill

Gaut's appeal to non-routinized skill sets out a way to preserve the claim creativity implies skill against a large objection. To further establish the claim, the thought creativity implies skill needs careful comparison against the characterization of skill proffered in the preceding chapter. The following sections adopt that project, before objections are met in sequence.

3.2.1 Review of the skill characterization

As a beginning, it is useful to recount the core analysis of skill derived from Hawley's treatment of knowledge-how. To review, it argued skill implies success to a relevant counterfactually-sensitive standard for the task attempted in normal circumstances. Several further requirements were added — the agent should not have a deficient understanding of their own method; the method and result must be suitably connected (excluding guesswork, intervening luck, and 'too easy' success). In short, the relevant success should be relevantly non-accidental. After a brief comment on decomposition into further abilities, each is discussed in turn.

Is creativity usefully decomposed into 'Intentional' and an 'Executive' component?

The preceding chapter proposed it is useful to present skill via two sub-abilities, an 'Intentional Component' and an 'Executive Component'. The distinction was drawn to address problems over skilful intention — how the skilled arrive at appropriate plans or policies influenced by aims and environmental considerations, but still in a way that is plausibly psychologically realizable.

A comparable approach fits creativity. Not only will creative agents like benefit from specialized patterns of attention to relevant cues[38], creative tasks can often be simplified. The creative agent can set intermediate, more approachable ends, rather than approach the task in a single effort. A creative sonata writer need not approach the task with a broadside — intermediate tasks can be set, first developing

[38]Evidence in favour of specialized attention was cited in Chapter 2.

a theme or leitmotif, before the wider sonata is approached. Equally in painting, a rough composition may be resolved before colouration is determined. Furthermore, creativity can exploit specialisms, automaticity, and skill in approaching sub-tasks. To exemplify, the creative improvisatory musician can rely on their dexterity to assure her fingers will meet the keys in a syncopated scale (simplifying the intentional task and associative cognitive load), so more attention can be levelled on harmonization. Applied iteratively and in combination, such methods suggest the generation of new and valuable material is broachable by a flexible skill. Neither do such mechanisms imply the ability to explain success — as argued for skill generally, the capacity to explain may be absent, or ascribed to a distinct skill.

Habituation

It may be questioned how any skill element in creativity could be habituated into, habituation being the usual way humans gain skills. What kind of habituation could allow agents to gain abilities in producing novel and non-trivially valuable material? Without a recognizable method of habituating into creativity, the association of creativity to skill will be thrown into question.

Recall not all habituation is like learning how to play scales fluently, where a fixed pattern is repeated until it becomes second-nature. A good barrister or chef does not gain their skill by repeating the same fixed action. Through observation or a more guided approach grounded in some theory, they cultivate a set of habits, rules-of-thumb, modes of structuring attention and approach, eventually fostering a sensitivity to relevant reasons. In time, these methods become 'second nature'.[39]

The lives of artists and other creatives suggest creativity, or at least its sub-skills, can be cultivated via similar means.[40] It is useful to distinguish two clear routes by which creativity, or at least its component skills, can be acquired through habituation, though not habituation into a fixed routine. Firstly, telling significantly new and valuable material from bad is a central component in all creative abilities, a type of discriminative judgement. For humans as found, this is not an innate or magically acquired ability, but gained through habituation. Consider, for instance,

[39] Recall further habituation once skilled tends to improve skill flexibility.

[40] A commonly accepted model of five-stage skill operation was set out in Chapter 2 via Dreyfus and Dreyfus (1980). In summary, the proposed stages were; 'Novice', 'Advanced Beginner', 'Competency', 'Proficiency', and 'Expertise'. The suggested line of progress is intuitive. Initially the learner focuses on applying explicit and specific rules, at first consciously, and then by habit. From there the learner is brought to think about exceptions to hard-and-fast rules. In time, a sense of reasons for action in the domain is gained, with rules retreating in significance as full skill emerges. With time, the skilled individual acts more directly because of applicable reasons.

how guided discrimination can eventually develop a scientific or artistic judgement nuanced enough to recognize valuable material non-accidentally.[41] Turning to the second strand, creativity needs material to evaluate. Novel proposals do not come readily to many, nor is the environment always rich enough to foster inspiration. Here again, methods or techniques can be learned or habituated into to help generate novel material — experimentation based on knowledge, relaxing of constraints, strategies to put oneself in an open or disinhibited state of mind.[42] In combination, these points suggest how creativity, or at least its central sub-skills, may be acquired through habituation.

Objection from unearned talent

A further objection now arises, returning to the idea creativity is sometimes an unearned ability rather than an acquired skill, usually a natural ability some are born with. If that possibility proved out, creativity would not be skill-like, at least insofar as its method of being acquired is concerned.

In reply, there are prior questions on how far unearned creative talents exist. Prodigious talents such as Mozart and Galois are often suggested as clear-cut cases. However, on closer inspection, it is not obvious such agents are born fully creative, but rather with a set of aptitudes and dispositions that allow creative skill to be gained more quickly. If some persons have a capacity to take up skills much more easily than others it would be easy to give the impression of unearned genius, especially given early endeavour often leaves no public record. Furthermore, the results of significant practice and stimulating environments at a young age should not be underestimated, particularly when added to fine-grained expert supervision and cultivation. Mozart had the benefit of a highly musical family, Michelangelo began his apprenticeship at around age seven.

Of course, this response (*modulo* environmental factors and levels of practice) supposes dispositions for gaining skills are distributed unequally across persons. Again, however, this does not worry the account of creativity implying skill, since varying aptitude for particular skills is a commonly acknowledged fact. Having more tastebuds might make becoming a proficient wine taster easier for a given agent, but it does not stop wine tasting from being a skill. The same holds for a disposition to pursue creative ends: there is no case for denying skill just because a person has a disposition

[41] An objection from natural talent, that creativity is an innate or unearned quality, is discussed below.

[42] See Gaut (2012), especially p.266 discussed below.

to acquire it or its sub-skills, any more than a natural aptitude to become a BMX biker.

Given these replies, there is no strong reason to think creativity of human agents is often gained other than through habituation, or that there is any compelling objection from natural talent.

3.2.2 Application of the core skill characterization

To substantiate creativity as partly constituted by a skill on the terms of the introductory chapter, it must be asked; (i) Does creativity work via families of tasks?; (ii) Is creativity specified via 'normal circumstances'?; (iii) Is creativity always something attempted or intended?; (iv) Does creativity have a standard of success?; (v) Does creativity imply an agent suitably understands his or her method?; (vi) Does creativity imply a suitable connection of method and result? The following six headings give a case for an affirmative answer to each question.

(i) Creativity works via families of tasks

Hawley invoked tasks to mark knowledge-how need not always succeed in a fixed or single way. There are many ways to climb a rock face, and those with knowledge-how or skill might succeed through indefinitely many variations. For this reason, the account of skill invoked 'families of tasks'. It is plausible creativity too works via families of tasks. There is not always a single or restricted number of ways to achieve creative success; there is not one way to write a creative sonata, render a part, or portray a figure. Furthermore, a creative problem may yield to many strategies or concatenations of strategies.

(ii) Creativity is judged in 'normal circumstances'

Skill was judged in 'normal conditions'. It is inappropriate to characterize the skill of a domino player by attending only to attempts made in an unfriendly environment. The normal conditions for playing dominoes exclude extremes of heat and cold, dominoes laced with disabling neurotoxins, interfering demons, and similar odd environments. Similarly for creativity, attempts made outdoors in force ten gales are inappropriate circumstances to judge the creativity of a painter or a composer. The point also affects circumstances that might affect attempt to generate new and valuable material. Consider Max:

> MAX: Max is trying to devise a new theory to cover data from several baffling experiments. However, an interfering alien takes against Max, and decides to see him fail at all future instances. Anytime Max gets close to a new thought, the alien zaps Max with a brain-scrambling device, so a new thought never arises.

Suppose, but for the interfering alien, Max would generate new and valuable scientific theories. It would seem Max *does* continue to have the trait of creativity; the interfering alien just blocks him from meeting success in those circumstances he finds himself in. Like skill generally, creativity is judged appropriately where circumstances are normal for the ability in question. Hawley's test for knowledge-how provides an intuitively correct test in both cases — the evaluation is made in the closest normal worlds where circumstances are normal. The same test also gives the right result where an agent finds themselves subject to a lucky but unlikely environmental or relevant technological factor. Consider now JOHANN:

> JOHANN: Johann sits at his desk and tries to compose a fugue. Though he succeeds in this world, his quill breaks in the vast majority of close possible worlds, distracting Johann so much that he can no longer produce a new and valuable work.

Johann's success is in a sense lucky (he does *not* succeed in the bulk of close possible worlds), yet intuitively this does not impugn Johann's creative success being skilful. Usually quills do not break so readily, meaning circumstances are not 'normal' enough to judge success for Johann or anyone relevantly like him. Like any skill, creativity is judged by how the agent would fare in normal circumstances.[43]

(iii) Creativity is something attempted or intended

In the discussion of skill and knowledge-how 'attempts' were introduced to distinguish the relevant abilities from unintentional behaviours. Is there similar reason to link creativity to attempts? Provided intention is construed broadly, there is a strong case creativity is always something attempted or intended. The case just above is typical — Johann was attempting to be creative in aiming for a new and valuable work. Yet other than when creativity is plainly intended, are all creative successes intended? At least by appearances, some successes come unbidden. Unbidden successes would

[43] Observe failures of these kinds may be characterized in terms of blocked creative potential.

seem a problem for theorizing creativity via skill because they can appear unintentional through a lack of suitable attempt. Adding to the problem, creative success can be the upshot of non-voluntary processes, as with free association. Non-voluntary processes appear quite unlike paradigmatic attempted behaviour — what, for instance, is attempted in free, rationally unconstrained association?

With a suitably broad notion of intention there is no reason to think creativity comes apart from attempted behaviour on either count. On the first worry, intention is wider than the conscious or deliberate. A standing intention is not consciously invoked, while others intentions can be tacit, unconscious, or otherwise non-occurrent. There is no reason to think agents cannot have a standing or unconscious intention to seek or produce new and valuable material. Turning to the second problem, that many creative processes do not seem the kinds of things that can be intended, care is needed not to miss what *can* be attempted in the relevant cases. Even if particular free associations cannot as such be intended, openness to new ideas can be cultivated, and impediments to the free association of ideas removed, among similar measures. In cases of entirely unbidden imagery, intention can figure in using or furthering such thoughts as part of an underlying project to generate new and valuable material.

This would appear the right result, given creativity seems to require at least some level of intention. Absent any kind of intention, novel and valuable products would be more like happy accidents.[44] Even so, a challenge could arise where the agent is actively seeking to *not* be creative. Suppose Gerry is a lifelong baker, and has spent many years inventing and perfecting new and valuable types of loaf. He is considered highly creative in his field. He tires of baking, and now turns his mind to a new career in engineering. As such, he abandons his previous interest in baking, devoting all his attention to learning his new craft. He manifestly wants nothing to do with baking, and tries to push any thought of it from his mind as nothing but distraction. Several months pass, and on the way to work he is struck by the thought of a new and valuable loaf.

Intuitively Gerry's discovery of this recipe is creative, or at least *prima facie* so.[45] Yet, on the terms of the offered account, how can this new recipe count as a manifestation of creativity? Gerry is, by supposition, not *attempting* to do anything related to baking. Rather, he channels all his efforts in another direction. Given this,

[44] Again, not to exclude creativity in appropriating a happy accident.

[45] The creativity explanation would be defeated if, for instance, the success was an unrelated upshot of a brain haemorrhage.

Gerry's case may appear an example of creativity that was not attempted.

In reply, a distinction should be drawn between deliberate attempts and absorbed dispositions to attempt. Absorbed dispositions tend not to be dropped or shed at will. Thought of in this way, there is no real threat in Gerry's case. His ingrained disposition toward generating and evaluating new and valuable ideas for loaves cannot be dropped at will, encompassing these cases within the skill account. Such ingrained dispositions are compatible with the desire to drop the disposition, and to take steps toward losing the intention. The point is only they cannot be dropped at will, having become in some sense habitual. As a marker of how absorbed skill may be, notice how quickly Gerry could resume his old course in baking should he wish to.[46]

(iv) Creativity has a standard of success

The account of skill based in Hawley's account of knowledge-how invoked a standard of success. As with the standard case, creativity implies success to a counterfactually-sensitive standard. More fully, a creative agent will succeed, given an appropriate attempt, in bringing about new and valuable material to a counterfactually-sensitive standard, where the condition of value fits relevant contextual considerations.

The counterfactual test is needed because actual success might not prove a manifestation of skill. An agent who bowls successfully only in the actual world, failing in normal counterfactual cases is not a skilled bowler. The same is true of creativity. If we knew an agent succeeded in generating new and valuable material only in actual instances, but would fail across counterfactual instances, we should not think they were creative, but only lucky. As fits the general account of skill, the counterfactual test only requires success to a minimum threshold counterfactual standard, possibly less than reliability. In addition, and like other skills, it might vary with contextual considerations. The number and value of results required to be a creative painter are less demanding for a five-year-old than an experienced fifty-year old.

Yet for creativity, several difficulties might be urged. With most skills there is a relatively clear idea of what success entails. Good bowling or archery requires hitting the target with a fair degree of success, in the range of normal conditions, and so forth. This kind of measure is principally statistical, even taking in contextual nuances[47], and is easily finessed for gradability. But creativity does not obviously fit a statistical measure of success. The number and degree of valuable novelties is a plausible start,

[46] To later purposes, it may be new and valuable material resulting from disavowed absorbed dispositions is less estimable and praiseworthy.

[47] For instance, the age of the agent, the equipment they have, and so forth.

but what counts as a valuable novelty is very contested in many fields.

To reply, not all skills, even aside from creativity, rely on straightforward statistical measures of success, nor imply thoroughly uncontested measures. The skill of one barrister is not proved greater by the simple fact they win more cases than another. If the cases weighed are trivial, greater skill might show in winning fewer but more complex cases. Moreover, the requirements of a skilled chef or barber might not be completely agreed at the lower threshold. The point is skill measures are often other than singly or wholly statistical, and can be somewhat contested. As such, there is no special objection to understanding creativity as skill on these grounds.

Yet if creativity is analysed in terms of skill, a common measure might be pressed for. What common measure could cover Mahler, Plato, and Lavoisier? The objection belies a faulty assumption direct comparisons must be possible. Without suggesting a common measure is impossible, one clarification presents their respective manifestations of creativity as abilities in distinguishable domains. Instead of demanding a global common standard, more local measures can provide the standard. Scope of domain and time period are obvious contextual considerations here. Plato was highly creative by the standards of philosophy in his time. Similarly, Lavoisier was creative by the canons of early modern science, and early experimental chemistry specifically.

There should be no objection creativity cannot involve a skill since creatives are not necessarily successful in every field at which they try their hand. Compare technical drawing. To be skilled in technical drawing, an agent need not be able to complete any and every technical drawing task — success to a sufficient standard in a smaller number of cases is enough for skill. This is so even though they may be overall less skilled than another who can perform the further tasks.

Even so, a related worry could enter over fluency. Now the thought is to associate skilled performance with fluent or fluid performance. However, it seems many creative persons are scarcely fluent in their performance — there is struggle and correction, and progress is far from linear. To remove the worry, it is sufficient to find other core examples of skill where steady progress toward their ends is not expected. Many examples might be offered. A skilled woodcarver producing a fixed but difficult product might also proceed in fits and starts. Similar points hold for toil and struggle — there is no reason to think skilled action must proceed without struggle or set-back. It is only necessary to be adequate to the minimum standard. Additionally, to be skilled it is not necessary to be perfectly or ideally so. Like other skills, creativity may come

in degrees: some are simply more proficient than others.

(v) Creativity implies an agent has a suitable epistemic relation of method and result, excludes accidental success

In a previous chapter, skill was found incompatible with two conditions[48]:

(1) *Deficient understanding of method employed* — where the agent does not properly comprehend how to succeed in particular circumstances due to misapprehension.

(2) *Fortuitous or accidental success* — in this kind of failure there is success but an 'absence of a suitable connection between the goodness of the method and the subject's use of that method'. This principally excludes guesswork or success due to accident.

It remains to argue creativity has similar exclusions.

(1) Creativity will not rely on a deficiently understood method

Consider again the position of Sally. Sally's success relied on a significant misunderstanding of her circumstances, she thinks she succeeds by doing one thing, but it really happens due to a causally connected factor she pays no mind to. Due to this misunderstanding, her action in this case would not be skilful in reaching her aim.

Again with creativity, new and valuable successes relying on a critical misunderstanding are not properly manifestations of creativity. Consider a trained improvising agent who yet momentarily misremembers part of what she has already played, proceeding with that mistaken conception. As it happens, her misremembering leads to a new and valuable juxtaposition to the performed phrase. This would otherwise not have occurred, and neither is the juxtaposed phrase creative as a response to the misremembered phrase. The juxtaposition, however new and valuable, is not a manifestation of creativity.

Or consider a similar case to that of Susie, who suffered bad means-end adjustment. There are imaginable cases of producing new and valuable material despite bad means-end adjustment, yet these do not look like manifestations of creativity. As an example, think of a painter who believes he gets a new and valuable effect by using certain colours in combination. However, his success actually follows from the rough elongated canvasses he had cobbled together with no thought, and which he

[48] *Infra.*, p.76 ff.

believes entirely irrelevant to their value. This kind of success does not look like a manifestation of creativity (though we may be glad it happened).

It might be questioned what deficiencies in understanding impede creativity, since it does not seem just any false belief will undercut a success manifesting creativity. If an eccentric agent falsely believed their abilities must fail every Friday the 13th, and so never tries to work on those dates, it does not prove they are unskilled. Similarly, a slightly off belief about the stress tolerance of a given alloy will not in any usual circumstance undercut the skill of a sculptor.

Consequently, the requirement cannot be too strong. It would be implausible if many artists from the past now counted as uncreative because they had a false or deficient theory of how they succeeded (for instance, Kandinsky). Nonetheless, it cannot be weakened to become vacuous, as when an agent *merely* truly believes the work has value, but with erroneous or no justification — e.g., thinking the music is new and valuable for its rhythm, but it is really because of a juxtaposition of qualities unnoticed by the agent.

One suggestion may be the method employed some epistemic virtue. Consider an agent in the 15th Century who observes the action of a tincture of St John's Wort on their depressive patients. However, their beliefs of why this succeeds is wildly mistaken (e.g., some variation on humorism). Their theory is of course false, but since St John's Wort acts as a simple mood stabilizer, the method is effective. Nevertheless, this may be allowed as a skillful success because it is epistemically reasonable, based in responsible conclusion from observation.

But now what of Romantics claiming their successes come from 'inspiration'? This looks like an error that might undercut their creativity. To reply, one might simply say the skill they possess is different to the one they imagined they had. This is not *ad hoc* given skills attributed are sometimes rather different to those their possessors claim. For a clear-cut instance, Astrologers cannot be skilled in the way they might imagine since there is nothing in nature admitting underpinning the causes posited, and in consequence there could be no basis on which there could be warrant. Yet Astrologers might be allowed skills of a different form — in 'cold reading', filling a psychological want for fun or profit, engaging in a form of make-believe, or so forth.

(2) Creativity is not manifested in fortuitous or accidental success, requires adjustment of means to ends

The thought skill does not rely only on fortuitous or accidental success was a further element in characterizing skilled success.[49] According with the argument given in the previous chapter, any new and valuable success that comes *only* by guesswork is not a creative success.[50] Suppose an agent who takes materials from a nearby refuse site, and throws them together paying no attention to the result. Fortunately, they are just the things needed for a new and valuable sculpture.[51] This kind of uninformed successful 'stab in the dark' is not a manifestation of creativity, but a happy accident. Even a marginally-informed throwing together of what is at hand relies too greatly on luck to qualify as creativity.

Turning to adjustment of means to ends, skilful action is also suitable to its ends, and often more than implementing a fixed or automated process[52], so allowing on-the-fly correction. This includes response to relevant reasons.[53] Combining with a previous theme, if creativity does imply a skill it will require adjustment to relevant reasons, and not mere success through incidental factors.

As shown above, creativity implies success due to selection for relevant reasons — if an agent succeeds solely in virtue of an incidental reason, they are not properly creative but merely lucky.[54] This leaves the remaining task of showing how creative skill can have a responsive character, sensitive and adjustable in light of relevant reasons. How is this possible and plausibly realizable?

Recall some other trainable skills track relevant reasons. As with recognizing and acting in light of reasons in other cases, creativity can preserve appropriate means-end relations through observation, reasoning, standing knowledge, and associated changes to intention. A skilled lawyer begins by taking in the case and applying her knowledge, perhaps through simplifying or organizing heuristics to arrive at a coherent strategy. If something unforeseeable happens in the case, the strategy can adjust on-the-fly toward conformity with the desired end. Methods employed need not be conscious, though may become so well-honed as to give the appearance of automaticity. There is no reason to think creativity cannot exploit similar mechanisms, bringing about or

[49] Hawley (2003) excludes guesswork by the Shelley case, as discussed in Chapter 2.
[50] This point is explicated below by way of luck and serendipity.
[51] This resumes a lesson of the received view. It is not to deny an agent may manifest creativity through selecting and retaining randomly associated material, however this is not pure guesswork.
[52] Fridland (2014)
[53] Provided there are appropriate circumstances, and with proper opportunity.
[54] This point is raised in Kieran (2014a).

retaining what is new and valuable for relevant reasons, allowing on-the-fly adjustment where needed.

3.2.3 Further exclusions

Beyond conformity with the core modelled on Hawley, skill was linked to two further exclusions.

Intervening luck

An arrow reaching its target only through a chance gust of wind fails to manifest skill, though it may be causally reliant upon it.[55] More widely, a success from intervening luck is not skilful since there is no possible way an agent could account or control for factors interposing between the ability and the targeted effect. Though such successes follow an appropriate intention, they do not manifest the relevant skill or ability, or at least not fully. By parallel, creative successes should not rely on intervening luck. Where success relies on a piece of bad luck offsetting a piece of good luck, there is no manifestation of creativity. Consider Joe:

> Joe: Joe is improvising at a piano, about to add a creative flourish to his performance. However, a chance draught slams a nearby door. He startles, and his hand jumps leftward. At that instant, another door opposite slams causing him to flinch in such a way the originally intended flourish is performed. The result is new and valuable.

As with skill generally, intervening luck is incompatible with agential creativity because the agent is unable to account for bad luck or counteract it (suppose the start Joe experiences is shorter than he can intentionally control or counteract, or involves a minor seizure).[56] However happy the result, a success from intervening luck is not a manifestation of creativity.[57]

[55] Notice intervening luck is one way to cast the anti-luck intuition behind the Sally case, but since the specific reason of failure is not brought out in Hawley, there is reason to present it separately.

[56] Not excluding the product of intervening luck may be recognized or used in a further creative project.

[57] Manifestation may be a matter of degree. Two cases from Turri make the point. Suppose two scenarios that might unfold when trying to heat some water with a microwave (Turri (2011), §6 cited in Bradford (2014)):

> BOIL: You place a cup of water in the microwave and press start. The magnetron generates microwaves that travel into the central compartment, penetrate the water, and excite its molecules. Soon the water boils.
>
> FIRE: You place a cup of water in the microwave and press start. The magnetron generates microwaves that cause an insufficiently insulated wire in the control circuit to catch fire, which fire deactivates the magnetron and spreads to the central compartment.

'Too easy' success

The characterization of skill allowed for involvement by other agents and technology external to the agent, at least in some instances. Even so, skilled agential success should not follow too easily from mechanisms external to agential control. At the very least, success should not become so easy the agent need scarcely do more than intend, nor should they succeed by doing just about anything.

Creativity has a similar requirement. Crucially, success should not follow too easily from the mere intention to generate new and valuable material, as where a guardian angel rearranges the world so this happens from the mere intention, or some other ridiculous strategy. Or, to take another case, agential creativity is not manifested if an agent relies too much on an external mechanism to discriminate good material from bad.[58] That at least would not be *agential* creativity — i.e., creativity of the agent. There may be a precondition of agential creativity in the capacity to generate novel material, but without the evaluative capacity it is incomplete. However, supposing the external evaluation comes from another agent, a *group* creativity might arise provided further conditions are met. A subsequent chapter considers this matter in more detail.

3.2.4 Summation of creativity and skill

It remains to give a summation of the relation of creativity and skill, before turning to objections.

Creativity implies a skill, if only by the evaluative component involved

Why suppose agential creativity is always partially constituted by a skill? To show this, it is sufficient to observe creativity implies having an evaluative mechanism for detecting new and valuable material. The necessary role for evaluation was proven

Soon the water boils.

In each case the water is heated, yet in BOIL the power of the microwave is manifested, whereas in FIRE it is not. The point extends to agential abilities. Bradford (2014) presents the point via a golfing case. Suppose two parallel scenarios of a competent golfer taking a shot. In the first case, the competent shot causes the ball to reach the green directly. In the second case, by contrast, a bird interposes in the course of the competent shot and carries it to the green. The skill is fully manifested only in the first case, though in both instances some skill is exhibited and success result. Summarily, manifestation drops as interposing factors are increased. An analysis allowing degree is further motivated since it would appear some measure of luck is an ineliminable part of success generally. Seldom if ever is there no risk of failure due to an environmental or otherwise errant causal sequence, and so almost every success will be lucky in some sense. See general discussion in Millikan (1997).

[58] This may include wider mechanisms, such as the market Kieran (2014a).

in a previous chapter. Such evaluative mechanism fulfil the conditions of skill, are plausibly psychologically realizable on the terms of skill previously elaborated, and are usually habituated into for humans as found. Usually such an evaluative capacity is joined by a generative mechanism that the evaluative mechanism is deployed on, itself drawing on skill. Importantly, however, creativity is not merely the ability to generate novel and valuable material, since that is consistent with an agent generating valuable novelties but accidentally or via intervening luck.

Kinds of luck compatible with skill

However, it should not be thought every kind of luck is incompatible creativity, in this paralleling many other skills. For one, luck in acquisition is compatible with creativity. Suppose an agent is very lucky in the way they acquire an ability to produce new and valuable material. That is no objection to their being creative. Just as the pilot who learns from an impostor who happens to speak the truth can still be a skilled pilot, so would a creative trained similarly.[59]

In addition, environmental luck seems compatible with creativity. Just as a pianist who gives a token performance in a room that floods in every other nearby possible world is skilled, so too an agent who performs in a room that floods in all close possible worlds can be creative.[60] The circumstances of the flooding room are not 'normal', while the ability is properly tested in the nearest worlds where normal circumstances obtain. Finally, certain forms of constitutive luck appear compatible with creativity. One need not think every agent is born with the same capacity to become creative, or indeed any capacity to become creative at all. In this creativity would parallel other skills — skill in sailing might require some luck in fundamental capacities.

3.3 Objections

A case creativity is partly constituted by a skill in hand, this section turns to principal objections confronting the account outlined, beginning with two shorter qualms on the relation to skill.

Transparency and warrant

First, it might be queried how creative agents could judge a prospective course of action has some appropriate likelihood of success, at least to maintain a suitable

[59] A fuller argument for this point was defended in a previous chapter.
[60] McKinnon (2014), p.570

relation of method and targeted result. If creativity implies a skill it should equip agents with some ability to evaluate a prospective strategy, if only to avoid charges the success is lucky in the wrong kind of way.

In reply, even if the prospects of a whole project may be unclear, one might reasonably believe success for given sub-tasks and sub-strategies is clear enough to justify using it or not, even if overall success is not fully ascertainable. As such, *some* idea of the overall prospects of a course of action may be available in many cases. Creativity would accord with many other complex skills in this regard. Resuming the legal example, prior to a long case with many complexities, a barrister might have only a dim and uncertain view of the chances her strategy will fare well as a whole, though enjoying reasonable confidence in its components. Nevertheless, that does not count against the strategy employed being skilful. Correspondingly, it is no decisive objection if creativity is not completely transparent in terms of its prospects of success.

But are there not cases where the reasons for success are opaque to the agent, such that it is unclear if they have warrant for non-accidental success? Like many other skills, creatives need not represent to themselves precisely how it is they succeed. Requiring mental representation, or even full access to warrant bases is implausibly demanding for most if not all skills. To give but one illustration, a skilled surgeon need not consciously represent to themselves how to successfully manipulate a stent into position, provided certain kinds of grievous misunderstanding and misconception are avoided. Neither is it true the skilled must be able to describe propositionally how they succeed — language may not have the precision, while success in description may be ascribed to a distinct skill. Provided creativity too avoids certain kinds of misunderstanding and misconception, parallel responses are available.

Evaluation is itself creative

It could be urged the proposal does not properly account for creativity since the recognitional or evaluative element outlined is itself creative. After all, not every judgment is learned, so being in some sense novel, while the result is also valuable — a discovery of a truth having worth.[61]

To reply, it is only necessary to give a case evaluation is not in and of itself creative. Creativity is not *just* the capacity to recognize value or significance (though there are

[61] Note also an evaluative capacity is something an agent might be praised or esteemed for. Or, in certain circumstances, perhaps blamed or rightly criticised for failing to use.

creative kinds of recognition). An appreciator might recognize value in a painting, but not do anything remotely creative — the recognition may have been closely-prompted by a guide. That is not to deny appreciation and creativity often go together, nor that they may draw on similar mechanisms, but merely to insist they are separable concepts.

Indeed, most evaluation is not creative in anything like the sense at issue, but trivial or at the margin. Most evaluations are not particularly insightful, or different from cases met in training. Just as generation of marginally different wallpapers is not creative, neither is a marginal if true judgement. Perhaps the 'a-ha' effect when as solution is reached invites the suggestion of creativity. But there are explanations other than creativity— a sudden realization need not be due to creativity, it could merely be the correct result becoming clear. That is not to assert evaluation is not sometimes unusually perceptive and so creative, but simply to show it is not necessarily so.

Serendipity

With a relatively developed account of how creativity relates to skill in place, it is possible to enter luck objections, particularly the problem of serendipitous success.[62]

To begin, an outlying use of the term 'serendipitous' to mark a distinct form of lucky success must be set aside. Occasionally 'serendipitous' is used for successes happening because of intervening luck as discussed previously. This is not the present sense. Rather, the sense grounding the objection is broached in passing by both Boden and Gaut. Boden defines serendipity as 'the unexpected finding of something one was not specifically looking for'.[63] Gaut gives a slightly different spin, aligning serendipity with the 'skilful exploitation of chance'.[64] Each captures new and valuable material generated in an intuitively lucky manner. Both are problem cases if the ultimate aim is to understand creativity via a skill for which the agent is creditable.

Taken strictly, Boden's definition of serendipity speaks only to finding what one was not specifically looking for. This could encompass numerous cases, many unrelated to creativity. An example might go as follows: Alfie thought his keys were in his coat pocket, but they actually fell out earlier that morning. He happens across them under a book. This, on Boden's conception, is a form of non-creative serendipitous success. Notice another form of finding counts as serendipitous on Boden's definition

[62] That is, further to those discussed in connection with Hawley.
[63] Boden (1994b), p.529
[64] Gaut (2009), p.86

— where the object is sought under a less specific kind. To take a mundane example, an agent could happen across a specific screwdriver. The agent was not looking for that specific screwdriver, but merely something suited to open a paint tin. In a way, this is serendipitous on the conception offered, and makes sense of Boden's use of 'specifically'. Lastly, is worth observing Boden's notion of serendipitous success does not *per se* commit on whether the finding is skilful or not, leaving open the possibility of non-skilful finding. However, given Boden's emphasis on the prepared mind in exploiting chance, skilful selection is a natural interpolation.

Gaut, in contrast to Boden, specifically understands serendipity as the 'skilful exploitation of chance'. The natural interpretation here is the skilful *use* of chance, and so skill is implied by serendipitous success. Two routes are proposed via which intuitively serendipitous successes are not ascribable to pure luck, each previewed above.[65] The first appeal is to 'product-value' rationality, involving the capacity to appraise the value of the product. As characterized, it is skill in recognizing the significance of chance occurrences. The second strategy for encompassing serendipity within skill cites strategies for inducing states for evaluation to exploit, increasing the chance of a serendipitous episode. Here Gaut notably allows these to involve non-rational sub-elements, such as free-association not subject to appraisal.[66] At least to the extent they can be induced, they are areas in which agents might develop skill.

To the current purpose, both routes help encompass serendipitous success within skill, each illustrated in Fleming's famously lucky discovery of penicillin by noticing the action of penicillium mould on an accidentally contaminated plate. Fleming needed an evaluative capacity to non-accidentally find the significance in the phenomenon, but his openness allowed him to make use of the lucky environment where chance brought factors together quite unexpectedly.[67] Though the evaluative capacity carries the weight of the Fleming example, Gaut observes openness is a powerful

[65]Two theses are reviewed by Gaut (2012), p.268: *'Modal asymmetry*: creative activity requires the exercise of a particular rational capacity (product-value rationality), but it does not require the exercise of an irrational capacity. [;] *Rational irrationality:* many, though not all, apparent instances of simple irrationality in being creative are really instances of being rationally irrational.' Both figure as part of Gaut's larger concern to elaborate how creativity can fit with rational strategies.

[66]Gaut (2012), p.266: '[...][F]ree association is not irrational, but is nonrational in the sense explained earlier, for there is no ground for rational appraisal or criticism of this flow of associations and ideas. The strategy of rational irrationality, then, falls into a wider class of rational strategies of openness to one's environment and one's mental life: it requires being open to the possibility that one's irrational mental states can promote one's creativity, and one may even actively pursue steps to induce them in oneself.'

[67]Gaut (2012), p.266: 'Such cases [of serendipitous success] are, however, not ones of pure luck: they require someone to spot the significance for his project of the lucky event. Since one cannot induce such lucky events, a good strategy to promote serendipitous discoveries is to be open to the possibilities that one's environment throws up.'

strategy in its own right, applying not only to environmental stimuli, but to the 'mental life' of the agent through free association of ideas.[68] Again, these methods increase the chance of a serendipitous event.

It remains to determine if these strategies give reason to believe all serendipitous successes are within the range of skill, so dispelling objections in this area. Consider the following serendipitous cases:

> SERENA 1: Serena is a poet who owns a special set of cards printed with ten thousand different nouns. Battling with writer's block on how to express a specific emotion, she gets up to make a cup of coffee and accidentally knocks the cards from their shelf. Three cards happen to land face-up. Serena notices these three cards, which happen to be those just suited to base a metaphorical expression of her specific emotion.

Or consider the slight variation where Serena deliberately tries to jumble the cards:

> SERENA 2: Serena is a poet who owns a special set of cards printed with ten thousand different nouns. Battling with writer's block on how to express a specific emotion, she gets up to make a cup of coffee and purposefully knocks the cards from their shelf. Three cards happen to land face-up. Serena notices these three cards, which happen to be those just suited to base a metaphorical expression of her specific emotion.

Given the responses outlined, there might appear no problem of serendipitous success since skill does the work in both cases — a skill in recognizing the significance of stimulus provided. Perhaps SERENA 2 can claim the further nous to enhance the chances of a lucky recognition by upsetting the cards purposefully. Yet these responses are imperilled when it is noticed successful recognition of new and valuable material only happens in a small proportion of close possible worlds. In the vast majority of close possible worlds, all three useful cards do not land face-up, and the creative realization is never made. But, for skill, when A intends to Φ, A should meet some suitable threshold for success across a non-gerrymandered set of close possible worlds. But here the success cases are unbelievably few. Even so, Serena would appear creative in this instance. Is this a disastrous problem in understanding creativity as skill?

If the *proportion* of cases in which Serena finds success provides the focus it is easy to think the requirements of skill are not met: success results in an unbelievably

[68] Gaut (2012), p.266

small fraction of cases. However, one might also consider the case in terms of modal distance. To present the point briefly, recast the problem case as a lottery, the three useful nouns printed on a single 'ticket', upping the number of other 'tickets' to equalize the odds. Though the odds of drawing that card are very low, drawing that card is no *less* likely than drawing any other. The cases of serendipitous success, where the agent non-accidentally recognizes the value of the cards, are not too distant to be accounted skilful. In this sense, though the agent is unlikely to meet creative success, the success is not too remote to be skilful.

Consequently, decisive luck objection to creativity is forthcoming here. Creativity can be compatible with luck including serendipitous cases provided there is a sufficiently developed view of what skill is, and the minimum standard for success allowed to take in modal distance rather than narrow probabilities. What must be preserved is success achieved in the right kind of way, but that does not rule out successes that are fortuitous in some sense.

Imperfect modal discrimination

Close modal failures might seem to pose another problem for creativity as skill. It could be some other kind of ability, itself described by counterfactual success conditions, though short of a fully-fledged skill is the better explanation where there is intention but near possibility of failure. Littlejohn proposes[69], from an appeal to epistemic cases, that there is an interesting class of abilities filling this gap. The motivation originates in distinguishing courses of action where there are close environmental possibilities of failure.

Littlejohn's core example imagines two agents, Michelle and Zoe. Michelle learns to fire a cannon at a target using the first edition of a training manual. She is familiar with the equipment and can account for numerous environmental factors. She does not, however, know there is a second edition of the manual covering a new range of cannon balls — now issued in 18, 20, and 22 lbs rather than 20 lb alone. She successfully fires the cannon at the target, but only because she luckily drew a 20 lb cannonball. Zoe, by contrast, is proficient with the second manual, and can discriminate between those available.[70]

Michelle, it is supposed, cannot discriminate between the various cannonballs, and so her success depends on luck. Zoe, by contrast, adjusts for another relevant variable,

[69] Littlejohn (2014)
[70] Littlejohn (2014), p.384

the weight of the cannonballs. The key point is then approached:

> If [successful action] manifests ability only when correctness results from the exercise of a discriminatory capacity that correctly classifies the objects one could easily encounter on the basis of some identifying mark, it looks like one must satisfy some sort of safety principle by virtue of satisfying the ability condition.[71]

The 'ability condition' simply states cognitive successes should be properly due to the agent's cognitive abilities.

> Ability Condition: One's cognitive success is properly attributable to one's cognitive abilities (i.e., one's success is because of one's abilities, manifests one's abilities, or is due to one's abilities).[72]

Yet there is a sense Michelle's success is not attributable to her ability as it very nearly failed, bringing Littlejohn to deny the Ability Condition is met. Clearly, however, Michelle is not *utterly* incompetent at using the cannon, but she is deficient with respect to Zoe. Correspondingly, Littlejohn argues Michelle manifests an ability, but this differs from the success being properly attributable to the ability.[73]

On this view, unless success is tuned to easily encountered environmental variables, the agent's success is not fully attributable to her abilities.[74] The larger idea is that abilities for which the agent is fully creditable must have an inbuilt discriminatory component to assure the success in modal case is properly attributable to the agent. Even so, a relative of ability can be conceded where success is less than guaranteed due to imperfect discrimination — an 'excellence'. Turning this to creativity, one might hold creativity looks unlike a skill, not disputing it may be an 'excellence', at least in those instances where there is a close discriminable cause of failure. The consequence will be doubt on how far creativity as outlined is really creditable to the agent as a skill.

The challenge set forth in this objection may be resisted. For one, there may be more careful individuation of skills through the different means involved. One might hold Michele has skill with respect to firing the old Acme cannonballs, but not the new ones. Zoe is skilled with both old and new type Acme cannonballs. According to

[71] Littlejohn (2014), p.379, interpolating 'successful action' for the analogous notion of 'correctness'.
[72] Littlejohn (2014), p.369
[73] Littlejohn (2014), p.385
[74] Littlejohn (2014), p.385

this reasoning, one might save the idea each has different skills rather than conceding Michele has a weaker 'excellence'. Alternatively, one might simply accept Michele has less perfect skill than Zoe with respect to using the Acme canon. Even so, both qualify as having skill since they each achieve an adequate degree of success over enough actual and counterfactual cases — the difference is only in the further degree of skill each enjoys. Similar responses are imaginable for creativity cases. An agent may have a less perfect creative ability where there is close discriminable failure, yet provided they meet the minimum conditions, still count as creative.

Creative tokens, isolated cases and try-outs

Finally, concerns may emerge on (i) the relation between creativity as a trait and tokens described as creative, (ii) isolated success, and (iii) first-instance try-outs.

On (i) and (ii), first compare the relation of goodness and good actions. It is not thought all good actions come from good people — it is generally acknowledged even a bad agent can do good things from time to time. Why not think a non-creative type can properly do creative things in particular instances? The problem is compounded when it is noticed a single token action might be done in the manner of the skilled. Applied to creativity this might look like creative action absent the scope of a skill (even allowing some skills and creative skills can be very narrow). Finally consider (iii), first-instance try-outs. If an agent makes but one actual attempt, are these *a fortiori* not creative successes? Satisfying a counterfactual test supposing there are no other attempts may seem entirely irrelevant.

The different kinds of case merit different responses. For the try-out case, the question is really over the relevance of invoking the counterfactual test where there is only an attempt in a single instance. It is unclear why what attempts are *actually* made should matter, provided the counterfactual test is passed in normal circumstances, and the agent could make other attempts if they so desired. When or whether agents attempt a creative or skilful act is separable from whether or not they have the skill, i.e., whether they are non-accidentally successful *should there be* attempts.

Returning to (i) success in the manner of the creative, and (ii) isolated successes, another kind of response is needed. In these cases success is achieved just as the creative would, but it is isolated from wider creative ability. Several accommodations may be offered. In a move parallel to Zagzebski, token virtuous or skilled actions might be defined in terms of what the virtuous or skilled agent *would* do.[75] This is not a

[75] Zagzebski as presented in Greco (2005), p.294 ff.

departure from the agential account offered, since the ultimate level of explanation is still the trait of the fully skilled person — here the production of new and valuable material via means that would succeed in normal circumstances.

Additionally, some concession to weaker notions of creativity is possible. Following Kieran, a distinction of 'minor' and 'major' creative success may be introduced.[76] A 'minor' creative success is just the production of something new and valuable. By contrast, a 'major' creative success is the production of something new and valuable through exemplary means. Extending this kind of approach, isolated cases may be conceded as in a sense creative, but less than ideal or paradigm instances.

3.4 Chapter conclusion

This chapter begins the main argument, demonstrating creativity is partially constituted by a skill on the terms set out in Chapter 2, then disposing of several objections. The link makes at least some sense of why creative persons are praised for generating new and valuable material — they are attributable to agents insofar as they are non-accidental results of relevant intentions. Moreover, since creativity is plausibly tractable by realizable psychological mechanisms common to skills, it shifts against any suggestion creativity is an unrealizable capacity. The remaining chapters elaborate and develop the implications of an account of creativity closely tied to skill.

Creativity is causally involved in producing new art, but the creativity of a work is also taken to be appreciable. Yet an influential account in aesthetics, Aesthetic Empiricism, claims this cannot really be so since the aesthetically relevant qualities of art are closely-circumscribed by direct perceptual encounter of the art object. Such accounts certainly exclude manifestations of skill and creativity from aesthetic relevance. To argue skill and creativity are relevant to the aesthetic appreciation of art first requires rebutting this position.

Correspondingly, Chapter 4 offers a refutation of the Aesthetic Empiricist but retains a key insight and motivation of the approach — that aesthetic relevant qualities make a difference to experience. Following this, Chapter 5 develops how both skill and creativity are aesthetically relevant to the appreciation of resultant works. Chapter 6 shifts to the value of agential creativity, accounting more fully for some central intuitions on its value by virtue of its skill-like qualities. To close, Chapter 7 draws

[76] Kieran (2014a)

out analogous results for the group case, having addressed some specific challenges.

Chapter 4

The Challenge of Aesthetic Empiricism

Chapter introduction

Showing creativity is an appreciable quality in art forces a confrontation with Aesthetic Empiricism. At core, the Aesthetic Empiricist seeks a very close tie between appreciation and direct perceptual encounter of the art object. On this view, there is no need or justification for appreciation to range far beyond the art object as directly encountered, certainly not to the extent some aesthetic relevance for skill and creativity would require. The Aesthetic Empiricist also has a strong intuition to draw on — that what matters and is of value in art is the experiences they can afford.

This chapter first expands on the Empiricist project, before Section 4.1 follows Lamarque[1] in identifying two claims tangled in the approach. Roughly characterized, the first *Art Relevance Claim* proposes to circumscribe art relevance by those qualities available to relatively unfurnished perception of the art object.[2] By contrast, the second *Experiential Claim* urges every aesthetic difference must manifest in an experiential difference (at least to a qualified appreciator, in favourable circumstances). The bulk of the chapter, Sections 4.2 and 4.3, discusses each claim in turn. The Empiricist view of art relevance is rejected, but the Experiential Claim endorsed. To better

[1] Lamarque (2010)

[2] The term 'art relevance' captures those features of art that appreciation might take into account. It is clear some criteria are needed. To use a common example, neither the back of a painting, nor the fact it is encountered on a Wednesday, are usually art-relevant.

explain how anti-empiricism on art relevance can be married with the Experiential Claim, appeal is made to recent work on the cognitive penetrability of experience. In sum, these arguments provide the foundation for the following chapter, which argues both skilful and creative production are at least sometimes relevant to the proper aesthetic appreciation of art.

Two preparatory points of delimitation: 'art objects' are here identified with those things accepted by a significant portion of the artworld as fit objects for appreciation; paintings on canvas or board, literary texts, dance performances, music, sculptures, and so forth. Disputes over boundary artforms are set aside. Second, the circumstances proper for appreciation, nor the qualities required of appreciators, are not stipulated in detail. Instead, the account relies on an intuitive understanding of what makes appreciators suitably equipped and circumstances proper; paintings are not approached by the colour-blind or in darkness, symphonies are not heard underwater or in echo chambers, and so on.

4.1 Aesthetic Empiricism

As adverted above, the Aesthetic Empiricist seeks to sustain a very close relation between art appreciation and relatively unfurnished perception or experience of the art object. Correspondingly, David Davies identifies Aesthetic Empiricism with a family of positions minimizing 'resources not available in or derivable from an immediate experiential encounter with an instance of the work'.[3] Such approaches have some pedigree, the outline of an Empiricist restriction extending back at least as far as Beardsley's proposal 'to count as characteristics of an aesthetic object no characteristics of its presentations that depend on knowledge of their causal conditions, whether physical or psychological'.[4]

Crucially, the Aesthetic Empiricist need not subscribe to the strong idea *everything* external to the art object is irrelevant to its appreciation. That idea is implausible. Beardsley presents the point in a neglected passage:

> We do not come to the object cold, [...] our capacity depends upon a large apperceptive mass. This may include previous acquaintance with the general style of the work, or of other works to which it alludes, or of

[3] Davies (2004), p.25

[4] Beardsley (1981), p.52, emphasis in original. Various earlier aestheticians emphasise experience to different extents.

> works which it sharply contrasts. All this may be relevant information for the perceiver what is not relevant is specifically information about the physical basis, the physical process of creation, and the biographical background [of the artist].[5]

Works are often valuable and appreciated in respect of their place in an artistic tradition (the developments made by Beethoven), and ties to other works (Raphael using the central face of the *Laocoön Group* for the blind Homer in his *Parnassus* fresco). Moreover, at least some public conventions of meaning must be allowed to make sense of literature. An Empiricist position might even allow ties to political, social, and other developments in the outside world as public and not strictly biographical (e.g., war art). At first pass, there is relevance in such factors, even if contextual factors occasionally distract, or are too uncertain to be employed.

Yet appreciation can certainly take in too much biography and detail on process. Sometimes knowledge of these facts stand in the way of correct appreciation, acting as nothing more than distractions. Knowing unpalatable truths about an artist's private life is something to be set aside, as might knowing the year and month in which a camera or lens was manufactured. Appreciators must often work to overcome knowledge of these factors, precisely because they seem to be distractions. Considered in this light, an account of art relevance focussed on direct experiential encounters with art objects seems like the attractive antidote. Indeed, if an appreciator is not focussing on the perceptual encounter, it might look as though the attention is no longer aesthetic, but directed by some other end or purpose.

But accepting Empiricism glossed on these lines makes several established features of appreciation look perplexing. For one, why would appreciators shun copies and forgeries?[6] Such objects might be perfectly indistinguishable from the original art objects, and function identically in a similar context of appreciation. To the Empiricist, this kind of approach must appear nothing more than error or prejudice. Furthermore, it is unclear if the Empiricist can tell a convincing story about 'readymades' and other works of 'found art' indistinguishable from non-art objects in terms of properties given in any usual sense of direct experience. On the Empiricist picture, it looks like such non-art objects are just as worthy of the same appreciation as their relations in the art canon. But that again conflicts with established appreciation practice. Perhaps, however, provided the Empiricist gives an incontrovertible

[5] Beardsley (1981), p.53

[6] See, for instance, Graham (2005).

account in other areas some revision in these areas might be tolerated.

This chapter broadly elaborates on Lamarque's[7] contention the Empiricist position tangles two claims; first is an 'Art Relevance Claim', second an 'Experiential Claim'. As a rough characterization, 'Art Relevance' limits every art-relevant quality to those available in relatively unfurnished perception of the art object. By contrast, the 'Experiential Claim' holds every aesthetic difference between works must issue in a qualitative experiential difference — or at least to an adequate appreciator, in relevant circumstances.

Though the two claims are often run together, they are distinguishable. Running through the possibilities, it could be:

1. Both the Art Relevance Claim and the Experiential Claim are true.
2. The Art Relevance Claim is true, but the Experiential Claim is false.
3. The Art Relevance Claim is false, but the Experiential Claim is true.
4. Both the Art Relevance Claim and the Experiential Claim are false.

Note, for the Empiricist, the Art Relevance Claim cannot be true but the Experiential Claim false. Suppose the Art Relevance Claim true — in that case immediate and relatively unfurnished perception of the art object circumscribed art relevance. Further suppose the Experiential Claim false — not every aesthetic difference between works must issue in a qualitative experiential difference. However, the second supposition conflicts with the first, incompatibly suggesting both all and not all properties for appreciation must be direct qualities of appreciation experience. Consequently (2) must be rejected, leaving the live possibilities (1), (3), and (4).

Following Lamarque's lead, this chapter offers a detailed case for (3) — the Art Relevance Claim is false, but the Experiential Claim is true.[8] Several overlooked responses from the empiricist are considered, and a firmer grounding for the Experiential Claim presented.

[7] See Lamarque (2010), p.126 ff. He sets forth two claims:

> *Positive Thesis*: the aesthetic value of a work of art is essentially related to how the work looks, sounds, ... or is experienced in an immediate perceptual (or experiential) encounter with the work.
>
> *Negative Thesis*: no factors relating to its history, context, or provenance are relevant to how a work looks, sounds, ... or is experienced in an immediate perceptual (experiential) encounter so no such features are relevant to its aesthetic appreciation (or value).

[8] Although Lamarque (2010) provides the model of the argument offered, it is there framed via a distinction between the 'Positive' and 'Negative' Empiricist Claims. Notably, position (3) is dubbed 'Moderate Empiricism' in Davies (2004), and associated with a refinement of the empiricist position.

To preview, the following Section 4.2 examines two ways of fleshing-out the Empiricist view of art relevance. Two initial candidates, 'Narrow Empiricism' and 'Formalist Empiricism' are formulated and rejected, before attention turns to 'Moderate Empiricism', stated by appeal to Walton.[9] This position is also shown unsustainable, but offers means to demonstrate 'supra-categoreal'[10] features of art, factors related to the way an art object is produced, can be relevant to its appreciation. Since these are plausibly part of what a *work* is as opposed to any direct encounter of mere art object can afford, the Empiricist conception of art relevance is disproved.

Following this, Section 4.3 shifts attention to the 'Experiential Claim', which poses every aesthetic difference figures as a difference in experience (or at least for some suitably placed and qualified appreciators). By implication, this means aesthetically distinct artworks should be perceived or experienced differently. Lamarque's support for this 'core' truth in empiricism is considered[11], before attention turns to challenges over marrying anti-empiricism on art relevance with the Experiential Claim. Noting some deficiencies in Lamarque's method of linking the two, recent work on cognitive penetrability of experience is deployed to better ground the claim. In sum, the aim is a position robust enough to acknowledge features up to and including agential features like skill and creativity, while remaining within the bounds of the experiential thesis, saving the details of application for the next chapter.

4.2 The Art Relevance Claim

As set out above, the empiricist Art Relevance Claim is somewhat underspecified. Here two main lines for developing it are considered — (1) 'Narrow Empiricism' and 'Formalist Empiricism', positions tying art relevance to the art object with the greatest strictness; (2) 'Moderate Empiricism' an account admitting modest features beyond the artwork as art relevant, though circumscribed by some articulable principles. Each is discussed in turn.

[9] Walton (1970)
[10] The term is owed to Davies (2004), p.31 ff.
[11] Lamarque (2010), p.175

4.2.1 Narrow Empiricism

'Narrow Empiricism' is intended to capture theories holding only properties internal to an art object, or at least subsets of those properties[12], to be art relevant.

As a first pass, consider a proposal unembellished sensory experience of the art object circumscribes art relevance. Clearly, bare sensory experience of an artwork is not always sufficient for full aesthetic experience of a work. Small children and certain animals can perceive the sensorily available properties of many art objects, but this experience is almost certainly impoverished for the purposes of appreciation. A monkey in front of a sculpture may see the shape and colour of a Henry Moore, but will not have, it is supposed, a full aesthetic experience. Yet it might be urged this misunderstands the claim — the idea is rather sensory experience of the work *by adequate human appreciators* is what matters to correct appreciation. This is not a solution — though some aesthetic properties are accessible by unembellished sensory experience, not all are. Aesthetic significance regularly draws on the wider ways sensory properties tie to wider contextual factors. To illustrate, Roy Lichtenstein famously emulated the look of printed comic strips in his paintings. Here the aesthetic significance turns on more than the sensory properties of spotted colour arrays. Rather, Lichtenstein *having painted a canvas like a comic strip* is part of what is appreciated. Again with Henry Moore, it is not merely the shape of the sculpture that matters, but its being *of a reclining human.* From these and many other examples, it is clear art relevance is not captured by sensory properties alone. Literature deals the decisive blow. To appreciate literature, it is necessary to go beyond anything that counts as sensory experience — the aesthetic qualities of the work are not in the ink on the page, nor exhausted by the audible qualities on hearing it. Even if imagination is likened to an internal sense, the point still stands since the imaginative engagement must relate the written work, author, and context.[13]

Further arguments confirm Narrow Empiricism should be rejected. Consider Danto's 'Gallery of Indiscernibles'.[14] The gallery contains identical red canvases. They are formally indistinguishable, each having the same shape, size, and colour. However, appreciators discover aesthetic differences between the canvasses once their individual histories are revealed — in fact each is *experienced* differently. Taken as the

[12]'Internal' properties alone may give the wrong impression, since micro-structure is internal but not available to appreciation. I thank Aaron Meskin for raising this issue.

[13]The *Pierre Menard* case discussed imminently provides a further demonstration of this point.

[14]Danto (1981)

product of the artist's preceding works, titling, intentions, context and processes of creation, aesthetic differences become apparent. So, where before only indistinguishable red canvases were found, there is now a pithy *Red Table Square* (the product of the disillusioned Magritte pupil), an evocative *Nirvana*, a daring *Kierkegaard's Mood* (the striking break of a conservative portrait painter), and so on. Such examples, Danto claims, indicate generative factors cause appreciators both to experience works differently, and to ascribe different aesthetic properties.[15]

The effect is not exclusive to visual arts, but has parallels in literature and music. Consider Borges's story of 'Pierre Menard'. The story presents an author working in a radically different context to Cervantes, but who produces a text indistinguishable from *Don Quixote*.[16] To an appreciator apprised of this contextual information, Menard's work has very different aesthetic qualities to the original, though the text is no different. Cervantes's work is not anachronistic, but Menard's output certainly is. Similarly, if Shostakovich had independently composed a *Ninth Symphony* identical to Beethoven's, an informed appreciation would perceive it as ironic not celebratory.

It is not necessary to offer further examples — Danto's phenomenon alone far exceeds what a purely formal delineation of art relevance will capture. But, if this is so, Narrow Empiricism cannot capture everything a work offers to experience. Consequently, it must be rejected.[17]

4.2.2 Formalist Empiricism

Nevertheless, the arguments offered above might be dismissed as too hasty. A second way of getting at the intuition behind Narrow Empiricism shows more promise, drawing on the formalist tradition in aesthetics. This suggestion constrains relevant artistic experience to the *formal* qualities of an art object — here dubbed 'Formalist Empiricism'. To assess this position, Zangwill's influential definition of Formalism is employed.[18]

> Formalist Empiricism: art relevant properties are entirely determined by narrow nonaesthetic properties, where a narrow non-aesthetic property is either:

[15] 'Works of Art and Mere Real Things' in Danto (1981), p.1 ff.
[16] Davies (2004), p.40
[17] Danto's argument foreshadows the invocation of cognitive penetrability of perception, discussed below. Applied here, the suggestion is with different cognitive make-up (beliefs, processes of appreciation, dispositions, and so on) art objects otherwise indistinguishable at the sensory level can yield markedly different appreciative experiences. To précis, empirical support for the phenomenon suggests a close link between aesthetic attributions and perception can be preserved. See Stokes (2014a). Notice in the Danto cases the difference can be isolated to beliefs about the works.
[18] Deploying Zangwill (1999), p.611 ff.

i) a sensory property,

ii) a non-relational physical property,

iii) a dispositional relation to our responses [specifically, properties disposing our responses to (i) or (ii)].

Formalist Empiricism so characterized has several attractive aspects. First, it avoids any suggestion all art-relevant properties must be fully internal to the art object, bringing in audience dispositions when approaching an art object. This brings with it a neat means for enfranchising emotional and other dispositional responses via dispositional qualities of the art object itself — i.e., effects the art object is disposed to produce in the presence of an audience. Moreover, it preserves a supervenience constraint — only some change to the non-aesthetic properties of the art object can change its aesthetic qualities.

Nevertheless, Formalist Empiricism is insufficient to capture what matters for appreciation. It too must overlook —or heavily misrepresent— important aspects of endorsed appreciative practice. For one, how formal features of a work relate to content, or are otherwise deployed in the service of an artistic intention, are appreciable in ways Narrow Empiricism cannot capture.[19] That an artist intends some figure to represent N, where N is some particular external to the art object, can have the greatest relevance. It might matter an artist was painting Joan rather than her identical twin Jane.[20] More damagingly, contextual and performative factors beyond the scope of (i) to (iii) are relevant to appreciation.

Consider Caravaggio's *Conversion of St Paul.* This work is not merely a visually pleasing array of colours and shapes, but means to portray a particular man dismounted from a horse in a particular way and on a particular occasion. Yet Caravaggio's choice of portraying a Biblical story in a dramatic but earthy way is further remarkable given the styles contemporaneous to its production. But since such interactions are factors not captured in (i) or (ii), nor (iii) because not a dispositional response grounded *solely* in (i) or (ii), Formalist Empiricism must be rejected. The case for rejection is only compounded when it is noticed most iconographic qualities would be debarred. Correct appreciation of Hogarth's satirical paintings and prints relies on intended iconographical references and states of affairs not captured by (i) to

[19] See, for instance, Goldman (2013)

[20] Notice some disposition of the painting to look like Joan or Jane will not dispel the problem. The painting of Joan may be thoroughly inadequate to her character, despite the intention to do so.

(iii). At a different time with different conventions, or had Hogarth's work replicated tropes unoriginally, the works would be appreciated and experienced very differently. Examples of this type are manifold, and might be repeated across different artistic domains.[21]

Despite cause to reject Formalist Empiricism, a more modest proposal in the Formalist line might be urged. Formalism, a defender could concede, cannot capture everything of relevant interest in art, yet it does capture some interesting *subset* of aesthetic properties found in art. Zangwill's own 'Moderate Formalism' defends this kind of position. In line with the preceding, *formal aesthetic qualities* and *non-formal aesthetic qualities* are distinguished:

> Formal properties are entirely determined by narrow nonaesthetic properties, whereas non-formal aesthetic properties are partly determined by broad nonaesthetic properties.
>
> The history of production of a work is always a broad property of it, since it is not a sensory property, nor is it a non-relational physical property, nor is it a dispositional relation to our responses. So the history of production of a work of art does not partly determine its formal aesthetic properties.[22]

Put shortly, Moderate Formalism allows *some* aesthetic properties in art supervene on strictly non-aesthetic properties, specifically non-formal qualities. Turned to the current purpose, the claim is *some* art-relevant qualities supervene on formal properties alone. The proposal is intuitively compelling. However, it discloses little, if anything, about appreciating artworks as found. Despite Zangwill's confidence, few if any artworks are appreciated on wholly formal grounds. Context potentially makes a difference to the proper experience of every imaginable art object, at least in respect of some of its qualities. Produced in sufficiently different contexts, two formally indistinguishable art objects might acquire radically different aesthetic qualities, even if qualities Moderate Formalism seeks to capture remain fixed.[23] It would seem context is always operative in determining aesthetic qualities, but unusual contexts are rare, and consequently overlooked.

Of course, this is not to deny *some* works could be appreciable as art on formal aspects principally, though this too looks questionable. If art-relevant qualities are

[21] More detailed examples of this pattern follow in sequence.
[22] Zangwill (1999), p.611
[23] Consider in particular the *Pierre Menard* case, p.141 below.

generally experienced differently in view of the intentional aspect to artwork production, Moderate Formalism may only be true of objects taken as pure aesthetic objects rather than artworks. But that is, at best, a partial account of aesthetic interest in art. For present purposes, it is sufficient to show Moderate Formalism does not give a comprehensive theory of art relevance. Given the breakdown of the 'Narrow' and 'Formalist' Empiricisms, the measure of 'Moderate Empiricism' is now considered, a position given a powerful formulation by Kendall Walton.

4.2.3 Moderate Empiricism

Moderate Empiricism goes beyond the empiricisms already considered in allowing further factors beyond the work as presented are relevant to aesthetic appreciation. Although best characterized by appeal to Walton, the rudiments of Moderate Empiricism have a longer history. From the quotation offered at the outset, Beardsley makes room for *some* considerations beyond the artwork to weigh in appreciation, these including 'previous acquaintance with the general style of the work, or of other works to which it alludes, or of works which it sharply contrasts'.[24] Beardsley's extension to literature is instructive — though imagination and affective engagement should banish authorial intention, there are constraints in public conventions of meaning and uptake. For the purposes of assessing the merits of Moderate Empiricism, however, Beardsley's account is scattered and unsystematic. Consequently, the following section looks to the more worked-out development found in Walton.

Walton — 'Categories of Art'

In 'Categories of Art'[25] Walton suggests a principled but intuitively plausible means of admitting wider factors beyond the artwork are art relevant, though still cleaving closely to direct experiential encounter with the art object. The key thought is the idea of a *category*. Walton gains his core Empiricist credentials because categories are intended, as relatively sparse and publicly ascertainable schematics or expectations appreciators use to structure encounters with art objects. Because of the concession to at least some features beyond the art object, the Waltonian position may be described as one of 'Moderate Empiricism'.[26] The central tenets of the theory comes out in three claims:

[24] Beardsley (1981), p.53
[25] Walton (1970)
[26] This usage is owed to Davies (2004), p.31

(a) A given art object, when perceived under a different category, may strike us very differently.

(b) A work can be perceived in multiple categories at once.

(c) A work has its [art-relevant] aesthetic properties circumscribed by those qualities it has when it is correctly perceived, which is to say when it is perceived under its correct art categories.[27]

In short, Walton gives us the idea an art-object, in conjunction with proper 'categorization', determines the aesthetic qualities of the artwork. Quite properly, a different categorization can issue in different experiences of the same art object (or at least for adequately placed appreciators). Walton substantiates through discussion of a detailed hypothetical case:

> Imagine a society which does not have an established medium of painting, but does produce a kind of work of art called *guernicas*. *Guernicas* are like versions of Picasso's "*Guernica*" done in various bas-relief dimensions. All of them are surfaces with the colors and shapes of Picasso's "*Guernica*," but the surfaces are molded to protrude from the wall like relief maps of different kinds of terrain. Some *guernicas* have rolling surfaces, others are sharp and jagged, still others contain several relatively flat planes at various angles to each other, and so forth. Picasso's "*Guernica*" would be counted as a *guernica* in this society — a perfectly flat one — rather than as a painting. Its flatness is variable and the figures on its surface are standard relative to the category of *guernicas*. Thus the flatness, which is standard for us, would be variable for members of the other society (if they should come across "*Guernica*") and the figures on the surface, which are variable for us, would be standard for them. This would make for a profound difference between our aesthetic reaction to "*Guernica*" and theirs. It seems violent, dynamic, vital, disturbing to us. But I imagine it would strike them as cold, stark, lifeless, or serene and restful, or perhaps bland, dull, boring-but in any case not violent, dynamic, and vital. We do not pay attention to or take note of "*Guernic*a"'s flatness; this is a feature we take for granted in paintings, as it were. But for the other society this is "*Guernica*"'s most striking and noteworthy characteristic—what is

[27] See Walton (1970). For (a) see pp.340–341, p.347. For (b) see p.341. For (c) p.356 ff.

> expressive about it. Conversely, "*Guernica*"'s color patches, which we find noteworthy and expressive, are insignificant to them.[28]

'Perception' here does not carry its everyday meaning of unmediated sense data, but an experiential encounter infused by skill, experience, and relevant conceptual stocks. The crucial point, however, is how a society with the category of *guernicas* would perceive Picasso's "*Guernica*" very differently to our own. The point, however, does not rely on esoteric cases. A critic unaware of a Giacometti's development of highly-elongated metal sculpture may find his figures wiry or frail. Yet if thought of as thin metal sculptures of Giacometti's particular style, other qualities come to the fore, e.g., expressiveness in the limbs.[29]

On categories

To elaborate, Walton expands on categories as having 'standard', 'contra-standard', and 'variable' characteristics. 'Standard' features support category membership when found in a work, 'contra-standard' features undermine category membership when present in a work, while 'variable' features neither support nor undermine membership in a category.[30]

Walton adds there are *correct* categories for specific works. This is an important addition because someone might accept Guernica-type cases as only supporting a psychological claim — that conceived under different categories artworks are experienced differently. For instance, one could accept the experiential point yet deny there is any method for choosing categories from the universe of those available. Though somewhat compressed, Walton argues there must be correct categories or else it would be too easy to make a true critical statement. In addition, the alternative presents critical practice as more relative than is really the case. If one rejects a previous judgment one cannot simply reply 'Yes, but I judged correctly relative to the standard C, the one I accepted at the time'.[31] Following on, one might add a little inventiveness might always cook up a category by which almost any given art-object would be a masterpiece or disaster. Again, it would be too easy to over-value (or under-value) works.

If all that is so, qualified appreciators only establish the correct qualities of a work when bringing the art object under a correct category (or categories). Walton

[28] Walton (1970), p.347
[29] Walton (1970), p.362
[30] Walton (1970), p.339
[31] Laetz (2010); Walton (1970), p.355

presents a few guidelines on how to determine a correct categorization. In rendering a judgment on correct categorization perceivable properties balance with four other considerations:

(i) Having a large number of category standard features[32]

(ii) It is better or more pleasing in that category[33]

(iii) The intention or expectation of the artist[34]

(iv) Currency at the time of production — specifically 'that [the category] is well established in and recognized by the society in which [the particular art object] was produced'[35]

Though the relative weighting of conditions (i)-(iv) are left undefined, Walton puts greater emphasis on the first — the correct category is 'likely to be that in which it has a minimum of contra-standard features for us'.[36]

In combination with (a), (b) and (c) give the thought art-relevant qualities are exhausted by those experiences an art object offers when conceived under the correct category. Yet importantly for retaining Empiricist credentials, Walton's categories are fairly schematic and have broad scope. They are to have currency and be well-established in the relevant society.[37]

Commentary on Walton

Nonetheless, the Waltonian picture faces very pressing objections. For one, an art object perceived under the correct Waltonian category (or categories) would seem insufficient to capture everything of aesthetic interest in our engagement with art. Davies begins a case against Walton by drawing on a case from Currie:

> Martians: We are to imagine a culture [...] whose members share our aesthetic interests and sensibilities but who possess vastly superior abilities of the sort relevant to the generation of art-objects: "What for us would be a work of consummate skill and subtle expression would be for them something unremarkable if it were the product of an average five-year-old Martian". We assume, further, that the Martians share our categories of

[32] Walton (1970), p.357
[33] Walton (1970), p.357
[34] Walton (1970), p.357
[35] Walton (1970), p.357
[36] Walton (1970), p.357
[37] Hence Davies (2004) classifies Walton as a 'Moderate Empiricist', p.31.

> art. We suppose, then, that a Martian child generates an entity *G2* that is perceptually indistinguishable from Picasso's *Guernica*, and that the Martians ascribe very little value to *G2*, whereas we hold *Guernica* to be a very valuable work.[38]

The MARTIAN case suggests a counterexample to the Waltonian account. Since art history and categories are supposed parallel for Earthlings and Martians (and by interpolation, their perceptual capacities), there would seem no principled reason to choose between Earthling and Martian valuations of either work. But if that is so, there seems an unaccounted aesthetic difference, reflected in our prizing of our Earth *Guernica* above Martian Guernica. The difference is unaccounted since there is supposedly no difference in the art object or relevant category. Yet that must undercut the Waltonian picture; the only plausible explanation for our aesthetic prizing of *Guernica* above *G2* must be 'supra-categoreal'.[39]

A defender of Walton might first seek to show one or other set of valuations must be abandoned for an error internal to either system (e.g., inconsistency), so allowing principled choice between Martian and Earthling valuations. On this conception, an error has occurred in one or both systems of valuation. However, it is not apparent what argument could back this kind of defence. Nothing else about the imagined cases suggests there *must* have been a mistake of the suggested kind, hence this response is set aside.

A better Waltonian response suggests the Earthlings and Martians do *not* share the same system of art categories, despite the setup. On this view, the Martian case contrasts with the Earthling case because the Martian child's skill is not properly compared with the human Picasso. If the worlds were truly parallel, the skill of the Martian child would stand to Martian art (and its categories) as does the skill of the Earthling child to Earthling art (and its categories). But that is not so, meaning it is at best unclear categories are shared.

Yet there is a further fault with the objection to Walton as formulated. Davies urges Currie's counterexample can simply reflect faultless divergence in evaluative weighting within a common system of categories.[40] There might be no difference in the *aesthetic properties* of Picasso's *Guernica* and *G2*, merely a difference in *evaluative practices* of Earthling and Martians. Any difference in artistic value is ascribed to

[38] Davies (2004), p.46. Inner citation from Currie (1989).
[39] The term 'supra-categoreal' is introduced by Davies (2004), p.31
[40] Davies (2004), pp.36–7

different emphases or weightings in valuation. There is no need to invoke supra-categoreal aesthetic features. Appreciators on Earth and Mars can acknowledge the same aesthetic attributes in virtue of shared categories, yet diverge in evaluations within those categories. Davies's meaning here is somewhat obscure, but sport might provide a guide. Imagine two societies with the same sport including the associated system of rules and descriptors of play. On account of these parallels, the societies attribute the same qualities to a particular sports match. But since one society puts a special emphasis on strong defensive play, it puts a special premium on this match the other does not. Both societies acknowledge this feature of the match, they merely weigh it differently.[41]

Since this reply imperils the original counterexample, Davies seeks a better response to Walton via a case first found in Levinson.[42] In the hypothetical case, Beethoven and Brahms independently compose identical musical structures in their respective historical contexts. But whereas the structure as composed by Beethoven is 'visionary', this would not be true of the later Brahms composition. Though, by hypothesis, Beethoven and Brahms worked in the same category, say, ROMANTIC SONATA, the difference in historical context lends each work different aesthetic qualities. But that, it seems, means only a supra-categoreal factor can explain the divergence, leading to a collapse of Walton's theory of art relevance.

Even so, the defender of Moderate Empiricism might be unimpressed by this turn. For one, Beethoven and Brahms stand distant in time, undercutting the thought their works fit within a single 'ROMANTIC SONATA' category. Rather, Beethoven's work might be brought under a 'EARLY ROMANTIC' category, Brahms a 'LATE ROMANTIC' category, or similar. Consequently, there is an easy explanation compatible with Empiricism; no supra-categoreal feature, only more than one category. A Waltonian category system merely needs to acknowledge the full gamut of categories.

Indexed Categorealism

The clear risk is an unacceptable and unwieldy profusion of categories, threatening Empiricist credentials. Expanding, how for instance are we to resist a category of MID-EARLY-CLASSICAL LOWER-EAST-MORAVIAN ORGAN SONATAS BY A FEMALE COMPOSER? Even further profusion could be pressed for, allowing in further contex-

[41] Notice, to avert an objection, nothing requires they *experience* the matches differently. Neither can one say evaluative weightings are included in the categories, for this would mean the categories were different.

[42] Davies (2004), p.46

tual factors.

As a reply, this section considers a friendly expansion to the Waltonian picture in the spirit of the previous subsection. Perhaps a single category might be maintained, or a constrained number of categories, by careful indexing. Call this view 'Indexed Categorealism'.

To redeploy the previous case, consider first the suggestion Beethoven and his successors embellish (or somehow modify) the ROMANTIC/ROMANTIC-SONATA category, bequeathing a changed category for others down through Brahms to inherit. The categorizing strategy now relates three components; art object, category, and the time of artistic creation. If such a picture proves sustainable, a broadly Waltonian Empiricism might be salvaged. Even so, two distinct theses should be distinguished:

> *Strong Indexed Categorealism*: *all* artistic properties are determined by the art object in conjunction with a correct category, plus the time of production.
>
> *Weak Indexed Categorealism*: *some* artistic properties are determined by the art object in conjunction with a correct category, plus the time of production.

The Empiricist needs Strong Indexed Categorealism for the strategy to succeed, since the weaker view might find space for supra-categoreal features. The weaker view only claims to show *some* of a work's aesthetic features are determined in the relevant way. However, to be satisfactory, the Empiricist must comprise *all* a work's aesthetic features.

Indexed Categorealism must be rejected. Even if categories come in various stages of development, context and nuance cannot be captured adequately without falling into unreasonable profusion. Artists producing art objects within the same temporally indexed category can generate aesthetically relevant supra-categoreal features. Suppose A and B are new works in the same category created by Artist_A and Artist_B respectively, and produced at the same time. Each artist has an identical oeuvre up to the point they begin work. Further suppose Artist_A continues to use a restrained, sombre palette in their new work. Artist_B, by contrast, uses a markedly more vibrant palate as compared with their earlier work. Such a work, experienced in light of the other works Artist_B has produced, would be highly remarkable for its being a joyous breakout.[43] This would be aesthetically relevant, and suffuse a cor-

[43] I thank Matthew Kieran for raising this kind of case.

rect appreciation of the work. However, given the terms of the case, this must be a supra-categoreal feature of Artist$_B$'s work, even allowing temporal indexing.

A last-ditch effort might be made to save the Waltonian picture by resolving categories to kinds of artist working within a category, or ultimately to the level of individual artists. This, however, is not an available strategy for the Empiricist. Categories at this level of resolution would range far beyond the immediate perceptual encounter with the artwork, and have far too narrow a scope to command Empiricist credentials. In view of these considerations, Moderate Empiricism must be rejected.

Outline of further supra-categoreal features

How far does the case for supra-categoreal features extend? Consider a first proposal holding context fixed:

> BAROQUE SCULPTORS: Two artists work in the same society, differing only in their skills with respect to certain media. Working independently of each other, they create visually indistinguishable art objects with parallel intentions to produce members of the same category 'BAROQUE SCULPTURE'. However, whereas Artist$_A$works in marble, Artist$_B$works in a marble-like material local to him, but somewhat easier to work with, marble*. Given a work executed in marble is more skilful than a comparable work in marble*, Artist$_A$'s work has different appreciable qualities to Artist$_B$'s : the work produced by Artist$_A$ has highly-regarded aesthetic features that should not be overlooked.

This example outlines how further supra-categoreal features are sometimes needed to capture everything of art relevance — here a difference in skill. Yet two dimensions to the example could cause doubt. First, the example relies on a difference in material substance, marble and marble*, having distinct physical properties.[44] Second, but relatedly, an objector might urge work in each medium involves distinct skills. To make a decisive case for such supracategoreal features, a more decisive case is needed.

To this end, consider Vermeer. Art historians and critics debate if Vermeer used a *camera obscura* to aid composition and execution of his oils. If Vermeer had relied on a *camera obscura,* critics hold they would be worse from the aesthetic perspective.

[44]The Formalist Empiricist as characterized will be untroubled with this case, given there is a difference in material properties. However, independent reasons to dismiss this position have been presented.

It would be more impressive if the works were composed and executed without the use of this device. To avoid obscuring the point, actual history may be abstracted from.[45] The relevant contrast figures in STILL LIFE I:

> STILL LIFE I: Two artists work independently in the same society, the seventeenth century Netherlands. They produce two indistinguishable canvasses, draw on the same history and have parallel intentions — as such, they work in the same category. However, whereas Artist_A produced his canvas freehand, Artist_B relied on a *camera obscura*. Artist_A's work has impressive aesthetic qualities Artist_B's does not given a work of the latter kind is less challenging than one produced freehand. Indeed, apprised of this fact, Artist_A's canvas is experienced very differently to Artist_B's.

Knowledge of these factors can and does affect our experience of relevant art objects, as demonstrated when new information comes to light. Suppose, for instance, some irrefutable evidence Vermeer had used the *camera obscura* came to light. The works would seem to us very different — what previously looked like the product of care and skill in hand and eye is now closer to mere tracing. Even so, a case for reintroducing categories might be pressed once more. Imagine the works fall into the category of STILL LIFE. Artist_A produces a STILL LIFE (FREEHAND), Artist_B, roughly, a STILL LIFE (CAMERA OBSCURA). In the latter case, accuracy and a certain way of representing space are standard for the category, and so aesthetic judgments are made *modulo* of that expectation. This form of categorization, however seems implausible and too *ad hoc* for the Empiricist to maintain. A small mend disposes of any lingering scruples[46]:

> STILL LIFE II: Two artists work independently in the same society, the seventeenth century Netherlands. They produce two indistinguishable canvasses, draw on the same history and have parallel intentions — as such, they work in the same category. However, whereas Artist_A works through skilful freehand, Artist_B succeeds through a fortuitous accident. But this means Artist_A's work has appreciable art-relevant features Artist_B's does not. Indeed, on knowing Artist_A's work is skilled, whereas Artist_B's rests on accident, we perceive them very differently. For instance, factors we

[45] See Davies (2004), p.16, p.35 ff.

[46] I also put aside objections mounted from the observation there is skill in using the camera obscura. Maybe so, but the skill of the artist who does not use the camera obscura will include being able to paint without it.

> thought of as strikingly accurate on Artist_B's canvas no longer strike us as so.

Still Life II makes the point with no appeal to a different category, trading exclusively on how agents work within categories. On what can be told from the perceptually available features of a categorized object, the appreciator might just as well be dealing with the product of a fluke. However, establishing whether this is a fluke or not is very important to our perception of a work. As such, supra-categoreal features would seem ineliminable for the full and correct appreciation of art. The point extends naturally to other aspects of artistic production. By any perceptual evidence an art object could offer *even when placed in its category* it could have skilled or unskilled, creative or derivative origin. Nonetheless, these seem relevant to appreciation and aesthetically salient. Before setting out further details in the next chapter, it is useful to dispose of some objections.

4.2.4 Intermediate objections

Category modifiers

For one, might a broadly Waltonian picture be salvaged through category modifiers adding skill, originality, and so forth? This would mean categorizing along the lines of 'ks'; 'skilled ks'; 'creative ks' 'skilled and creative ks', and so on. The trouble is to do so without abandoning a modest number of categories, rendering it untenable as a credible Empiricist project. For one, it is not evident such categories have currency as part of appreciative practice. A 'skilled dutch still life' is not a category used in criticism, even if there are skilled works of the dutch still life category. More fundamentally, however, categories would require even further elaboration to the point of ludicrous excrescence. Skill and creativity are not always exercised in the same way, and the aesthetic qualities of resultant works turn on the details, like any skill.[47] These are not captured by bringing the work under a publicly available category of the type Walton describes. Similarly, learning an art object has accidental features can be relevant to appreciating it, but there is no appeal to Accidentally Realized Ks, and not all accidents are of a piece.

Since the category structure cannot extend to all such features without abandoning the Experiential Claim, the Moderate Empiricist position must be set aside.

[47] A fuller explanation of this thought follows in the next chapter.

Actual categorization norms

A second objection appeals to actual categorization norms. This objection urges category proliferation is of no concern since the extent of Waltonian categories is a contingent matter, intended to be set by what appreciators actually do.[48] Indeed, Walton's considerations (i)-(iv) might read as a straightforward effort to tidy actual practice, not legislate from the armchair. Given a pragmatic case for categories sensitive to skill and creativity, there is freedom to do so. Category proliferation finds a natural limit only in usefulness. For some art domains, actual practice motivates a quite extreme category proliferation; a brief web search returns a dizzying number of 'Techno' music genres, often with further sub-types. Critical practice can also sustain categories for relatively niche audiences, it only needs a modest case to introduce them.

In response, it is unclear what the current objection adds, other than a supposition critical practice always terminates at some non-trivial category. Yet, as observed earlier, critical practice does not invariably sustain categories sufficient to capture the full gamut of reflectively-endorsed appreciation, not least of which was skill. This is not to deny categories are often critically useful: refining and expanding categories is a project that has many pragmatic and educative considerations in its favour. Rather, the point is only art relevance is not fully captured by the Empiricist.

Apparent artistry

A final objection in the spirit of Walton posits art-relevant qualities are those an art object in conjunction with a category, time, and *its apparent* nature leads us to suppose. If apparent artistry determines art relevance, the extent to which an art object is actually skilled or has any other purported supra-categoreal feature is of no real significance.

At root, the objection is autonomist in spirit, and false to facts already encountered. Established appreciation practice has a place for the concept of the artistic fluke. Knowing a work is a fluke affects perception of it, though this counters its apparent qualities. Furthermore, looking to apparent artistry will correspondingly risk overvaluing or undervaluing token works (the artist may just enjoy a lucky fluke, or be suffering from an impediment that makes their output all the more impressive).

In review, an adequate theory of art relevance must allow supra-categoreal features, disproving even the most sophisticated Empiricist views on art relevance. Cor-

[48] I owe this objection to Aaron Meskin.

respondingly, attention now switches to assess the other strand to Empiricism, the 'Experiential Claim'.

4.3 The Experiential Claim

The preceding section argued the Empiricist's Art-Relevance Claim is untenable, even on its most plausible moderate formulation. Contrastingly, this section argues in defence of the Empiricist's 'Experiential Claim'. To recapitulate, the Experiential Claim argues for the centrality of perception or experience in the appreciation of art. The root is a supervenience claim — no aesthetic difference without a difference in the perception or experience, or at least for suitably placed observers. The view is immediately attractive: if all aesthetic differences are given in experience, there is no need to suppose there are aesthetic differences without an experiential difference.

Again, the claim is approached first through Lamarque's argument in *Work and Object.*[49] Though the arguments Lamarque presents are found inconclusive, extended reasoning in the same vein substantiates the Experiential Claim, which Lamarque describes terms the 'Empiricist Constraint'. Rather than seeking a knock-down argument for the Experiential Claim, it is defended through several strategies leaving the burden of argument against those who would reject it.

As adverted above, Lamarque identifies two commonly conflated ideas in the Empiricist project, defined as the 'Positive' and 'Negative' theses, the latter mapping to the Art Relevance Claim discussed above:

> *Positive Thesis*: the aesthetic value of a work of art is essentially related to how the work looks, sounds, ... or is experienced in an immediate perceptual (or experiential) encounter with the work.
>
> *Negative Thesis*: no factors relating to its history, context, or provenance are relevant to how a work looks, sounds, ... or is experienced in an immediate perceptual (experiential) encounter so no such features are relevant to its aesthetic appreciation (or value).[50]

From these theses, Lamarque proposes to retain an 'Empiricist Constraint' redescribed below as the 'Experiential Claim':

[49] Lamarque (2010)
[50] Lamarque (2010), p.126

> Empiricist Constraint: *No aesthetic difference without a perceptual (or experiential) difference.* Works cannot differ in aesthetic character if that difference is not accessible to the senses (or in the case of literature to experience more broadly conceived).[51]

4.3.1 Interpreting the Experiential Claim

Lamarque rejects the Negative Thesis for reasons akin to those presented above against the Empiricist Art Relevance claim, in particular Danto cases.[52] The relation of the Positive Thesis to the Empiricist Constraint is less clear, given the former concerns aesthetic value, and the latter aesthetic 'character', a fact an objector may seek to draw apart. Leaving this aside, here interpretation focusses on the Empiricist Constraint specifically.

Lamarque preambles the constraint with a gloss: 'The aesthetic character of a work must reside in, and be accessible to, some appreciative experience or perception of the work'.[53] The emphasis is once again on something given 'immediately' in experience. However, 'immediacy' here does not necessarily imply temporal immediacy — it may be some aesthetic experiences come only after a time. Correspondingly, there is no suggestion a complex pictorial harmonies or literary devices are never aesthetic because they require time to discern. Rather, the thought is an aesthetic property must not be 'indirect' or 'inferred', but a quality that can be experienced by at least some qualified appreciators in appropriate circumstances. Put another way, qualities are not aesthetic if only inferred to, having no possibility of affecting experience.[54]

Within this scope, the phenomenal differences may be clear and distinct or rather minor. The experiential differences between seeing red rather or green, a pentagon rather or a square, a 'Middle G' or a 'Top C' are quite vivid. But aesthetic differences need not always be so marked. Flickers of emotion on reading a novel, or hearing the alto is slightly flat are more muted. Notice there is no commitment to hold a quality must always yield the *same* impression. The contribution of some quality in an art object might vary depending on what other qualities are present, and might require significant training to discern. Its impact may also differ due to faultless differences

[51] Lamarque (2010), pp.126–7; Lamarque's emphasis.
[52] Lamarque (2010) §6.3, pp.128–9
[53] Lamarque (2010), p.126
[54] What is meant my experience here? Roughly, the idea is of an immediate and incorrigible impression as opposed to a mere belief. As such, the phenomenology is comparable to input from the other senses.

of taste and preference. Even so, an adequate appreciator, can at least in principle find some experiential difference.

Another qualm may be subverted by a friendly amendment. Lamarque's formulation might invite the idea aesthetic qualities always make an impression. But aesthetic experiences are not a *necessary* result of engaging with an artwork. As has already been broached, a darkened or foggy room will not allow the aesthetic qualities of an artwork to be appreciated. Yet even in ideal conditions, appreciators do not always appreciate successfully, missing what they have seen previously, or else having a bad day.

If art-relevant properties are on occasion not experienced by those engaging with art objects, it might seem these properties are related to experiences only incidentally, undercutting the Empiricist Constraint. These considerations are not decisive. On the best interpretation, art-relevant properties are dispositional — they are disposed to cause experiences of the relevant kinds in appreciators in appropriate circumstances. More specifically, the dispositions are toward those with adequate skills and capacities successfully invoked in an appropriate environment. Hence it is no objection if a great painting fails to cause aesthetic experiences for colour blind agents in a foggy room, or some appreciator has an off day. With these points in view, the Empiricist Constraint might be reformulated as the Experiential Claim:

> Experiential Claim: No aesthetic difference without an experiential difference. Works cannot differ in aesthetic character if that difference is not accessible to the perceptual experience of any suitably qualified appreciator.[55]

4.3.2 Interpreting Lamarque's argument

With these clarifications, Lamarque's argument may be examined more closely. What of indistinguishable art objects of the Danto kind? To maintain the Experiential Claim, a difference in aesthetic character must issue in an experiential difference. On first blush, this looks somewhat implausible. Given two identical cricket balls plucked from a production line, any suggestion these should be experienced differently (other than for some trivial '*this*' or '*that*' reason) would be absurd.[56] A similar

[55] Deploying Lamarque (2010), pp.126–7.

[56] For completeness, it should be noted Lamarque distinguishes two claims:

(1) If a and b are distinct works of art then there is an experiential difference between them (when they are experienced correctly).

absurdity may be claimed for indistinguishable art objects — how is it possible, let alone justifiable, to experience indistinguishable art objects differently?

For Lamarque, an aesthetic difference can be vindicated in art through distinguishing *objects* and *works*:

> [W]e need to draw on the distinction between physically identical objects and distinct works. Perception might not tell the former apart but it can register differences in the latter.[57]

This is a metaphysical thesis tied up with a perceptual claim. What perception cannot distinguish at the level of *objects* it may distinguish as *works*.[58] Returning to Danto's gallery, though the red canvasses are indistinguishable as mere objects, they are perceived differently as works. As works they have qualities determined by artistic intention, processes and context of production. Only as objects are the Danto canvasses perceptually indistinguishable.[59]

4.3.3 Commentary on Lamarque

Does Lamarque offer reason to accept the Empiricist Constraint? Several objections present. For one, it is not always clear whether Lamarque intends to move from (A) to (B):

(A) X and Y can be perceptually indistinguishable objects, yet nevertheless perceptually distinguishable as works X* and Y*.

(B) If X* and Y* are distinct works, they shall be perceptually distinguishable when taken as works, even if they are indistinguishable as objects, X and Y.

(2) If *a* and *b* are distinct works of art then there is an aesthetic difference between them.

Glossing (1), Lamarque adds 'E is a (qualitatively) different experience from E' just in case there is some (non-trivial) characterization true of E that is not true of E''. In sum, Lamarque targets a very comprehensive notion of experience for the appreciation of art, reaching beyond his conception of an 'aesthetic' difference. By appearances, that term is associated with something like the 'Formalism' sketched above. However, it is not an entirely terminological move, but framed to avoid 'trivial' experiential differences figuring as a relevant difference — his example is the experience of *this* rather *than* that marble sculpture, where the perceived objects are otherwise of a piece. We are to accept (1) but reject (2). Claim (2) is dismissed in view of putative works without aesthetic qualities — conceptual works in particular. Whether there are such works is not directly at issue here, so attention is focussed on (1), here characterized in the main text.

[57] Lamarque (2010), p.131

[58] As the preceding arguments illustrate, 'works' are needed to make sense of reflective appreciative practice. Hence an object is at most partly constitutive of the kind relevant to art. A very detailed examination of the metaphysics of 'works' is not entered into here, but it is clear works are partly constituted by relevant processes of generation. Elaboration on the relevance of skill and creativity to work identity and appreciation follow in sequence.

[59] Lamarque (2010), p.131: 'Perceptual indistinguishability is true of the objects only prior to their being identified as works'.

Plainly, (A) does not entail (B) directly. (A) can be true if, as Danto cases show, *some* indistinguishable objects are distinguishable as works. (B), however, is a universalized claim for which Lamarque offers thin support, seemingly nothing other than a claim background knowledge informs all perception.[60]

However, the claim about perception from which Lamarque draws his conclusion is questionable in its own right. A claim perception of low-level qualities always draws on background knowledge is vulnerable to counterexample, or at least difficult cases. In the famous Müller-Lyer figure, the line segments continue to appear to have different length, even though one *knows* through demonstration they are of the same length. As such, it is not obvious *all* perception draws on background knowledge in the sense required.

A less strong position might claim background *belief* (true or not) informs all perception. Even if the Müller-Lyer case is dismissed as unusual, this too is unclear. In seeing a rubber ball in broad sunlight, it is not clear perception of its dull redness is informed by background belief in any salient sense. True, having an experience of *a dull red ball* may be so informed, but this does not meet the point at issue.

More damagingly, even a concession background belief informs all perception will not prove works are invariably perceptually distinguishable. Belief could inform all experience, but not always yield distinct relevant experiences for works (or, less strongly, at least to the extent Lamarque imagines). Cases with indistinguishable objects but distinct works are the natural problem cases.

For current purposes, it is not necessary to consider whether for every distinct work there is a distinct experience, though the elaboration of the next chapter gives a foundation to this conjecture. It is sufficient to elaborate on the Experiential Claim understood as implying (A): X and Y can be perceptually indistinguishable objects, yet nevertheless perceptually distinguishable as works X* and Y*, leaving the elaboration for skill and creativity to the next chapter.

The cognitive penetrability of experience

What positive case can be made X and Y can be perceptually indistinguishable objects, yet nevertheless perceptually distinguishable as works X* and Y*? To argue background belief alters experience of art in aesthetically relevant ways, recent work on the cognitive penetrability of experience may be appealed to. In this vein, Stokes

[60] Lamarque (2010), p.132

offers evidence the beliefs and other cognitive states an appreciator enjoys can influence their aesthetic perception.[61] In short, different beliefs and cognitive stocks can dispose appreciators to organize and cognize low-level properties of perception differently, and this can make an aesthetic difference even where objects are otherwise indistinguishable.

The result is no different from many other areas of perception where phenomenal contrast suggests cognitive penetrability.[62] Empirical evidence suggests aesthetic properties are perceived as high-level properties where these 'may plausibly depend in some important way upon the organization of low-level properties'.[63] For instance, with more knowledge and understanding of whiskey, a taster with unchanged sense organs can begin to experience samples of the same spirit differently. Examples of this kind demonstrate changes in experience may come from a change in cognitive stock or process, the sample being unchanged. The case naturally extends to art. Learning more of a painting, an appreciator may come to experience it very differently, though the art-object and patterns of light reaching the retina are unchanged. Different thought processes or patterns of attention cause the appreciator to experience the indistinguishable object very differently. Turning back to the artistic case, Stokes uses Waltonian examples like the Giacometti case previously mentioned to show category membership and intention more generally can change perception of relevant works.[64]

Earlier material in this chapter showed artistic relevance must take account of supracategoreal artwork features, including skill and creativity in production. Yet this is still some way from showing skill and creativity can be aesthetically relevant within the terms of the Experiential Claim. Nevertheless, cognitive penetrability of experience provides the lead.

4.4 Chapter conclusion

This chapter began by identifying two claims within Aesthetic Empiricism; an Art Relevance Claim and an Experiential Claim. Broadly following Lamarque, it offered detailed argument the Empiricist Art Relevance claim is mistaken, while endorsing the Experiential Claim. Following this, it turned to show how recent work on the

[61] Stokes (2014a)
[62] Stokes (2014a), especially p.6 ff.
[63] Stokes (2014a), pp.14–17 ff., analogizing the good appreciator to the expert discriminator.
[64] Stokes (2014a), p.13, p.31: "[P]erception of works is sometimes affected by beliefs, concepts and other cognitive states about art and artworks, and this may sometimes be out of the perceiver's control."

cognitive penetrability of perception helps marry a rejection of the Empiricist Art Relevance Claim with commitment to the Experiential Claim.

The next chapter applies the argument for creativity and skill, showing each is at least sometimes relevant to the aesthetic appreciation of art, and so without falling afoul of the Experiential Claim.

Chapter 5

Generative Processes and Appreciation

The last chapter argued the Empiricist conception of art relevance should be rejected, but the Experiential Claim maintained. This shorter chapter discusses the role of art generative processes in more detail, demonstrating that at least sometimes it is appropriate to experience art objects issuing from skill and creativity differently from an otherwise indistinguishable art object. As such, skill and creativity are shown to have aesthetic relevance in at least some cases.

In brief, the thought is skilfully and creatively produced art objects can have distinct art-relevant properties on the terms of the last chapter — skill and creativity can make for different works.[1] Such differences can properly feed into different appreciative experiences, and so skill and creativity can be aesthetically relevant while remaining within the Experiential Claim. Following detailed elaboration in Section 5.1, objections are discussed in Section 5.2.

5.1 Production processes and appreciation

Art objects are the result of intentional action. Even readymades and other found objects must be selected by an artist to achieve the status of art.[2] At the most general level, intentions can be understood as plans, potentially defeasible, whereby an agent

[1] The metaphysical distinction of Lamarque (2010), presented in the previous chapter, is the employed here.

[2] This point is familiar from institutional theories of art.

is disposed to execute the content of the plan, by some non-deviant causal chain, either now or at some future point.[3] This does not, however, mean art production is merely the implementation of a fixed plan. Like many other intentional processes, higher-order intentions can govern subsidiary intentions hierarchically, allowing degrees of flexibility. Correspondingly, when a change in circumstance or an ineffective process means the intention is blocked or frustrated, subsidiary intentions can be modified or adapted until success is achieved (or else the intention changed or abandoned).

What kinds of intention might influence experience of resulting works? Least controversially, it seems intentional art-making must begin with some level of constraint, minimally, choice of a provisional medium and category. Where there is no initial choice of this kind, the object produced only begins to take on determinate artistic qualities when construed within an art category, or some other kind of constraint is supposed.[4]

Ordinarily, a finalizing intention is also discoverable, marking its completion so far as the artist's action is concerned. Within these two bounds, the artist exploits processes in service of their overall end — actions and selections that eventually yield a work. In total these are the generative process behind the artwork.

At the outset, it is clear category choice or choice of constraint can be aesthetically relevant, potentially suffusing the way an appreciator will approach a work. For instance, category intention may be key to deciding whether the work is a satire or not. However, this is still far from showing the relevance of skill and creativity.

To begin showing skill and creativity can be aesthetically relevant, the following subsections discuss how works can be aesthetically differentiable in experience. Two routes are identified: (i) the sensory contribution; (ii) presentational schema picking up the processes of production.

(i) Sensory contribution

In the normal cases where the art object has sensory qualities, part of the contribution to experience will come from relevant sensory experience of the art object. To take but two examples, the beauty of a portrait could rely on shape and colouration of the

[3]See Livingston (2005) and Mag Uidhir (2013). Connecting to the previous point, Livingston holds art creation is intention dependent, stressing this does not mean art must be created 'under the concept of "art"', only that it issues from an intentional act. Mag Uidhir argues art must be subject to 'substantial intention dependence', if only to make sense of failures in art-making.

[4]I mention other constraints since the artist may be seeking to initiate a new category. None of this undercuts the fact unconstrained doodling, exploration at the piano, and other processes are ancestors to art, providing material for future use. It is only to propose since they are unconstrained they are not part of art proper. If adopted to a specifically artistic end, some constraint is in play.

painted surface; in music an effect may depend on a timbre or tone. Given the long relation of aesthetics to sensation, it is not fruitful to expend space on the relevance of sensation to aesthetic experience.

(ii) Presentational schema

Here a schema is understood as a method or process of organizing, directing attention toward, or otherwise construing the art object by relating it to the processes and context of its generation.[5] That a difference in the organization of low-level features can make a difference to perception was argued in the preceding chapter by appeal to cognitive penetrability of experience, substantiated by Danto cases even in the case of objects and artworks otherwise indiscernible.[6] The present proposal is an extension and elaboration of that idea. Yet 'organization' is only part of the picture if taken to mean rearrangement of elements already in experience. The thought is schema may introduce other phenomenological differences, not merely reorganize perception of the object.

More fully, the suggestion is works can yield distinct and non-trivially different experiences when approached under a schema capturing the contextualized generative process of the artist. These constitute the art relevant processes on which the schema build, integrating numerous intentional and executive components. To take a motivating example, consider learning a feature was deliberately selected rather than a fluke choice, or skilled rather than an unnoticed accident. But this is a different way of saying there is a way for skilled and creative production to affect perception of the object. Since the intentional processes involved in art-making admit of skilled performance of various kinds, perception of the object may also be determined by these facts.

There is some precedent for presentational schema. That the process of creating an art object is relevant to schema since these are essential to work identity was shown previously via Danto's gallery and Davies' discussion of the *Pierre Menard* case. Currie's notion of appreciation tracking a 'heuristic path' presents another development of the thought. For Currie, it is one task of the critic to assist in establishing such heuristics through 'historical and biographical'[7] work:

[5] Most iconographic features are included via the context of generation. For general precedent, see Currie (1989) and redeployment of similar ideas in Davies (2004), discussed more fully below in relation to circumscribing art-relevance.

[6] Consider the analogous phenomenon of 'aspect-seeing'. Such cases may be related to the suggestion found in Stokes (2014a) whereby aesthetic properties are perceived akin to other high-level properties, and differences in experience are traced to the organization of lower-level properties.

[7] Currie (1989), p.68

> [A]ppreciation of an art work is not merely the appreciation of a final product — a visual pattern, a word or sound sequence — but an appreciation of the artist's achievement in arriving at that pattern or structure. He must show us in what ways the artist drew on existing works for his inspiration, and how far that product was the result of an original conception. He must show us what problems the artist had to resolve in order to achieve his end result, and how he resolved them. His job, in other words, is to trace, as closely as he can, the artist's heuristic path to the final product.[8]

It must be observed Currie takes the heuristic path as 'constitutive of the work itself' in a particular way. In Currie's conception, a heuristic ties up with the discovery of works as 'action types'.[9] For the current purpose, it is not necessary to adopt the idea artwork creation necessarily involves discovery, nor that every work of art is an action type, only that artworks are correctly perceived under schema capturing relevant aspects of their production. Again, the key thought is such schema provide the structuring or organizing means for encounters with the art object, the differentiating cognitive factor underpinning a changed perception. To mark the distinction from Currie's use, these may be dubbed 'presentational schema', however 'heuristic' is also used below without Currie's commitments.

The role of presentational schema

For a very general instance showing the role of presentational schema, imagine two identical poems, created in parallel contexts and with parallel categoreal intentions. In one case the poem is a continuation in the same stylistic vein as the artist's other works, in the other it is a radical departure from previous work (it might, given other aspects of the poem, convey irony). A difference in reception intention is evident in the second case, and this affects our experience via the schema. Features that might otherwise be marginal or slight become prominent or otherwise structure experience.

Note less obvious aspects of process of art creation may affect appreciation. Differences in the way a project was organized and thought out can affect experience. To illustrate, suppose an exhibition of two indiscernible art objects aiming at parallel artistic statements (say, a specific anti-war message). Apprised of differences

[8] Currie (1989), p.68
[9] Currie (1989), p.70

in how the projects were planned and executed, substantially different appreciation experiences can result. One work may be appreciable as battling to solve a problem of shape, the other a problem of tone and colouration. Again, these distinctions in intentional process may affect our overall experience of the work. For a further instance, imagine knowing a particular dance is done under a special chosen constraint — the experience is altered correspondingly.

To make a general conjecture; for any two distinct works taken under an appropriate schema, there shall be some experiential difference, at least when appreciated by a qualified observer. This is probable since the relevant intentional background involved in producing works is so detailed as to make the alternative improbable — context, choice, and differences in execution are too variable.

For the current purpose it is not necessary to enter into every detail of what schema capture, nor whether the conjecture every two distinct works will yield at least one distinct experience proves true. The current purpose is to make a case for the aesthetic relevance of skill and creativity in at least some instances. No proof will be offered skill and creativity *invariably* make a great aesthetic difference. Certainly, it is not at all clear a creative history is always aesthetically interesting, if only because creative action may sometimes prove too thin for appreciation to latch on to. It is, challenge enough to show both skill and creativity can make an aesthetic difference in at least some clear-cut cases. The approach is two-step. Chapter 3 argued creativity is in the least *partially* constituted by a skill. If skill properly affects appreciation, the foundations for showing how creativity can do the same will be clearer, even for indistinguishable art objects. Correspondingly, the following discussion considers skill before turning to creativity specifically.

5.1.1 Application to skill — at least some artworks that are the products of skill merit distinct appreciation experience

The existence or lack of skill can bring appreciators to experience resulting art objects differently. What looked like a feat of accuracy becomes flat and unremarkable when it is known a *camera obscura* was used. The same is true of accidents. Consider two dance performances. Otherwise indiscernible, and occurring in parallel contexts with parallel categoreal intentions, in one the pleasing movements are not due to skill, but a haphazard stumble over a curtain. So too in literature, an allusion learned to be

accidental can flatten perception of a work as compared to an identical text.[10] In such cases, at least part of the experience is not shared in the appreciation of both works — in one the effect is experienced as a feat of marvellous control or choice, but in the other merely a happy but otherwise dismissible feature.

The case is parallel for skilled as compared with unskilled performance of the same scripted work — the controlled, ends-adjusted non-accidental action of the skilled performance is appreciable in ways unskilled action is not, and central to a changed appreciation of it. Extending the point, skill in organization and planning may be appreciated in just the same way as more visible modes of execution. A fresco evidencing the skill of Tiepolo in setting out its elements is experienced differently compared to the product of a chance method where cut-outs are thrown in the air and painted indiscriminately. Finally, observe different skills can cause a changed perception of indiscernible art objects — the perception of work in unerasable silverpoint and normal pencil are different, even if visually indiscernible.

It is not claimed all appreciators, or even qualified appreciators, will find the difference in experience. The position is agnostic on whether any *individual* appreciator's experience of a work must be different — asserting only that between any two works there is at least one experience not shared by both. This is to allow for blameless differences of taste[11] and other blind spots in otherwise qualified appreciators. Relatedly, notice the deployment of heuristics is not redundant. It may be psychologically possible to entertain an art object alongside a judgment as to the nature and success of intentional processes behind it, yet not have an experience organized and suffused by that fact. This is not an esoteric possibility — an off day may mean the most qualified appreciator does not perceive qualities she has recognized before.

5.1.2 Application to creativity — at least some artworks that are the products of creativity merit distinct appreciation experiences

Chapter 4 showed how different production processes can make it appropriate to experience otherwise indistinguishable art objects differently. The previous subsection gave the extension for skill generally. In the present subsection, the reasoning is

[10] The analogous effect when considering products of an automated process as compared to skill is worthy of mention. Skill cases have qualities of agential control that affect appreciation of the work. A difficult vibrato may be virtuosic for the performer, but merely mechanical for the machinery. I thank Matthew Kieran for pressing this point.

[11] On the matter of taste, the *pleasure* any appreciator takes may of course vary greatly.

developed for creativity. Two main conclusions are argued for. Firstly, that at least sometimes creativity makes for an aesthetic difference. Secondly, that creativity is generally aesthetically relevant.

Suppose first an appreciator is informed Work A manifests the creativity of the individual who produced it, whereas Work B is nothing but a very fortunate accident. Apprised of this information, what might have seemed like a trivial effect to impart is now experienced as a leap, transformation, or innovative way of overcoming some constraint. Comparison with later work in the same mould brings the same effect into view. Considered in light of the process of production, the experience of an early and creative modernist novel in comparison with an identical later text is notably distinct. The former is experienced as bolder for solving certain problems for the first time rather than following known tropes and formulas. By contrast, the later work is suffused with an air of routine, feeling more staid and unadventurous for using known patterns. Analogous cases present for different artforms.

Such cases are no different to experiencing skilled performance of a given work as compared with unskilled or non-agential performance. The controlled, ends-adjusted non-accidental action of the creative performance is appreciable in ways the others are not, and is central to a changed appreciation of it.

For another case, consider generation of identical musical phrases. One can imagine the same sonic structure resulting from accident (the unskilled presses keys at random), non-accidentally from skill but not creativity (sheet music performance), or from creativity (skilled improvisation). Each is heard differently – still, the fact one results from creativity directly colours a fully informed experience of the work as compared with the other cases. Such instances establish creativity is relevant to the appreciation of at least some works it issues in. Does the point extend to all creatively produced works? That point is more speculative, but some comments may be offered.

It was previously argued there is likely an appreciable aesthetic difference associated with every distinct work, located either in the relevant sensory features of the art object, or because of relevant differences in the intentional production process translated into an experiential difference through presentational schema. 'Relevant' variations excludes differences in artistic processes we are indifferent to, for instance, deciding to paint an area of red before an area of blue where this makes no difference overall. More fully, having a skilled or creative history is generally a difference in the intentional aspects of artwork production, and can generate different works. Cogniz-

ing the relevant art objects under a heuristic encompassing these facts explains how each distinct work might afford a distinct experience.

Generally, for every relevant variation in intentional processes there is (a) a presentational schema because a different work (b) an experience associated with bringing the relevant art object under that heuristic. As such, differences in generative processes produce different works, and these feed through to differences in experience. The skill and creativity cases follow the same line — differences of skilled and creative production can make for different works, factors feeding through to changed experiences by the mechanisms outlined. Given the earlier conjecture, no proof is offered *every* skilled or creative produced work is aesthetically different, only that some are so, though it looks plausible for the general case.

In closing, it should be noticed there is no claim creatively produced works must be more pleasurable or rewarding to experience, though this could be so in many cases. Nor is any claim made pleasure cannot be taken in the lucky or derivative work — the point is only to set out the case for correct appreciative practice.

5.2 Objections

Circumscribing art-relevance

Yet it may be asked if intentional aspects of production are so relevant. At the very least, if works are a special ontological category as distinct from mere objects, it is necessary to say something on what circumscribes art relevance, if only so the content of presentational schema can be fixed.[12]

Some form of radical subjectivism or independence of appreciation from intentional constraints is not a live option. Leaving aside wild and eisegetical interpretations, there are constraints originating in how intentions relate to contexts. To once again use the *Pierre Menard* case, writing the text of *Don Quixote* in the modern context constitutes a different work — it is to be understood as doing something different from the same text produced in Cervantes's time. Menard's work deploys anachronistic language for a particular effect, whereas Cervantes' does not, and this is integral to grasping the Menard work. Similarly, art-relevance cannot indulge the intentions of an artist too much. The case is analogous to general considerations about meaning.

[12]This section draws on the detailed discussion in Davies (2004). There Davies goes on to argue for one account of how to circumscribe art relevance — Interpretive Intentionalism. However, the specifics of that account are not entered into here.

Meaning is not solely what a speaker intends; someone might decide to use the word 'book' with the intention of denoting PENCIL, but they do not succeed in meaning PENCIL in virtue of this alone. Hence, if someone says 'There is a book in the box' in normal circumstances, they do not succeed in conveying 'There is a pencil in the box'. Meaning is determined by interpersonal factors. Returning to art, similar reasons suggest artworks should not be interpreted solely by the artistic intention, since alone cannot determine meaning and significance. An artist cannot give any work the rich content of *Four Quartets* simply by intending it — the artist faces constraints of meaning and significance.[13] Similarly, a dauber does not succeed to do what Velazquez did *purely in virtue of doing something with intention.* The agent must succeed in conveying something with rich content in a public medium, at least such that a well-equipped group of qualified appreciators could secure uptake.

However, a problem lurks insofar as not every intentional aspect to the causal history of a work proves relevant to its artistic nature. Observing a parallel problem, Davies notes pausing to drink a cup of coffee does not appear relevant to work identity or appreciation.[14] To circumvent, Davies proposes to count in the identity of the work only those processes 'directly relat[ing] to the goal of articulating an artistic statement'.[15] To the present purpose, the thought work identity is connected to those processes directly related to meeting artistic aims is the needed element, removing any doubts over Davies's notion of articulation. This response includes something like the coffee break as art relevant only if directly intended as part of meeting an artistic aim.[16] For instance, if a painter drinks coffee to induce a frenetic state useful to her expressive end, it will count, but not as part of a casual pause. Likewise, the intention to pay off a debt will not become part of the identity of the work — such a fact only relates to the 'larger story' on why the work exists.[17]

Certainly, there will be difficult cases in deciding if processes are or are not 'directly' involved, and one may worry over circularity in appealing to *artistic* aims.[18]

[13]Davies (2004), p.80 ff.

[14]Davies (2004), p.152. To take another example, skilful hand-priming of a canvas would not usually be appreciable or relevant to work identity.

[15]Davies (2004), p.156. The full formulation makes reference to vehicular media, the replete aspect of conventions of the practices and materials the artists work in: 'The motivations that enter into the identity of the work, and thus bear upon its appreciation, are those that directly relate to the goal of articulating an artistic statement — they thereby have the general form "manipulate the vehicular medium in this manner in order to produce a vehicle that will articulate an artistic statement having a particular content p."'

[16]Speaking of the 'purpose behind the work' glosses over nuances in Davies theory involving articulation in a public medium, but these points need not be filled out here.

[17]Davies (2004), p.156

[18]I also set aside worries over cases where artists claim exhibiting skill was no part of their aim.

Nevertheless, the former problem is not obviously decisive, nor the latter circularity clearly vicious. The point is simply to show a plausible account of art relevance can allow many intentional processes, including the manifestation of skill and creativity, as directly involved in achieving the artistic purpose. Even if further work on circumscribing art relevance proves necessary, the position is compatible with many elaborations on what circumscribes art relevance, including pluralistic and institutional turns. Since cases given previously show skill and creativity are, at least sometimes, both constitutive of what the work is and aesthetically relevant, it is not necessary to resolve every detail.

Imperfect information

A related objection now follows. Due to imperfect information, it must be conceded, some heuristics do not follow the actual process behind the work. In such cases the appreciation rests on a kind of mistake.

Response— This is an orthogonal issue. Proper heuristics can be the aim of appreciation, though adequate appreciation only requires some approximation. Of course, the work can be brought under an incorrect schema, and indeed might seem more valuable under an incorrect schema, however this is no reason to abandon the account offered. Extremely subtle colouration of a painting may strongly invite the idea it was achieved through skill. However, each such property would be perceived quite differently should it be learned they were flukes or not generated in anything like the way supposed. The key point is intention should be incorporated and weighted to the extent it is known. Reasonable supposition, potentially defeasible in light of new information, fills the gaps. Though there is some uncertainty, this does not make nonsense of appreciation, but merely indicates the need for judgement.

Indifferent processes and parallel production

A first objection takes up a problem for the art-relevance position borrowed from Davies. Suppose Monet is confronted with two possibilities; either paint Section A of a particular landscape before Section B, or paint Section B before A. This constitutes a difference in the intentional performance behind the work, and looks art relevant by the terms of the Davies account. Nevertheless, it is not clear Monet's choice here makes a difference to appreciation — supposing, in addition, both are effected with equal skill, the same techniques, and so on.

In the very least, the effect of such intentions may be doubted where wider practices surrounding artistic production are held in view.

Response— To avert objections of this kind, it is enough to note the worrying case only arises where the conventions of the medium put no store by a particular choice, here the order of execution. In other words, this kind of case is indifferent or neutral from the standpoint of the overall artistic aim (at least in the case supposed). Provided the overall purpose is the same, and the medium manipulated with equal skill, in parallel contexts, and so on, the order of execution is not salient here. Once this is allowed, the basis of the objection falls away.

But now suppose A and B produce indiscernible works with parallel intentions in completely parallel contexts. Is this not a case of two separate works without an experiential difference? A slightly different response is needed here. If context, intention, and execution are *entirely* parallel it looks like the works are two tokens of the same type. In such a scenario, there is no reason to experience the works differently. However, in actual cases, this is probably never encountered.

Experiential differences are insufficiently distinct or aesthetically negligible

Suppose A and B work in parallel contexts and produce indiscernible art objects. However, A is more skilled than B in bringing about the art object by the *slightest* margin. Will A's work be experienced differently to B's? It looks like there could be a non-aesthetic difference without a concomitant experiential difference.

Response— The objection need not be a problem unless *any* change in non-aesthetic properties must cause a change in relevant experience. However, the Experiential Claim only requires no aesthetic difference without a non-aesthetic difference. Since this kind of case does not challenge that claim, the objection does not compel. A further response might argue works are, at some level, determinables rather than determinates in their ontology. If this is so, very slight differences of skill may in fact make the same work. Since the proposal requires only that distinct works are experienced differently, this secondary mode of response is also available.

A variation might cause more trouble. Suppose a slight experiential difference is found in such a case. Why not think they could be *aesthetically* trivial, or perhaps practically negligible? Concessively, it may well be such differences are sometimes aesthetically trivial or practically negligible, though that would need careful demonstration. Yet that does nothing to impugn the general thought skill and creativity are relevant to appreciative experience in some central cases.

Conceptual works and special cases

Some kinds of art, and 'conceptual art' in particular, might be thought to present special problems. In these cases, standard perceptual qualities are marginal if not irrelevant to appreciation. Indeed, there may be no clear art object at all, only an idea, a description, or set of instructions for appreciators to follow. If so, an objector may contend there are appreciated qualities in these works without a corresponding experience.

Response— Several points undercut such worries. In the first place, notice *some* experiences can be associated with such works. Very roughly, there is something it is like to consider the description or instructions for the art object, and their specification by intentional (potentially skilful) action in a context. Schemas are no less available for conceptual works. Skill and creativity can show not only in selecting a worthwhile thought or statement, but in finding interesting means to convey it. Though these processes may be entirely internal to the artist[19], reasonable conjectures on their nature still affect our perception of the gesture or concept presented for appreciation.

Supervenience of evaluation

What of the possibility different appreciators shall not make parallel evaluations even under the same schema, even when mistakes and differences of taste are ruled out? It does not appear use of the same schema definitively excludes different aesthetic evaluations.

Response— The claim made only comes to something like this: provided two qualified appreciators ascribe different valuations to an art object, they must be using a different schema (further supposing the work is unchanged, they have the same taste, and so on). Of course, many different and incompatible interpretations are put on art objects, underpinning different experiences of the same art object. Here the exclusive focus is the special kind of engagement that goes on when experiencing a work under its correct presentational schema. Mistaken interpretations and experiences do not vitiate the account, just as differences of taste do not.

Disavowal of skilled and creative purposes

Further worrisome cases may arise where artists claim exhibiting skill or creativity was no part of their aim. In the very least, it seems possible a new and valuable product could non-accidentally result from someone denying a creative purpose. To

[19] Kieran (2009a)

a different purpose, Gaut mentions tribes who deny their new and aesthetically rich works are novel despite marked differences from previous work.[20]

Response— At minimum, the import of such avowed intentions may be doubted where the wider practices surrounding artistic production are considered. When undertaken in a cultural or religious setting, there may be reason to state false intentions. Personal idiosyncrasies may have a similar effect, bringing individuals to deny a creative purpose. Finally, it is of course possible agents are simply blind to their true purpose.

Non-agential production

Consider now two indistinguishable chairs where Chair A is the product of skill and Chair B the product of an automated industrial process.[21] There is a widely shared intuition Chair A is appreciable in ways Chair B is not. Nevertheless, a computer might be programmed in ways that mimic the skilled carpenter, so it has sensitivity to the grain of the wood, the specification of the customer, and so forth. It would seem odd if the industrial process had to be experienced in the same way as the skilled process.

Response— A quick reply could suggest the craftsman has much nearer control of their product, but this is not compelling because one might equip the computer with a more sophisticated algorithm. However, a better reply suggests the agent *achieves* something the computer does not, and on these grounds it is appropriate to experience it differently.[22] In the next chapter, the link to achievement is broached and clarified.

5.3 Chapter conclusion

Building on the previous, this chapter first considered appreciation at a general level, identifying how aesthetic appreciation of a work turns on perceiving the art object in conjunction with the correct presentational schema. Taking this line, it then turned to show how skill and creativity in production can generate distinct works, and so cause an experiential change when perceiving art objects under corresponding presentational schema. As such, skill and creativity can be aesthetically relevant within the terms of the Experiential Claim. In closing, summary objections were replied to. The case for

[20] See Gaut (2014b), p.189 ff.

[21] I owe the framework of this objection to Matthew Kieran.

[22] The framing here leaves aside any achievement by the programmer, and questions whether computers can engage in intentional processes.

the appreciative relevance of skill and creativity in place, the next chapter focusses attention on the value of creativity and its tokens. Via the conditional final value of achievement, it seeks to explain why creativity and token creative successes tend to attract praise and esteem.

Chapter 6

Creativity, Creative Tokens, and Value

Chapter introduction

With an account of creativity and its appreciative relevance in hand, this chapter turns focus to the value of agential creativity, or more specifically the value of creativity as predicated of human persons. Creative individuals are regularly admired and esteemed for their creativity. In addition, creative tokens are commonly prized — creatively produced artworks tend to be valued and prized above otherwise identical objects. The purpose of this chapter is to discover if these practices have any justifiable foundation.

Without question, creativity is often of instrumental value. Defined as a trait or disposition toward ends both new and valuable, it is of clear worth. Correspondingly, since new and valuable material is very often sought, creativity will often have value as a means to produce it. Given the desire to make a new and valuable pharmaceutical drug, relevant creativity ability in a researcher has clear instrumental value. Similarly in art, if an artist seeks a new and valuable composition, artistic creativity will have instrumental value. That is not to claim creativity is *always* a useful thing to have, a trait universally of instrumental value. Even with a creative aim, a demon could punish agents who would be creative in normal circumstances with failure. Despite this, however, creativity has instrumental value for beings like ourselves when aiming for new and valuable material.

This may invite the thought creativity is merely admired or esteemed on pragmatic grounds. If this is so, practices of praise and esteem are useful for encouraging a useful trait, but there is nothing particularly valuable about creativity *per se*. The problem of explaining the praise and esteem is only compounded when considering its products. Even if creativity is shown valuable as an instrumentally reliable trait, that does not obviously feed through to special value of its products. Consider an espresso produced by a coffee machine.[1] An espresso does not have the slightest higher value in virtue of having come from reliable coffee machine. Indeed, there is no generally valid move from 'more reliable means of production' to 'product with more value': the mere fact a process is reliable does not add to the value of the product.

To address this objection, this chapter examines several routes to account for the special value of creativity and its products, and so explain why it tends to be admired or esteemed. Although a first instructive pass fails in Section 6.1, a second pass in 6.2 fares better, but again meets problems. Section 6.3 offers the main account via Pritchard's notion of achievement, making a case agential creativity and token creative successes each have conditional final value. In doing so, it presents an expansion of the previously met thought that creativity is an achievement in character[2], adding how creative successes can be achievements. Showing both have conditional final value, it becomes clear why the trait and token creative successes are regularly valued and estimable apart from their instrumental value. Emphatically, however, the emphasis here is not to give an exhaustive account of whatever distinctive value creativity and its token successes have, but rather to account for some central intuitions on the specific value of each.

Intrinsic Value

A first possibility is set aside with brief comment. It might be thought agential creativity is valuable because creativity has *intrinsic* value. Interpreted literally, this would mean it is valuable in virtue of properties internal to the ability alone. Yet it is not clear this makes ready sense. Take first a simple Moorean test whereby a world empty but for X is considered to find the value intrinsic to X.[3] Aside from worries a simple Moorean test cannot capture how the value of a whole is often conditional on other factors[4], there is difficulty in applying such a test to creativity

[1] 'Intellectual Motivation and the Good of Truth', pp.135–54 in DePaul and Zagzebski (2003).
[2] See mention in Kieran (2014a) discussed above.
[3] Moore (1993) with discussion in Olson (2004).
[4] This line of thought is set out more fully below with reference to Kagan (1988) to the conclusion values are not invariably additive.

and abilities more generally. Though it might make sense to compare a world empty but for experiences, what would it mean to compare a world empty except for creative ability? Worlds empty except for creative agents are a better candidate, but then intuitions are potentially corrupted by introducing an agent, or if not by the agent, because the world is otherwise non-empty — there are potential relational qualities. In response, a more direct comparative test could be suggested — compare a world with a creative agent against one with a maximally similar non-creative agent. There may be an intuition the first world has greater value than the latter. Once more, however, this seems vulnerable to corruption by the value of those capacities and mechanisms underpinning the capabilities of creative (or nearly creative) individuals[5], and residual worries over confusion with instrumental value.

Again for creative products, an object with a creative history does not have more value for reasons of *intrinsic* value, i.e., what is accounted for in virtue of its internal properties alone. A creatively produced *Guernica* could share all its internal properties with a chance or later intrinsic duplicate, yet there is a widely-shared intuition the creatively produced product has more value than the latter.

6.1 First Pass: Greco, reliability, and abilities

The obstacle to deriving the value of tokens from the reliability of the process producing it was highlighted above through the espresso machine example. A first response derives from Greco's attempt to explain the related problem of explaining the value of token knowledge over true belief.[6] In the epistemic case, Greco seeks support for the claim beliefs have value for the very fact of being *able true beliefs*. Associating the view with a broadly Aristotelian approach, he argues:

> [K]nowledge is a kind of success from ability, and in general success from ability is both intrinsically valuable and constitutive of human flourishing, which is also intrinsically valuable.[7] Moreover, both success from ability and human flourishing have "final" value, or value as ends in themselves, independently of any instrumental value that they might also have.[8]

To the current purpose, the salient aspect is the argument about success and

[5]Sorites-type objections make these vivid.
[6]Greco (2010)
[7]Reading 'valuable' to mean 'having value' throughout.
[8]Greco (2010), p.99. Greco takes Aristotle as a model for this line of thought.

abilities 'generally'. Three claims are to the fore. First, successes from ability and human flourishing have final value. Second, successes from ability are constitutive of human flourishing and so have final value — in consequence, they have more than instrumental or 'practical' value.[9] Finally, successes from ability have more value than success absent ability, or ability without success.

Importantly for Greco, success from ability is not just a target result causally connected to an ability, but success *'because of'* ability. This seeks to quell worries over Gettier-type scenarios, where there is success yet not *because of* ability, but some accidental factor.[10] Whether or not this move is sufficient to undercut worries over Gettier-vulnerable knowledge cases might be mooted, but the case for the greater value of successes 'because of' ability is quite general:

> Suppose, for example, that an athlete runs a race in a way that is clearly an exercise of her athletic excellence. Suppose also that she wins, but only because the other runners, some of whom are equally excellent, get sick before the race. Or suppose that she wins, but only because the other runners were bribed. Clearly, neither sort of win is as valuable as it could be. What one really values as an athlete is to win as the result of ability.[11]

In such cases, as where the runner who wins by default, Greco appeals to idea we put greatest value by successes which are genuine results of ability.

It is now possible to broach the value of creative success via the template Greco offers. The suggestions would be creative success, like success from abilities generally, have intrinsic value, are constitutive of human flourishing, and have final value over any instrumental value they might have. Moreover, there is the thought creative success 'because of' ability is of the greatest value as compared with new and valuable material simply connected to creative ability, but not properly because of it. The focus here is on the first two claims for the creativity case, and the third more incidentally, though the points raised would hold of many other abilities.

Final value as a constitutive part of human flourishing

Consider first the suggestion creativity has final value for making a contribution to a good life. It may well be creativity makes a contribution to human flourishing, however the claim cannot be it *invariably* makes such a contribution. Creativity can be turned

[9] Greco (2010), p.99, generalizing from the epistemic case.
[10] This further underpins an account of fake-barn scenarios. See Greco (2010), p.99-101.
[11] Greco (2010), p.99

toward bad ends, and it far from clear the creativity of a torturer or tyrant makes their life better in any respect.[12] Equally, for individuals like Van Gogh it would at least be peculiar to think creativity contributed to their flourishing, given the strain suffered for it. Moreover, in a demon-governed world where creativity is punished it is not clear how the addition to an agent's well-being could arise. Although several ways have been offered to respond to these difficulties[13], any tie between creativity and the life well lived is far from direct and uniform.

Now take the thought creativity may be *necessary* to human flourishing. Again, it is not easy to see why generating new and valuable material is a necessary constituent of the good life, certainly if this means having some significant ability to produce great artistic or scientific work. More plausibly, *some* level of moral or intellectual creativity could figure as a necessary part of human flourishing, perhaps for the purposes of fostering suitable reactions to the world. This, however, would need considerable demonstration.

Final value generally

Consider now the possibility creative successes have final value in the general case. Sometimes successes from ability serve impermissible ends, the tokens successes making the world worse. To hold a skilfully devised torture has final value seems perverse. For similar reasons, it would be hasty to conclude forming and maintaining a creative skill is of final value in all cases — a skill directed at torturing another is a poor candidate for final value.

Even taking up the weaker suggestion successes from ability *generally* have final value, value to no further end or purpose, there are difficulties.[14] Once more, abilities can be turned toward bad and trivial ends — a surgeon may use their skill to do harmful procedures, or primed reaction to play rock-paper-scissors against a computer. In addition, there are successes from ability that are implausibly candidates for final value on account of the low-grade skill needed. It would be odd to claim X's successful unscrewing a jar has final value, at least in normal circumstances. More generally, there are many cases of able success that do not plausibly have final value, illustrating the difficulties in making such a claim for the general case. A firm foundation for explaining the value of creativity needs a changed approach.

[12] Creativity in devising torture instruments is raised in Gaut (2010), p.1039.

[13] Kieran (2014b) disposes of several objections creativity cannot be part of the good life, in particular cases where creativity seems immoral or makes lives go worse.

[14] See, for instance, Korsgaard (1983) and discussion in Olson (2004), deployed below. The point stands even if supervenience on intrinsic properties is not presumed.

6.2 Second Pass: Grant, imagination, and realization

For a brief second pass, consider Grant's recent proposal on the value of imaginativeness, understood as something akin to creativity as described above, to which is added a reasonable expectation of success. The theory is formulated with particular focus on the art case.[15]

Grant proffers argument toward two claims. First, that imaginativeness 'normally' has final value.[16] Second, that artworks manifesting imaginativeness have artistic merit, a merit being a value-adding feature.

On the first claim, given the thought an imaginative work need not come from an imaginative person, the discussion levels at the imaginativeness of creative *acts*. Specifically, Grant develops the thought imaginative acts, understood to include the mental act of thinking, can have final value.

> One might hold that the imaginativeness of thinking has final value, just as the imaginativeness of persons is said to have. For one might think that the virtuousness or skilfulness or, in general, the excellence of an act has final value. It makes that act an end in itself. The imaginativeness of thinking is an excellence of the mental act of thinking. So it too has final value.[17]

Turning to the second claim, an initial move distinguishes merits realized in thought, action, or perception, from merits in resulting products. Manifesting an excellence in a result can be a merit because acting excellently 'is an end in itself'. However, Grant also suggests it is 'unsurprising' there is a practice by which properties manifesting excellences count as merits.[18] Sport might offer workaday examples — a match has merit and is valued for manifesting excellent features of the sport in question.

Crucially for understanding imaginativeness in art there can be higher-order merits, i.e., qualities realized in the realization of other skills and powers. Imaginativeness looks like a higher-order merit of this kind, allowing the manifestation of other

[15] Grant (2017), unpaginated manuscript.

[16] See Grant (2017): (a) 'One might not agree that imaginativeness is a virtue or skill. But one might still agree that the imaginativeness of a person normally has final value [...]';(b) 'That excellences normally have final value suffices to explain why we count them and properties that manifest them as criteria of merit.' The notion of merit will be discussed presently.

[17] Grant (2017)

[18] Grant (2017): '[I]t is unsurprising that there exists a practice in which we count properties that manifest excellences as criteria of merit.'

qualities to be excellent and have final value for reason of their imaginativeness. Nevertheless, the theory does *not* imply or require excellences have final value under all conditions.

Likewise, for the purposes of discussing merits in token artworks, mere excellence is not enough to establish artistic merit.[19] Not all excellences involved in producing a work will necessarily add to artistic merit, Grant offering the example of courageously expressing a banned political view. Here the fact qualities can be involved in the realization of other qualities is of use once more. To be an artistic merit the quality must be expressed in realizing an art aim. Here Grant adds the further clarification manifesting an excellence *can* make something an artistic merit, not that it invariably *must*. Finally, because the work must genuinely possess imaginativeness, artistic merits are unlike many other qualities ascribed to artworks — with properties like emotion the appearance of expressing the emotion is all that matters.

6.2.1 Commentary on Grant

At the outset, one point on Grant's treatment of imaginativeness as it concerns artistic merits may be set aside. Grant's account leaves open how an imaginative (or creative) history ever figures properly in the correct appreciation of an artwork, and does not develop on which 'practices' translate excellences into merits. Previous chapters have sought greater resolution in this area, showing how such features might properly figure in appreciation while staying within the experientialist tradition. To the current purpose, the fundamental thought excellence may figure in the realization of results is well-taken, fitting with the arguments of preceding chapters — creativity may figure in the realization of other ends. In addition, though Grant's focus is artistic cases, there are obvious extensions to imaginativeness serving non-artistic purposes.

More problematically, the claim imaginativeness 'normally' has final value is not specified in detail, nor the grounds on which it is asserted, and so hard to evaluate. To that end, neither does it explain why acting excellently has final value. Centrally, however, Grant's proposal does not fully address the value of creativity predicated of agents since it levels at acts and the realization of first-order merits — it is a theory of imaginative acts not agential trait. Although it suggests links of creative success to manifesting excellences, it does not explicate why either would have final value. The following third pass seeks a way past these concerns. Nevertheless, it follows on

[19] Grant (2017)

one thought from Grant: as with imaginativeness, creativity might not have value without exception, but under some conditions or circumstances.

6.3 Third Pass: Creativity, achievement, and conditional final value

This section looks afresh at the question of creativity and value. In what follows, creativity is linked to final value. To reiterate, it is clear creativity does not always have final value. Final value, to review, was defined as value to no further end or purpose. The creative torturer, bully or fraudster is not plausibly manifesting a trait with final value. However, as met in the last subsection, this admission does not rule out the idea creativity has conditional final value, final value under some condition or conditions. Later sections argue this is where the ability is oriented toward overall permissible ends.

Yet it was also observed not all successes from ability have final value. The method here is to proceed via relating creativity to achievement. Correspondingly, the following section begins by arguing for a general notion of achievements and their value, adapting a recent proposal by Pritchard.[20]

6.3.1 Pritchard on '*Achievements, Luck and Value*'

Pritchard first suggests achievements have value in the general case via a thought experiment:

> [C]onsider the following two options: a life in which one achieves the most fundamental goals of one's life (one has a fulfilling marriage, one raises happy well-adjusted children, one is successful at work, and so on) versus a life which is subjectively indistinguishable and yet where the successes in question are simply due to luck.[21]

Compared with an experientially identical life, there is intuitively more value in the life filled with achievement. This provides the basis of a first characterization of achievement:

[20] Pritchard (2010)
[21] Pritchard (2010), p.21

> **Achievement (I):** An achievement is a success that is because of the exercise of one's relevant abilities (rather than due to some factor external to one's agency, such as luck).[22]

This formula meets with some difficulties given Pritchard's interest is successes 'primarily creditable'[23] to exercise of relevant agential abilities. Principally, Achievements (I) encompasses too much. Pritchard provides the example of raising an arm in normal circumstances. Raising an arm in normal circumstances would not be an achievement for a normal agent. Even so, not all achievements are difficult when they are undertaken, they are (in a sense) easy to those who complete them. Sporting greats need not endure difficulty when they succeed: the success comes with ease and fluidity. Nevertheless, they unquestionably achieve something. To resolve the riddle, Pritchard proffers a second bifurcated notion of achievement:

> **Achievements (II):** An achievement is a success that is either: (i) because of the exercise, to a particularly significant level, of one's relevant abilities; or which is (ii) because of the exercise of one's relevant abilities (rather than due to some factor external to one's agency, such as luck) and which involves the overcoming of a significant obstacle to that success.[24]

Achievements (II) will exclude raising an arm in the normal case since it is not a manifestation of a skill to a particularly significant level. However, this formulation allows for achievements where we should not normally speak of great skill. Obstacles can make normal acts achievements. Though under 'normal' conditions raising an arm is not an achievement, it may be where there is a significant obstacle, perhaps in recovering from injury.

What of Sampras's aces or Ronaldo's free kicks, which are completed without difficulty? To encompass such action undertaken in normal circumstances, Achievements (II) allows successes from abilities exercised 'to a particularly significant level'. The explanation of the ease with which they succeed is their great level of skill.[25] More compactly, achievement requires either great skill or the overcoming of significant obstacles.

[22] Pritchard (2010), p.22
[23] Pritchard (2010), p.21
[24] Pritchard (2010), p.23
[25] Pritchard (2010), p.24: '[W]hile the respective achievements are easy for them, they are only easy because of the exercise of such a great level of skill in attaining this achievement. Thus, these successes qualify as achievements because they satisfy the first condition[.] In contrast, in cases where no great skill is on display then the overcoming of a significant obstacle to success is vital if it is to count as an achievement.'

Yet a large issue looms, prefigured above. If there is a hope to claim achievements 'normally' have final value, the account must confront putative achievements that appear not to have final value "because they seem to be inherently 'bad'."[26] If achievement is directed toward the inherently bad, a claim to final value looks mistaken. An orchestrated ethnic cleansing might need very skilful planning, but it balks to think there is final value here.[27] Pritchard looks to two defences. A first possibility concedes some achievements do not have final value though 'by nature' they have final value. A second possibility is to argue that 'contrary to appearances all achievements are finally valuable, it is just that the value in question is overridden by other factors'.[28] To explain, Pritchard ties the two options to a distinction between '*prima facie*' and '*pro tanto*' values respectively, using the former without its normal connotation. Whereas *prima facie* value can be 'undermined', so that 'it no longer applies'[29], *pro tanto* values always make a contribution to value. A *pro tanto* value may be overshadowed by other considerations, but the contribution to value is not undermined. Lying provides an illustrative negatively-valenced example. One might think lying is always *pro tanto* bad, though sometimes circumstances involving a lie have more value overall as compared with the alternatives. Pritchard does not propose to choose between the two strategies — achievements can have final value even given the possibility of evil achievements if we avail ourselves of either the *prima facie* or *pro tanto* route.

6.3.2 Commentary on Pritchard

Aside from a silence on how contextually-determined factors for assessing achievements should be stipulated[30], difficulties arise over the argument for the final value of achievements. To recount, Pritchard concludes achievements might have *prima facie* or *pro tanto* final value, but does not commit. The problem is both solutions to the problems of evil achievements are hard to maintain.

Take first the *pro tanto* route. This option is hard to swallow. A brutal dictator might orchestrate a genocide skilfully, but it is not obvious its being done with very great skill (or despite significant obstacles) makes *any* contribution to a world's value.

[26] Pritchard (2010), pp.24–5
[27] Residual questions on *achievement* could be raised here.
[28] Pritchard (2010), p.26
[29] Pritchard (2010), p.26
[30] For instance, what constitutes a 'significant' obstacle, how is skill exercised 'to a significant level' to be set?

Yet the *pro tanto* claim requires the world is at least *somewhat* better in virtue of this very achievement. Indeed, the skilful aspect to a genocide might as easily make the world worse. This being so, the *pro tanto* route is unappealing.

Now consider the *prima facie* claim. The suggestion is achievements have final value somehow by their nature, though this value had by nature can be undercut or undermined so certain achievements are no longer finally value.[31] Achievements have final value in the same way tigers are by their nature fierce, though some tigers are not because they are tamed.[32] Unfortunately an appeal to generics does not resolve all difficulties. The claim non-finally valuable achievements are somehow defective or malformed seems false. A skillful genocidal dictator has brought about something bad by the right means to that purpose, but not something malformed or developed against a normal tendency. As such, there are grounds for a significant measure of scepticism against both the *prima facie* and *pro tanto* understandings.

The conditionalist alternative

There is, however, another way to argue some but not all achievements have final value enjoying more defined prospects. This strategy holds achievements have *conditional final value*, and then describes those conditions. To recount, final value is roughly value to no further end or purpose, but not necessarily on account of intrinsic properties alone. More formally:

> The value of some F is final if and only if the value of F is such that it is non-contributory, i.e., if F is not (merely) valuable as a part of a valuable whole, and non-derivative, i.e., if the value of F is not derived from the (final or non-final) value of something else[.][33]

Before explaining further, an 'intrinsicalist' and 'conditionalist' understanding may be distinguished:

> ***Intrinsicalism***: the final value of something is invariant with context.
>
> ***Conditionalism***: the final value of something may supervene of factors extrinsic to that which possesses it.[34]

[31] I thank Aaron Meskin for assistance in interpreting this point.
[32] Pritchard (2010), p.25
[33] Olson (2004), pp.34–35
[34] Olson (2004), p.33: '[The] view (which is tantamount to the view that the final value of something may not vary according to the context in which it appears) will be referred to as *intrinsicalism* about final value. The opposite view that allows that final value may supervene on features non-intrinsic to that which has it (and hence that the final value of something may vary according the context in which it appears) will be referred to as *conditionalism* about final value.'

Two points are worthy of emphasis in interpreting the conditionalist understanding. First, conditional value can supervene on factors (objects, situations, etc.) extrinsic to the thing possessing it. Lincoln's pen is an example of final value in virtue of extrinsic properties — as a pen its value is wholly instrumental and indistinguishable from that of a perfect duplicate, however in virtue of Lincoln's owning it and using it to pen the Gettysburg Address it has a special value. Second, even if conditional, final value must stop short of *deriving* from the context. Since a context obtaining is not a normative fact, the supervenience is from the non-normative to the normative.[35]

The conditionalist understanding of final value has a considerable pedigree.[36] Consider analogous counterexamples to the final value of happiness — the happy genocidal dictator. The pleasure a genocidal dictator may experience is not good in itself, as shown when its wider context is considered. Correspondingly, happiness might be characterized as having conditional final value, final value under some conditions obtaining (e.g., the happiness is not possessed by a morally abhorrent agent).

Following this thought, so too achievements may have final value depending on context. In brief, the idea would be creativity has final value only in certain contexts, or where other conditions obtain.[37] The next section considers the prospects of this strategy.

Achievements have *conditional final value*

As was observed above, some bad ends appear to be achievements of some kind. Again, the genocidal dictator may show extreme skill in organizing systematic murder. Yet it balks to think success in genocides have final value.

This still leaves open the possibility achievements have conditional final value, depending on wider context or circumstances. Turning back to achievements, one suggestion is where the success is *worthwhile* — i.e., something of positive value, perhaps service of human needs.[38] This is not without difficulty, however, as there are apparent achievements in things that are not actively worthwhile yet not actively bad. Something might be achieved in a very eccentric hobby, and it might even have final value, though it would be strained to call it *worthwhile*.

Here the suggested condition is where the success is *overall permissible*, drawing on the intuition that which is finally valuable must, all things considered, be allowable.

[35] Olson (2004), p.35

[36] Kant (2012) offers a lucid early account, holding happiness is good and deserved only on condition of the good will, or else in proportion to virtue. A weaker condition makes the germane point here.

[37] Kieran (2014b) gives the outline of this kind of response.

[38] Consider Griffin (2011) on accomplishment as tied to serving human needs.

The thought is not moral permissibility, but a wider ethical permissibility capturing the overall balance of values.[39] The defence is via a contrastive test. Consider a world where an agent intends to bring about an overall permissible product via achievement as characterised — i.e., where this involves exercise of ability to a particularly high degree or despite a significant obstacle. Contrast this with an identical world except such a permissible result is an accident. In a world in which the success is non-accidental, there is more value than that where it results accidentally. The intuitively greater value is most plausibly ascribed to final value of the achievement.[40] As such, the argument provides a plausibility case permissible token successes have final value where ability is exercised to a particularly high degree, or other significant obstacles are overcome. The intention is not to claim such contrasts prove the final value beyond question given the difficulties of arguing the contribution of any factor is additive and uniform[41], but to give the most viable plausibility case for the final value of the achievement.[42] To reiterate, the claim is a world where a permissible success results non-accidentally either from ability exercised to a particularly high-degree or despite significant obstacles has intuitively more value than maximally similar worlds where the result follows accidentally, this suggesting the thing achieved has final value.

Perhaps this will lead to an objection — some high-grade abilities do not seem likely candidates for final value. Consider natural languages. The ability to speak German does not appear to be the sort of thing that could be finally valuable. In part this may be because high-grade natural languages are often acquired passively, or abilities some people continue to acquire very naturally. Moreover, linguistic abilities

[39]The general thought is to admit a pluralism of values beyond the moral, and balance these. Such an approach would at minimum extend to the aesthetic and epistemic. Perhaps the most influential discussion of the ethical as involving concerns wider than the moral is given by Williams (2011) in *Ethics and the Limits of Philosophy*.

[40]For precedent on attributing final value from contrast cases see Kagan (1988) §VII, p.28 ff., discussion below. To dispense with the objection one world could merely contain more instrumental value, consider the worlds may be identical except in one the result is achieved via intervening luck. In such a case, there would be no difference in instrumental value.

[41]Summarily, Kagan (1988) considering the moral case observes a 'ubiquity thesis' is usually assumed in contrast cases. On such an assumption if a factor has relevance it will always weigh in the same way, hence any one pair of cases is sufficient to establish its import. However, it is conceivable other factors may co-determine the value in given cases, undermining the assumption the difference in value is specifically determined by the different factor alone.

The point is not merely theoretical. For one, factors are not necessarily additive — the fact A rather than B is responsible for some independent suffering can make it right to do A some good, though the other option is a greater benefit to B. For another, the import of a factor may be changed by the nature and degree of other factors involved (a benefit done to a tyrant may not be good at all). See especially Kagan (1988), pp.16–17.

[42]Hence Kagan (1988), p.29 argues of the moral case: 'Assuming that the contrast cases are well-constructed [...] it does seem to show that the factor in question is of genuine moral relevance. For surely something has to account for the difference in status of the two cases, and by hypothesis all other factors have been ruled out.'

are seldom lost after fluency.

To respond, it should be recalled it is successes from high-grade abilities or other relevant abilities despite significant obstacles that have final value. Looked at more carefully, however, a high-grade ability in German should be associated with that of a developed writer, though not necessarily so great as Goethe, Mann, or Nietzsche. At this level, facility with language can be lost or blunted without practice — the proficient seek to 'keep their edge'. Moreover, significant obstacles to such linguistic abilities can be found. Some suffer from inaptitude in acquiring language, or other more general impediments to learning. Understood in these ways, it seems even proficiency in a language can be an achievement, care need only be taken to locate where and why.

Even so, the possibility of valueless achievements might also be pressed again, adding to the suggestion further conditions are needed to link achievement and final value. Is it correct rolling the length of a county has final value?[43] Aside from noting the technique and obstacles to persistent effort involved in many such cases, it is consistent to maintain the final value is comparatively slight, or that the final value of any achievement is tied to the wider value of what is produced, though not exhausted by it.[44]

Discussion of Pritchard brings other possibilities into view. The most obvious application is to explaining individual creative successes as achievements, involving abilities exercised to a particularly high degree or despite significant obstacles. However, notice also gaining or maintaining many skills can involve achievement, either as the direct result of exercising ability in a particularly high degree, or for overcoming significant obstacles. As such, many skills —and qualities involving skills— can have final value as achievements. This is a conclusion of considerable scope, but to the current purpose provides a way to flesh out the thought creativity is an achievement in character, and explain why it is especially esteemed.

6.3.3 Three theses on creativity and value

It remains to set out the details for creativity in particular. Three central claims on the value of creativity are entered, expanding beyond the conclusions on instrumental value offered at the outset. In combination, these points account for some central

[43] I thank Aaron Meskin for mentioning this kind of case.

[44] This point is returned to briefly below in treating of creativity.

intuitions on the value of creativity, and why it and its products tend to be esteemed.[45] The intention is not to specify every reason or condition by which creativity and its tokens might have final value, nor account for every facet of the evaluative practices surrounding it. Rather, the aim is to explain and account for some central aspects of these evaluative practices. Moreover, the focus is creativity as a quality possessed by normal humans— unusual mechanisms by which creativity might be acquired are not considered. To this end, the summary claims are:

1. Creativity is often an achievement because gaining or maintaining it involves success from ability exercised in a particularly high degree, or else overcoming significant obstacles.

2. Where an achievement, creativity plausibly has final value under condition of its overall permissible direction.

3. Token creative successes are often achievements, and where so plausibly of final value under condition of their overall permissibility.

(1) Creativity is often an achievement because gaining or maintaining it involves success from ability exercised in a particularly high degree, or else overcoming significant obstacles.

The account of achievement offered above connected achievement to (i) success from abilities exercised in particularly high degree OR (ii) success from abilities overcoming significant obstacles. Creativity is often an achievement for just these reasons.

Any success abilities exercised to a particularly high degree or despite significant obstacles will count as an achievement. Skill itself is often a success from abilities of just these kinds, so skills too can be achievements. To corroborate, consider how gaining and maintaining the skill of a surgeon may be an achievement — it requires high-grade ability to align practiced concentration and dexterity with sophisticated theoretical and practical knowledge. Equally, the skill of a barrister may also be an achievement due to the exercise of high-grade skill. It involves considerable ability to align high-grade skill in memory, on-the-fly reasoning, verbal dexterity, and the ability to 'read' a witness under the pressures of a courtroom. Even so, other skills can be achievements where there are significant obstacles to gaining and maintaining

[45] This is partly because, arguably, some minor cases of creativity may not be finally valuable — consider again Boden's case of the child working out how to use a previously unseen gadget. Here neither the success nor the trait are clearly of final value.

it, as where peeling an orange may be an achievement where there is a severe bodily tremor or phobia.

Agential creativity will often be an achievement for being produced or maintained by ability exercised in a particularly high degree. High grade capacities will be needed to develop or maintain a non-accidentally successful capacity for generating new and non-trivially valuable material.

The exercise of ability in particularly high degree will be conspicuous in composing and aligning the means toward these ends, in particular a generative and evaluative capacity. However, other less obvious will also need harmonizing, centrally; (i) mechanisms for establishing ends; (ii) mechanisms for organization and adjustment; (iii) mechanisms for establishing the right kind of epistemic position; (iv) patterns of attention. Given creative success must go beyond the familiar, the task is more challenging than with most other skills. Similarly, *maintaining* creativity will often involve exercise of high-grade abilities — as with many other skills, high-grade self-awareness and self-correction exercised, and difficult new exercises devised to avoid becoming stale.

Yet the definition of achievement offered also locates achievement where abilities are levelled despite significant obstacles. Markedly, gaining and maintaining creativity will often be an achievement for the obstacles to possessing it. Aside from the challenges individuals face through time, not least of which arise around personal and economic circumstances or individual health, gaining and maintaining creativity throws up significant obstacles and challenges of its own. As such, even fairly mundane cases of creativity will be achievements .

Creativity is, at least for humans as we know them, fragile and liable to degrade.[46] Individuals face temptations of laziness and the repetitive solution, while it is all too easy to fall into stale, unoriginal, and repetitive modes. Equally, working consistently at the edge of capacity in the way required for persistent creative success puts considerable strain on agents — a notable obstacle in itself. Moreover, the need to keep so many complex sub-abilities maintained and aligned only compounds the problem, as where improving one sub-skill blunts or affects another ability. To illustrate, gaining greater knowledge might be necessary to make progress in a creative domain, but tend to preclude freer thought, or distract enough to impede performance.

Plainly, there are multiple general ways gaining and maintaining creativity will be an achievement. Of course, individuals might devise exercises and practices assuaging

[46] For suggestions in this regard see Annas (2011) on skills degrading and Kieran (2011) on the fragility of individual creativity.

these risks. However this is no objection; it shows only a new area in which to achieve.

(2) Where an achievement, creativity plausibly has final value under condition of its overall permissible direction.

Where the product of high-grade ability as detailed above, or gained or maintained despite significant obstacles, creativity plausibly has final value under condition of its overall permissibility.

Contrastive tests indicate achievements have final value under condition of their overall permissibility. Consider two worlds. In one, individuals bring about permissible ends non-accidentally by exercising high-grade abilities or despite significant obstacles. In the other, the same ends resulted accidentally. On reflection, the former world has more value than the latter, suggesting the achievement is of final value. This argument extends for success in establishing or maintaining abilities, not excluding creativity — creativity itself has final value where an achievement under condition of its overall permissibility.

How is 'overall permissibility' to be understood in the context of creative ability? A reasonable interpretation of 'permissible' in this context is direction or orientation of the ability toward overall permissible ends. Turned toward innocent artistic or scientific pursuits, creativity will have final value. But if, for instance, the ability is turned toward markedly bad ends, as with the torturer or author with a significantly immoral objective, it will *not* have final value unless there is some sufficiently countervailing interest. This allows creativity to be finally valuable when expressed in an aesthetically compelling work but with a somewhat immoral content, or where otherwise novel and significant work involves a moderately immoral factor.[47]

As mentioned above, maintaining a trait against erosion is a success as much as gaining it, an achievement for the agent.[48] This is acutely relevant to the value of creativity. As a trait it would seem especially prone to degrade for the fact it works at the limit of development and capacity — it is almost always easier to fall back into the familiar, or only attempt very marginal change. This being so, maintaining creativity can will often have final value, and indeed more than skills that do not tend to degrade, as is the case for riding a bike or using a yo-yo.[49]

[47] In the case of creativity, epistemic as well as aesthetic interests (among others) might have the countervailing effect.

[48] This explains why a trait inculcated by chance or alien means is of less value than one brought about by ability.

[49] I thank Matthew Kieran for emphasizing these points.

Of course, this is not to maintain all permissibly-oriented creativity is of the same value — the creativity of Mahler may be set above Bruckner without disputing both were creative in some degree. Relatedly, the claim has scope to allow creativity ability resulting from abilities exercised in an even more significant degree or despite more pronounced obstacles has greater final value. Still, where creativity is produced or maintained via ability exercised to a significant extent or in the face of significant obstacles, it plausibly has final value wherever it is permissibly oriented.

(3) Token creative successes are often achievements, and where so plausibly of final value under condition of their overall permissibility.

Creativity can produce token successes that are achievements, and plausibly of conditional final value. Consider an artwork produced by creative means. In the general case, such an artwork will be produced by ability exercised to a significant extent or in the face of significant obstacles, and so count as an achievement for the reasons offered above. Agential creative successes will often be achievements because of the challenges humans must face in producing new and valuable material, or the exercise of relevant abilities in a particularly high-grade way directly — non-accidentally producing new and non-trivially valuable material requires exercising significant evaluative ability.

In addition, such a token success has a claim to final value where it is overall permissible. A variant of the contrastive test makes the point.[50] Suppose two worlds where agents intend to bring about new and non-trivially valuable permissible ends. Further suppose the worlds are identical, except in one world the success is accidental, the other non-accidental via achievement. Intuitively, the world where the individual succeeds non-accidentally via achievement is of greater value than that which success happens accidentally. Such cases indicate non-accidental successes from achievement toward permissible novel and valuable ends are plausibly of final value. In turn, this explains why artistic works manifesting creativity are often esteemed, even where the art object is indistinguishable from the product of a non-creative agential process.

A note on creativity and virtue

Several authors raise the possibility creativity is a distinct *virtue*.[51] At minimum, a virtue in the creative domain would be a trait that makes success more accessible

[50] Again, this is not a direct test since one cannot populate a world with an ability and the achievement alone.

[51] See, for instance, Kieran (2014a), Kieran (2014b), and Gaut (2014b). In passing, Zagzebski (1996) also raises the possibility.

through a relevant motivational commitment. It is not necessary to determine whether there are such virtues, or the details of their workings to indicate there is no obvious clash with these accounts.

In fact, gaining and maintaining virtues are opportunities for achievements, whilst also plausibly of final value (though whether this proves conditional or unconditional for the virtues is a separate question). Any such virtues would require gaining, maintaining, and coordinating many abilities, up to and including patterns of attention and motivation. Again, there are openings for exercising abilities to a particularly high degree, or at least other relevant abilities confronting substantive obstacles. These again are areas of achievement. Of course, none of this implies individuals *must* be motivated by creative ends to qualify as creative. It is only to hold that if creativity stands up as a virtue it is in affinity with the case presented.

6.4 Objections

After meeting summary general objections, a general challenge to the final value of art is considered, drawing on a recent discussion by Stang.

6.4.1 Summary general objections

Locus of the final value

This objection poses the final value of achievement is the wrong way to account for intuitions over the value of creativity since it puts too much emphasis on gaining and maintaining a skill trait, even if this does show its value is not reducible to the value of successes it produces. As such, it misses what is distinctively valuable about creativity, and defective at least to that extent.

In response, creative ability is differentiable partly because of what is involved in bringing forth novel and valuable material. To do this non-accidentally is a rather different kind of ability than most other skills. Achieving new and valuable material non-accidentally by going beyond current levels and expectations is not a trivial matter. Commonly, it involves work at the limit of capacities to secure novelty, and so nothing like exercising a routine.[52] Moreover, the evaluative capacity will be sophisticated given it must do more than identify trivial novelties, and do so through sensitivity to relevant reasons. Finally, to offset another objection, recall creativity

[52] I am grateful to Matthew Kieran for raising this point.

was found as not *just* the capacity to recognize value or significance (though there are creative kinds of recognition). An appreciator might recognize value in a painting, but be doing nothing remotely creative — the recognition may have been closely-prompted by a guide. The value of creativity is consequently not simply that of the evaluative skill involved.

A related worry for the account offered must now be raised. Suppose X is a sculpture that it was overall permissible to produce. This worry poses it is only the agent having produced X skilfully that is the achievement, nothing is established on the value of X itself. That is, *the fact of the object having been produced skilfully* might be of final value, but nothing is established about resultant objects. Further contrastive tests address this worry. Suppose two worlds, the first in which X persists unaffected; the second identical except X is destroyed by a freak thunderbolt, but immediately replaced by an intrinsic duplicate ejected from a nearby volcano. Further suppose no one in the second world is any the wiser to the change. Yet the world in which the sculpture persists has more value than that where the sculpture is destroyed and replaced. This furnishes a plausibility case the token sculpture has final value.

Badly-oriented creativity may be valuable

The main argument of this chapter proposed creativity has final value under condition of it having an overall permissible orientation. Even so, it might be argued badly oriented creativity is equally skilful and hard to maintain, and on this account, should have some value.

But is it unavoidable to say the creativity of an imaginative heist as compared to the gratuitous torturer has some claim to value? On closer inspection, it is not clear this is the right thing to maintain. For one, any value creativity has may be tied to creativity in conjunction with an assumed end, but does not attach to creativity *per se*. Furthermore, it might be incorrect to praise or admire the totality of what the robbers did, indicating it is not of final value, though one may be *impressed* by it. The purpose is simply to show such an objection need not be fatal to the account presented here.

Creativity in certain permissible areas does not appear to have final value

It could now be observed creativity in certain matters is not obviously of great value; devising byzantine new strategies for playing tiddlywinks, for instance. In such cases,

can it be correct to invoke final value?

To respond, it is enough to note the above makes no claim on *comparative* final value, merely some value to no further end or purpose. The argument is not suggesting any final value creativity has is unrelated to the value of the end served — creativity in finding a cure for a significant illness plausibly has more value than in finding new strategies for tiddlywinks.

Moreover, non-trivial success in a trivial domain must not be confused with mere trivial success. In both cases preserving a skill may plausibly have final value provided maintaining the skill is permissible, even if the overall aim is not very valuable. Neither does the account suggest any final value creativity has must always be especially great. Lastly, to forestall another objection, there is no suggestion creativity is always the right thing to try and gain or maintain. If there are pressing moral demands, then developing or maintaining creativity is not necessarily the best course of action.

Talent

An objection from talent might now be pressed. The thought is creativity will seldom have final value because talent is so often involved. Talents are not earned, and qualities that are not earned do not look as though they should be praised or esteemed.

The place of natural talent is easily overstated. Though some people have natural advantages, disposed to pick up certain skills more quickly, there is still a large amount of refinement and rehearsal involved in gaining and maintaining any significant ability. Yet even admitting natural talents, one might still believe there is some value in talents however they come into existence. That is, one might believe a natural-born Leonardo's creativity has final value apart from any method of acquisition or maintenance.[53] The claims here are compatible with those conclusions, as is taking the achievement case to have a distinct final value. The purpose is not to account for all value creativity might have, but to address the normal case for human agents.

6.4.2 Stang contra the final value of art

It remains to raise one further challenge for the account as it concerns artistic success. Stang offers a line of argument against the final value of artworks, structured around a 'Final Value Thesis' (FVT):

[53] Perhaps the same is also true of more esoteric cases, for instance if aliens were to instil creativity into a human agent through technology.

> FVT: Artistic value, the value that works of art as such have, is a kind of 'final' value; objects that possess artistic value are valuable for their own sake in virtue of their value as art.[54]

It is commonly held artworks have final value as art. An attractive argument urges the artistic value of a work of art consists in the final value of the experiences that work affords.[55] Again, such a theory purports to explain the value of art by close association to the experiences an object affords, or more accurately the property of 'affording finally valuable experiences of understanding the work'.[56] 'Understanding' is needed to subvert irrelevant experiences explaining the value of art.

Stang suggests experientialism is correct, but any experientialist mode of preserving the final value of art objects must be rejected. The experientialist commitment to FVT is characterized with the following argument:

> (1) The work is not merely a causal instrument for producing the experience. Instead, it is impossible to have that experience of any other work; the experience is essentially an experience of that work.
>
> (2) The experience is finally valuable.
>
> (3) If A is not merely a causal instrument for B, but it is impossible for B to exist without A, and B is finally valuable, A is finally valuable.
>
> (4) ∴ The work is finally valuable.[57]

He charges such defences err in mistakenly assuming 'that if an object is valuable but it is not valuable for its own sake, then it [must] possess that value in virtue of making a causal contribution to the existence of a finally valuable object.'[58] Yet there are putative examples of non-causal ways things without final value can contribute to objects with final value — a rest in a Beethoven piano sonata is essential but not of final value *even if* the whole is. The rest is essential to the sonata, but not finally valuable itself. As such, there is at least the possibility of being an essential but non-finally valuable constituent of a valuable whole.[59] From this Stang concludes the

[54]Stang (2012), p.271
[55]Stang (2012), p.271
[56]Stang (2012), p.273
[57]Stang (2012), p.273
[58]Stang (2012), p.273
[59]Stang (2012), p.273: 'But, as we have already seen, causal contributions are not the only kinds of contributions valuable objects that are not valuable for their own sake can make to ones that are valuable for their own sake. Objects can also be nonfinally valuable in virtue of being essential constituents of finally valuable wholes.'

artistic value of a work cannot be of final value within an experientialist approach.[60] In full, the argument runs as follows:

> (1) If an object possesses a value in virtue of its contribution to a finally valuable whole, then the former object is not valuable for its own sake in virtue of its contribution to the finally valuable whole. The object may be finally valuable, but not in virtue of its contributing to the finally valuable whole.
>
> (2) If experiential theories of artistic value are correct, then a work possesses artistic value in virtue of its contribution to a finally valuable experience of that work.
>
> (3) ∴ If experiential theories of artistic value are correct, works are not valuable for their own sake in virtue of their contribution to the value of experiences of them.
>
> (4) ∴ If experiential theories of artistic value are correct, works of art are not valuable for their own sake in virtue of their artistic value. In other words, artistic value is not valuable for its own sake.[61]

Since the experientialist might hold particular works are essential constituents of any finally valuable experiences they afford, instrumentalization —the view any work suited to give a similar aesthetic pleasure is substitutable— is not strictly entailed, and any objection on that count set aside.

The main rebuttal to FVT instead argues its proponent must subscribe to an unacceptable 'invidious distinction' if the production process behind a token is appealed to.[62] We are to imagine a group of cinema appreciators, 'the cinemaniacs', who put special store by seeing projections of the original print of a film. This, they argue, has more final value than seeing other experientially identical projections of later prints. The problem is any argument brought against the cinemaniacs might be brought against the defender of the Final Value Thesis. The insistence projections of the original have final value above later projections is analogized to finding greater final value in an original artwork as compared to any non-accidentally identical object.[63] Any argument brought against the cinemaniacs would seem to undercut the

[60] Stang (2012), p.274
[61] Stang (2012), p.273
[62] Stang (2012), p.274 ff.
[63] It is unclear why the restriction to 'non-accidentally identical' objects is introduced, but perhaps an exclusion of natural unappropriated objects may be in view.

FVT.

In cases where more value is intuitively ascribed to the original, Stang contends this is rather artefact value 'grounded in causal and historical connection to important persons, places, or events.'[64] Emphatically, however, any difference in artistic value from the productive act of the artist is denied when encountering indistinguishable tokens.

Responses to Stang

The argument Stang offers against artworks having final value in virtue of their artistic value at least stands in tension with the account presented, particularly insofar as the final value of creative artistic tokens is concerned.

What responses can be offered? For one, it is not at all apparent the cinemaniac case will prove what Stang desires. For one, the cinemaniacs make an error over film. The medium of film does not allow privileging of a particular print in the way the cinemaniacs do. As such, the cinemaniacs fail in their appreciation efforts from the start. Any normal director intends screenings of any print that is or derived from the original as the thing to be appreciated. Of course, an eccentric director could specify only screenings of the original are the true work, but this looks more like a move toward conceptual art, or some further artistic statement.

Most fundamentally, however, the objection is to (1) in the last formalization. It may be that something possesses final value in virtue of being part of a finally valuable whole, and specifically in virtue of making a contribution to a finally valuable whole. Generalization from the rest in the Beethoven sonata seems unsafe. The individual sporting achievement of players retuning play in a badminton match may have final value at least partly in virtue of its contribution to a finally valuable match. Or consider a proof of an otherwise uninteresting lemma or proposition. The final value of formulating this proof may partly lie in its being a contribution to the proof of another difficult proposition. In each case, the ultimate whole would not be the thing it is, nor have the final value it does, were it not for the specific final value of the contributing part.

Returning to the main theme, even if artistic value is ultimately reflected in changed experience, that does not mean the achievement of creating a work is not finally valuable and integral to its value as art. It may be so because the creative achievement is an essential contributor to the finally valuable object of artistic value

[64] Stang (2012), p.277

— the work. No departure from the centrality of aesthetic experience in artistic value is required to assert this. As argued previously, the very same features that make distinct works underpin changed aesthetic experience by structuring perception. In view of the aggregate of these reasons[65], Stang's argument against FVT is set aside.

6.5 Chapter conclusion

This chapter concludes the main argument for agential creativity, with the purpose of accounting for several normative practices surrounding human creativity and token creative successes. In turn, it made a case for the final value of creative ability under certain conditions, entering parallel arguments for creative products. In closing, several objections were despatched. The next and final chapter turns to consider extensions of the account of agential creativity for the group case.

[65]For objections to Stang's associating artworks with types, see Grant (2015).

Chapter 7

Group Creativity

Chapter introduction

Earlier chapters built a case agential creativity is an ability to produce new and valuable material in a certain kind of way. More specifically, creativity implies a skill meeting a counterfactually-sensitive success condition. It excludes certain forms of luck, as well as exhaustive search procedures. The previous chapter then argued for several normative claims centred on final value and achievement. Yet, aside from individual agents, it makes sense to describe groups as creative. The artistic domain provides ready examples. Dance troupes, improvising jazz bands, and teams of writers, among others, might all be described as creative. Under certain conditions, it might also make sense to describe film crews and teams of producers as creative. Yet artistic examples do not exhaust the phenomenon. Research groups, product design teams, and negotiating delegations, among many other examples, might qualify as creative through non-accidentally generating new and valuable material. By appearances, group creativity is a real world phenomenon.

There are several immediate parallels to the discussion of creativity as predicated of individual agents. Group creativity can have an instrumental focus, concerned with new and valuable means, but might also focus on ends. On the instrumental side, a research group might show its creativity in devising a new production method for a fixed output, a group of painters in devising a better means for realizing a specific effect. Regarding ends, artists and researchers may devise great artworks, performances, or theories, examples of creative ends.

To extend the parallel, one would expect group creativity to arise with practice

rather than spontaneously, and it looks in some way intention-dependent, not like a coincidental alignment of individual efforts (as when a group of people on a bridge marches in step). In sum, one might argue that provided the group avoids an exhaustive search procedure[1], produces new and valuable material in the right way (i.e., non-accidentally, not too easily), and all from the right kind of intention, then the workings of the individual case, including normative points, will translate easily. Analogizing from the individual case, a beginning might be found in the following definition:

> Group Creativity: a group ability, on condition of a qualifying intention, to generate new and valuable material non-accidentally (but not via exhaustive search), and meeting a counterfactually-sensitive success condition.[2]

Motivation for an account of group creativity

Nevertheless, it could be suggested there is no need for a special account of group creativity because an explanation is already available in the previous discussion.

Is group creativity explained by BVSR?

Consider again blind variation with selective retention (BVSR) models.[3] At the most general level, BVSR models try to account for creativity by linking a fully or partially 'blind' generation mechanism, i.e., one that does not fully apprehend the resulting output, together with a capacity for selective retention of more promising or 'fitter' candidates. This process may then be iterated until new and valuable material is found. Though rejected in the individual case, an appeal to BVSR might also be proposed for group creativity.

Certainly, the BVSR model has some application to some cases of group creativity. Groups can implement strategies employing blind variation with selective retention toward creative success. For instance, a group might have some individuals generate material, others reject material of certain kinds, with further variations generated on the remaining material. This could be repeated indefinitely until new and valuable

[1] An exhaustive search procedure deployed in the group case is no more creative than the individual case. One could imagine a group whose members executing a Goodyear-type search process, but the point is unaffected — creativity is not compatible with an exhaustive search procedure. Observe group skills too may be non-routine.

[2] This ability might be specified more closely from further parallels with previous chapters, but the following points stand independently.

[3] BVSR approaches were broached in a previous chapter taking Simonton (1999) as model.

material results. Notice the group need not employ *completely* blind generation (their material need not be incompetent) for the idea to work.

Nonetheless, there are problems, and it is useful to recall problems met in the individual case. Despite the promise of BVSR mechanisms, Gaut expressed worries over (i) creative success-rates proving higher than blind variation and selective retention makes plausible (ii) the risk of tautology. A further worry about overly-lucky success (at least where valuable material is retained for the wrong reasons) was also identified. Leaving aside worries over tautology, the other worries have relations in the group case.

Groups are often successful to a degree hard to square with a simple BVSR operation. Even if it is accepted BVSR operations need not be completely blind, it is hard to dismiss the worry completely. The thought of an improvising jazz trio achieving much success through BVSR mechanisms is scarcely credible. BVSR is hard to apply where there is group improvisation as so little time is available for the required BVSR iterations in such a fluid and interlinked scenario.

Second, consider how BVSR processes spread across a group could be *insufficient* for creativity. Imagine a desert island. One inhabitant spends the morning blindly generating doodles on the sand before going off to gather food. Later in the day another individual comes along and deletes doodles according to whim, which, being unimaginative, the second individual could not have generated alone. Unaware of the other inhabitant, the first returns and generates variations on the remainder with small variations. After several iterations of this process a new and valuable pattern results.

There does not appear to be *group* creativity in this case (and no evidence of creativity whatsoever), despite instantiating blind variation with selective retention — the selective pressure is just the preference of the second agent. Such cases suggest more is required for group creativity than BVSR alone. Several diagnoses might be offered. Aside from no natural group to speak of, there is no understanding or intentional control. There is new and valuable material, but it is more like a happy by-product of the way individual projects and preferences align. All this is not to deny the precursors of creativity, that the group could not easily instantiate group creativity, nor that there is not imaginativeness or some less demanding creativity concept, but merely to hold group creativity is not strictly present.

Finally, BVSR formulations do not clearly rule out accidental successes, at least

because material may be kept for the wrong reasons — i.e., not for the reason or reasons they are valuable. This undercuts a creativity attribution.

Is creativity the outcome of individual creativity?

Even so, there is further scepticism of the need for a group account. One might suppose group creativity is an outcome of individual creativity, and quite straightforwardly. If so, it might be thought group creativity only merits causal investigation — the task is to discover how individual creative skill is best cultivated, combined, and deployed to further group projects. If that story is correct, a distinct account of group creativity could seem unmotivated. Put otherwise, if group creativity depends on and is ultimately explicable by agential creativity already discussed, it shall have merely causal not philosophical interest.[4]

Furthermore, it could be observed there are categories or species of creativity that are not philosophically interesting.[5] There is a category of Lancastrian creativity, and a category of all creativity occurring on a Tuesday, but we do not think either deserves special philosophical attention. Many classes of creativity have historical, sociological, economic, or psychological interest, but no philosophical interest. If group creativity is just a form of creativity with no special conceptual or philosophical interest, there is no reason to grant it special attention.

Chapter overview

This chapter adopts the restricted aim of showing group creativity is a topic of philosophical interest in the face of sceptical doubts of the type just related. The argument offered below shows group creativity is conceptually interesting and not solely of empirical interest, has a claim to final value, and is of relevance to the appreciation of group-produced artistic works.

Section 7.1 offers an outline metaphysics of group creativity. After relating group creativity to general problems in understanding collective action, it turns to show group creativity does not require agential creativity, nor must proceed from the abilities individuals hold singularly. It is argued non-accidental creative success typically involves distinct abilities because agential abilities do not always combine for non-accidental group success. This gives a foundation for Section 7.2, which argues for the value of creativity and relevance to appreciation of group creativity. This relates core cases of group creativity and creative success to achievement, and seeks to show

[4] I am grateful to Matthew Kieran for bringing out this concern.
[5] I owe this objection to Aaron Meskin.

group creativity often plausibly has conditional final value, then turning to demonstrate the aesthetic relevance of group creativity. Finally, Section 7.3 addresses general objections, offering summary responses to foreseeable concerns with the account offered.

7.1 Outline metaphysics of group creativity

Clearly, the above is only a sketch. Given one might believe group creativity is a simple function of individual creativity something must first be said on the difficulties of group action to motivate investigation.

General complications of group ability, behaviour, and intention

If group creativity is an intention-dependent group ability some philosophical interest is inherited from general problems of group action and intentionality. For one, it is significant not all behaviours of groups are group actions since following from no intention they do not qualify as group action. Consider, for instance, the tendency of groups of individuals to walk in lock-step on a bridge. This is no different form the agential case of behaviours that are not actions because they do not follow from intention in the right way.

However, rife disagreement follows this general concession.[6] It is not transparent how non-accidental coordination gets off the ground, while vexed questions turn on delineating group membership in hard cases. Further philosophical questions turn on how praise, blame, and other evaluative qualities are properly distributed for groups — whether groups can be credited in their own right, or all evaluative qualities ultimately apply to individuals.

For present purposes these issues can be suppressed. Group creativity has a philosophical interest at least because it need not reduce to agential creativity. The argument develops by first showing creative success does not always proceed straightforwardly from individual creativity or individual skill, moving to prove group creativity does not require individual creativity. A broad set of cases is then discussed where non-accidental creative success involves distinct abilities because individual abilities do not always combine unproblematically for non-accidental group success.

[6] See, for instance, Searle (2002). Critical discussion found in Roth (2010).

Group creativity is not always the simple product or combination of individual skills and abilities

Group successes are not always a simple product or result of combining individual skills and abilities, including individual creative skills and abilities. A 'simple' combination being one that does not require some special competence or ability to bring success in its end.

Certainly, group successes *sometimes* result from the straightforward combination of individual skills and abilities. The idea is best presented after a non-creative example. Suppose two people desire to get from Leeds to Durham blindfolded. However, A only knows how to get from Leeds to York. Contrastingly, B only knows how to get from York to Durham. Though neither taken individually can navigate from Leeds to Durham alone, they can navigate a route successfully through a relatively straightforward combination of their abilities. Or, to take a different kind of example, two gymnasts might use their general gymnastic abilities to stand double-height. Standing double-height is something neither could achieve alone, however their individual gymnastic abilities combine straightforwardly for this kind of success.

Some group creativity fits this model of simple combination. Suppose a group of two aims to produce a new and worthwhile decorated vase. Further suppose A is a potter who reliably produces new kinds of vases valuable for their shape. Despite this, A has no decorative ability. By contrast, B is a painter who produces new and valuable patterns reliably, but is not an effective potter. By agreement A and B might resolve A shall pass B vases to paint. Acting as a group they can produce new and valuable decorated vases, though neither could non-accidentally produce such a vase alone.

Even so, many central cases of group creativity will not result from an easy combination of skills and abilities possessed by members of the group. The approach adopted first shows (1) Agential skills do not necessitate group skills, the same applying to creativity; (2) Group creativity does not require agential creativity where capacities are distributed in specific interpersonal ways.

Individual skills do not necessitate group skills

Commonly, it is *not* the case groups can so easily combine individual skills for group success: special or further abilities are needed. Three problems are to the fore:

***(i) Clashes over means and sub-aims*:**

The skilled may employ means and sub-aims that block group success. For instance, suppose A and B are skilled entrepreneurs who acquire a failing company. The pair now aims to maximize company profits by a combined effort. They resolve A shall take charge of one office, B shall take charge of another. Though A's and B's plans would work independently, A and B undercut each-other's methods (for instance, A's skilful plan puts extra work on staff B would skilfully employ elsewhere). Here the skills and abilities of A and B do not cohere together toward group success.

***(ii) Inability to form a common approach*:**

Sometimes clashes may be resolved quite easily, but this is not always so. Suppose two music producers must work together on a project to appease an eccentric captor. Individually they may be skilled, however they cannot resolve a common method for the task due to differences in the way each is skilled. Though they both meet the success condition for the individual skill, they cannot combine successfully together because of incompatibilities in their approach. For instance, A might need to see a specific section or sub-task completed to work productively on the remainder, whereas B would need to tackle those tasks last. Despite being individually skilled, their way of setting up the problem differs so there is no way to work on the project together. The clash of means is not incidental but baked into the way they are skilled. Notice the same kind of problem arises with disagreements over ends that are indefinitely characterized. Two agents might be skilled but quite unable to reconcile differences over what is needed or wanted in a specific case, or even comprehend why other members take the approach they do.

Though it is true learning an individual skill often brings the foundations of group success with it, this is not necessarily so.[7] Consider performance musicians. A violinist may be able to play alone, but struggle to play a quartet part. For such an individual, playing with others is a further skill that needs learning. Or, to take a creative case, a musician might be able to produce new and valuable material alone, and so count as creative, but be at a loss to do anything creative as part of a group. Perhaps they cannot coordinate with others, or cannot compromise over aims.

[7] As an instance of when the individual skill usually brings a capacity for group success consider skill in cooking very simple dishes. Given individual skill, it would be very peculiar for a group to fail; the capacities making for individual success combine quite readily. Still, where the dish is not so simple, or some creativity is required, too many cooks might spoil the broth.

(iii) Temperamental impediments:

An inability to compromise over aims leads into a more general observation. More mundane reasons may prevent group success emerging when skilled individuals work together. It is possible a group may contain skilled individuals unable to tolerate the work habits or personalities of other group members, or otherwise not jell. Where such problems become pressing, group projects are imperilled. Or perhaps, alternatively, there are irresolvable disagreements over the details of the precise aim to implement. Either way, it is not guaranteed skilled individuals will work successfully in concert.

The preceding points apply to groups aiming for new and valuable material, groups with a creative intention or purpose, as any other. Just as in non-creative cases, there are many ways for individuals to thwart each other when pursuing a creative end. Means and plans may clash, blocking group success. Furthermore, individuals may prove unable to settle on a common approach to a creative problem, or face interpersonal challenges sufficient to block group success.

To draw out the corollary, non-accidentally successful group projects will often involve further skills or abilities to secure non-accidental success. Creative projects are no different, similarly requiring further skills and abilities. Before turning to consider how groups can succeed non-accidentally, the next section pauses to show group creativity does not require individual creativity.

Group creativity does not require individual creativity because capacities may be distributed interpersonally

Groups can be creative even though all members, taken individually, are not creative. How might this be so? Suppose A does a reasonable job of generating musical themes, but not at evaluating their merit or novelty. More particularly, most of A's output has the quality of 'elevator music', but occasionally they hit upon a very interesting theme. Regrettably, A does not recognize the difference between this and other music generated.[8] Suppose B meets no success when attempting to generate new musical themes, but can recognize new and valuable music proficiently. This being so, whilst neither A nor B can non-accidentally arrive at a new and valuable piece independently, they can do so successfully by a relatively simple combination of their skills and capacities. In such a case, it is quite natural to describe the group as creative. Notice,

[8] I am grateful to Matthew Kieran for assistance in clarifying this point.

however, none of its members are musically creative — i.e., tasked with generating a new and valuable theme, neither could succeed non-accidentally alone. Admittedly, either agent might count as in *imaginative* in some sense.[9] What seems lacking, however, is full-blown creativity.

Other examples may be offered in a similar line. Consider a theatre company. One member offers suggestions for interpreting a play. Most of these suggestions are of little value, but occasionally there is something very valuable. Regrettably, this member is not very good at evaluating the merit of suggestions offered. Others in the group are not too imaginative, they fall short when trying to generate new interpretations, but are very good at picking out what will work. No group member is individually creative, yet they work creatively as a group. For a non-aesthetic example, consider a policy group within a bureaucracy. One member of the group thinks of interesting policies, however they are not minded to political exigencies and wider practicalities. As often as not their plan is inconsistent with other laws, or could not pass the legislature. Other group members are not imaginative in policy terms, but are more attuned to realities of the political process — i.e., spotting the valuable policy. No member of the policy group in creative let alone. Nevertheless, in combination they form a creative policy unit.

These examples should be sufficient to show group creativity does not imply individual creativity. However, there is no suggestion such cases are the only way group creativity could obtain without individual creativity, nor that no other interesting relationships hold between creative groups and creative individuals. Even so, creativity has appeared where there was previously no creativity in the agents, even allowing the underpinnings are there. This should not cause undue puzzlement; something similar must hold in the individual case supposing individuals are not born creative. At some point the individual capacities and sub-abilities must come into the alignment through which agential creativity is realized.

Objections to interpersonally distributed capacities

Several likely objections present. Each is sketched with summary response.

Firstly, an objector might suggest individual creativity is hidden in the cases suggested.[10] The objector notes at least one agent has something with the look of creative recognition in these cases. We allow certain persons are creative in virtue

[9] A less demanding creativity concept, such as Boden's, could fill out this concession.

[10] I owe this objection to Aaron Meskin.

of what they recognize in data or in their environment, why not in these cases? *Response*— For one, any recognitional capacity could be split between several further agents to cancel this point — one subgroup can only find novelty, the other value. To this, however, it might be objected the recognition of value does not suffice for creativity. Yet if it alone sufficed appreciators who recognize value yet have no hope of generating it would qualify as creative. Since that is not so, the objection may be set aside.

However, an objector might urge at least one member of the group will turn out creative, though not for the domain in question. Even though no member is creative in this particular area, at least one is somehow so, and the creativity of the group arises by some kind of extension from those abilities. *Response*— again, while such a relation might actually be true of some cases, there is no reason to think it must apply in every case. Indeed, it is quite easy to make sense of the case with the hypothesis no member is creative in any domain.

Third, it might be supposed at least one of A and B does something creative in their very act of combining. That is, individuals may qualify as creative in virtue of working toward an end they could not achieve alone. *Response*— this kind of response certainly applies to some cases, but the point is not affected. One could imagine agents copy the combinatory strategy from elsewhere, and so are not creative in combining. As such, there is no reason here to dismiss the cases offered.

Turning back to the earlier case, it might be queried how original material is generated. If what A does is too random, which one might suspect if A cannot evaluate their output, it might be doubted anything A and B complete together is non-accidentally successful. *Response*— even conceding A's generation should not be too random, this does not affect the cases at hand. A can have *some* ability, just not enough to recognize valuable material alone. This is why the examples are formulated around agents who generate mediocre material — not entirely incompetent but only unable to set apart their more interesting outputs from their stock output.

The fifth suggestion holds individuals can qualify as creative in virtue of the group being creative, neatly disposing of the cases. *Response*— it is unclear if this suggestion avoids the distributive fallacy. Individuals composing a group do not automatically inherit group qualities, and short of an argument to think creativity is a case where they do, the objection does not persuade.

Lastly, perhaps the objector will now seek to redescribe the case. The individu-

als might be *dependently* creative, i.e., creative under certain specifiable conditions. *Response*— this move does not convince as an objection. The examples can be formulated so the condition for each individual producing new and valuable material non-accidentally is the collaboration of other agents — but that is just to say they rely on some group to do anything creative, and are not creative on their own. In consequence, this objection is also set aside.

7.1.1 Non-accidental group success in producing new and valuable material

The preceding argument showed group success does not always work by simple summation of skills or abilities, suggesting further abilities are needed to bring about relevant successes non-accidentally. In addition, it was argued group creativity does not require individual creativity. The main purpose of this section is to check group creativity does require non-accidental success, and counter worries over realizability by suggesting some mechanisms through which this can be so.

The account of individual skill offered in the first chapter centred around several claims from Hawley's treatment of knowledge-how. Following those questions, it may be asked; (i) Does group creativity work via families of tasks?; (ii) Is group creativity specified via 'normal circumstances'?; (iii) Is group creativity always something attempted or intended?; (iv) Does group creativity have a standard of success?; (v) Does group creativity imply an agent suitably understands his or her method?; (vi) Does group creativity imply the right kind of connection of method and result?

For each point, a brief argument posits the parallel of group creativity, and that the supplementary conditions held of skill in the agential case also hold of the group case. These build to show group creativity implies the group analogue of individual skill.

(i) Group creativity employs families of tasks

Individual knowledge-how introduced 'families of tasks' since there is seldom a single correct way to demonstrate knowledge how in each domain. In the group case a similar phenomenon is found. There need be no single way for a group to approach a task creatively making it appropriate to allow for families of tasks.

(ii) Group creativity is specified via 'normal circumstances'

In the individual case, creativity was judged via tests on attempts made in 'normal circumstances'. As such, it was assimilated to any other skill. Group creativity, like the group analogy of skill, works similarly. The creative ability of a jazz band is not judged in a force ten gale, nor a ballet company in extreme cold. A link to 'normal circumstances' also offers a way to dispose of puzzles over environmental luck. Like the pianist playing in a room that would easily flood[11], we do not worry the group was not truly creative because in most nearby possible worlds success is blocked by flooding of the auditorium. Moreover, circumstances are not normal where an eccentric poisoner would debar all successes except those the group does happen to take.[12] Success to such a group is in a sense lucky, yet not in a way that tells against group creativity since circumstances are far from normal for the skill in question.

(iii) Group creativity is something attempted or intended

Like other skills, creativity in the individual case was understood as intentional, depending on an attempt or intention to bring about new and valuable material, however deep or disguised it might be. Creativity is not like indigestion, or some unintended by-product. Similarly in the group case, group creativity is not an incidental group behaviour, as when groups tend to walk synchronously on a footbridge. Rather, group creativity stems from a relevant kind of intention or attempt. What this kind of intention comes to is difficult to stipulate in detail, but for present purposes it is clear group creativity is not merely a behaviour.

(iv) Group creativity has a standard of success

Individual creativity, in line with other skills, was specified by a counterfactually-sensitive success condition. So too group creativity has a counterfactually-sensitive standard of success. To count as having group creativity, it is clear groups must be *able* to produce new and valuable material from a relevant intention, at least in some circumstances, actual or counterfactual. Groups, like individuals, do not have abilities in what can never be done. Success in the actual world is, however, not a perfect guide to the ability being a skill. The group might succeed in the actual world, but fail in all nearby possible worlds, making the success nothing more than an anomaly. Alternatively, the group might fail in the actual world, but succeed satisfactorily in all nearby possible worlds.

[11] McKinnon (2014), p.570

[12] This kind of case is familiar from Sosa, e.g., Sosa (2009a).

By implication, a group could produce new and valuable material without being creative. This could be so if the group does produce new and material in an attempt, yet fails relevant counterfactually-sensitive tests. Consider a group attempting human pyramids in normal circumstances. Though the group might succeed in forming the pyramid in the actual event, it could fail in all nearby possible worlds, so causing us to deny it has a skill in this regard. Likewise, if a group produces new and valuable material without passing appropriate counterfactually-sensitive tests it is not creative.

The details of the standard will vary for contextual reasons, mirroring the individual case, yet it is clear the success condition must have some sensitivity to counterfactual cases. Other ways a group may fall short of creative ability can now be presented. The first two, inherited from Hawley, may be presented together.

(v) Group creativity implies the group has suitable epistemic relation to the method employed*; & *(vi) Group creativity implies a suitable connection of method and result

In the individual case, creativity required a suitable understanding of the method employed, and a certain kind of connection between method and result to assure successes a relevantly non-accidental. Analogues of these requirements apply in the group case. Cases paralleling those employed by Hawley hold for group creativity to the exclusion of guesswork and misapprehension: (1) *Deficient understanding of own method* — where the subject does not comprehend how to get success in the relevant circumstances; (2) *Fortuitous or accidental success* — where success happens 'through the absence of a suitable connection between the goodness of the method and the subject's use of that method' — guesswork and misapprehension are the central instances.[13]

Taking misapprehension first — if a group generates new and valuable material via certain kinds of misapprehension, successes will not show creativity. Suppose a group aims to generate a new and valuable dance. The group selects for the dance for Q specifically, the quality it takes to be new and valuable. However, the new and valuable aspect is actually R, a discounted factor, and Q is neither new nor valuable. In this kind of case, it would be difficult to see the new and valuable work as a paradigmatic creative success.[14] Even so, and like the individual case, some misapprehension is compatible with group creativity *provided* the success is not

[13]Hawley (2003), p.28

[14]One may wish to allow it is creative in a less demanding sense, such as Boden's.

explained solely by misapprehension. More is said on this below.

Turning to guesswork, if a group generates new and valuable material *purely* by guesswork, this will not count as creativity. A pure lucky guess —the stab in the dark— does not make for creativity in the group case any more than in the individual case. Of course, group creativity is compatible with experimentation and recognition of new and valuable material, hence the claim group creativity does not work *purely* by guesswork.

The epistemic requirement inherited from Hawley only excludes certain kinds of happy accident, misapprehension, and guesswork. This was understood in such a way that false theories are tolerable provided that some sufficient epistemic capacity is in place. Notice the group case does not require group members to establish strong beliefs about the identity and dispositions of other group members, nor for the group (or any member of the group) to comprehend the method employed propositionally, or be able to articulate how it is the group succeeds.

Further exclusions

The agential account proposed two further exclusions on non-accidental success, borrowed from other elements of virtue theory.[15]

• *Group creative ability excludes intervening luck*— Individual skilled success is incompatible with intervening luck, and certain kinds of easy success. The group analogues are reviewed in turn.

An able shot that goes awry from a freak gust of wind only to find its target by another chance counteracting gust does not qualify as a skilled success. By similar reasoning in the group case, new and valuable material resulting from intervening luck does not make for a creative success. Imagine a group of ice skaters attempting to improvise a novel and valuable big finish to a performance. Here a rare gust slams a door in the ice-rink causing several to go off course, another chance gust causes an opposing startle, and a new and valuable flourish results. Even if the result is indiscernible from what would have happened were it not for the gusts, the success is nonetheless not creative.

• *Group creative ability excludes 'too easy' success* — Moreover, success should not rely too much on external mechanisms or otherwise 'too easy' if they are to qualify as fully creative. Although not every form of external support is incompatible

[15]The appeal was formulated by reference to Greco (2010).

with group creativity[16], group creativity should exclude certain kinds of reliance on external mechanisms. Just as an agent who relies too much on an external body or mechanism such as the market to pick successes from failures is not properly creative, the same is true of groups. Similarly, if eccentric aliens or guardian angels interfere in the world so groups intending creative success are successful even where they would otherwise fail, we should not consider such a group creative. This is so despite the results following non-accidentally from a group with the ability and intending that very kind of success.[17]

Methods for realization of non-accidental group success

If group creativity is an ability analogous to individual creativity, it is necessary to say something on the processes and mechanisms that make for non-accidental success, if only to counter worries it cannot be a realizable kind. In the individual case, the relevant abilities comprised (i) an ability to determine relevant intentions, perhaps with ongoing adjustment; (ii) mechanisms, processes, and sub-abilities for producing non-accidental success from those intentions. Respectively, these were summarized as 'Intentional' and 'Executive' abilities. The present task is to locate some equivalents in the group case. Some principal mechanisms and strategies groups can deploy for non-accidental success are reviewed cursorily. Enough is said to address realization concerns, and provide the foundation for normative conclusions relayed in the next section.

- *Mechanisms for establishing ends* — For a group to reach an end non-accidentally, ends must be established and group efforts gear accordingly. In some cases of group endeavour the ends shall be very highly specified. In group creativity cases, however, specification might extend only to certain parameters and constraints on a solution. Either way, deciding or resolving upon and ensuring group efforts gear toward it is not always a trivial process in view of coordination problems, differences over purpose and motivation, and so forth. Yet, aside from agreement and knowledge of the habits and dispositions of other agents, several other mechanisms are of use.

- *Mechanisms for organization and adjustment* — Although some group projects

[16] For instance, the electric guitar band that cannot set up its own sound equipment.

[17] One could concede, however, that there is something close to the kind of creativity under analysis in these cases. Following Boden, there is certainly the production of new, valuable, and surprising material.

might be straightforward to structure and organize, requiring no more than a little common sense, this is not always so for reasons related above. Where such conditions hold, the group must face conflicts and hard choices, devising strategies and solutions, so not to imperil non-accidental success.

Though often challenging, these problems are not always insurmountable — common policies, rules, or even mutual understandings are of great assistance. Just as the individual may use 'rules of thumb' to manage their own behaviours, so too groups may ably deploy coordinating and simplifying policies, tacit or explicit, to secure success up to an including closing the gap between current performance and an intended result.

Furthermore, to achieve ends non-accidentally, groups must often adjust. Adjustment and revision is needed in the face of chance events and failed strategies. Even so mechanisms analogous to the individual case are identifiable here. Though often more complex than the individual case, groups too can deploy mechanisms to determine how far they stand from group goals or sub-goals, changing behaviour accordingly. Again this may be directed by the whole group, or by a specialized subgroup. For instance, a subgroup or specific individual (a producer or director) may monitor what is developing, offering appropriate guidance.

- *Mechanisms for simplification* — Several simplifying mechanisms were identified in the individual case, and at least simplify the problem. For one, skills and abilities can exploit hierarchies to simplify intentional problems. Higher-order abilities can deploy lower-order abilities, down through routines and basic processes of diverse kinds. This being so, not every detail of a group action must be determined on every occasion, simplifying the intention-setting and coordinating problems confronting the group considerably. Groups can, furthermore, assign subgroups or individuals to specific tasks. Deputation can exploit specialisms, or simply free other members of the group to work on other tasks — not every group member must work on the same tasks concurrently to arrive at non-accidental success.

- *Mechanisms for establishing the right kind of epistemic position* — As was shown, non-accidental group success in pursuing an end requires group efforts to mesh and cohere toward that end. A related requirement holds the group should

have the right kind of epistemic relation to the ability. For this to occur, group members will need sufficient information on how others in the group will behave to direct their own action toward the group end. It is therefore non-accidental success places certain epistemic demands on the part of the group members. Suppose A and B and C are trying to improvise in a trio. If none of the trio has any idea on how the others will react, or even if they each have some slight and patchy idea, successes will have the character of accidents. More generally, if the membership cannot predict, to some sufficient degree, other's reactions and dispositions, any group success will be accidental. Without doubt the epistemic underpinning of non-accidental success that needs to be established will often be quite thin — perhaps little more than 'I believe B shall supply me with music to evaluate' and 'I believe B shall evaluate music I supply'. Nevertheless, the group must be in an admissible relation to the method employed.

In part, expectations are aligned by the kinds of common policies touched on above. However, it is worth mentioning a few more particularly involved in establishing the epistemic position. Aside from general epistemic capacities, observation and discrimination, together with abilities in deploying and manipulating information gathered from such sources, shall in many cases be central to non-accidental group success.

- *Mechanisms for communication* — Furthermore, to establish a shared conception of the end, as well as for general coordination and adjustment, skills and abilities in communication shall often prove essential. For non-accidental success to occur it is frequently the case various instructions, hints, prompts, and other content must be communicated and understood. This can be as simple as describing and disambiguating the ends aimed at, but extends to resolving plans in a changing context.

Removing the intention

The previous section examined focal cases of group creativity to outline some mechanisms underpinning non-accidental success. Brief attention to a more esoteric case helps to clarify responses to some complexities involved over intention in the group case. Consider the case of Creativity Ltd.:

Creativity Ltd: Suppose a corporation with several members. Under

> the arranging eye of its CEO, members go about their assigned business, confined in their cubicles, ignorant of what others are doing. Each takes their work, performs an operation, and passes it to another member. None of the 'cubicled' group members are individually creative, and the CEO could not bring about new and valuable material alone. However, the corporation produces new and valuable material with regularity.[18]

Creativity Ltd appears to live up to its name producing new and valuable material non-accidentally — it is creative. The intention of the group to bring about new and valuable material is secured through the CEO arranging the group to that end. Now suppose the CEO is killed, but the cubicled members continue to output new and valuable material, following the pattern set by the CEO. The group continues to produce new and valuable material reliably. Without the continued intention of the CEO and continued arrangement, does the group still qualify as non-accidentally successful in the new scenario, and so creative?

A first kind of worry arises over the intention to produce new and valuable material a group — it might be questioned if such a group still intends to produce new and valuable material in the sense required. Here it might be replied the group manifests the intention of the departed CEO. Just as individuals can have standing intentions, a group might inherit an intentional state set by the CEO. Notice, however, how quickly non-accidental success could be lost in this kind of case, assuming the group has no capacity for self-regulation.

A second kind of worry questions if the epistemic conditions are met. Does the group have a suitable understanding of how success is achieved so success happens in the right kind of way? In the group case under consideration, there is no fortunate happenstance, misapprehension, or guesswork to worry over, but perhaps the group no longer instantiates any proper epistemic relation to its method. After all, once the CEO departs no individual in the group need know what the group is doing or is 'for' (suppose the last assembly happens in the dark). But if that is so, no agent associated with the group understands what it is doing. For that reason, it looks like the group no longer qualifies as creative once the CEO dies, but is more assimilable to a happy side effect of creativity in nature. This is so unless, perhaps, the group continues to instantiate the CEO's understanding of how to connect method and result. Nevertheless, this epistemic relation would be exceptionally fragile, folding easily

[18] I owe the origin of this case to Aaron Meskin.

into a mere happy side-effect.

The preceding two sections characterized group creativity, and entered some indications on the main underpinnings of non-accidental group success. An instructive esoteric case was presented. Before turning to other matters, it is worth noting how, like the individual case, some forms of luck do appear compatible with group creativity. As was shown, environmental luck is compatible with creativity. However, other forms of luck are compatible — it is very improbable Lennon met McCartney, just as it is very improbable an individual has the underpinnings of creative genius. In the following section attention shifts to some normative conclusions on group creativity.

7.2 Group creativity, value, and appreciation

Some points on group creativity and value may now be broached. This subsection translates several arguments made for individual creativity to the group case. It is useful to begin by reviewing the kinds of value creativity might have along dimensions of instrumental, intrinsic, and final value

- ***Instrumental Value*** — Clearly, group creativity will often have instrumental value. If there is a desire for new and valuable material, which is very often the case, group creativity will be of instrumental value as a means to that end. Furthermore, group creativity will often be the best candidate means for producing new and valuable material since agents acting alone cannot broach many kinds of project — a group approach may be the only candidate means.

- ***Intrinsic Value*** — In parallel to the individual case, it might be suggested the value of creativity and creative products is a matter of intrinsic value. Again, however, this does not seem correct. Group creative ability is not evidently of intrinsic value since the test is unsuited. Although it makes sense to compare worlds empty but for valuable experiences and certain kinds of object, what would it mean to consider and compare worlds empty except for group creative abilities? It might be tempting to consider the world empty except for a creative group. However, introducing agents may have corrupted the intuition, rendering conclusions unsafe.[19]

[19]This is not to deny worlds in which success happens from ability are intrinsically more valuable than very similar worlds where the group creative success happens accidentally. The problem concerns the potential corruption of the test.

Similarly, creative products are not evidently more valuable for reasons of intrinsic value, i.e., what is accounted for in virtue of their internal properties alone. A painting that results from group creativity may be identical with the result of chance, but there is a widely shared intuition the former has more value than the latter. A different conception of value is evidently needed if evaluative practices surrounding group creativity are to be explained.

- ***Final Value*** — The remaining candidate is final value. Final value, in review, was defined as value to no further end or purpose. In what follows, creativity is linked to final value. Immediately, however, it is clear creativity is not always of final value. The creative torturer or bully is not manifesting something of final value. Like the individual case, however, this admission does not rule out the idea creativity has *conditional final valu*e, i.e., creativity has final value under some conditions. Paralleling the individual case, it is shown creativity is plausibly of final value when oriented toward overall permissible ends.

It remains to set out the details for group creativity, adding two points on the value and appreciation of resulting tokens. In combination, these points account for central intuitions on the value of group creativity. In review:

1. Group creativity is often an achievement because gaining or maintaining it involves success from abilities exercised in a particularly high degree, or else overcoming significant obstacles.

2. Where an achievement, group creativity plausibly has final value under condition of its overall permissible direction.

3. Token group creative successes are often achievements, and where so plausibly of final value under condition of their overall permissibility.

4. Group creativity can be relevant to aesthetic appreciation — at least sometimes it is appropriate to experience an art object that resulted from group creativity differently from an otherwise indistinguishable art object.

7.2.1 Group creativity and achievement

Group creativity is often an achievement because gaining or maintaining it involves success from abilities exercised in a particularly high degree, or else overcoming significant obstacles

The previous chapter linked agential creativity to achievement, drawing on the account offered by Pritchard. The account connected achievement to (i) success from high-grade abilities OR (ii) success from other relevant abilities overcoming significant obstacles.

Since gaining and maintaining group creativity is often the product of abilities exercised to a particularly high degree, group creativity will likewise often be an achievement. Like other significant group abilities, reflection shows group creativity will often be the product of high-grade ability. New and valuable material is not something just any group can bring about non-accidentally — not just any bunch of translators could produce the King James Version, or keep working toward valuable non-trivial novelty beyond the limits of the familiar. High grade capacities will be needed to develop or maintain a non-accidentally successful capacity for generating new and non-trivially valuable material. The exercise of ability in particularly high degree will be conspicuous in forming and aligning abilities distributed among the membership, particularly because non-trivial capacities for generation and evaluation must be aligned, centrally; (i) Mechanisms for establishing ends; (ii) Mechanisms for organization and adjustment; (iii) Mechanisms for establishing the right kind of epistemic position; (iv) Mechanisms of group communication. To take a concrete example, consider the abilities a jazz band or dance troop will usually need to establish and maintaining an appropriately robust ability to produce new and non-trivially valuable material non-accidentally, or for a research group to remain open and creative in a long project where the task could easily become stale.

Yet the definition offered, achievement is also found where other relevant abilities are levelled successfully but despite significant obstacles. This is of even clearer relevance to the gaining and maintenance of group creativity. In fact, even mundane cases of group creativity will be achievements because of obstacles to gaining and maintaining a group ability to non-accidentally produce new and non-trivially valuable material. Obstacles may be of the general types introduced in the individual case, circumstantial (as when a codebreaking group must work in adverse wartime conditions), but should also include obstacles to keeping a group targeted toward non-

accidental success in a complex end. To bolster the force of this point, notice group creativity is once more fragile and liable to degrade.[20] Groups are no more immune to the temptations of laziness and the easy solution than the individual agent. Indeed, commonly there may be a *greater* tendency to compromise in the group case because of in-group dynamics and the involvement of multiple agents; both individual abilities and their harmonization toward group success must be preserved against decay. Just as agential abilities can degrade, groups skills can erode and decay, or members no longer jell or understand each other. Lastly, notice trying to improve one group ability may throw another ability, imperilling group success — the group must now be bolder, but through enthusiasm its evaluative capacity slips. Though groups can undoubtedly exercise abilities in devising exercises and practices assuaging these risks, that is no objection; it shows only a new area in which achievements can be had. Summing up, in the same way individual creativity is often an achievement, there are parallel reasons why group creativity shall often be an achievement.

7.2.2 Group creativity and conditional final value

Where an achievement, group creativity plausibly has conditional final value under condition of its overall permissible direction

When group creativity is an achievement — produced or maintained from ability exercised in a high degree, or despite significant obstacles — it is plausibly of final value under condition of its overall permissibility. For agential creativity, a contrastive test substantiated the point for permissible achievements generally. A similar contrastive test makes the case for the group case.

On reflection, a world in which a group brings about an overall permissible end non-accidentally via achievement has greater value than an otherwise identical world where the same end resulted accidentally. Paralleling the previous chapter, this makes a plausibility case group creativity has conditional final value where an achievement, the condition once more being direction or orientation of the ability toward overall permissible ends.[21] Again, it is not just gaining the trait that can be the product of such abilities, and thus plausibly of final value, but also maintaining it. Maintaining a skill-like trait against erosion is a success, something that a group may non-accidentally effect. That being so, group creativity, where produced or main-

[20] This translates points from Annas and Kieran discussed in Chapter 5.

[21] The pattern of these arguments was given in Chapter 6, in view of the difficulties applying contrastive tests.

tained non-accidentally via achievement is plausibly of final value, at least where this kind of success is overall permissible.[22]

As with the agential case, a reasonable interpretation of 'permissible' in this context is orientation of the ability toward overall permissible ends — i.e., on balance of moral and non-moral considerations. Turned toward innocent artistic or scientific pursuits, creativity will plausibly have final value. But if, for instance, the ability is turned toward significantly bad ends (e.g., the group tortures or produces significantly immoral material with no countervailing value) it will *not* have final value. Given the possibility of trivial successes, an objector might resist the intuition permissible successes from ability plausibly have conditional final value. However, to recapitulate the response for individual creativity, group creativity should avoid this objection because creativity is an ability to generate novel products of non-trivial value.

7.2.3 Token group achievements and final value

Token group creative successes are often achievements, and where so plausibly of final value under condition of their overall permissibility

Like the individual case, group creativity can produce tokens that are achievements, and plausibly of conditional final value. Consider an artwork produced by group means. In the general case, such an artwork will be produced by ability exercised to a particularly high degree or in the face of significant obstacles, and so count as an achievement for the reasons offered above. In line with the above, such a token success also has a claim to final value where it is overall permissible. A variant of the contrastive test makes the point. Again suppose otherwise identical worlds where a group intends to bring about new and non-trivially valuable permissible ends. Intuitively, a world where the group succeeds non-accidentally from ability exercised to a particularly high degree or despite significant obstacles is of greater value than where success is accidental. Such cases indicate permissible group creative success are of final value where achievements. As with the individual case, this explains why artistic works manifesting group creativity are often esteemed, even where the art object is indistinguishable from the product of a non-creative group process — the works are finally valuable achievements.

[22]Notice the argument helps explain why a group trait inculcated by chance or alien technological means is not of the same value as one brought about by group ability — the same difficulties and challenges are not met.

7.2.4 Group creativity and the appreciation of art

Group creativity can be relevant to appreciation — at least sometimes it is appropriate to experience an art object that resulted from group creativity differently from an otherwise indistinguishable art object

A preceding chapter showed how different production processes can make it appropriate to experience otherwise indistinguishable art objects differently. This is because different production processes may make for different art-relevant properties and so different works. Since what are otherwise indistinguishable art objects may be different works, it is not odd to hold they can properly be experienced differently — by means of cognitive penetration, knowledge of the work affects appreciation of relevant art objects.

To briefly review the argument of the individual case, an extrapolation from Danto cases showed different works can merit different appreciation experiences.[23] It was then argued a creative production history can make for a different work. As different works, otherwise identical art objects with a creative production histories may properly be experienced differently.

The group case follows a similar line. For one, a group method of production can also be artistically relevant without broaching creativity. Consider first how a history of group production is relevant to appreciation. At least in part, this may be because artistic statements come to differ. An art object due to the intentions of A and B working together may be distinguished in terms of reception intention from an identical art object produced by A and B separately. This is simply because it may be intended for appreciation as the work of A and B jointly.[24]

For further illustration, consider how it can be proper to have a different experience of a sonic structure as produced by a trio as compared with the same produced by an individual — the former may sound like a compromise, or as involving less marvellous performative skill. Equally, a novel authored by a group will be conceived differently from the product of one author if only because different qualities are attended to, or because an inconsistent narrator may be attributed to the voice of different group members. These points are not merely speculative — trying to decipher the contribution of members is something appreciators actually do, work on Warhol and

[23] Danto (1981)

[24] Of course, the group may intend the object to be approached *as though* it is the work of one artist.

Basquiat collaborations offering empirical evidence knowledge of group production structures the way appreciators attend.[25]

Of course, this is not to claim group production always adds to the experience so far as pleasure is concerned — cases can be imagined where group production is a detracting feature. To use the case mentioned above, a group authored work might be less impressive than thinking of the work as being that of a single artist.[26] This does not, however, affect the point group ability involvement can still make a difference to appreciative experience, at least in some instances.

These points made, group creativity may be broached. Evidence is marshalled toward two main conclusions. Firstly, that at least sometimes group creativity makes for an aesthetic difference. Secondly, that in the general case of group creativity, there are aesthetically relevant differences.

As was shown, an art object resulting from the joint skill of A and B may be distinct from an identical art object produced by A and B separately — it is a different work. The point extends to at least some group creative works — a group producing new and valuable material with creativity rather than through repetition of old and known ways generates works appreciated differently. Again, this may be so even where the art object is indistinguishable from other group produced art objects — the group has still generated a different work via a substantially different intentional process of production.

To expand, a history of creative group behaviour means a pattern of creative group intention. This can underpin different presentational schema which, in combination with the relevant art objects, are the differentiating feature through which distinct works can afford distinct experiences. Consider two dance improvisations resulting in indistinguishable patterns of movement. Now suppose an appreciator is informed of the art-relevant fact Work A manifests the creativity of the group performing it, whereas Work B is nothing but a very fortunate accident. Apprised of this information, the work is experienced differently. For instance, what in Work B previously presented as a well-chosen feature now has the character of a fortunate accident.[27] Correspondingly, confirmed of the creative origin, Work A may be savoured all the more. Apprised of the creative skill the group deploys, and any additional constraints

[25] Smith and Newman (2014)

[26] There is no empirical work addressing this question directly, however Smith and Newman (2014) likewise discuss results indicating information a poem had multiple authors leads to a lower judgement of quality as compared with a single author.

[27] Compare how the white fleck savoured as perfecting the canvas through consummate skill no longer impresses when revealed to be an overlooked accident.

under which they worked, it is experienced in light of the remarkable processes involved.

Indeed, a group creative work may be experienced differently from the output of individual creativity. Consider again two identical sonic structures. A successful group improvisation resulting in such a structure is often more striking than an individual improvisation, though sonically identical. To corroborate, imagine a two-hand improvisation performed by one pianist. Now imagine a sonically indiscernible improvisation performed by two pianists using one hand each. The latter is heard and experienced differently, and probably more impressive, even with other contextual factors held fixed.

Generally, variations in group intentional processes offer (a) a heuristic under which to bring resulting art objects (b) the possibility of a distinct experience associated with bringing the relevant art object under that heuristic process.[28] As such, it appears a history of group creative production will be of a wide appreciative relevance. The argument here does not, however, seek to show every group creatively produced work merits a different appreciation experiences, only that some are so through examples of the type presented.

7.3 Objections

To cap-off discussion of group creativity, some chief objections require response. Objections with replies paralleling those concerning individual creativity are not presented — the focus is on special challenges for the group case.

Epistemic demands

An opening objection raises worries over the epistemic and justificatory position required of the group for non-accidental success. The worry enters over how far this epistemic requirement extends. It might look as though group members must have very substantial knowledge of the intentions and dispositions of other members for the group to succeed non-accidentally. But a requirement for detailed knowledge of others in the group seems like an implausibly demanding burden, at least for the majority of cases.

[28] 'Relevant' variations excludes differences in artistic processes appreciation is indifferent to, for instance deciding to paint an area of red before an area of blue where this makes no difference overall.

Response— For one, it is unreasonable to hold group members to the standard of *certainty* over other member's cognitive states and dispositions. Group members only need to reach a position where successes follow non-accidentally from a relevant intention and to a counterfactually-sensitive standard. The only things specifically incompatible with the right kind of epistemic relation were certain kinds of misapprehension and guesswork. But reaching such a position need not be so demanding, supposing agents can make normal assumptions about other's cognitive states and dispositions. Furthermore, and to forestall another objection, a reasonable guess is not objectionable in the way a *pure* guess would be.

Initial collaboration

Can collaborators working together for the first time be creative in any early output? The members are not known to each other, so how could expectations align for non-accidental success?

Response— As formulated, the objection rests on faulty assumptions. Even the very first group actions might find the underpinnings of non-accidental success in reasonable beliefs about dispositions and ancillary conventions and expectations. Such information is often 'common knowledge', or otherwise easy to infer. When this is noticed, however, the objection is voided of considerable weight. This is not to deny some initial successes will fail to token creative success, but to notice early successes need not necessarily be accidental. Correspondingly, the objection is set aside.

Unequal contribution and motivation

It is quite possible participants in a creative group have different levels of motivation and involvement in the shared project. Furthermore, some individuals in a group might be disinclined toward the collective aim, or even trying to sabotage it. Nonetheless, it is not hard to think of cases where a less than compliant membership does not debar group creativity. How can a group remain non-accidentally creative in the manner described in cases where part of the membership is trying to undercut success?

Response— To fit with the account, the group need only preserve an ability to bring about success non-accidentally to the relevant counterfactually-sensitive standard. Generally, a difficult or sabotaging member does not threaten the non-accidental success of the group provided certain mechanisms are in place. Non-accidental success

with such members only requires success *despite* the recalcitrant member — where this could mean efforts to ignore, assuage, contain, or manage them. Certainly, disruptive participants make group success more difficult to achieve, but it does not make it impossible. Notice, in addition, it is consistent to hold groups where some members seek to undermine a shared creative project is less than ideally creative without denying it has the trait at all.

This kind of objection does, however, indicate the need for care in attributing credit around group projects. How responsibility and credit are distributed is a question that cannot be resolved here. In many cases the precise cut between what is due to given individuals and what is due to the group shall be hard to draw. Indeed, speaking of the whole group as skilled or creative may sometimes be a courtesy or manner of speech — the real ability resides in an active subgroup or individual. Nevertheless, none of this undercuts the possibility of group skills, nor the account set forth above.

Creative success is easier in a group

It might be objected multiple authorship can make something less of an achievement. Working in a group might make a success more achievable. A specific sculpture might be a very significant undertaking and achievement for one individual, but lighter work for a group of individuals. A comparable claim might be entered on group creativity — sometimes group involvement makes generating new and valuable material easier, affecting attributions of final value.

Response— It is necessary only to stress the multiplicity of considerations and dimensions of evaluation in play. To claim group creativity is an achievement and plausibly of final value is not to enter a claim on the comparative nature of these successes, or the degree of final value involved. A given token can have final value and be an achievement in terms of the group creativity involved, but that is not to imply it must have equal or greater value than an equivalent product of an individual. Judgments of achievement and final value should be sensitive to projects and challenges of different kinds.

7.4 Chapter conclusion

Extending beyond the agential case, this chapter linked group creativity to non-accidental success in producing new and valuable material. Reasons for developing a specific account of group creativity were broached first, before turning to set out some plausible mechanisms by which group creativity can achieve success non-accidentally. Following this, several arguments were entered on the value of group creativity. The final section offered summary responses to manifest objections.

Chapter 8

Conclusion

This work undertook an elaboration and expansion of the most viable philosophical account of agential creativity via the notion of skill. To that end, it first developed a detailed view of skill sensitive to concerns over realization. After outlining specific lacunae in the received view, creativity was shown to be partly constituted by a skill, though motivational supports may be needed on occasion.

Focus then switched to appreciation and Aesthetic Empiricism, a significant obstacle to any view relating creativity to the aesthetic appreciation of art. Reasons were offered to reject the Empiricist conception of art relevance, but the thought all aesthetic qualities have an effect on experience was retained. Within this constraint, cognitive penetration of experience gave means to explain how creativity can be relevant to the aesthetic appreciation of art.

Turning to value, the previous connection to skill provided a foundation to link both creativity and its products to achievement and conditional final value. Finally, attention shifted to the group case. It was shown group creativity does not always reduce to individual creativity, while points paralleling the individual case hold for appreciation and value.

To glance beyond the argument offered, the discussion suggests a wider application. Other seemingly skill-like qualities like sensitivity, courageousness, and empathy are regularly praised and esteemed in art. In addition, these qualities are often presented as relevant to appreciation. Given skills of various kinds were demonstrated to be achievements and plausibly of final value, and skill generally of potential relevance to the appreciation of art, it might be hoped these and other aspects of artistic practice can be illuminated by extension of the arguments offered. Though these topics are

beyond the scope of this work, a plausible template for their development is in hand.

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