ACCOMPLISHMENT

Abstract: The concepts of knowledge and of accomplishment have many similarities. In fact they are duals, in a sense that I explain. Similar issues arise about both of them, deriving from the functions they serve in everyday evaluation of inquiry and action.

I. THREE WAYS NOT TO BAKE A CAKE

guessing. Alice wants to make a pound cake. She pours out random quantities of flour, butter, and sugar, from packages in the cupboard whose labels she does not read. They happen to come out roughly a pound each. ("Why is it called a pound cake?" she wonders. "I guess because you really pound the ingredients together.") She mixes in a couple of eggs and supposes this is enough, but then drops the carton, shrugs her shoulders, and breaks them all into the bowl. Mixing and baking are equally random. Eventually she supposes it might be ready, opens the oven door, and out comes a perfect pound cake. A success that she cannot repeat, which could more easily have resulted in failure.

compensating accidents. Bruce looks up a recipe. He gets the proportions right and follows the mixing instructions precisely. He even preheats the oven to 325 degrees. But it is a centigrade oven, and 325 will burn it to a crisp. Unbeknownst to him there is a fault in the wiring, and temperatures over 200 C cause one set of elements to fail, so that the temperature is reduced to exactly 160 °C. He waits 75 minutes and out comes a perfect pound cake.

lack of control. Charles knows that it is a centigrade oven, and that the recipe is good. He follows it faithfully, and the result is fine. The good result depends on the fact that he had not beaten the eggs very intensively and had added a fair amount of liquid, which compensates for the low air pressure where he is. Had he been cooking at sea level in

normal weather he would not have compensated for the smaller number of bubbles in the batter. So although the cake came out well, the result depended on an accident of the circumstances.

Each agent has succeeded in one way and failed in another. The ways in which they have failed should be familiar. *Guessing* resembles epistemically irresponsible belief-formation such as hasty conjecturing or sloppy reasoning. *Compensating accidents* resembles some early Gettier cases: the right result emerges because a reasonable mistake leads to a correct result. *Lack of control* resembles some later Gettier cases, of a relevant alternatives flavour: there are potentially perturbing factors that the person cannot compensate for. In each case the person has something which can be compared to knowledge. But of course it is not knowledge. It concerns the way in which their plans, desires, or intentions are fulfilled rather than the way their beliefs, convictions, or suspicions are satisfied. Taking the resemblances at face value, they suggest that situations in which individuals fail to acquire knowledge can be paralleled by situations in which their actions fall short of their aims. In particular, belief that is true but is not knowledge has its parallel in desire that is satisfied but does not result in the agent's *accomplishment*. The purpose of this paper is to formulate this parallel - or as I shall say, duality – between knowledge and accomplishment more carefully, to defend it, and to suggest what follows from it. The first task is simply to state it as clearly as I can.

II. DIRECTION OF FIT

When a person has a true belief about her environment there is a situation which has a semantic fit to her belief. There are also causal relations that typically hold between situation and belief, and very often when the belief qualifies as knowledge some variant of "she believes p because p" holds. A person normally operates in such a way that she updates her beliefs so that they continue to correspond to the facts, so

changes in fact will, all going well, prompt matching changes in belief. So much is familiar, if hard to say precisely and ringed with exceptions.

When a person has a satisfied desire directed at her environment there is a situation to which her desire has a semantic fit. There are also causal relations that typically hold, and very often when the fact qualifies as an accomplishment some variant of "p because she wants p" holds. A person normally operates in such a way that she modifies the environment so that it continues to correspond to her desires, so changes in desire will, all going well, prompt matching changes in fact. This too is familiar, if hard to say precisely and ringed with exceptions.

These two platitudes are symmetrical: exchange "belief" and "desire", exchange "knowledge" and "accomplishment", and reverse the orders of causal influence and of direction of semantic fit. The transformation takes general truths about knowledge to general truths about accomplishmen*t*, and vice versa. This is why I prefer to say that the concepts are dual rather than parallel: it is not that the same things are true of them, or that every particular truth involving one can be turned into a truth involving the other, but that a systematic transformation turns general facts about either into general facts about the other. This is the relation between dual concepts in mathematics, such as conjunction and disjunction in logic (meet and join in lattices and Boolean algebras), point and line in projective geometry, or vertex and face for polyhedra.

Several authors have suggested versions of the idea. The most explicit is Ernest Sosa[1]. Sosa describes knowledge as belief that is

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[1] [references are also listed at the end] See in particular *Knowing Full Well* (Princeton: Princeton University Press, 2010). A similar idea underlies some of Timothy Williamson's work. See the introduction to *Knowledge and its Limits* (Oxford: Oxford University Press, 2000). In Sosa the idea depends on a particular analysis of knowledge, and in Williamson on the suggestion that no analysis is possible. But it can be developed independently of either, as I am

Accurate (true), Adroit (epistemically virtuous), and Apt (adroit because adroit). In many writings Sosa uses a metaphor of purposeful action. The knower is like an archer who hits the target because of his skill. In his recent *Knowing Full Well* the metaphor has become a generalization. All directed actions fall under the AAA scheme of evaluations

> When someone flips a switch as a means to turning on a light, … he has an ostensible reason on which … he bases his action, namely that flipping the switch is a means to turning on the light. Now, any means to a further objective will of course fall short if it does not bring about that further objective. Moreover, it will fall short if the objective is obtained by a certain kind of luck: i.e. in a way that does not manifest the agent's competence. Suppose the means-end belief to be true: … But suppose that belief to be competently acquired but Gettiered, so that it is only true by epistemic luck. In that case, I say, flipping the switch still falls short, not because it does not bring about the light's going on, but because it brings it about in a way that does not fully enough manifest the competence of the agent, being thus an inapt performance. (*op. cit.* p.46)

Sosa's suggestion is that knowledge shares the three As with well-directed actions. He does not mention the reversal of direction of fit, nor any systematic body of truths concerning accomplishment. His suggestion is put in terms of a particular account of knowledge. My question is whether before we make enlightening and explanatory theories, knowledge might have a twin in the domain of action that is equally familiar and equally central to our everyday thinking. My defence of a positive answer to this question is meant to be

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doing here, and as I have suggested in chapter two of *Bounded Thinking: intellectual virtues for limited agents* (Oxford University Press, 2012). I explore some consequences of the idea, without defending it, in 'Accomplishing Accomplishment', *Acta Analytica.* **27**, 1, 2012,1-8

independent of contested accounts of knowledge, intentional action, rationality, and other related concepts.

First notice how many platitudes about knowledge and accomplishment come in dual pairs. In noting these, an intended sense of "accomplishment" should become more salient, just as the intended sense of "know" emerges in the first few sessions of an epistemology class. To begin, knowledge entails truth: if a knows that p then p. Similarly if a accomplishes that p then p. Obviously neither converse holds. In many cases if a knows that p then a believes that p because p is true. Correspondingly, in many cases if a accomplishes that p then p is true because of a's desire for p. There are many reasons why someone can believe truly without knowing. They generally turn on lack of connection between fact and belief. It may be a complete coincidence that the person's belief turns out to be true, as with fantasies or guesses. Or more interestingly it may be that the person is trying for the truth but with a method whose success would need luck. Slips of reasoning are the standard example. Coincidence gives success without accomplishment, too, as when you wish for wealth and then win the lottery (via a ticket bought for you as a surprise, say). And here too a person may try to realise her desire but in a way whose success requires luck, and again faulty reasoning gives examples. There are simple belief-formation situations that are models of knowledge, notably perception, where a relatively simple fact causally not very distant from the agent produces a sensory impression that leads to a similar belief, in a way that is normally reliable. Equally simple patterns of action are models of accomplishment, notably bodily action directed at an immediate aim, where a desire leads to a motor intention which leads to a bodily action which produces a change in the world that matches the desire. We depend on others for much of our knowledge: telling that. Often one person knows something and another acquires the information from her so that, under suitable conditions, she also

knows it. We also depend on others for much of what we accomplish: telling to. One person transmits her desire to another who acts, so that, under suitable conditions, the first person has accomplished the result via the second person's action.

A major motive for ascriptions of both knowledge and accomplishment is the assignment of credit and the assessment of competence[2]. You do not get any credit when your guesses turn out right, nor when your random actions happen to succeed. We give credit for knowledge for a reason: we rely on other people's information and if the truth of someone's belief is not due to the combination of the fact and their epistemic virtues then they are not likely to provide true information on the next similar occasion. The reasons for giving credit for accomplishment are similar: we rely on other people getting things done, and if someone's successes are not due to their desires plus their practical virtues then they are unlikely to get the job done on the next similar occasion.

Some regularities mix knowledge and accomplishment. If you guess at a fact and base your action on it, then the result is rarely an accomplishment. If you do not accomplish some epistemic task then the result is rarely knowledge. A bungled experiment, for example, does not count as something the experimenter has achieved, and the conclusion drawn from it, even if true, is not known. It is hard to state broad generalizations here, because there are usually many relevant sources of information and many ways of achieving an end. For example, a scientist might test a weed-killer on a crop, be confused about which plots had received the treatment, and in searching to identify the "weeds" - actually the crop - growing on the supposedly

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[2] This is a generalization of the ideas of Welbourne and Craig. See Michael Welbourne *The Community of Knowledge* (Aberdeed:Aberdeen University Press 1986), Edward Craig *Knowledge and the State of Nature* (Oxford: Oxford University Press, 1990.)

control plots, read a textbook article explaining the efficacy of the treatment. Or a voyeur might try to dig a hole in a wall to see whether a neighbour sunbathes in the nude, work at the wrong wall in the wrong direction, and collapse a wall to a different yard where the neighbour of interest happens to be visiting and sunbathing. Or one might base an action on information that fails to be knowledge, and accomplish one's aim all the same. So one might try to swat a fly, mistake its mirror image for it, making the mirror fall down and startle the fly towards one where one could accurately aim and swat it. Here the acquisition of a false belief (the fly is there) is one of the causes of a situation in which one is able to accomplish one's aim. It would be very hard to find formulas which excluded cases like these. But, generally, successful actions that are based on knowledge tend towards accomplishment, and true beliefs that are based on accomplished evidence-gathering tend towards knowledge.

We are usually gathering information and satisfying our desires simultaneously, with each an inextricable part of the other. When searching for a book with the answer to a question one has to discover which library has it, in order to find and read the book, in order to learn the answer. So it should be no surprise that generalisations concerning successful results in either dimension tend to involve successes in the other.

The symmetry that gives rise to the duality is hard to turn into definitions of knowledge or accomplishment, or even into tight conditions. So if someone just doesn't get the concept of accomplishment you can provide clear examples, and also marginal or controversial cases, whose status is also informative. ("If you cannot see that this is a tough one, you lack a feel for it.") And having given a sense of the symmetry you can use examples of either to generate examples of the other, as with "Gettiered" actions. But since there is no simple uncontroversial formula at hand, it is hard to slap down obstructive

intuitions. In particular, the element of direction of fit is hard to specify independently. To see this, consider cases in which a belief causes the fact that makes it true, or a desire is caused by the result it aims at[3]. For the first, think of many beliefs of a spoiled and capricious person whose lover ensures that whatever extravagant expectation they form will come to pass. ("I am sure that we will be in Bali next Christmas", "It somehow seems inevitable to me that you will propose via a skywritten verse ", but also "I hate the thought of losing you, but I cannot shake the conviction that this time next year you will no longer care for me".) For the second, think of someone so reconciled to their fate that they long for every next development of their medical prognosis. ("My white cell count has doubled; that must be the direction in which I must hope to travel", "The doctor says I have only a few weeks: I am sure he is lying but it would be the right interval to hope for.") The problem the cases pose is that the rules for turning generalisations about knowledge and accomplishment into one another require us to reverse direction of fit, and this requires fit to be asymmetrical, as is intuitively right. (In Anscombe's classic example[4] the purchases have to fit the shopping list but not vice versa, while the detective's record of what was bought has to fit the purchases but not vice versa.) But satisfaction is symmetrical - "believes p and p" and "wants p and p" can both be made false by a discrepancy in either argument place - and as we have just seen causal order is an unreliable guide. In much more ordinary cases, too, it is just not true that there is a one-way causal direction to beliefs from the facts that make them true, or from desires to the facts that fulfill them. So why given a belief, a desire, and a fact do we insist on evaluating knowledge by asking of a process leading to a belief whether the result

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[3] See Grant Reaber, "Rational Feedback", *Philosophical Quarterly*, **62**, 249,2012, 797–819

[4] G.E.M. Anscombe, *Intention,* (NY: Cornell University Press, 1963) p. 56. See also Lloyd Humberstone "Direction of Fit" *Mind* (1992)**101**: 59-84.

fits a fact while in evaluating accomplishment we ask of a process leading to a change in the world whether the result is a fact that fits a desire?

Direction of fit can be clarified somewhat in terms of accomplishment itself, though this will not give us any definitions. A belief-acquiring project will be a failure unless the beliefs that are formed as a result are true. A world-changing project will be a failure unless the resulting facts fit the agent's intentions. This is so even when it is the beliefs that cause the facts and the facts that cause the intentions or desires. Suppose for example that some belief of the capricious beloved sets off a frantic activity by the lover which makes the beliefs true, but that by the time the lover has finished the beloved has abandoned the belief for a contrary one. ("Oh no, I see it now: it will not be a biplane writing verses but skydivers leaping like fireworks.") Then the beloved has failed as a believer. At any rate this counts as a failure in the beloved's believing career, though it may be a successful as manipulation or exhibitionism. Or suppose the medically fated person is exposed to evidence that her future is headed in a certain direction, as it in fact is, and embraces it enthusiastically. But at the last moment a random event derails her to a different destination. (She is enthusiastic about the coming metastasis, but it turns into a mystery remission.) As an agent she has failed: her desires are not satisfied, even though she has a reasonable belief.

The conclusion to draw is that when a person is engaged in a project that centers on belief-formation then her ends have not been accomplished unless she gets the beliefs she is aiming at and they are true. This will not be so for projects for which forming beliefs is incidental or instrumental. And a project centering on producing some change in a person's environment will have failed – will be a non-accomplishment - unless the changes she is aiming at do happen, and they are accomplishments. This is not trivial: it counts it as failure when

the changes happen but not in ways that qualify them as accomplishments. Similarly, gaining a belief that happens to fit the facts is not accomplished inquiry or thinking unless its truth is an accomplishment. This might seem just a roundabout way of saying that we want our beliefs to be knowledge just as we want our actions to result in accomplishment. And it would be just that if we could reduce knowledge to a special kind of accomplishment, a possibility that I consider and reject in the final section of this paper. But as a clarification of direction of fit it relies on the fact that belief-acquiring projects are special cases of motivated action - one is trying to produce a change in the world that involves one's own informational state - and they are accomplishments only if the belief is true. This conclusion also supports a familiar distinction between belief-like and desire-like states: a belief-like state is governed by processes which result in accomplishment only when there is a fact that matches a state they produce, while a desire-like state is governed by processes which result in accomplishment only when the state produces a fact that matches the state. Note the crucial asymmetry: belief-like states are associated with state-producing processes where accomplishment requires that the state match a fact, while desire-like states are associated with result-producing processes where accomplishment requires that the result match the state[5].

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[5] Might a state fit facts in both directions? This would be so for Altham's Besires See J.E.J. Altham "The Legacy of Emotivism." in G. Macdonald and C. Wright (eds.), *Fact, Science and Morality* (Oxford: Basil Blackwell, 1986), pp. 275-88. But besires match different facts in the two ways. My thought that I ought to visit my grandmother in hospital is desire-like related to my making the visit and belief like related to an obligation of care. See Matthew Bedke "Moral Judgement Internalism" *Philosophical Studies* **144**, (2009): 189-209. I see no impossibility in a state that has both directions of fit for *the same* objects. And one might argue that examples such as those I have been using describe such states. But they must be rare, so that we do not make a special category of them. A peculiar kind of bidirectional fit happens when one person

III EXPLANATION - WILLIAMSON'S QUESTION

There is a simple connection with explanation here. If we can understand why people succeed on particular occasions we have a grasp of their suitability for shared projects. From credit to job-assignment. Williamson[6] has pointed out that knowledge plays a role in explaining action that mere belief cannot play, because of its lack of an intrinsic connection with the object of the belief, and has argued that true belief cannot play the same explanatory role. ".. the substitution of 'believe truly' for 'know' sometimes" he writes "involves explanatory loss." Williamson defends the claim with examples, prompting several opposing analyses of the examples. The back and forth can go on for ever. Start with an example in which knowledge explains but bare belief does not, and then expand it so that belief plus some other features falling short of knowledge explains the action as described, then expand the example as described, so that these features are not sufficient. It is not clear what counts as winning, especially since it is not clear what kind of explanatory power we are chasing. There is explanation in terms of the motive for acting - idiomatically why the person did it - explanation of the action as a an event in the world - for example in terms of a statistical regularity- explanation in terms of the success of the means taken - idiomatically how the person managed to do it - and others. Given the natural affinity of knowledge, credit, and reasons for success, I take it that the last of these is the promising focus. So the idea I shall defend is that knowledge has a systematic explanatory connection with accomplishment. This is more specific, weaker, than Williamson's claim in that it concerns just explanations of why a person

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deliberately communicates with another. Then there is a self-fulfilling desire that someone have knowledge: fit both ways.

[6] See Williamson,*op cit,* especially chapter 2 section 4. For critical discussions of Williamson's claims about knowledge and explanation see Frank Jackson's critical notice of the book, *Australasian Journal of Philosophy* **80** (2002): 516–521; and P D Magnus and Jonathan Cohen "Williamson on knowledge and psychological explanation", *Philosophical Studies*, **116** (2003): 37-52.

accomplishes something, and stronger in that it suggests a regular, default, connection: the standard way of explaining accomplishment is by appealing to knowledge.

Not aspiring to definitions of either knowledge or accomplishment, it is natural to argue from examples. We can combine this with argument from imperfect definitions, characterizations that capture some of what is required in particular cases. Consider a case of knowledge by tracking, and tracking-based accomplishment[7].

Fred has become an expert fly-swatter. He understands the way flies take off backwards as danger descends, and strikes accordingly, and he has become very good at registering the path of a meandering fly. On one occasion he swats a particularly annoying and evasive fly that had eluded others. How did he do it? Why did he succeed? Obviously because he knew where the fly was, and he knew how to swat it. His moment-to-moment informedness of the fly's location gives him a moment-to-moment capacity to guide the swatter to it. Fred has not only a true belief where the fly is at the instant he unleashes his swat, but also where it was during an interval before and an interval after. Since Fred's true beliefs about the fly's location come in bunches, temporally and counterfactually spread, his success is not explained by his having any particular true belief. He could easily have

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[7] One of the most philosophically influential scientific papers in the 1960s was J.Y. Lettvin, "What the Frog's Eye Tells the Frog's Brain", *Proceedings of the IRE* **47,** (1959):1940-51. I believe, on only circumstantial evidence, that its influence is largely due to Michael Arbib's *Minds, Machines, and Mathematics* (New York:McGraw-Hill, 1964). Arbib was not widely cited by philosophers, but their footnotes tended to stick amazingly close to his references. The classic sources for tracking are Fred Dretske 1970. Epistemic Operators, *Journal of Philosophy* 67: 1007- 23, and part II of Robert Nozick *Philosophical Explanations* (Oxford: Oxford University Press, 1981). For more recent work see Fred Adams and Murray Clarke, "Resurrecting the Tracking Theories", *Australasian Journal of Philosophy,* 83 (2005):. 207 -221, Sherrilyn Roush *Tracking Truth: Knowledge, Evidence, and Science* (New York: Oxford University Press: 2005) and chapter two of my *Bounded Thinking* (OUP 2012). But though all of this may be inspired by Lettvin, perhaps via Arbib, any suggestion Lettvin made about frog knowledge was really a device towards explaining frog accomplishment.

had any one of these and have missed the fly. His success *is* explained by his having a unified set of true beliefs that track the fly's location. But to appeal to these is in this case to appeal just to his knowledge.

Or consider a belief reliably linked to the facts, not necessarily by tracking: the well-informed burglar. He gets in through a basement window and makes a beeline for the library on the fourth floor, where among the two thousand books he heads straight for a copy of *The Collected Works of Wilkie Collins* on a top shelf and takes the diamond hidden in a hollow within. Later we ask "how did he know?," because it would be incredible that he guessed. To say that he had a true belief and did not know would be to give a very weak and puzzling explanation, since it would need to be augmented with a story about how the belief came to be true. As it is, if we want to improve the explanation the thing we most need to add is an account of his source of knowledge. Did someone tell him, or did he insinuate the household in disguise when the gem was being hidden, or did he know the habits of the hider from some other incident? Whatever the source, his reliable connection with the location of the diamond explains his reliable grasp of it, his accomplished theft. If he had looked for it somewhere else it would have been because his source had given different information, because it was somewhere else.

There are cases where there is no identifiable true belief to play an explanatory role. We explain how someone got home through a maze of alleys and back streets during a flood by saying that she knew the geography of that part of town very well. So when one route was blocked she was able to find another. We can make this explanation without having any idea which routes she reliably connected with which destinations. All we need to know is that she did have many such beliefs, and that they were known. As with the fly-swatting case, it would take a miracle to produce all these beliefs not as knowledge but in such a way that they were all true, and if the miracle occurred the

result would not be an accomplishment but a fortunate success.

IV OBJECTIONS FROM LOOSE TALK

We often speak in ways that seem less demanding than knowledge and accomplishment, taken with full rigor, might suggest. And we often use other words that seem to serve the same purposes, but which can have pretty relaxed, even trivial, conditions for their satisfaction. Since there has been so much less philosophical accumulation around accomplishment, our use of it is more varied and less guarded. We say "only one person managed to get through the maze, and that was just by luck." Did she really manage it, or are we embroidering the fact that only one person did get through the maze? Or does "manage to" require less than accomplishment. But compare: "these children do not know much: only one got the answer to question six right, and she was guessing." Are we embroidering the fact that only one child produced a correct answer, or does "get the right answer" require less than knowledge? It would not be too bizarre conversationally to say "only one child knew the answer, and she was guessing", just as one could get away with saying" getting through the maze was difficult; only one person accomplished it, and that was just by luck."

It is not at all obvious where to draw the lines between metaphor, acceptable falsehood, and contextually correct stretching of borderlines here. I think the most helpful thing is for me to present a conjectural line, which is surely just one way of putting the pieces together.

Suppose that Xantippe told Socrates that she knew he forgot to buy fish on his way home. She will have used an epistemic verb, more likely one with a *gnosth* root than one with an *epist* root [8] We don't

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[8] This is the result of a conversation with Michael Griffin, though I am sure he would not stick his neck out this far. Very relevant is Gail Fine "Does Socrates Claim to Know that He Knows Nothing?", Oxford Studies in Ancient Philosophy 35 (2008), 49-85

know exactly what she would have said, ancient ordinary language being hard to come by, and ancient voices of women all but lost, but there is a number of verbs she could have used. Their uses form a background for the technical vocabulary that her husband and the succeeding generations of philosophers used to make and defend interesting claims, many of which seem to us now utterly bizarre. This vocabulary influenced that of European languages so that in English a single verb "to know" is predominant. This sometimes makes it harder to say some subtle things ("yes, I knew she was lying, but I didn't really have any evidence", though someone else might say "I had the definite intuition, which turned out to be correct, that she was lying, but without the evidence I was some way short of knowledge".) But it is also a recognition of a fact, that many of the thoughts we want to express using "know" focus on a particular central relation, vague and elusive and probably contextual though it is, between thinkers and facts.

Xantippe may also want to tell Socrates that he accomplished the purchase of a fish for dinner, that terrible husband though he is he has still got them a meal on this occasion. Then too she can use a variety of words. And since her husband and his friends do not get so worked up when using them, they remain untheorized. So, much later, we have many ways of saying that someone did something, thanks to her efforts rather than fate. Sometimes we say it just by using an unqualified action verb. "Jane balanced a spoon on her nose," meaning that to Jane's credit she managed the delicate coordination of sensation and control. But the presupposition can be over-ridden: "a gust held the spoon so that for a miraculous moment Jane balanced it on her nose." Accomplished, managed, succeeded, achieved, made, did: all of these can on occasion express the concept in question. The variety adds subtlety to the way we speak, but again there is a single vague, elusive, and probably contextual concept behind a central class of uses. Or so I am suggesting. One might doubt that there is any such central concept,

even allowing it to be vague, subtle, and so on. The argument against that suggestion here is conditional. If you think that there is a single concept behind crucial uses of "know", "learn", "discover", "realise", "find out", and so on[9], then you should think the same in the dual case[10].

Besides the greater baggage that has accumulated around knowledge than around accomplishment, there are apparent differences between belief and desire that might seem to generate uncomfortable disanalogies between knowledge and accomplishment. One concerns irreversibility. You can come to disbelieve something you once believed, or you can simply forget, and as a result knowledge can be replaced with non-knowledge. But, it might seem, what's done is done, so accomplishment cannot turn into non-accomplishment. But in fact just as some knowledge is permanent, some accomplishment can be undone. This can happen when an effect is produced as long as one does not spoil what one has at first achieved. For example you calm someone down, from their over-reaction to a triviality, and from the moment they become calm you have accomplished a social smoothing, *unless* you stupidly say something to set them off again. There are many such examples.

One might worry also that belief is a less varied business than desire, thus making the concept of knowledge less diffuse than that of accomplishment. We might take knowledge to require belief, while

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[9] tell (as in hawks from handsaws), be aware, grasp, …:

[10] I am going to dodge one issue that needs a long and careful discussion: the relation between accomplishment and intentional action. The latter concept has indeed received a lot of philosophical smoothing, and it is intuitively in the same territory as the former. But they are not the same. One can accomplish that democracy prevails, through a lifetime's efforts, but there is no intentional act of doing so. One can set things up so that something happens unintentionally, for example that one blurts something out, thus accomplishing that the unintentional act and some immediate consequences of it occur. I have discussed this issue elsewhere, and it needs its own extended treatment.

accomplishment can be found with desire, intention, or other pro-attitudes. But in fact conjectures, suspicions, and convictions can all be known, and it is controversial whether there is a single stable class of states of mind to be called beliefs[11]. Moreover in the duality of knowledge and accomplishment, belief and desire do not play simply parallel roles: the direction of fit leads from belief to fact but from fact to desire. So the comparison of belief and fact is just as relevant. And we have an enormous variety of variant ways of referring to facts effects, changes, developments, consequences, and results. So for all the terms of these relations we have a plethora of non-synonymous labels. It is safer simply to say that for knowledge suitable conditions have to be met by a state with a mind-to-world direction of fit and that for accomplishment suitable dual conditions have to be met by a state with a world-to-mind fit.

One last point about what it seems right to say. Some people find it unnatural to describe something awful, immoral, or stupid as an accomplishment. While I do not share this intuition I have found that others have a resistance to calling a well-executed murder, or a brilliantly executed act of painting oneself into a corner, accomplishments.   "Accomplishment" gets taken as "worthy accomplishment". But surely people accomplish regrettable things. Someone may accomplish the poisoning of his grandmother, and while we may hesitate to list it among his accomplishments (exploits, successes, ..) we may agree that he did accomplish this horrible thing. Perhaps in some conversations a deed is not called a success, let alone as an accomplishment, unless it produces some valuable result. This would be analogous to a Platonic dismissal of trivial or shameful

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[11] Asbjørn Steglich-Petersen assures me that in Danish there are words to translate "conviction", "conjecture', "faith", "thought", and other terms that overlap with the philosopher's "belief", but no word with exactly its range of meaning. And everyday English?

knowledge as not really knowledge at all. (Is knowing that you burped eight times over your beer really *Wissenschaft, scientia, episteme*?) But if there is a coherent concept here to be explicated it is not the one I am after.

V DUPLICATING SOME BIG QUESTIONS

Enormous traditional worries about knowledge have their dual analogs. There could be accomplishment skeptics who argued that, given the role of chance in human affairs and the impossibility of controlling all the details of every action, we do not strictly speaking accomplish anything. We merely make efforts in the direction of desired results, and sometimes the world cooperates. Sending birthday flowers you do nothing to prevent aliens from intercepting the shipment before it arrives or from replacing the roses with indistinguishable flowers that are fatal to smell, so the success of your gesture is largely the result of the good fortune that none of these possibilities intervened. And while in the grip of such considerations we might tend to downgrade most apparent accomplishments to successes, snapping back when the topic changes, in the familiar contextualist pattern.

Skepticism is so diffuse and yet familiar that one might reply that enough ingenuity could reproduce it anywhere. Like seeing famous faces in stains on the wall. So it is more significant that more specific related questions have their duals. I will mention only two: problems about lotteries and Dretskian issues about closure.

You aim to pay off your mortgage by winning the lottery. This is more promising than it might seem because your uncle who works in the lottery office has found a legal way of putting ten thousand tickets where you can buy them. There are a hundred thousand tickets in all, and one of yours is drawn. Have you accomplished your win or just lucked out? Intuitively the latter, and the intuition would be the same if you had got a larger proportion of the tickets. The purely random

nature of the draw is essential here. In contrasting cases where the probabilities are the same but they are the chances of determinate but unknown factors, we are more tolerant. You make your escape by jumping in the only car available. One in ten of these cars will not start, but the one in place that night does. So your plan worked and you got away. (Hannibal plans to ambush the Roman army at Trasimene, so he hides his troops below the ridge where they will probably not be seen. There is, say, a one in ten chance that Roman scouts will spot them, but he gets away with it. He has accomplished his ambush, though his plan could easily have failed.)

The phenomenon here is that we are more willing to count desired results as accomplishment if the probability of failure is due to lack of conclusive evidence than if it is due to purely random factors. This parallels the fact that we are more willing to attribute knowledge to a person's belief if it is based on a high epistemic probability than if the probability is based on a stochastic process. The operative distinction here, between probabilities based on strength of evidence and probabilities based on random processes, is highly vulnerable, and threatens to collapse under just a little probing[12]. But that is a problem about the sustainability of our intuitions in both cases.

Now consider a negative lottery. If your ticket is drawn you are fined an enormous sum. But there are one hundred thousand tickets so the danger is small. You have been saving to pay off your mortgage, and you deliver the check to the bank on the first of July. Was this an accomplishment? It certainly seems like one. But you did nothing to forestall the lottery disaster, which would have derailed the whole plan. You would not have said that you knew it would not happen, and you would not have said that your plan to escape the fine had worked.

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[12] See John Hawthorne *Knowledge and Lotteries* (Oxford: Oxford University Press: 2004), especially chapters 1 and 4. The literature is enormous. What matters most here are the connections with not very aleatoric-seeming risks, as in Stewart Cohen 'Knowledge, Assertion, and Practical Reasoning' *Philosophical*

(There was no plan deeper than keeping your fingers crossed.) And though you acted with the overwhelming probability that your act would succeed its non-failure is due to the luck of the draw. So how is it that you did not control your not being fined but you did control your payment of the mortgage, though the two were so closely linked? I do not know, and I suspect no one else does either.

Closely related to these puzzles are others, in which a person has a strong claim to have accomplished p, but a weaker one to have accomplished q, where "if p then q" is a necessary truth. Fred shows his child the zebras in the zoo: to make it the case that his child sees the zebras he has to make it the case that his child has not seen painted mules[13]. But intuitively, the latter is much less plausibly among Fred's accomplishments. He has taken explicit measures to get to the zoo and to be by the zebra pen, but he has done nothing to forestall sneaky mule-painters. So if the zebras are not painted mules he can take no credit for that. For that matter, Fred has done nothing to ensure that the whole zoo trip is not an episode in the experience program of an experience machine, but if they are really seeing zebras then it cannot be.

Refutations, disarmings, and accommodations of these issues follow parallel courses in epistemology and the theory of accomplishment. Some are no doubt more persuasive than others, but the parallelism is the issue now. I am personally attracted to contrastivist reactions, on which one says that, for example, Fred accomplishes his child's appreciation at that moment of zebras rather than wildebeest, but does not accomplish his child's appreciation of flesh and blood genuine zebras rather than physical or striped phantasms. A generally contrastivist attitude is pre-theoretically plausible for accomplishment, since there is always a margin of error in

Issues, **14** (2004):, 482–491.
[13] The case is obviously transformed from one in Dretske, *op cit*.

determining the precise consequences of acting, leaving it to factors outside one's control to determine the which specific possibility becomes actual. The duality of accomplishment and knowledge then allows contrastivism in epistemology to gain some of this plausibility for itself. So if one is a contrastivist for accomplishment one is likely to be a contrastivist for knowledge[14].

VI POSSIBLE CONCEPTUAL ECONOMIES

Getting things done collectively makes us evaluate one another's information-gathering and intention-fulfilling capacities. We have many concepts to apply in doing this, including knowledge and accomplishment and there are many relations between them. They can be iterated: one person can know what another has accomplished, or accomplish that another has a true belief.

Of particular interest are accomplishments of other intentional states. You can make someone know something, by telling them or providing evidence or just turning them to look. And you can make someone accomplish something. For example you can train someone in a skill and then instruct them to exercise it. After giving two days of expert tuition in unicycle riding you say "off you go, now". And you can accomplish that you accomplish something. You can set aside the time for learning and watch unicycle videos yourself, then choose a suitable location for your first extended ride. If you accomplish that you accomplish something, then you accomplish it, just because accomplishment is factive. But just as with knowledge, the converse is not true.

This is important because it reveals a potential tension in thinking about accomplishment parallel to the internalist/externalist

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[14] Similarities and connections between contrastivist positions in several domains are explored in the essays in Martijn Blaauw, ed. *Contrastivism in Philosophy*, Routledge, to appear.

divide about knowledge. When one accomplishes anything many other facts have to be as they are for the accomplishment to occur, and a significant part of these will normally be outside one's control. But sometimes one can get a grip on some of them, setting the stage for one's later accomplishment. The most intuitive cases are ones where preparation is required, which one can arrange for oneself or which can happen for other reasons or fortuitously. Facing a job interview one can trust in general knowledge and quick wit or one can find out what questions are likely to be asked. Compare two successful candidates. One does not prepare but finds she can handle the interview topics, with intense concentration and frantic summoning of resources. The second checked out the concerns of each member of the panel and then organized a mock interview in which he was grilled on those very issues. Both have accomplished good interviews, but she has accomplished that she accomplish it - she has arranged that she was able to make it go well - while he has not. He did make it go well, but whether it was an interview that he could make go well was something over which he exerted no control. Similarly one might accomplish that one knew the answers to the questions on a test, or one might know the answers without having accomplished that one would know them. Less hangs on chance or factors outside one's control when one accomplishes accomplishment than when one merely accomplishes, as epistemic luck plays a smaller role when one knows that one knows than when one merely knows. And in both cases more permissive ways of speaking, in which a person need exercise less control in order to know or accomplish, combine easily with a wider gap between mere knowledge or accomplishment and its iterations. In the implausible limiting cases in which total certainty or total control over interfering factors or alternative possibilities is required, the KK and AA principles are defensible.

Often, running through the parallels between knowledge and

accomplishment, I have simply repeated familiar principles about knowledge, substituting accomplishment for knowledge and changing a few details. This might suggest that a single set of principles would do. Accomplishment is clearly not a special kind of knowledge, but might knowledge be a special kind of accomplishment, where the aim is to acquire true belief? Everything would be simpler and more general. Much of epistemology would be a special case of the theory of accomplishment.

Attractive though the idea is, I do not think it is right. The first problem is making the suggestion definite. When one comes to know that p, one has rarely begun with an intention to believe, let alone know, that p. On the rare occasions that one sets out to believe a particular proposition, the aim tends to be to believe it whatever its truth value, and sometimes to believe it even though one now thinks it false. And many instances of knowledge are not results of any very specific aim at true belief. Most of any person's knowledge is acquired simply by looking around and by attending to what others say. So the intention is at most the very diffuse one of keeping up with things around one. And since one can know without accomplishing that one knows, as when someone recognizes a friend's face in a crowd in a faraway city, one can know without accomplishing true belief.

The converse is more puzzling. It cannot be that whenever a person successfully follows an epistemic intention then everything that results is knowledge. I could be curious about Brazilian history and by reading Wikipedia acquire a large number of true beliefs and one false one. But suppose someone has an intention to answer a question: "p or q?" She inquires and succeeds, in that she concludes truly that p. Suppose that the success is an accomplishment, the desired result is due to the particular means taken. Then, the claim is, the person has knowledge. So accomplishment in answering a question is knowledge.

I think that this conclusion may be right, though it falls short of

identifying knowledge with the accomplishment of true belief. It has its own dual principle: accomplishment in satisfying a desire is accomplishing accomplishment, and thus success. So though success and true belief fall short of accomplishment and knowledge, to accomplish either of a pair is to accomplish the relevant other. This makes intuitive sense in terms of the targets of epistemic and practical projects. Suppose you want the answer to a particular question, inquire, and find it. You wanted a true belief and you got knowledge. If you had tried for true belief that was not knowledge, you could have got it, by an enquiry that resulted in flawed or Gettierized grounds for a nevertheless true conclusion. But that would have been a fluke that vitiated the enquiry. The enquiry would have been a failure though it achieved its end: it would not have been an accomplishment. It is the same if you wanted to get a certain end but wanted it to happen by luck or coincidence. You might get it, but you would not have achieved it. Call this the invisibility thesis: accomplishment cannot see the difference between knowledge and true belief or that between success and accomplishment[15]. To accomplish one is to accomplish the other.

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[15] The invisibility thesis is relevant to questions of the value of knowledge, as discussed in Jonathan Kvanvig's *The value of knowledge and the pursuit of understanding* (New York: Cambridge University Press, 2003). The value of knowledge is hard to distinguish from the value of true belief, but valuing true belief makes us value knowledge, for that is what we get when we accomplish true belief. For more on this see my review of Ernest Sosa Knowing Full Well *Notre Dame Philosophical Reviews* 2011.26.23
http://ndpr.nd.edu/review.cfm?id=24129

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