

A very short history of imagination

Introduction

The point of trying to sketch even a very short history of imagination is due to the way such a complex concept accumulates its meaning. What we mean by the term today is a compound of residues of various meanings people have had of it in the past. Many of our most complex concepts are accumulations of meanings whose constituents often do not always entirely cohere. We have a sense of vagueness about such concepts. In the case of imagination, I think this sense of vagueness is due in part to its complexity but also in part to its containing a number of elements that do not sit comfortably together. I think we can clarify its present complex meaning by unfolding some of the ideas that have folded into it over the centuries.

The old style of intellectual history -- in which modern Western thought is taken as an unequivocal pinnacle reached by a progressive, evolutionary path from the confusions of myth, through the glories of Greece and Rome, the Renaissance, Enlightenment, and so on, to ourselves in the present -- has hit a number of snags of late. This is a particularly unhelpful paradigm or story-line if our focus is imagination. In as far as imagination is assumed generally to be a good thing, it is far from clear that it is more fully exercised, more evidently life-enhancing, more socially beneficial now than at the beginnings of human history. We have difficulty denying that in the mythologies of the world there is evidence of imaginative life of a vivid power rarely encountered in the Western intellectual tradition today.

So let us begin with imagination in mythic cultures, and then try to trace something of its career in the mental life of the West. In the conclusion to this chapter, I will synthesize as well as I can the persistent features evident in the varied uses of the concept, trying to provide that "more articulate grasp" on imagination.

Myth, memory, and emotion

Whatever scholars have made of myth — which has not been much until quite recently — all have had to acknowledge that in its varied forms it certainly exemplifies imaginative activity. Some used to argue that it is the kind of crazy thinking that results from the imagination running wild, without the constraints of rationality. As such, it was claimed to be unproductive thought, reasonless, like the unconscious rambling of a demented dreamer (cf. Blumenberg, 1985; Kirk, 1970). And yet it is ubiquitous in oral cultures.

Why do we find such vivid and powerful imaginative thought at the earliest times from which we have any traces? The closeness to oral myth is commonly assumed to be responsible for the power of the earliest Western literature, of Homer and the epic poets of the near-East and Scandinavia, of the Indian Vedas, of Aeschylus and Sophocles, and so on. Myth, it is increasingly clear, is evidence of great intellectual energy, not of some infirmity of the mind.

Perhaps we may pose our question another way: What social needs were fulfilled by such highly developed imaginative activity so early in human cultural history? The simple answer seems to be that this imaginative vividness was stimulated by the

need to remember. In oral cultures, people know only what they can remember. The lore that binds a tribe together, and helps to establish each individual's social roles and very sense of identity, is coded into the myths. The myths are held to be sacred, and they are passed on with the utmost care. They contain the divine warrant for the social arrangements that give the tribe its structure and character; they determine appropriate marriage partners, appropriate behaviour and feelings towards relations and others within the tribe, appropriate economic activities, and so on.

Why cannot this lore be preserved in some more straightforward or systematic or — we would be tempted to say — rational form? Why are not explicit directions or lists of activities, regulations and laws preserved? The answer seems to be two-fold: first, such lists or explicit directions would be very hard to remember faithfully through many generations and, second, they would not attract people's emotional commitment to them.

The amount of lore or "information" contained in a corpus of myths is quite considerable, and recent research has confirmed what myth-users knew long ago — that we can remember a set of vivid events plotted into a story much better than we can remember lists or sets of explicit directions. The second point is related to this but, while no less important, is perhaps more complex. The great power of the story is that it engages us affectively as well as requiring our cognitive attention; we learn the content of the story while we are emotionally engaged by its characters or events.

The vividness and power of myth stories turns on the way we are arrested by their images. They are typically strange and unlike anything in our experience or environment. It was discovered long ago that the more vivid the images used to encode a tribe's lore, the more easily and securely it was remembered. This discovery has been the basis of all memorizing techniques developed in the pre-historic, medieval, and modern worlds. Those advertisements which promise to "Improve your memory in 30 days!" are based, usually rather inefficiently, on techniques that were already ancient thousands of years ago, and which reached a second peak of development in the Middle Ages (Spence, 1984; Yates, 1966).

So it was the need to memorize things that early stimulated and developed the human capacity for imagination. Patterning of sound, vivid images, and story structuring were, we might sensibly observe, the most important early social inventions. It was these technical linguistic tools, and their effects on the mind, that helped human groups to cohere and remain relatively stable.

These techniques do not become irrelevant after the invention of writing, of course. Patterned sound, vivid images, and stories continue today to do important work for us. In this first stage of our very short history of imagination, however, we should note the close connections, discovered early, among imagination and memory and emotion. Such connections are recognized in the Greek myths, where Mnemosyne, goddess of memory, is mother to the Muses, the goddesses of poetry, literature, music, dance, and so on. (The "and so on" included in later antiquity all intellectual pursuits. Plato and Aristotle organized their schools as associations for the cult of the Muses. Thus Museum came to mean a place of education and research.) Imagination and memory have seemed to many people throughout history to be closely allied; both can call ideas or images into our minds, and those of imagination, while they have a freedom memory lacks, seem to rely on memory to supply their raw materials.

Ancient and Medieval imagination

As the tower of Babel grew ever higher towards heaven, the Hebrew Jehova said "Behold the people, how nothing will be restrained from them, from what they have imagined to do" (Genesis, II, 6). The beginning of human history as described in the book of Genesis involves a similar act in which the first people encroach on God's prerogatives. Adam and Eve eat the fruit of the tree of the knowledge of good and evil so that they might have divine knowledge. That act heralds the beginning of history, in which people can remember a past and imagine a future different from the present. They can form plans, that is, for conditions that are presently non-existent.

The main Hebrew term for imagination is "yetser", whose root is the same as that of "yetsirah", which we translate as "creation". In both of the above stories, human beings are trespassing on powers that properly belong to God. That people are to remember this and desist from so doing is made clear by the punishments visited on Adam and Eve and on the builders of Babel. In both cases, acts of rebellion against the limits God set for human beings exhibit the power to imagine a future that is different from the past. But, as Kearney puts it: "As a power first dramatized in man's defiance of divine prohibition, the yetser bears the stigma of a stolen possession" (1988, pp. 40/41).

Throughout the ancient Hebrew tradition, the yetser is considered a dangerous capacity. It seems inescapably bound up with attempts to usurp God's creative power. Human creativity, that product of the active imagination, is seen constantly threatening to divide God from His people. The attempt to imagine what is not given human beings to know is the source of our difficulties; that is a persistent message of the Talmud. So Moses brings the commandment against trying to make any image of God, who is unknowable and unrepresentable.

The ancient Greek myth of Prometheus tells a similar story. Prometheus steals fire from the gods and gives it to humans. The power over fire enables human beings to transform their world and to encroach on the prerogatives of the gods. Prometheus suffers an even nastier fate than did Adam and Eve. Pro-metheus means fore-thinker; one with the power to see or imagine a different future: Above all Prometheus made possible the imaginative enhancement of experience, the ... distinction between what happens to us and what we make of this happening The imagination has always been a contentious power, as a result, so far as men are concerned in their relations with the gods (Donoghue, 1973, p. 26).

The imagination in both ancient Greek and Hebrew traditions represents a rebellion against divine order, it disturbs the proper harmony between the human and the divine worlds, and it empowers people with a capacity that is properly divine. The main sense of imagination in both these traditions, however, is more like what we mean by foresight or planning. The creative element which looms so large in modern conceptions is in the ancient world only dimly glimpsed and hinted at in a disturbed way; creativity remains a prerogative of the divine. It is the power to make a world, perform miracles, destroy cities, cause earthquakes. This kind of power, and the imagination that frames it, is beyond the capacities that humans can deploy.

In the classical Greek world the sense of imagination is elaborated, particularly in the work of Plato. His ideas exerted an immense influence for two thousand years, the wake of which still pulls hard at us. Plato articulated an image of human life and education that placed the highest value on the development of reason. Reason was of value because through its use one could gain secure knowledge about what was real and

true about the world and about experience. One distinction which he bequeathed to Western culture was between this reasoning faculty that can know the truth and the faculty of imagination that can only mimic the appearance of things. In Plato's view, painting and poetry are not among the greatest expressions of creative power, but rather are inferior activities, caught up with appearances and unable to move towards abstract ideas through which alone truth may be approached. In his dialogue, *Protagoras*, Plato sees Prometheus's theft as not simply of fire but of the cultural arts of making things with it. All imaginative acts, all making of images, however, are simply copies of the original creative acts of the gods. As the original is the reality we live among, then all copies must be inadequate and false in one way or another. Such images are particularly deceptive says Plato, echoing Moses, because they may "misrepresent the nature of gods" (*Republic* [Cornford, p. 69]).

The original idea of a bed is what we must know in order to be able to recognize something as a bed. What the carpenter makes is, then, one remove from that ultimate reality; it is merely an example, a more or less inadequate attempt, to give practical shape to the ideal bed. But the painter who makes an image of that bed is twice removed from reality. The painter is just copying the carpenter's copy. The painter is ignorant of everything about the bed except how it looks. Art, then, can teach us nothing about what is true and real.

This perhaps seems odd to us today. We no doubt go along with Plato about the importance of trying to discover what is real and true about the world and experience. But we tend to think that what is real and true is indeed in the world accessible to our senses, not in some world of ideal abstractions. Well, obviously, this is hardly to do justice to the complexity of Plato's ideas about knowledge, but it suggests that his conception of imagination and its functions is not one in which they are highly valued. Indeed he sees images as appealing to the lower parts of our nature and strengthening the lower functions of our minds at the expense of the higher. So those activities which might stimulate and develop the imagination have tended to get short shrift in educational schemes influenced by Plato's ideas — which pretty well includes all those of the Western world. The Platonic emphasis is on a curriculum of gradually accumulating and clarifying forms of knowledge.

There has, of course, always been retained some degree of interest in developing the imagination. A rather different valuation of imagination is evident in the influential work of one of Plato's students. Aristotle argued — against Plato — that the artistic imagination is not simply portraying copies of copies of things. Rather the artist tries to represent universal features of human experience; the aim is not simply copying, but rather showing through the particulars something more generally true about the world.

Aristotle considered mental images to be the way we connect our sensations of the world with our reason. So to Aristotle the imagination is constantly involved in our intellectual activity: "every time one thinks one must at the same time contemplate some image" (*De Anima*, 432a). Aristotle prefigures ideas that we will see more fully developed during the Enlightenment and Romantic periods. But seeing the imagination as something that plays a constant role in perception makes it a potential contributor to rational thought rather than the Platonic deceiver and seducer of the mind away from rationality.

But in Aristotle's work, as well as in Plato's, the imagination is still a faculty that copies what is in the world. It is dependent on the sensations or on reason:

"imagination remains largely a reproductive rather than a productive activity, a servant rather than a master of meaning, imitation rather than origin" (Kearney, 1988, p. 113); or, as Croce puts it:

Ancient psychology knew fancy or imagination as a faculty midway between sense and intellect, but always as conservative and reproductive of sensuous impressions or conveying conceptions to the senses, never properly as a productive autonomous activity (1972, p. 170).

It is difficult to be entirely precise about Plato's and Aristotle's sense of imagination, however, because their Greek did not have an exact equivalent for the English word. *Phantasma* is the closest term that most commonly overlaps with what we refer to as "imagination". But it has a more general sense of "appearance" or "how things appear". *Phantasmata*, for example, are involved in the sun appearing small, in such illusions as the land appearing to move when we are on board ship, in delusions during illness, or in our allowing irrational passions to make things appear to us as we wish them rather than as they are. Not all of these are cases where we would today readily use "imagination". On the whole, unlike Plato, Aristotle "lays little stress on its [*phantasma*] use to envisage possibilities other than the actual. More prominence is given to the passive reception of appearances than to the active power to call them up" (White, 1990, p. 9).

During the Medieval period we find no significantly different conceptions of the imagination from those inherited from the ancient Hebrew and Greek traditions. At the beginning of the Middle Ages or at the end of the Roman Empire — depending on how you see St. Augustine's (354-430) work — we find "imaginatio" used in a way that combines the Biblical distrust of images with the Platonic sense of them as a hindrance to philosophical contemplation. For St. Augustine they were additionally a threat to spiritual life. Imagination is considered at best a somewhat distrusted servant of higher intellectual functions. During the later Middle Ages, St. Bonaventure (c. 1217-1274) accepts that the imagination can be useful if it carries the mind towards God, but he emphasizes that it must be kept firmly under the control of reason or it will more likely lead in the other direction. For those in whom reason is not highly developed, imagination is also likely to lead people to take images for what they are merely images of.

St. Thomas Aquinas, profoundly influenced by Aristotle, considers the imagination a kind of mediator between mind and body; it passes up to the reason in the form of images what it takes from perception, and the intellect then purifies these images into abstract ideas. But, despite this role in thinking, the imagination is still to be distrusted as a particularly weak part of the mind, susceptible to confusing its images with reality — or to being induced to do so: "Demons are known to work on men's imagination, until everything is other than it is" (Aquinas, *Summa Theologiae*, 5, 147).

That, anyway, is the official church conception of imagination, preserved in philosophical texts. Less accessible, however, is the rather different view embodied in uses of the profane imagination in popular culture. In this intellectual underworld it would appear to have been celebrated and enjoyed in witchcraft, folklore, occultism, and other realms where the body, dreams and magic enjoyed an energetic currency denied them by the church (Le Goff, 1986).

But prior to the Enlightenment it must be said that the imagination was not considered either particularly interesting or energetic in our mental lives. This lack of

enthusiasm seems a result of the conclusion that the imagination was almost entirely a mimetic faculty — it copies reality or draws its images from perception. The fact that it can create images of things never seen could be easily accommodated to this mimetic conception. You form an image of a horse; you form an image of wings; you imagine the wings stuck on the horse; and so you imagine a flying horse — to use Thomas Hobbes's example (1962, p. 3). Or as Plato puts it:

Imagine ... the figure of a multifarious and many-headed beast, girt round with heads of animals, tame and wild, which it can grow out of itself and transform at will. That would tax the skill of a sculptor; but luckily the stuff of imagination is easier to mould than wax (Republic [Cornford, p. 316]).

Why make a fuss about such a commonplace capacity? The fuss might better be directed at the use made of it. Plato's concerns were echoed in a different context when the Inquisitor of Toledo condemned El Greco's religious paintings: "I like neither the angels you paint nor the saints. Instead of making people pray, they make them admire. Beauty inserts itself as an obstacle between our souls and God" (cited in Kearney, 1988, p. 10).

The persisting influences of Plato and Aristotle are evident in Pico della Mirandola's treatise *On the Imagination* composed at the beginning of the sixteenth century. We find, somewhat debased, such Platonic sentiments as: "Imagination conforms with intellect, in being free, unfixed, and devoted to no special object. But it is surpassed by intellect, since it conceives and fashions the sensible and particular only, while intellect, in addition, conceives and fashions the universal and intelligible, and such things as are purified from all contact with matter" (1930, p. 33). Similarly Platonic is his admonition: "We must strive with all our powers to the end that everwatchful reason may incessantly stand guard before the gates of the mind, that it may repel those phantoms which refuse to obey it" (1930, p.79). But we also find fairly straightforward echoes from Aristotle's *De Anima*: We are told that imagination "enters into alliance with" all superior intellectual powers, which could not function unless imagination "support and assist them" (1930, p. 33) and that "imagination itself is midway between incorporeal and corporeal nature, and is the medium through which they are joined" (1930, p. 37).

Another reason for the lack of fuss about this commonplace capacity was due to the more profound and meaningful experiences that we today associate with imagination being then associated with the concept of the soul. But once the centrality of the soul to people's conceptions of themselves began to wane, so imagination began to "grow" into the place it vacated (McFarland, 1985).

Imagination in the Enlightenment

René Descartes (1596-1650), early in the Enlightenment, reasserted a conception of the mind as properly governed by reason, and of analytical reason as adequate to properly make sense of experience and the cosmos. So he concluded: "This power of imagination which I possess is in no way necessary to my essence ... for although I did not possess it I should still remain the same that I now am" (1917, p. 127). Descartes also wrote of "the misleading judgement that proceeds from the blundering constructions of the imagination" (1931, p. 7). In all his references to the imagination, it is clear that his conception of it was limited to, dependent on, and equivalent to the forming of images (White, 1990, Ch. 3). His student, Nicholas Malebranche (1638-1715)

wrote a treatise, called *The Search for Truth*, which describes the senses, the imagination, and the passions as obstacles to be overcome by reason in its search for truth. Clearly the imagination had no significant part to play in this search.

This aggressive rationalism, along with the beginnings of modern scientific inquiry during the same period, had no need for a sense of the imagination as anything other than the mimetic and ornamental faculty of the ancient and medieval worlds. Francis Bacon observed that imagination "hardly produces sciences" but only poetry or art, which is "to be accounted rather as a pleasure or play of wit than a science" (1864-74, Vol. 4, p. 406). This rationalism was not without its critics, however. And it is in their work that we see the gradual expansion of imagination from a kind of ornamental, entertaining, mimetic faculty into a centre and source of meaning and originality in human experience.

But that expansion was slow. Early in the eighteenth-century Addison concluded his series of pieces on the imagination by observing that: "The pleasures of the imagination, taken in their full extent, are not so gross as those of sense, nor so refined as those of the understanding" (*The Spectator*, Monday, June 23rd, 1712). Addison clearly thinks that the imagination is not a serious part of the mind's equipment, but rather that it adds a kind of ornamental delight or "bestows charms" or offers "a kind of refreshment" to the serious and hard-working understanding and reason. This is a sense of imagination that equates it very largely with "fancy" — a kind of idle, frothy, mind-wandering entertainment.

Key to associating imagination with the centers of creativity and meaning is the separation of fancy and imagination, and the allotting to fancy those mimetic, ornamental, charming activities, and to imagination many of the faculties earlier associated with the soul, along with some other new ones (Engell, 1982). But the classical view of imagination as primarily a kind of intermediary between sense perception and reason persisted until the latter part of the eighteenth-century, and while attention was increasingly given to its powers of novelty, these were still distinguished from whatever generated ideas within us:

Besides the ideas ... which are presented to the senses; the mind of man possesses a sort of creative power of its own; either in representing at pleasure the images of things in the order and manner in which they are received by the senses, or in combining those images in a new manner, and according to a different order. This power is called Imagination; and to this belongs whatever is called wit, fancy, invention and the like. But it must be observed, that this power of the imagination is incapable of producing anything absolutely new; it can only vary the disposition of those ideas which it has received from the senses (Burke [1757], 1967, pp. 16,17).

Even as Burke propounded what was the advanced, educated view of the time, the Scottish philosopher David Hume (1711-1776) continued to publish his revolutionary ideas to a largely indifferent world. Indeed, for twenty years preceding Burke's account of imagination, Hume had been writing and publishing work which laid the basis for a revolution in philosophy and psychology. Hume had initially expected enthusiastic applause, furious attacks, and through it all detailed scholarly scrutiny and controversy, for which he was prepared. Instead, his ideas were generally neglected, or were read with bewilderment, and the few who bothered to respond did so with dismissive scorn. But one of his readers understood him. The German philosopher, Immanuel Kant (1724-1804), followed up Hume's work, which led, among much else, to

a significantly changed conception of the nature and function of the imagination.

Hume distinguished between "impressions," which are what we are aware of in perception, and "ideas," which are images of these impressions which we form in the mind. This image-forming faculty plays, so far, much the same role between sense and reason conceived for it earlier. But Hume also argued that our perception of the world is fleeting, partial, constantly changing, and yet what is delivered to the mind is a stable, clear, constant image of the world. How is the latter stable and constant image generated from the flux of perceptions? Hume, who was very much a hard-nosed empiricist, reluctantly concluded that this crucial role at the very foundation of our mind's functioning was performed by the imagination.

Kant went even further. He could not accept Hume's notion that what we actually perceive are discontinuous and partial "impressions." Kant argues that "impressions" are perceived as already organized and structured. So we do not need to see the imagination as somehow creating coherent images out of incoherent perceptions. Rather imagination is pushed, as it were, to perform the even more fundamental task of providing the prior structuring of our perceptions. That is, what we can perceive, and know, is predetermined by our imagination. What we experience is the world already structured by the imagination. So, at the most basic level of meaning-making, the imagination is active.

Both Hume and Kant associate a number of other qualities with imagination, qualities that have affected our modern conception of it. Hume, for example, notes the connection between imagination and our feelings: "lively passions commonly attend a lively imagination" ([1739] 1888, p. 427). He notes further that: "It is remarkable that the imagination and affections have a close union together, and that nothing which affects the former can be entirely indifferent to the latter" ([1739] 1888, p. 424). Kant observes that the imagination can generate in us ideas that cannot be expressed or represented in any other form; ideas of infinite space, endless numbers, eternal duration can also fill us with complex emotions involving wonder and the sense of the sublime. But what is sublime is only secondarily the intangible features of the cosmos: "What is sublime is our own minds in contemplating them" (Warnock, 1976, p. 63). So attention inward to the wonder of the mind itself comes along with the new conception of imagination. There is a world within, no less interesting and open for exploration as the world outside.

"The imagination is a powerful agent for creating as it were a second nature out of the material supplied to it by actual nature" (Kant, [1790] 1952, p. 314). Here is a different imagination from that of the classical world. It is proclaimed as central to our sense-making but yet is ineffable even to those who gave it its modern shape; it is, to Hume, "a kind of magical faculty of the soul" (1888, p. 24). Herder, influenced by Kant, says in the late 1780s:

Of all the powers of the human mind the imagination has been least explored, probably because it is the most difficult to explore ... — it seems to be not only the basic and connecting link of all the finer mental powers, but in truth the knot that ties body and mind together" (cited in McFarland, 1985, p. xiii).

From Descartes' view of the imagination as at best an irrelevance and at worst an obstacle to securing knowledge, we come by the late eighteenth-century to the strong role which Kant viewed it playing, in his *Critique of Pure Reason* (1781). (Though, it should be noted, in later works Kant sees a more restricted role for

imagination, and in the shortened, revised version of the 1781 Critique (which had left his readers as bemused as Hume had left his) called the Prolegomena to Any Future Metaphysics (1783), he does not mention it ["Einbildungskraft"] at all.) The strong role involved it in providing a synthesis of experience to the mind: this synthesis "is the mere result of the power of the imagination, a blind but indispensable function of the soul, without which we should have no knowledge whatsoever, but of which we are scarcely ever conscious. To bring this synthesis to concepts is a function which belongs to the understanding" (Kant [1781], cited in White, 1990, p. 44). What is noteworthy here is the clear distinction between the things that the imagination deals with, and concepts.

The Romantic imagination

The primary imagination I hold to be the living power and prime agent of all human perception and as a repetition in the finite mind of the eternal act of creation in the infinite I AM (Coleridge, *Biographia Literaria*, Ch. XIII).

So the Romantic poet Coleridge expresses a culmination of the trends we have been following. The image of God in people is no longer seen as the soul but rather is identified in the creative imagination. Coleridge seems to be implying enthusiastically that Adam and Eve were right to eat the forbidden fruit and Prometheus was right to steal the fire, and that it is our job to exercise the creative powers we have been given.

This primary imagination echoes Kant's strong position, even if in greatly inflated language. It is that fundamental, non-voluntary, largely unconscious synthesizer of experience that is at the root of our consciousness. Coleridge distinguishes from this a "secondary imagination" which is basically similar to the primary but which works at the conscious level. It takes the material generated by our primary imagination and "dissolves, dissipates" it and uses its elements consciously to create imaginary worlds. This is the source of the artists' consciously controlled creativity; it is "essentially vital." He distinguishes further the "Fancy," which he sees as essentially mimetic, involving the combining of images from memory and the kind of ornamental, but uncreative powers ascribed to imagination by most seventeenth-century and early eighteenth-century writers. (This, anyway, is how I read his distinctions, though it must be admitted that the distinctions are not altogether pellucid and one sees somewhat varied interpretations of them.)

The Romantics had inherited from the Enlightenment a conception of imagination that involved three connected functions: it was involved in perception, creating particular kinds of order and making sense of experience for us; it was a conjurer of images of what we had in the past perceived or of images made by combining elements from past perception into new forms; and it was tied into our emotions, evoking responses to what was not present as though it was present. The Romantics added, with much emphasis, that creative insight or intuition most evident in the work of the artist. This further power of imagination may be simply a result of the conscious control of the other functions working at a high pitch. But the conscious control, and the sense of the self-conscious mind as itself wonderful and worthy of exploration, provide a distinguishing characteristic to the Romantics' conception of imagination.

William Wordsworth talks of the poet as possessing
... a disposition to be affected more than other men by absent things as if they were

present; an ability of conjuring up in himself passions which ... do more nearly resemble the passions produced by real events than anything which, from the notions of their own mind merely, other men are accustomed to feel in themselves (1802 Preface to the *Lyrical Ballads*).

This emphasizes the power of poets to respond emotionally to images they can call up at will and so, in some significant way, control their experience. But it also suggests that this poetic function of the imagination is what anyone uses, with greater or less intensity, when reflecting on the past, future, or otherwise absent.

But Wordsworth also saw the full import of Kant's "Copernican Revolution". As Copernicus had shown that the Earth orbited the Sun, and not the other way around, so Kant showed that the mind determined how the world was perceived, it did not simply produce a copy of the world delivered by the senses. So Wordsworth saw it as crucial that "Imagination ... has no reference to images that are merely a faithful copy, existing in the mind, of absent external objects; but is a word of higher import, denoting operations of the mind upon these objects" (Wordsworth [1815] 1940-49, Vol. III, pp. 30-31). The reproductive uses of imagination — of translating perceptions into memory and up to reason, calling forth images of things once perceived, or of connecting images of things perceived with one another — which were the limits of its power that the ancient and medieval worlds recognized are not merely now transcended, they are denied. That is, the function of the imagination is such that it never merely copies the world or translates perceptions; it is a constantly active and creative faculty that shapes the world we perceive and that uses our hopes, fears, and other emotions in that shaping.

Coleridge claimed that Wordsworth's greatness was due to his combining profound thought with deep feeling. Wordsworth clearly saw this combination as another power of the imagination. We have tended to inherit from the Romantics a sense of imagination belonging to the arts and as something distinct from the functions of our reason. But Wordsworth knew that reason and imagination were not mutually exclusive faculties, or even in any way incompatible. He declared, rather, that imagination was nothing other than "Reason in her most exalted mood" (*The Prelude*, Bk. XIV, l. 192).

The Romantics added, or gave pointed definition to, another dimension of the concept of imagination; that is, its imprecise but strong connection with childhood experience. Much of our adult intellectual activity, in this view, is stimulated by a sub-conscious attempt to recapture the "lost vision," the purity and power of the perception, experience, and emotion of childhood. William Wordsworth is perhaps the most compelling advocate of this view. When he considers a young child playing or wandering by a stream he sees one "on whom those truths do rest / Which we are toiling all our lives to find" ("*Intimations of Immortality*", ll. 115/6). Consider, for a moment, the kind of food you most hated when you were five years old. Try to recapture the intensity of that loathing. Now perhaps you eat that food routinely. We often account this a triumph of character, a mark of adulthood. It is, of course, rather a result of the decay of taste-buds. Similarly, those who share Wordsworth's view claim that our experience of the world is most vivid and clear in childhood (see, e.g., Coe, 1984), and that that vividness and clarity gradually decays as we get older.

Intellectual changes with age are described almost invariably as "developments," as progress and advance. A focus on the Romantic conception of imagination suggests

that this comforting story is, in part at least, a fiction. The justification for stimulation of the imagination throughout the educational process is that the imagination is the faculty which can best preserve the memory and wonder-full experience of childhood. This perception has tended to be appreciated mainly by those in whom, indeed, imagination seems most fully active: particularly poets and artists. It is an insight constantly being recovered with a kind of surprise, perhaps because it runs so starkly against the conventional view: "Perhaps true imagination, nothing to do with fantasy, consists in seeing everyday things with the eyes of our earliest days" (Paz, 1989, p. 772).

Romanticism has bequeathed to us a much enlarged conception of imagination and a new conception of the mind. During this period the classical and medieval conception of the mind as a kind of mirror on the world changed dramatically, such that the mind was seen as more like a lamp, which shines out showing a world lit by its generative energy (Abrams, 1958). In particular the Romantics were aggressive in asserting that the imaginative artist could help us to reach truth and reality no less than could the scientist: Beauty, as Keats compactly puts it, is Truth. This new conception of a creative imagination was supported by the transformation of the physical environment during the Industrial Revolution. The series of inventions, creating a new world and changes on a scale never before seen, also needed to be accounted for. While many of the Romantic poets were horrified at the industrialization of the world, this too could be recognized as a further product of the "repetition in the finite mind of the eternal act of creation." The revolutions in the political world, particularly in France, and in poetry and in people's conception of themselves, and in the material fabric of cities, factories, and railroads, led many Romantics to a high pitch of enthusiasm, and extravagant rhetoric about the imagination's powers. And while, as Kearney deflatingly observes, the "Romantic imagination could not possibly deliver on its promises" (1988, p. 185), mainly because it could only form images not realities, the monumental changes to reality in the Industrial Revolution gave people grounds to believe otherwise.

Imagination in the modern period: philosophical work

"A connection of imagination with imagery gripped the thought of so many philosophers from Aristotle to the present day so strongly that they ignored the contradiction between it and their actual use of the notion of imagination" (White, 1990, p. 6). What was true of Hume, White argues, applies equally to all other pre-twentieth-century philosophers: "Hume's own actual use of the concept of imagination and the words 'imagine', 'imagination' and 'imaginary' was both exactly the same as our contemporary use and yet at variance with his theory of imagination" (White, 1990, p. 42). Philosophers in this century have untied imagination from imagery, as our use of the concept of imagination requires, and have explored implications of its new freedom. (However, it should be noted that the confusion that gripped philosophers is one from which Coleridge and Wordsworth long ago broke free.)

Sartre, Wittgenstein, and Ryle have each, in quite similar ways, attacked the traditional, constricted concept of imagination articulated in previous philosophical writings. They each undermine the notion that the imagination is a faculty or distinct part of the mind whose particular functioning we might explore. Because we call some acts imaginative does not imply that there is a thing in the mind we could identify as the imagination, as the fact that we call some things fast does not imply that there is a thing

in the world we could identify as speed. Similarly each of them rejects the notion that imagining something is "seeing" a mental image or quasi-picture with the "mind's eye." When imagining, however vividly, we do not see anything because there is nothing to be seen, or to see with, in the mind. When we imagine the sound of a tree falling in a deserted forest, there is no sound nor any organ in the mind for hearing it. (This is to follow Ryle's [1949] way of formulating these points.) While at one level it is obvious that seeing and hearing are different from the kind of "seeing" and "hearing" supposed to be conjured up by the imagination, it is this way of talking about our imaginative experience that has tended to lead us astray: it "is a picture created by the mentalistic vocabulary that we have inherited, and it is the pervasiveness of this vocabulary which makes it so difficult for us to avoid speaking and thinking of the imagination as a hidden faculty engaged in covert operations" (Novitz, 1987, p. 8). The difficulty is such that no-one is likely to stop talking about mental images as products of the imagination, however misleading this might have been. But, as Warnock suggests (1976, p. 196), we should not worry over-much, as such terms are increasingly recognized as metaphoric.

Of these three twentieth-century philosophers, Sartre has written most extensively about imagination. He set himself to articulate a theory of imagination that would satisfy two requirements: "It must account for the spontaneous discrimination made by the mind between its images and its perceptions; and it must explain the role that images play in the operation of thinking" (Sartre, [1940], 1972, p. 117).

Sartre set himself the task of examining with great care the phenomena of mental images. He took from the phenomenologist Husserl (1859-1938) the idea that imagination is an intentional act of consciousness rather than a thing in consciousness; it is one way in which our consciousness works, rather than a distinct part of it that might be studied separately. He concluded that one could further specify a series of characteristics of imagination. Perception and imagination, he argued, do not so much deal with different objects as represent different ways of being conscious of objects. The image of an object differs from a concept of an object in that the image provides an "intuition" of the presence of the object; concepts provide symbols of the object, without the attendant sense of presence that the imagination generates. The imaginative consciousness deals with objects as if they are present, while knowing clearly that they are not.

The "quasi-observation" that we experience with images is also different from perception in that it can teach us nothing we do not already know, whereas by perception we can learn new things. Sartre cites the thought experiment, in which you are asked to imagine the Parthenon. We can all bring some kind of image of it to mind. Now, count the columns. You can only do this accurately if you already know how many columns the Parthenon has. You cannot derive this knowledge from the image.

Imagination also differs from perception in that perception "receives" its objects, whereas imagination intentionally generates them. Sartre considers the imagination's capacity to intentionally make its own meanings very important. It is the condition by which "consciousness discovers its freedom" (Kearney, 1988, p. 227). The imagination's independence from the objective constraints of the perceived world allows it freedom over time and space. They can be stretched, reversed, obliterated or whatever. This freedom is a condition of the non-existence or the "nothingness" of the objects of imagination. Imagination then "is not an empirical and superadded power of consciousness, it is the whole of consciousness as it realizes its freedom" (Sartre, 1972,

p. 270).

This is a rather Continental way of putting it, of course, but it is echoed by Sartre's English contemporary, I.A. Richards. For Richards, "Imagination named the active mind, the mind in action construing and constructing, dissolving and re-creating, making sense, making meaning" (Bertoff, 1990b, p. 61). Mind you, this is not all that much clearer, and sounds very like Coleridge's "secondary imagination." Both Sartre and Richards agree, however, that we will not get a clear grasp on the powers of imagination if we focus on a part of the mind's functioning, rather imagination is understood better as a way in which the mind functions when actively involved in meaning-making, in its generative mode.

Alan White criticizes Sartre, Ryle, and Wittgenstein because, when they get down to detailed analysis, they nearly always confine their attention to cases of imagining some sensory object or experience — a tree, or a friend Peter, or riding a horse, or eating a lemon. This tends to focus attention on visualizing, which in turn leads to comparisons and distinctions between imagining and seeing, remembering, hallucinating, dreaming, or whatever, about a particular object or experience. If, however, one took as paradigmatic of imagination such very common cases as "I can imagine a world without war," or "I can't imagine wanting to live like that," or "I can imagine what the neighbours will think," or "I never imagined you would fail," or "Imagine her running a shoe company," or "Imagine selling your birthright for a mess of pottage," then the kind of visualization suggested by such an example as "I imagine my beloved's face" would be considered incidental. The main difficulty in dealing with the concept of imagination, as White meticulously shows, has been "a mistaken assimilation of imagination and visualization" (1990, p. 85). He reminds us that the "imagination of a theoretical thinker may be as rich or as poor, as vivid or as faint, as that of a painter" (1990, p. 89), and that we have imaginary troubles as often as we hear imaginary noises. So "imagining and forming an image are not the same" (1990, p. 90). And, reciprocally, we can have images, in dreams or aroused by conversation, without our imagining anything. One can distinguish between visualizing and imagining by reflecting on the fact that to visualize Jane would be the same as to visualize her identical twin sister, Giaconda, but to imagine Jane would be distinct from imagining Giaconda; or you could imagine a suitcase completely obscuring a cat but not visualize it in a way distinct from simply visualizing a suitcase. (I have taken most of the examples in this paragraph from White.)

Even in literature, which is the area of human thought and expression where the evoking of sensuous, quasi-pictorial images is often considered most active, one has to agree that "much great literature does not evoke sensuous images, or, if it does, it does so only incidentally, occasionally and intermittently. In the depiction even of a fictional character the writer may not suggest visual images at all If we had to visualize every metaphor in poetry we would become completely bewildered and confused" (Welleck and Warren, 1949, pp. 26/27).

White concludes that to "imagine something is to think of it as possibly being so" (1990, p. 184), and that an "imaginative person is one with the ability to think of lots of possibilities, usually with some richness of detail" (1990, p. 185), and that the "very imaginative child not only thinks of and treats the chair as a fortress, but fills it, in word and deed, with a wealth of possible detail" (1990, p. 186). He adds that imagination "is linked to discovery, invention and originality because it is thought of the possible rather

than the actual" (1990, p. 186). This seems close to Sartre's notion of imagination as what empowers us to conceive of possibilities in or beyond the actualities in which we are immersed, and as such the key to our sense of freedom. It also calls up Brian Sutton-Smith's throw-away suggestion that imagination is the subjunctive mood of mind (1988, p. 19). It also recalls Paul Ricoeur's notion that imagination involves us not just in seeing actualities, but "suddenly we are 'seeing as ...'; we see old age as the close of day, time as a beggar, nature as a temple with living pillars, and so forth" (1978, p. 8). If the mood of imagination is the subjunctive, its trope is metaphor.

"Being able to think of the possible" may seem something of a let-down after our pursuit of imagination as intermediary between sense and mind, and as implicated in our sensations themselves, or as connected with "lively passions," or as our share in the creative power of God. When we commend people for varied forms of imaginativeness, are we always commending their capacity to think about possibilities? Implied in White's discussion is the sense of the possibilities being useful, appropriate, or fulfilling. This leads us to Barrow's neat formulation: to be imaginative is "to have the tendency and ability consciously to conceive the unusual and effective in a variety of particular contexts" (Barrow, 1990, p. 107). This blends well with Steen Halling's observation with regard to interpersonal relations: "We speak of a person as being imaginative insofar as he or she responds to an interpersonal crisis or impasse in a way that is unexpected and yet nonetheless appropriate and fruitful with respect to accomplishing a favourable outcome or resolution" (1987, p. 140). So if imagination, following White, is the capacity to think of possibilities, and the commendatory sense of being imaginative, following Barrow, involves thinking of unusual and effective possibilities, are we finally home and dry?

One thing, at least, seems to have been left behind in these formulations; they do not imply its absence so much as ignore it. The missing element is one considered crucial by Mary Warnock. She gathers the ideas of Hume and Kant about the imagination's role in perception and blends them with the generative or productive sense worked out in Romanticism. From the mix emerges her conclusion: There is a power in the human mind which is at work in our everyday perception of the world, and is also at work in our thoughts about what is absent; which enables us to see the world, whether present or absent as significant And this power, though it gives us 'thought-imbued' perception ... is not only intellectual. Its impetus comes from the emotions as much as from the the reason (1976, p. 196).

Warnock, following Sartre, argues, as have many before her, that there is an irreducible affective component in any use of imagination. Certainly if we revisit some of the examples used above, we may be inclined to agree with her. In cases like "I can't imagine living like that," or "Imagine her running a shoe company," or "Imagine selling your birthright for a mess of pottage," one might readily admit that they both express and evoke not a set of quasi-pictures in the mind but rather emotions. They are thoughts about possibilities, but they also carry feelings about the possibilities. The question is whether this affective component is a necessary element in imagining or a desirable element for making imagining more powerful, varied, appropriate, unusual and effective, or an element necessary for certain kinds of imagining but not others.

This is another of those questions I will not answer here, and could not answer anywhere — to borrow G.K. Chesterton's delightful cop-out. We can observe straightforwardly, I think, that a considerable range of imaginative activity is distinctly

affect-laden. Imagining is most commonly not a kind of thinking from which our feelings are excluded. Yet we can sensibly talk about a mathematician performing an imaginative calculation, which seems on the face of it not to require any affective component in the thinking itself, even if a sense of triumph or delight might infuse the achievement.

Though perhaps the exploration of possible directions, the probing in various directions for a solution that fits, that is appropriate, that is "pretty", or that is aesthetically satisfying, cannot be performed without some affective engagement. And perhaps it is precisely this affective engagement — this probing of possibilities for that which fits — which distinguishes the imaginative from the conventional mathematician. Certainly mathematicians' accounts of their major break-throughs supports both a significant affective component and also a common recourse to quasi-pictorial images (Shepard, 1988). When our imaginations are evoked or stimulated by something, it seems rare that there is not also an affective tug that comes with it; as John Stuart Mill put it: "the imaginative emotion which an idea, when vividly conceived, excites in us is not an illusion but a fact, as real as any other qualities of objects" (cited in Warnock, 1976, p. 206). Still, we might wisely leave the question of whether there is a necessary affective component in any imaginative act open.

This sense of the imagination as our capacity to think of possibilities is congruent with Ricoeur's characterization of its role in our mental life as performing a "prospective and explorative function" (1965, p. 126). It is by means of imagination — to use the language of phenomenologists — that we make ourselves; seeing the directions in which we might move, the possible selves we might inhabit. It leads to formulations such as Elya Prigogine's "The real is the realization of one of many possibilities" (cited in Halling, 1987, p. 140).

Imagination in the modern period: psychological work

Philosophers' conclusion that imagination is a kind of thinking that commonly does not involve forming images in the mind or dealing at all with examining quasi-pictures in "the mind's eye," must initially leave us a little uncertain of what to make of contemporary psychological work, which has taken such assumed phenomena as its subject matter. Let us consider this psychological work briefly, and see what implications we might infer from it about imagination.

With the development of experimental psychology in the late nineteenth-century we see a different kind of attempt from the philosophers' to come to grips with imagination. Sir Francis Galton conducted research — initially a questionnaire — to "elicit the degree in which different persons possess the power of seeing images in their mind's eye, and of reviving past sensations" (Galton, 1883, p. 255). He discovered, much to his surprise, that a number of his colleagues claimed that they did not form images at all, but that most women, children and "people of the labouring class" claimed to be able to "visualize" vividly images of past conditions, such as the contents, and colors, of their breakfast tables (Galton, 1883). As refined abstract thinking was most highly valued in the sciences, visualizing and image-forming seem to have become generally considered a more "primitive" form of thought — to use Galton's term. After all, if women, children, and labourers could manage it easily and vividly and his intellectual colleagues often did not manage it at all, it was clearly a skill to be associated with lower level intellectual functioning.

This disrepute tended to persist within science, and perhaps even more so

within a psychology that has been eager to be considered scientific. John B. Watson, "the father of behaviourism", considered attempts to study imagination and mental images pointless, as they entailed no measurable behaviours. Howard Gardner describes the subsequent history of the imagination in psychological research: There was no reliable way to define imagery in an experimental situation, no agreement about what should count as an imagistic or imaginary experience For such reasons, the ghostly image was exorcised for half a century from respectable academic psychology (1985, p. 324).

In some psychological circles this disrepute and neglect continue. But through this century the most successful physicists and mathematicians, when asked to account for their discoveries or most famous break-throughs, have very frequently described images as crucial (Shepard, 1988). Perhaps the best known is Einstein's description of imagining himself riding on a light-beam as leading to the theories of relativity. In the wake of such accounts, it has become fashionable to admit to experiencing vivid mental imagery, and mental images have again become a subject for serious psychological research (Kosslyn, 1983).

Given the research methods available to psychologists, their focus has largely been determined by whatever features of imagination seem to induce some behavioural correlate. This has led in particular to a focus on images. Perhaps because this precisely focused research clearly deals with something much more restricted than what people usually refer to by "imagination", that term has almost entirely been replaced in the psychology literature by terms such as "imagery", "imaged", "imaging", and so on.

Recent work has been stimulated by findings such as Allan Pavio's that word pairs which were readily "imagable" were more memorable than those which could not be so readily "imaged" (Pavio, 1965). He thereby showed that it was indeed possible to demonstrate in experimental situations effects of the kinds of mental phenomena behaviourists had exorcised (Pavio, 1971). Important work was also done on how people respond physically to their images; for example, on how people's closed eyes typically "scan" images of recently seen maps or geometrical shapes. Shepard and Metzler's (1971) work was largely responsible for launching this particular branch of research, and it has been significantly developed by Kosslyn and his associates (1980). Gardner claims that this research has "delineated major properties of the imagery system" (1985, p. 326).

After having been so neglected for so long, the study of mental imagery has become what Block describes as "one of the hottest topics in cognitive science" (1981, p. 1). But the way the topic is pursued in cognitive science seems somewhat at odds with philosophical work on imagination. In the psychological literature, mental imagery is usually defined something like "some representation of the perceptual experiences stored in a manner that the pattern recognition mechanisms can make use of them" (Lindsay and Norman, 1977, p. 414). This is a definition that, shorn of its modern technical language, seems very close to Aristotle's and Hume's. In cognitive psychology, imaging seems to exist only as a substructure of memory, in that it occurs in the process of trying to remember something. ("Memory refers to that part of the soul to which imagination refers," Aristotle, *De Memoria*, 450a.) Cognitive science research certainly seems to return us to conceptions of images as representations manipulable or "scannable" in the mind. The response of philosophers tends to be dismissive: "The discovery by psychologists that we can 'manipulate our images' no more shows that the

images are entities than a discovery that we could make pains or itches move up and down our leg would show that these were entities" (White, 1990, p. 124). This observation might in turn be dismissed by psychologists as irrelevant to their model building procedures. Harder to dismiss, perhaps, are the severe criticisms of psychologists such as Pylyshyn (1979, 1984), who make not unrelated points: e.g., developing a point by Hebb, "what people report is properties not of their image but of the objects that they are imaging" (Pylyshyn, 1981, p. 153).

Imagery, as it is usually dealt with in cognitive science, is assumed to have some sensory content (e.g., scannable images) because it is assumed to be a revived sensation. It is this conception of images that we have seen discredited in the philosophical literature, and that poses a problem for the relationship between cognitive science research on imagery and the study of imagination. But, as Murray notes, "[m]ental imagery, of course, is not to be identified with imagination, but neither is it to be dismissed as totally unrelated" (1987, p. 176). So, while current psychological research on imagery seems better characterized as related to memory of previous perceptions than to imagination, it would be incautious therefore to dismiss its findings as of no relevance, and imprudent to ignore the potential value for education of findings such as Pavio's.

Conclusion

"To imagine something is to think of it as possibly being so" (White, 1990, p. 184). This terse formulation sums up a considerable range of attempts to grasp the complex nature of imagination. It captures both the sense in which we can conceive of the world as other than it is, with flying horses and ourselves ruling it, and also the sense in which the historian or physicist or any of us strives to conceive of the world exactly as it is. The former encompasses one of the commonest senses evident in our very short history, the latter encompasses Coleridge's sense of imagination as thinking that is unsubdued by habit, unshackled by custom, and as that which enables us to transcend those obstacles to seeing the world as it is that are placed before us by conventional, inadequate interpretations and representations. Both senses of this capacity to think of something as possibly being so, point to the imagination as the source of novelty, originality, and generativity.

When we commend someone as imaginative we imply that they have this capacity in a high degree. Imaginativeness is not a well-developed, distinct function of the mind, but is rather a particular flexibility which can invigorate all mental functions. We recognize the imaginative person by the impact in some particular realm of their unusual and effective thinking — to use Barrow's joint criteria. So, in language use imaginativeness may be evident by wit, in thought by insight, in planning by ingenuity, and so on. The flexibility that is central to imaginativeness seems to enable the imaginative person to conceive of a wider than normal range of states or actions that do not exist or that do not follow by literal extrapolation from current states or actions or from conventional representations of states or actions. In conceiving an indeterminate range of such states or actions the imaginative person can hold them in the mind, consider potential implications, assess their appropriateness, scan their features, selecting whichever might be most unusual and effective. (People who produce effective but conventional plans, language, ideas or whatever, we would consider sensible or sound but not imaginative.) In pursuing this sense of imagination in action, I realize that I have

approached a model not unlike that articulated by Arthur Koestler in his *The Act of Creation* (1964). This suggests that creativity might be considered as the outward expression of imagination working in a high degree.

Unfortunately the way I have characterized imaginativeness above suggests a sequence in which the imaginative person first generates and then evaluates the range of possibilities. If instead we accept Sharon Bailin's characterization (1988) in which evaluation goes on in the act of generation, we would not preclude forms of thinking that are clearly unusual and effective but that seem to move directly to the most fruitful possibility. That is, the above characterization is not an attempt to provide a literal description of a process of thinking. Rather it should be taken as an attempt to capture features of imaginativeness in a graspable form; so "flexibility", for example, should not be read literally as a power of generating endless possibilities interrupted by a selecting mechanism. As long as we recognize that "flexibility" and "scanning" and "selecting", and so on, are significantly metaphoric we need not be led to inappropriate simplification.

There is a sense of "imagination" that has recurred prominently in the very short history above which does not fit with White's formulation. David Hume was the most articulate advocate, and Mary Warnock a modern proponent, of implicating imagination in creating coherence and meaning at the basic level of perception. I want to touch on this, not to try to incorporate this sense into our conception of imagination, but to exclude it. The origins of seeing imagination as implicated in the most basic level of making perceptual sense of the world we found in the belief that all the contents of the mind had their origin in prior perception. The senses were the only source from which ideas could have come, and the ability to recall images of things seen in the past served as a paradigm of how imagination somehow could invade the memory and represent salient features of remembered perceptions, but also combine and transform them at will. Given that Hume believed sense impressions were the only source of all our knowledge and concepts, the somewhat magical faculty of imagination became his chosen candidate for transmuting impressions into ideas. One cannot but feel, at this remove, that there was something a little arbitrary in Hume's deployment of imagination for this role. Warnock's recent championing of something like Hume's view is a little harder to understand. She claims that imagination "is involved in all perception of the world, in that it is that element in perception which makes what we see and hear meaningful to us" (Warnock, 1977, p. 152). Now Warnock's claim is different from Hume's in that her point is that imagination is what heightens our perceptions and allots significance and meaning to them. In particular she is interested in the role of emotion and value in doing so. But, at least in the form she has developed this sense of imagination, and more obviously in the way Hume deployed it, it seems to conflict with two features of the conception being developed here.

It conflicts first with the sense of imagining as a conscious, intentional activity. Day-dreaming, for example, slides over into imaginative activity only when we assume the director's seat; a dream can slide into imaginative activity only when we wake and recognize its unreality. Imagination, as Sartre and Wittgenstein both emphasized, works consciously knowing the unreality of its objects. Imagination operating "in all perception of the world" does not require conscious or intentional intervention and, at least in Hume's sense, is a capacity we share with cats, dogs, and earthworms. The second conflict concerns the arbitrariness of Hume's deployment of "imagination" to plug a gap in his account of how knowledge is generated and grows in the mind. Very few people

today believe that such an account is anything like correct, despite its historical importance for psychology and philosophy. Given that modern accounts do not look for some faculty to transmute world stuff into mind stuff, that role for, and conception of, imagination is obsolete. So, we will probably have a more coherent and adequate grasp on imagination if we jettison the notion that it is implicated in all our perception of the world.

White's formulation lacks any references to images. His work, and much of the philosophical research of this century, has been concerned to show that imaginative thinking does not require images, and that those accounts of the imagination that conceived it as primarily the capacity to form images were either wrong or relevant only to some kinds of imaginative thinking. White summarizes this point: "The presence or absence of imagery depends only on what kind of thing is imagined in either of these ways; is it perceptual or non-perceptual" (1990, p. 188). But the presence or absence of images does not seem to be a simple binary condition, rather it has been clear from common experience and from Galton's research, and much other research since, that there is a continuum from vivid quasi-pictorial images, through more partial images, to the most fleeting, impressionistic evocations that may feel more like moods or emotions but which nevertheless have some imagistic component.

Again White emphasizes that a "vivid imagination is not the ability to 'see' or 'hear' things clearly in our mind, nor, as philosophers from Descartes to Hume thought, merely to rearrange 'ideas', that is material previously received through the senses, but to think of varied, detailed and, perhaps, unusual and hitherto unthought possibilities, whether or not these include perceptual and, therefore, imageable features. The imagination of a genius is not necessarily linked to his faculty of forming images" (1990, p. 192). If by "image" we mean vivid quasi-pictures or quasi-sounds then this seems likely the case. But if "image" refers to something towards the other end of the continuum suggested above, then matters are rather less clear. Imagining Medieval Christendom, or what the neighbours will think, or selling one's birthright for a mess of pottage certainly can involve fleeting, partial, insubstantial images. And while Shepard's (1988) research does not establish a necessary link between the imagination of a genius and his or her faculty of forming images, it does show that this link is much more common even in non-perceptual topics in mathematics and theoretical physics than had commonly been thought to be the case.

The evoking of images, as Sartre argues with a range of examples, seems to have an irreducible affective component. And if we resist that "irreducible", we have to acknowledge that an affective component is common. That is, the imagination enables us to feel about something not present or even real as though it were real and present. The commonly observed link between imagination and emotions, especially in cases where images are consciously evoked, is one of some relevance here; as is the common observation that when we sustain a sequence of images in the mind they move in a narrative, riding on metaphoric connections. So that nexus of affect, narrative, and metaphor is commonly brought into play when we exercise the image-forming capacities of imagination. The discovery of oral cultures concerning the power of images for holding information or ideas in the mind, has tended to be depreciated during the period of "high literacy", in which the abstract concept has played a more valued role in intellectual life than the affective image.

My point in raising this complicated, if fashionable, set of topics — image,

emotion, narrative, metaphor — is due to my desire to leave open a question White's formulation seems to close down. His work has marginalized the image in conceiving of imagination, arguing that the presence or absence of images turns only on whether one is imagining something with or without perceptual qualities. I think it should remain open as to whether evoking (sometimes fleeting, partial, barely acknowledged) images is part of all uses of the imagination. Imagining selling one's birthright for a mess of pottage or what the neighbours will think or Medieval Christendom may indeed not necessarily call up detailed quasi-pictures as does imagining one's beloved's face. But imagining selling one's birthright for a mess of pottage, at least for me, crowds behind the concept an indeterminate mass of images, half-images, fleeting Old Testament scenes, perhaps pictured in childhood, particular parents and children, bowls of pottage, and so on; Medieval Christendom has, thronging behind and sustaining the concept, images of Popes, pilgrims, half-remembered pictures of St. Francis and St. Dominic, monasteries in modern ruins or ancient operation, and so on; "what the neighbours will think" is supported by images of particular neighbours, some long dead, incidents in which their thinking was significant, of garden walls and fences, houses, and so on. The imagined concept can be dealt with abstractly, but once imagined it seems to serve as an identifier, evoker, and retriever of a range of images that, as it were, line up or throng up behind it ready for easy access to conscious contemplation. The images seem not necessarily evoked or retrieved by any logical classificatory system but rather by emotional, or metaphoric, or even sonorous associations. So the mess of pottage brings into bizarre, but typical, association Jacob and Esau, Scottish crofters eating porridge, prodigal sons, school-day breakfasts, clam chowder, and on and on. This realm of associated images underlying concepts is one that Freud explored to interesting effect. My point here is that if imagination entails even in some vestigial forms this kind of evoking of images even when we deal with abstract ideas, then the point Warnock emphasizes about the necessary affective component in imagination applies not only to those obvious cases of vivid and dramatic quasi-pictorial images but to all uses of imagination. That is, it lets the wild animals that come along with images into the domesticated concept from which White excludes them. This is an issue that will not be decided by individual witness to what seems to be the case when one imagines things, but such cases might suggest, at least, that we not conclude unqualifiedly that the role of images in imagination is unimportant in forming an adequate grasp on it.

More straightforwardly, however, we find the emotions aroused with the imagination because what drives us to think of things as possibly being so is commonly tied to our hopes, fears, and intentions.

I would like to make one final observation, more in harmony with White's formulation. This concerns the relationship of imagination and rationality. Wordsworth's claim that imagination denotes amplitude of mind and reason in her most exalted mood catches two topics of relevance here. "Amplitude of mind" reflects the observation already made about imaginativeness entailing flexibility, variability, richness of detail, unusualness in thinking. That imagination should also and relatedly be considered "Reason in her most exalted mood" may seem rather less obvious. The common distinction between reason and imagination made through much of the above very short history is one that remains influential still. There is certainly a tendency in educational writings to see them as more or less discrete, and mutually anti-pathetic, categories, even to the extent that some areas of the curriculum are largely assumed to

address and develop one and other areas are largely assumed to address and develop the other — science and mathematics are commonly taken to deal mainly with reason and the arts with imagination. (There is an element of simplification if not caricature here, but much less than one might wish.)

Identifying imagination in the capacity to think of something as possibly being so, certainly does not suggest any conflict with rationality. Rather, the ability to hold alternative conceptions in the mind and assess their adequacy or appropriateness would seem a necessary component of any sophisticated rational activity. "How, Solomon, can you rationally decide between the competing claims of two women each claiming custody of a child on the grounds of being the mother?" The rational resolution was neither a matter of literal calculation nor formal logic, and neither would one suggest that Solomon behaved irrationally. Rather, it was a case of reason in her most exalted mood.

We might consider David Hammond's (1990) adaption of Gerard Manley Hopkins's term and conceive of imagination as the "inscape" of rationality. This certainly obliterates the false and destructive dichotomizing of the two and suggests an enriched and expanded sense of rationality. With imagination as its "inscape", we can see how the capacity to conceive of possible worlds enables us rationally to probe alternatives and to explore beyond what is conventionally represented or can be formally or literally extrapolated from what is or seems to be the case. The slight difficulty with this is that it tends to suggest both that all rational thinking must involve some degree of imaginativeness and that irrationality lacks imaginativeness. Neither of these suggestions seem warranted (nor does Hammond's use imply that they are).

So, imagination is the capacity to think of things as possibly being so; it is an intentional act of mind; it is the source of invention, novelty, and generativity; it is not implicated in all perception and in the construction of all meaning; it is not distinct from rationality but is rather a capacity that greatly enriches rational thinking. The imaginative person has this capacity in a high degree. It may not be invariably true that imagination involves our image-forming capacity, but image-forming is certainly common in uses of the imagination and may in subtle ways be inevitably involved in all forms of imagining; and image-forming commonly implicates emotions.

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