12.C: the ***PhilosophyIdeas*** overview of

Rationalism

Empiricists say that all of our knowledge boils down to experience, even if it seems very abstract, and remote from the senses. Rationalists argue for the opposite view – that reason can offer direct knowledge, and even when knowledge is very close to experience, reason still has the last word, by converting the sensations into knowledge. Nowadays this division looks a bit simplistic, and most thinkers embrace a more complex view, but the distinction remains important, and most modern philosophers can be placed closer to one school than to the other. One thing at stake is the status of human reason. Rationalists incline to the view that reality has a rational structure, which can be mapped by following lines of reasoning, and we might even say that knowledge is the resulting map. Empiricists reject this, and see knowledge in the patterns of experience, rather than in its rational and logical connections.

The history of rationalism shows a slow decline in ambitions, from grand claims that reasoning can reveal the ultimate truths, down to a more cautious claim that all of our knowledge depends on rational foundations. The boldest claims made have been that we can achieve certainty through reason (but not through experience), that only reason can reveal to us what is necessary, and that the cosmos itself is a rational structure, and hence can be known my reason. The model of good reasoning for rationalists has always been mathematics, and it is held that absolute **certainty** is available to us there, both in the simplicity and self-evidence of the basic concepts, and in the procedures of proofs, which guarantee a sequence of truths by the clarity of the rules and the obviousness of each step. If science and philosophy can exhibit the same clarity and discipline (said early rationalists) then similar complex certainties might be rationally attainable.

Just as it seemed that experience was uncertain, but reason might achieve certainty, so it was also thought that experience only shows us what *happens* to be true (the contingencies of existence), but we also want to know what *has* to be true (the **necessities**), and reason is the obvious means of achieving that. In theory this was to be achieved by the 'natural light' of pure reason, offering a direct vision of necessities, but in practice the role of imagination was paramount in the process. Thus what is unimaginable is impossible, what is imaginable is possible, and what cannot be imagined to fail is necessary. These 'modal' truths are not found merely in the picturings of imagination, but in the assessment of their implications by reason. Seeing *why* some things are imaginable and other things are not gives us insight into what is impossible, contingent or necessary.

The most important presupposition of this optimistic style of rationalism is that **reality itself is rational**. The awesome order of the moving heavens, and the perfect regularities, patterns and structures of nature (which seem mathematical in character) reveal an intrinsic reason in the cosmos (whether or not it is divinely inspired). Logic and mathematical modes of thinking are not only the very fabric of nature, but are available to human reason. One view ('platonism') is that the foundations of reality are a set of eternal unchanging ideas, and that our natural reason (Gk *logos*) and the process of critical argument called *dialectic* can raise our minds to a vision of these ideas (or 'Forms').

The idea of *logos* relies on rational insight and intuition, and less on the formal modes of logic and mathematics. An alternative rationalist approach is modelled closely on geometry. The idea is to find some obvious basic axioms about reason, and then build a philosophical **system**, in clear steps resembling theorems in geometry. Examples of basic axioms are the principle of sufficient reason (there is a reason for everything), and the principle of non-contradiction (p and not-p cannot both be true). Because reality is rational, it is presumed that all truths are provable, and there is one correct logic which can be employed. Thus we can aspire to a single rationally coherent philosophical vision of reality.

Such system-building moves a long way from experience, and empiricists sounded a loud warning note – that the further you move from experience the less reliable your conclusions become, and if experience contradicts your lofty theorems then it is crazy to hang onto the theorems. A bold move then suggested that many of the assumptions about reality that drove rationalist systems are actually features of the human mind, not of the world. A more modest rationalism emerged, where reason deconstructs our own intellectual apparatus, revealing more limited certainties and necessities, and building systems centred more on the mind than on the world. In addition, the model of geometry became less impressive when it was found that you could tinker with its axioms to create new geometries.

While the aspirations of rationalists declined, their confidence in reason did not. An important part of rationalism is its commitment to **innate ideas**. Empiricists favour the view that everything (or almost everything) within the conscious mind comes from external reality. Rationalists reject this view, because the bedrock concepts and principles of rational thought could not possibly derive from experience. They are the criteria by which we evaluate experience, and so our own assessment of intuition, the rules of logic, coherence and proof can only come from within the mind (*a priori*). These rational standards must be built into the mature human mind, and are thus taken to be innate rather than learned from experience. A famous example claimed that when a piece of candle wax is melted all of the experiences change and yet we still say it is wax, showing that innate reason has made the judgement. Similarly, it is only reasoning about the stars (rather than staring at them) which arrives at the truths of astronomy.

Empiricists always doubted the claims to certainty made by rationalists, but modern rationalists are sympathetic to the 'fallibilist' approach – that just as memories are directly known but not entirely reliable, and just as we can make mistakes in proofs, so the a priori insights and intuitions of rationalist philosophising are rewarding but fallible. The claims of logicism in mathematics (that mathematics can be entirely reduced to logic) also encouraged the rationalist position, by offering a simplified logical structure for reality, and calling for fewer innate foundational concepts.

Opponents reject all of these claims. We should take messy reality as we find it, it is arrogant to claim certainty, we have no idea whether anything in nature is necessary (and our imagination is no help), intuition is dodgy, logics are just formal languages, and experience is always more reliable than reasoning when they conflict. Nevertheless, the rationalist approach to philosophy will not go away.