1. **Propositional Knowledge**
   1. Propositional knowledge, “knowing that,” is distinguished from procedural knowledge, “knowing how” and other kinds of knowing
   2. An epistemic subject S, with some representational abilities, may be said to know or not to know that p, where p is a proposition, in S’s circumstances, which include a time.

2. **The Methodological Project**
   1. Two tasks of epistemology can be distinguished
      1. The normative task, which set standards or norms for knowing or not knowing
         1. It seems that there must be some description of the cognitive capacities of the subject in order for any norms to be applicable to them
      2. The descriptive task, which describes how knowledge comes about
         1. It also seems that the descriptive task cannot be carried out without some appeal to norms that determine when knowledge has actually come about
   2. Two methods of investigation can be distinguished
      1. “Particularism,” which begins with a stock of knowledge attribution and crafts its norms in terms of what would produce that stock
         1. The question then arises as to the legitimacy of the presumed stock of knowledge
      2. “Methodism,” which begins with norms and looks to discover what knowledge attributions satisfy them
         1. The question then arises as to how the norms can be chosen, without appeal to a stock of knowledge
   3. Chisholm called these problems “the wheel,” which rotates from one method to the other
   3. Two further methods of investigation can be distinguished
      1. The analysis of a fixed concept of knowledge
         1. The analysis depends on our knowledge attributions
      2. The investigation of how knowledge attributions are made
         1. Knowledge attributions are made according to some conception of what knowledge is

3. **The Normative Project**
   1. Epistemic norms range over several dimensions
      1. The nature of epistemic norms
         1. Internal norms
            1. Modeled on moral norms, in terms of permissibility of belief
            2. Modeled on decision-making norms
         2. External norms
            1. Modeled on relation to the truth
      2. The strength of epistemic norms
         1. Infallibilist
         2. Fallibilist
      3. The structure of epistemic norms
         1. Foundational
         2. Non-foundational
            1. Deductive
2. Inductive
3. Abductive
4. Coherence

4. The Descriptive Project
1. There are two ways of describing the cognitive capacities of epistemic subjects
   1. From “the armchair,” purely by introspection
      1. “Armchair” epistemology seems best suited for epistemology of the a priori
      2. One’s view of oneself may be incomplete or obscured by bias
      3. The internal starting point seems to leave out important aspects of human cognition
   2. By external scientific investigation
      1. The scientific enterprise itself must also be the subject of epistemic evaluation
      2. Sociological factors may also be taken into account
         1. Some hold that the collective beliefs of societies constitute knowledge

5. The Formal Project
1. There have been various kinds of attempts to formalize aspects of knowledge
   1. Theories of probability and epistemic decision-making
   2. Theories of implication regarding what is known
      1. A key component of most such theory is closure under known detachment
         1. If S knows that p and S knows that if p then q, then S knows that q
         2. This principle plays an important role in discussions of knowledge attribution
            and skepticism
      2. Another, controversial, kind of implication is that what is known is known to be
         known (the “KK thesis”)

6. The Linguistic Project
1. Self-attribution of knowledge might be understood as a “performative utterance”
   1. To affirm that one knows that p is taken to be like giving one’s word that p is true
   2. If p is false, then one who has asserted knowledge of its truth can be held accountable
2. Attributions of knowledge may be understood by reference to the context of attribution
   1. It appears to be the case that knowledge attributions vary with the context in which the
      attributions are made
   2. The mainstream “contextualist” view is that the context of attribution determines the
      strength of epistemic norms that must be satisfied for knowledge
   3. There are two factors of the context of attribution that might be in play
      1. Theoretical concerns, such as whether skeptical hypotheses must be dealt with
      2. Practical concerns, such as how important it is for the attribution to be correct
3. One way to view the differences in standards is with respect to the epistemic risks which the
   attributor is willing to take
   1. A risk-tolerant attributor is willing to make attributions with weaker standards
   2. A risk-averse attributor is only willing to make attributions with stronger standards
4. Variability in knowledge attributions can be understood in two ways
   1. As merely a fact about the way in which it is appropriate to make attributions
   2. As indication of the truth-value of the attributions
5. Variability of the truth-value of the attributions can be explained in several ways
   1. A single epistemic standard is applied, but whether or not it is met depends on the
      circumstances of the attributee (“subject-sensitive invariantism”)
      1. This has the consequence that one person may correctly attribute knowledge to
         someone in the same epistemic position as himself, while denying knowledge to
         himself
   2. Different epistemic standards are applied, depending on the context of attribution
(“contextualism”), which may be understood in various ways
1. Attributions of knowledge invoke different standards, depending on the content of the proposition at issue (Dretske)
2. Attributions of knowledge function in the same way as indexical terms like “I,” “here,” and “now,” generating different propositions in different contexts of utterance (Cohen)
3. Attributions of knowledge function like vague terms such as “tall” (Lewis)
4. Variability lies not in contexts of attribution but in context of the assessment of the truth of attributions (MacFarlane)
5. Variability can be given no coherent systematic explanation
6. The variation in the strength of epistemic position needed for knowledge attribution can be understood in terms of which alternatives to the truth of the proposition at issue are “relevant”
   1. One might be correct in attributing knowledge in cases where alternatives cannot be ruled out but are not relevant
   2. Some alternatives are relevant because of the nature of the proposition at issue
      1. Seeing a painted mule is an alternative to seeing a zebra
      2. One cannot rule out the alternative that one does not see a painted mule
      3. Therefore, one does not know that one does not see a painted mule
      4. By closure, one does not know that one sees a zebra
      5. But some, like Dretske, think that one does know that one sees a zebra, in which case closure is to be denied
    3. One approach is to claim that one’s knowledge that one sees a zebra and one’s ignorance that one sees a painted mule are the result of the application of two different standards
      1. One knows in ordinary contexts of attribution that one sees a zebra because painted mule alternatives are not relevant
      2. One does not know in skeptical contexts of attribution that one sees a zebra because painted mule alternatives are relevant
      3. The range of relevant alternatives that must be excluded is a measure of the stringency of one’s epistemic standards
      4. Thus, one knows by lower standards that one sees a zebra but does not know by higher standards that one does not see a painted mule
      5. This saves closure, because the “knowledge” in the two cases is governed by two different standards and hence is equivocal: one knows by lower standards that one sees a zebra but does not know by higher standards that one does not see a painted mule
      6. An objection to this approach is that when we are in a context of attribution which invokes higher standards, we must retract attributions made in lower-standards contexts
8. It appears that one way in which higher standards must be invoked is that alternatives, no matter how outlandish, become relevant when they are brought to our attention (Lewis)
9. A further issue concerns the way in which alternatives to the truth of the proposition at issue can be ruled out
   1. One approach is to say that an alternative can be ruled out if one is “sensitive” to it
      1. Suppose q is a relevant alternative to p in which p is false
      2. One is sensitive to the truth of p just in case if p were false, one would not believe it
      3. Thus, if q were true, one would no longer believe that p
      4. For example, if one saw a painted mule, one would no longer believe that one sees a zebra
      5. DeRose proposes that this condition must be met whenever an alternative becomes
relevant by being brought to the attention of someone attributing knowledge or ignorance.

6. Requiring sensitivity is a higher standard than not requiring it, and so in “ordinary” contexts, the standard is lower than “skeptical” ones in which alternatives are made salient, triggering the sensitivity standard.

10. Lewis proposed that ‘knows’ functions like a vague term.

1. Context determines when propositions employing vague terms like ‘tall’ are “true enough” for correct use in a given context.

2. So, in some contexts, it is “true enough” to attribute knowledge given the standards in play in the context.

3. To know, on this account, one must be able to rule out all alternatives to the proposition at issue except for those which may be “properly ignored,” and the range of alternatives that may be properly ignored is a measure of the weakness of epistemic standards: the more alternatives that can be properly ignored, the lower the standards.

4. When a skeptical alternative is brought to one’s attention, it cannot be properly ignored.

5. When doing epistemology, skeptical alternatives are brought to one’s attention.

6. Therefore, when doing epistemology, skeptical alternatives cannot be properly ignored.

7. But the skeptical alternatives cannot be ruled out.

8. Thus, when doing epistemology, one must always attribute ignorance to oneself.

9. Lewis claims that knowledge requires meeting a standard of infallibility.

10. But it turns out that infallibility is only relative to the set of alternatives that may be properly ignored.

7. The Analytic Project

1. The standard form of analysis of knowledge is that a subject S in circumstances c knows that p if and only if C, where C is some condition.

2. The condition C is typically formulated as a conjunction of necessary conditions.

1. If S knows in c that p, then p is true.

2. If S knows in c that p, then S believes in c that p.

3. If S knows in c that p, then S is sufficiently warranted in c in believing that p.

3. The truth condition is generally accepted and is understood as meaning that the proposition that p corresponds with the way the world is.

1. Some object to the condition or its interpretation.

1. Some say that truth is relative to the subject or an epistemic community, so there is no “correspondence.”

2. Some say that knowledge attributions express only the degree to which one believes that p.

4. The belief condition is generally accepted and can be understood in different ways.

1. Belief may be “absolute” or may come in degrees.

2. Belief is a state of being “settled,” or involving a commitment.

1. The commitment might be of several sorts.

1. Intellectual commitment, based on a goal of attaining as many truths and avoiding as many falsehoods as possible.

2. Commitment due to conditioning, habit, unconscious bias, etc.

3. Practical commitment, in the sense of being willing to act on what one is committed to.

3. The belief condition can be understood as meaning that knowledge is a kind of belief.

1. Williamson argues that knowledge is not a kind of belief.

2. Rather, knowledge is the most generic “factive” mental state.

1. A factive mental state is one that must represent a fact if it is to exist at all.

1. The commitment might be of several sorts.

1. Intellectual commitment, based on a goal of attaining as many truths and avoiding as many falsehoods as possible.

2. Commitment due to conditioning, habit, unconscious bias, etc.

3. Practical commitment, in the sense of being willing to act on what one is committed to.

3. The belief condition can be understood as meaning that knowledge is a kind of belief.
1. Examples of factive mental states are perceiving and remembering

5. The sufficient warrant condition is schematic: sufficient warrant is whatever needs to be added to truth and belief in order to constitute knowledge

1. The schematic nature of the condition leaves its interpretation open, though there appears to be a minimum requirement

1. If S is sufficiently warranted, S’s epistemic position must be strong enough so that if the condition is satisfied, S’s belief is not accidentally true

2. One way to look at sufficient warrant is in terms of S’s epistemic position being strong enough to enable S to rule out alternatives to the truth of p

1. If all alternatives must be ruled out, then if S is sufficiently warranted in believing that p, then S’s sufficiently warranted belief would be “infallible” if true

2. Most epistemologists reject the infallibility condition, requiring only that a certain range of “relevant” alternatives be ruled out

3. The next issue is how the alternatives are to be ruled out

1. “Internalism” may be described as claiming that the alternatives must be ruled out on the basis of S’s “internal” resources

1. There is disagreement what the resources are and how they are mobilized

1. Sellars describes this requirement in terms of a “logical space of reasons” in which the factors that rule out the alternatives must be located

2. Because they have proposition content, beliefs seem best suited to play this role, and an account that restricts this role to beliefs may be called a “doxastic” account of warrant

3. If psychological states of S without propositional content are allowed to play a role in warranting beliefs, then the scope of “reasons” must be expanded beyond beliefs, as with Pollock’s notion of “mental pointing”

2. Another way of describing what makes a belief that p warranted is that it fit with the evidence S has for its truth, and such an account is called “evidentialist”

1. The notion of “evidence” seems broad enough that both beliefs and non-belief psychological states can be counted as evidence

3. A motivation for internalism, advanced by Sosa, is that there is a kind of knowledge that is “reflective” and which involves S’s perspective on S’s own cognitive abilities

4. Some hold that there is a “deontological” motivation for internalism

1. The claim, first made by Austin, is that knowledge requires “epistemic responsibility,” in that one is to be held accountable for self-attribute of knowledge

2. Since one cannot be held accountable for information not at one’s disposal, accountability restricts the basis of one’s warrant to one’s internal states

3. The deontological approach suggests that internalism may be motivated more generally as a way of analyzing the special case of self-attribute of knowledge

2. “Externalism” is the denial of internalism: what makes one warranted need not be confined to S’s internal states

1. Externalism may be motivated in several ways

1. Internalism is too restrictive, in that we can properly make knowledge attributions to subjects that do not weigh evidence or operate within the confines of the logical space of reasons

2. There is a kind of knowledge described by Sosa as “animal knowledge” that does not require the kind of internal processing as does “reflective
knowledge”
3. Even if internalism is appropriate for first-person attributions, there is no such requirement for third-party attributions
2. Denial of externalism is largely based on appeal to intuitions, as in the case of someone who reliably generates true beliefs but without any inkling as to how
1. Then one could claim that forming the belief would be “epistemically irresponsible” or “unreflective,” and that it is not made from the first-person point of view
3. Internalists and externalists in general share the “negative coherence” condition that S’s belief be consistent with S’s evidence (however “evidence” is construed)
4. The corresponding positive condition is at issue within the internalist camp
1. One issue involves the relation between belief and experience
   1. Doxastic internalism faces the problem that restricting the conditions for warrant to beliefs that constitute reasons or evidence “detaches them,” so to speak, from the experiential conditions that give rise to the beliefs in the first place
   2. Non-doxastic internalism faces the problem of how to “attach,” so to speak, experiences to belief in a way that is not merely causal and hence externalist
2. A second issue pertains only to doxastic internalism
   1. Some beliefs are basic and support all other beliefs (foundationalism)
      1. It is held by foundationalists that this is the only way to prevent an infinite regress of reasons or circular reasoning
   2. All beliefs tied together in the logical space of reasons (or field of evidence) by a relation of “mutual support” (coherentism)
      1. The coherence relation may be of two types
         1. The belief that p is a member of a coherent body of beliefs (BonJour)
         2. The belief that p coheres with S’s body of acceptances (Lehrer)
      2. It is held by coherentists that there is not a large enough stock of foundational beliefs to support the whole body of other beliefs
         1. Few beliefs are “self-warranting” or “unwarranted warranters”
         2. Such beliefs are subjective and cannot support beliefs whose content extends beyond the subject’s own psychological states
      3. This limitation might be overcome by appeal to psychological states that lie outside the logical space of reasons (or body of evidence), which, if one need not be aware of those states, would introduce an externalist kind of foundationalism
   3. Some beliefs are foundational and others warranted by coherence (foundherentism)
      1. This is a compromise to overcome the problem of the lack of a robust body of foundational beliefs
3. Some beliefs are foundational and others warranted by coherence (foundherentism)
   1. This is a compromise to overcome the problem of the lack of a robust body of foundational beliefs
5. Externalists differ with respect to the positive conditions for warrant
1. S’s belief “tracks the truth”
   1. If p were false, S would not believe that p (sensitivity)
      1. In some cases, sensitivity would violate closure, with an example being that S knows that S sees a red barn but does not know that S sees a barn
   2. If S were to believe that p, then S would be true (safety)
      1. There seem not to be very many safe beliefs
   3. If p were true, S would believe that p (counter-safety)
1. The condition is redundant given that p is true and S believes that p
2. S’s warrant in believing that p is caused by the fact that p
   1. This seems most suitable for perceptual knowledge
   2. It is very limited, in that it does not account of knowledge of abstract objects, the future, and other things that do not stand in causal relations to epistemic subjects
3. S’s forms the belief that p reliably
   1. Reliability allows for warranted belief in the absence of a causal connection
   2. One challenge for reliability is the “generality problem,” according to which it seems arbitrary to set limits that exclude conditions where S is not reliable in a way that is not relevant to warrant
   3. Another challenge to reliability is that one may be reliable in a way that is in some sense “accidental,” as when a brain lesion is the cause of reliable belief
4. S’s belief is warranted when the product of “virtuous” cognitive processes
   1. The “virtue” account of warrant is supposed to rule out cases of accidentally reliable true belief
   2. Plantinga understands virtue in terms of a “design plan” for the cognitive system, but it might be understood in a purely functional way, in terms of the “apt” formation of belief
     1. Sosa limits aptness as adequate by itself for sufficient warrant only in the case of animal knowledge
6. There are various ways in which the problem of accidentally true belief (the “Gettier problem”) can be approached
   1. Such cases can be ruled out if warrant is taken to be infallible
   2. They may also be ruled out by giving up the analytic problem altogether
   3. Externalist accounts seem less vulnerable than are internalist accounts, as a causal connection, reliability, or virtue might seem to rule out accidentally true beliefs
     1. However, each of these views relies on some notion of the “appropriateness” of the causal connection, reliability, or virtue in order to rule out accidental true belief (as with the brain lesion case)
4. Internalist ways of coping with the Gettier problem generally rely on a notion of a defeater of an otherwise warranted belief
   1. The approach would be that no external facts defeat the internal justification
     1. One problem with this approach is that misleading evidence may defeat reasons or evidence that should be adequate for warrant
     1. This problem might be overcome by requiring that one’s internal warrant must withstand any challenge from the total body of facts, including that misleading evidence is misleading
7. Some accounts of warrant add an “available evidence” condition for warrant
   1. It is required for warrant that S’s body of reasons or evidence include relevant information that is readily available to S, including information about the reasons or evidence possessed by other members of S’s “social group”
8. The Validation Project
   1. Skeptics deny or refuse to assert S’s knowledge in circumstances c that p in a broader or narrower range
     1. Some epistemic subjects are incapable of knowledge
2. Some circumstances prevent S from having knowledge
3. Some propositions are unknowable
4. Some subjects, in some circumstances, with respect to some propositions lack knowledge (local skepticism)
5. All subjects in all circumstances, with respect to all propositions lack knowledge (global skepticism)

2. Classically, there are two forms of skepticism
   1. The outright denial of knowledge, associated with ancient “academic” skeptics
   2. The refusal to make knowledge claims, associated with the ancient “Pyrrhonian” skeptics

3. The interesting cases for epistemology are those in which the reason for denial of knowledge is that the subject, in the circumstances, lack knowledge that p because of lack of warrant that p
   1. Of particular interest is the case where S is finite mind and p is the proposition that an external world exists or is some proposition that presupposes that one exists (such as that two human hands exist)

4. The basic argument is that what constitutes reasons or evidence for S is S’s internal states, which are incapable of generating strong enough reasons or evidence for external-world beliefs
   1. Externalists are not vulnerable to the argument, since they do not require that warrant be based on internal reasons or evidence
   2. However, from a first-person perspective, one might be left wondering whether one does in fact meet the external condition (being caused to believe by an external object, believing reliably that external objects exist, etc.)

5. There are two classical “Cartesian” versions of the argument, both based on the premise that it is possible that there be a source of our “perceptual” psychological states which is not external objects, such that it cannot be distinguished “from within” whether such a source is the real source
   1. The weaker version is that the source is ourselves, as in a dream
      1. It may be replied that when in a dream, one cannot (at least sometimes) distinguish dreaming from waking, but when one is awake, one can
         1. Waking experience seems to “feel” different from dreaming experience
         2. Waking experience has a coherence that dream experience lacks
   2. The stronger version is that the source (such as the Cartesian “evil demon”) is one that produces “perceptual” psychological states that are in no way distinguishable from such states produced by an external world
      1. There are several straightforward strategies for coping with the demon argument
         1. Denial that there could be a source of the kind that is postulated by the skeptic
         2. Denial that demon-type account of the source of the experiences is a relevant alternative that must be ruled out
         3. Allowing that the alternative must be ruled out and showing how it is ruled out
         4. Dismissing the so-called problem altogether, which seems the mainstream approach today
   2. The main reason the “problem” is dismissed is the widespread adoption of particularism
      1. The default position that we should take is the “common sense” view that we do have knowledge of an external world
      2. There is an apparent problem only if one is a “methodist” who believes that the standards for warrant are to be adopted independently of appeal to particular
1. It is argued that appeal to particulars is the only feasible starting-point for epistemological investigation.

2. It is also argued that beginning with the presumption of our knowledge of an external world does not beg the question against real skeptics, because (mental aberrations aside) there are no real skeptics (Greco).

3. Moore claimed that any principle that would lead to the skeptical consequence will be less plausible than our common-sense belief in the existence of an external world.
   1. A skeptic might counter that while beliefs of common sense are initially more plausible, reflection might reveal that the standards used in the skeptical argument are even more plausible.

3. Another argument for skepticism is based on the closure principle.
   1. If S knows that S has two hands, then by closure (given that S knows that if S has two hands, then S is not a demon-victim), S knows that S is not a demon-victim.
   2. But S does not know that S is not a demon victim.
   3. Therefore, S does not know that S has two hands.

4. There is more than one response to the closure argument.
   1. Rejection of the universal application of closure.
   2. Acceptance of closure and of the claim that S knows that S is not a demon-victim.
   3. Acceptance of closure and of the claim that S does not know that S is not a demon-victim.
      1. This is the response of contextualists such as DeRose.
      2. The claim is that in different contexts of attribution, different standards are in play.
      3. In high-standards contexts, the skeptical conclusion must be accepted.
      4. In low-standards contexts, the conclusion can be safely ignored.
      5. A criticism is the claim that once the skeptical alternative is raised, one’s standards should remain at the higher level.

5. The attempt to overcome skepticism directly comes in various forms.
   1. Descartes gave an a priori argument for the existence of a non-deceiving God and claimed that if external objects were not the source of our “perceptual” beliefs, then God would be a deceiver.
   2. It is argued that external objects as the source of our “perceptual” experience constitute the best explanation for the structure of that experience.
      1. Russell appealed to the simplicity of the explanation.
      2. Berkeley had claimed earlier that God as a source of the experience is a simpler explanation than an external-world explanation.
      2. BonJour argues that the three-dimensionality of our experience is best explained by the existence of a three-dimensional external world rather than a simulation of such a world.
   3. Lehrer allows that the demon-source of “perceptual” experience constitutes an objection to belief in an external world, but he claimed that the objection could be answered on the basis of what one accepts.
      1. It can be objected that most of what one accepts presupposes belief in physical objects, so that appeal to them begs the question.
      2. But then the relevant remaining beliefs would concern our “perceptual
experience”
3. Then it seems that an inference to the best explanation would be the only way one could answer the objection that they are caused by a demon-source