Class #26: The Synthetic *A Priori* and the Transcendental Aesthetic
Kant's *Critique of Pure Reason*,(AW 717-737)

I. Approaching Kant's First Critique

There is something fundamentally anti-philosophical about the way in which we are proceeding in this course.
Good studies in philosophy, especially in the history of philosophy, usually consist of close readings of texts.
In this class, we have been trying mainly to focus on a few central topics, and look briefly at how various philosophers of the modern era think about them.
I do not mean to imply that we have not been doing philosophy.
We have looked at the texts and analyzed the most important passages.
But our approach has been mainly from the center out.
We have been starting with the key claims, the philosophers' main conclusions, and then working backwards to evaluate the arguments in as much detail as we can see in the short time we have.

Our approach contrasts with what one might call a deductive, or synthetic, approach.
On the synthetic approach, we would start at the beginning of a work, and trace the argument carefully through a text.
We took that approach to Descartes's *Meditations*, but we quickly abandoned it with the difficult arguments in Spinoza's *Ethics*, with the assaults on the various overlapping expositions of Leibniz's work, and with the dense repetitiveness of Locke's *Essay*.
Still, the approach is nearly unavoidable, given our syllabus.
Kant's work, perhaps more than that of any other philosopher, deserves a slow, careful reading.
The best we can do will be to spend a little time on a couple of key difficult passages..

Kant's master work in metaphysics and epistemology is called the *Critique of Pure Reason*.
A critique is not merely a criticism, though people often misuse the term.
A critique is an extended review or commentary.
See the usage note in the American Heritage Dictionary which calls many of the common uses of 'critique' pretentious jargon.

Kant wrote three Critiques late in his life.
The First Critique is devoted to the questions, "Is metaphysics possible?" and, "If so, how?"
We can see Kant's First Critique as attempting to define the limits of human knowledge.
The rationalists over-reached, claiming knowledge where none could really be had.
But the empiricists fell short, ending as skeptics or idealists.
Kant's work attempts to bridge the two approaches.
The Second Critique (*Critique of Practical Reason*) concerns moral philosophy.
The Third Critique (*Critique of Judgment*) concerns aesthetics.

The First Critique may be seen as the dying gasp of the representationalist theory of ideas that characterizes the modern period.
It certainly marks the end of the modern era.
Western philosophy for about a century after Kant mainly focused on the consequences of his so-called transcendental idealism.
After that, philosophy sort of branches into two schools.

The first school follows Nietzsche and Kierkegaard into twentieth-century continental philosophy and literary theory.
The second school follows Mill and Frege into the linguistic revolution and twentieth-century analytic philosophy.

Kant wrote the first edition of the First Critique, now called the A version, in 1781.
He published a second edition, now called the B version, in 1787.
Most people now read the two editions together.
Some of the B version extends and clarifies Kant's original arguments.
We will not spend time on the distinction between the two versions.
Both are presented in the Ariew and Watkins, and you can see the marginal page numbers for each.

II. Reason

Everyone we have read accepts that we have some kind of ability to reason.
The rationalists and empiricists disagree about the matter for reason.
The rationalists believe that the content of our judgments is provided by innate ideas and sense experiences.
They differ about the veridicality of sense experience, but not about whether we are presented with sense experience.
The empiricists believe that the content of our minds is provided only by sense experiences.
They look to reduce reasoning to psychological associations among images.
Kant rejects rationalism for being dogmatic and going beyond its true abilities.
He rejects empiricism for its skeptical conclusions.

One might think of pure reason, the titular subject of Kant's First Critique, as logic.
If we take logic, as Kant does, to be the rules of reasoning in thought, then Kant's project may be seen as a logical project.
He looks in part at how reason can determine, or structure, an object.
He also examines how reason can make objects actual, through the application of pure thought.
Kant thus claims that some cognition is pure, consisting of reason acting on itself.
That's different from thinking that there are ideas carrying significant particular content innate in us.

III. Kant's Copernican Revolution

Kant compares his First Critique to Copernicus's revolution, the shift from a geocentric model of the universe to a heliocentric one.
Aristoteleans believed that the sun, stars, and other celestial bodies circled the earth.
Astronomical discoveries made the cycles of those bodies highly complicated.
Copernicus and others found that astronomical mathematics became tractable if we posit a moving Earth.

> Having found it difficult to make progress there when he assumed that the entire host of stars revolved around the spectator, he tried to find out whether he might not be more successful if he had the spectator revolve and the stars remain at rest (Bxvi, AW 720a).

Kant argues that the empiricists found it impossible to justify knowledge of a material world because they assumed that our cognition has to conform to objects.

They started with an assumption of a structured world independent of us and tried to account for knowledge of that world.
Locke counseled humility.
Berkeley eliminated the material world.
Hume ended up a skeptic.
They could not find a way into a transcendent world.
But, Kant argues, if the objects have to conform to our cognition, then we might have *a priori* knowledge of those objects.

One way in which objects conform to our cognition is in imagination, when we fantasize.
If all of the world were merely one person's fancy, then the objects of that world would necessarily conform to that person's cognition.
Such a view of the world would be an unacceptable, subjective idealism.

In contrast, Kant defends a transcendental idealism.
In Kant's idealism, the world conforms to our cognition because we can only cognize in certain ways.
The world of things-in-themselves, or what Kant calls the noumenal world, remains, as it did for Hume, inaccessible, completely out of range of our cognition.
The noumenal world is beyond the limits of possible experience.
But any possible experience has to conform to our cognitive capacities.
The phenomenal world, the world of possible experience, is necessarily structured according to those capacities.

Kant believes that our cognitive capacities come under two general headings: intuition and understanding.
Intuition (or sensibility) is our mental faculty for having something presented to us.
Understanding, which is structured according to certain basic concepts, is our mental faculty for determining, or thinking, about objects.
All objects have to be presented in intuition and determined by concepts in the understanding in order for us to think about them.
Thus, all of experience necessarily conforms to the two aspects of our cognition.
Logic, as the laws of thought, will help us understand our faculty of cognizing and will thus help us understand the phenomenal world.

The distinction between the realm of objects of possible experience and that of transcendent objects helps Kant deny the legitimacy of much of the work of the continental rationalists.
For example, God is, according to Kant, outside the range of possible experience, and thus can not be an object of knowledge.

> In order to reach God, freedom, and immortality, speculative reason must use principles that in fact extend merely to objects of possible experience; and when these principles are nonetheless applied to something that cannot be an object of experience, they actually do always transform it into an appearance, and thus they declare *all practical extension* of reason to be impossible. I therefore had to deny *knowledge* in order to make room for *faith* (Bxxx, AW724a-b).

Similarly, *a priori* knowledge of a mind-independent noumenal world is impossible.
But *a priori* knowledge of our world of possible experience is possible if we pay attention to the conditions of that experience.
By reasoning about the underlying framework of our experiences, we can unmask the conditions for those experiences, the metaphysical structure of our knowledge.

IV. The Analytic and the Synthetic

Kant asks whether metaphysics is possible.
His claim is that it is, and that it consists of synthetic *a priori* judgments.
To understand this claim, we have to contrast two distinctions, between analytic and synthetic claims and between *a priori* and empirical, or *a posteriori* claims.

For Kant, analyticity and syntheticity are characterizations of judgments, which are mental acts.
Judgments, for Kant, following Aristotle, are all of subject-predicate form.
The analytic/synthetic distinction is today generally taken to be a linguistic distinction, a difference between kinds of propositions or statements.
A proposition is, roughly, the meaning of a sentence.
Propositions may be coarsely divided into subject and predicate, just like judgments.

Whether we take analyticity and syntheticity to be properties of judgments (as Kant does) or propositions (as most contemporary philosophers do), they almost always are taken to be dependent on concepts.
Analyticity involves conceptual containment.
Given a judgment of subject-predicate form, the judgment is analytic if the concept of the predicate is contained in the concept of the subject.
So, 'bachelors are unmarried' is analytic because the concept of a bachelor contains the concept of being unmarried.
'Bachelors are unhappy' is synthetic because the concept of a bachelor does not contain the concept of being unhappy.
It may be the case that all bachelors are unhappy, but that depends on the way the world is, and not on the way that language or concepts are.

Concepts may be taken either as mental objects (thoughts) or as abstract objects.
If we take concepts to be thoughts, then different people can not share concepts.
My thoughts are not your thoughts, even though we can think about the same thing.
It is thus preferable to take concepts as abstract objects, and to take our thoughts to be about concepts.
When I think of a concept, like the concept of a bachelor, I perform a mental act which we can call grasping the concept.
These concepts are structured, so that they can contain, or not contain, other concepts.

I won't much pursue the question of how concepts contain other concepts, or what the relation of containment is.
But, we should notice that there are at least two different notions of conceptual containment that philosophers have used.
Kant uses what Frege (in the late nineteenth century) called beams-in-the-house analyticity.
When we look at a house, if we want to see if it contains a certain structure, we merely peel back the walls, and literally see the beams.
In contrast, Frege defends a plant-in-the-seeds analyticity.
According to Frege, a statement can be analytic as long as it follows from basic axioms according to analyticity-preserving rules of inference.
One of the advantages of Frege's views over Kant's is that he can handle statements that are not in subject-predicate form, like JW.

JW John walks with those with whom he strolls.

Sentences like JW seem analytic, true in virtue of the conceptual containments of their parts.
Yet, they are not of simple subject-predicate form.
The concept of 'walking with those with whom one strolls' is not contained in the concept 'John'.
Again, I won't pursue this worry about Kant's account of analyticity; I just wanted to point it out.

V. Linguistics, Epistemology, and Metaphysics

Analyticity and syntheticity concern relations among concepts, whatever we take them to be.
The linguistic or conceptual (or even psychological) distinction between analytic and synthetic judgments is independent of the epistemological distinction between *a priori* justifications and empirical (or *a posteriori*; these are synonymous terms, as I am using them) ones.
A statement is justified empirically if we appeal in our account of how we know it to particular sense experiences.
Our belief that snow is white is empirical, since we have to see snow to justify knowledge of its whiteness.
In contrast, our belief that 3+2=5 may be justified *a priori*, as prior to, or independent, of sense experience.
We need to see snow in order to know that snow is white.
We need experiences with no particular objects in order to know that 2+3=5.

Further, no empirical experiences will undermine *a priori* claims.
When we add 2 cups of water to 3 cups of salt, and fail to come up with 5 cups of anything, we don't abandon the claim that 2 + 3 = 5.
Similarly, two chickens added to three foxes doesn't produce five animals; it just yields three fat foxes and a pile of feathers.
The arithmetic claim remains true independent of its failure to apply in some cases.

So the analytic/synthetic distinction is linguistic/conceptual; and the *a priori*/empirical distinction is epistemological.
A third distinction, between necessary and contingent claims, is metaphysical.
Some claims hold necessarily, like mathematical claims.
Other claims are merely contingent, like the claim that snow is white.
Many philosophers typically, and traditionally, considered claims to be necessary only if they are believed *a priori*.
Discussing the apriority of physical laws, Kant makes that claim explicitly.

> [Such] propositions are clearly not only necessary, and hence of *a priori* origin, but also synthetic (B18, AW 726b-727a).

As Hume argued, one can not arrive at a necessary truth from contingent experiences.
Further, one might think that all *a priori* claims must be analytic, since one reasons to the truth of an analytic claim without appeal to experience.
Similarly, one might align contingency with empirical justification and syntheticity.
A claim is contingent when it is justified by appeal to sense experience and it brings together concepts that are not necessarily related.

In particular, Hume makes these two claims.
Relations of ideas are necessary, justified *a priori*, and analytic.

Matters of fact are contingent, justified empirically (by tracing ideas back to initial impressions) and synthetic.
We'll put aside the necessary/contingent distinction, since Hume and Kant agree on it.
Then, we can depict Hume's claim in the following chart.
The upper-right and lower-left cells are empty.

Hume's Rubric	*A priori*	Empirical
Analytic	Relations of Ideas	--
Synthetic	--	Matters of Fact

Kant's big claim, his answer to the question of whether metaphysics is possible, is that the lower-left cell is non-empty.

Kant's Rubric	*A priori*	Empirical
Analytic	Logic / Beams in the house	--
Synthetic	Most Mathematics, Metaphysics, and Some Physics	Empirical Judgments

Kant argues that metaphysics is possible, and it consists of synthetic *a priori* judgments.
He agrees with Hume that matters of fact are all synthetic.

> Experiential judgments, as such, are one and all synthetic (A7/B11, AW 725a).

Thus the upper-right cell remains empty.
But Kant disagrees with Hume that the converse holds.
There are synthetic claims that are not experiential, or empirical.

VI. The Synthetic *A Priori*

Kant's least contentious examples of synthetic claims that are not empirical are mathematical.
In particular, he claims that '7 + 5 = 12' is not analytic.

> Mathematical propositions, properly so called, are always *a priori* judgments rather than empirical ones; for they carry with them necessity, which we could never glean from experience...It is true that one might at first think that the proposition 7 + 5 = 12 is a merely analytic one that follows, by the principle of contradiction, from the concept of a sum of 7 and 5. Yet if we look more closely, we find that the concept of the sum of 7 and 5 contains nothing more than the union of the two numbers into one; but in [thinking] that union we are not thinking in any way at all what that single number is that unites the two. In thinking merely that union of 7 and 5, I have by no means already thought the concept of 12; and no matter how long I dissect my concept of such a possible sum, still I shall never find in it that 12. We must go beyond these concepts and avail ourselves of the intuition corresponding to one of the two... (B14-5, AW 726a).

Extending the claim that there are synthetic *a priori* judgments to metaphysics, Kant claims that 'every effect has a cause' is also synthetic *a priori*.
The universality of the statement entails that it is not an empirical judgment.
But, Kant claims that it is not an analytic judgment.

> In the concept of something that happens I do indeed thing an existence preceded by a time, etc., and from this one can obtain analytic judgments. But the concept of a cause lies quite outside that earlier concept and indicates something different from what happens... (A9/B13, AW 725b).

In addition to mathematics and metaphysics, Kant claims that physics also proceeds according to synthetic *a priori* principles.
The claim that some scientific propositions are synthetic *a priori* shows that Kant's conception of physics is closer to that of Galileo and Descartes than it is to that of contemporary physicists.
The science of the scientific revolution was more speculative, whereas much of contemporary science is more experimental.
While some contemporary physics is highly speculative, it is generally held that a mark of a good theory is whether it is testable, or refutable, or otherwise confirmed or contravened by experimental results.
String theory, which is a purported unifying theory for physics, has been controversial because its proponents have not been able to formulate tests for it.
Kant agrees that some portions of physics must be empirically testable.
But he also believes that certain physical principles are synthetic *a priori*.

> *Natural science contains synthetic* a priori *judgments as principles*. Let me cite as examples just a few propositions: e.g., the propositions that in all changes in the corporeal world the quantity of matter remains unchanged; or the proposition that in all communication of motion, action and reaction must always be equal to each other (B17-18, AW 726b).

Kant's latter example is Newton's third law of motion.
His claim is that such laws hold necessarily, and so can not be learned from experience.

Hume agreed that universal physical laws could not be learned from experience.
From that claim, and the empiricist's belief that all knowledge comes from experience, Hume was led to skepticism.
Kant, working in the other direction, starts his reasoning by accepting that there are mathematical, metaphysical, and even physical laws that hold necessarily, that are known *a priori*.
Working backwards, he argues that our cognitive abilities must be such that they allow us to know those principles *a priori*.

> For experience would provide neither strict universality nor apodeictic certainty... (A31/B47, AW 733b).

Kant does not argue that innate ideas are built into our minds in the way that Descartes and Leibniz alleged.
Instead, he argues that there are certain cognitive structures that impose an order to our possible experience.
The mind has templates for judgments, which are imposed and can be known *a priori*.
But, against those who defend innate ideas, it does not contain judgments themselves.
If we look at our cognitive structures, turning our reason on itself, we can find the necessary structure of our reasoning, and grounds for synthetic *a priori* claims.

That process, which Kant calls transcendental reasoning, is the essence of Kant's Copernican revolution.
Kant's transcendental arguments lead to a description of our subjective conceptual framework, which nevertheless holds necessarily for all possible experience.

To summarize, to make room for metaphysics, Kant argues that, like much of mathematics and physics, it consists of synthetic *a priori* judgments.
Since these judgments are synthetic, and not analytic, they do not follow simply from conceptual analysis.
Since these judgments are *a priori*, they can not be learned from experience.
Hume's claim that we can not learn them from experience led him to skepticism.
Kant starts with the claim that we know them, and works backwards, or transcendentally, to the conditions that must obtain in order for us to have such knowledge.
Such conditions will be the necessary structures of our logic, or reasoning.

As I mentioned, we will not have time to examine all of the First Critique.
We will look at the first two parts: the transcendental aesthetic and the transcendental analytic.
These two parts correspond to two distinct functions of our psychology.
In the transcendental aesthetic, Kant discusses how objects, and the world, are given to us.
In the transcendental analytic, Kant discusses how our minds understand, or determine, that which is given.
We are presented with a world having certain properties.
Kant calls this aspect of human cognition our sensibility.
Then, we cognize that world according to certain concepts.
Kant calls this aspect of human cognition the understanding.
By examining the properties that form the foundations of all our experiences, we will find the necessary properties of our experience.
By examining the concepts that determine all our understanding, we will find the necessary properties of our thought.

VII. Intuition

Let's start with a few definitions.

> The effect of an object on our capacity for representation, insofar as we are affected by the object, is *sensation*. Intuition that refers to the object through sensation is called *empirical* intuition. The undetermined object of an empirical intuition is called *appearance* (A19-20/B34, AW 729b).

Not all intuitions must be empirical.
But, in empirical intuitions we can divide the matter from the form.
The matter is what corresponds to sensation.
If I am holding a pen and looking at it, I am given some appearance in intuition.
Additionally, this appearance has certain abstract properties, a form.
The particulars of the form of this appearance are unique to my experience of the pen.
But the general properties of the form of appearances are properties of all such experiences.
All experiences take place in space and in time.
My experience of the pen is necessarily given in intuition in both space and time.

Some intuitions contain no empirical matter.
These are pure intuitions.

We can consider pure intuitions by performing what might be thought of as Lockean abstraction.
It is the kind of abstraction that Berkeley did not disallow, the consideration of some properties of an idea, rather than others.
We can consider pure intuitions by thinking about intuitions without any matter.

> If from the representation of a body I separate what the understanding thinks in it, such as substance, force, divisibility, etc., and if I similarly separate from it what belongs to sensation in it, such as impenetrability, hardness, color, etc., I am still left with something from this empirical intuition, namely, extension and shape. These belong to pure intuition, which, even if there is no actual object of the senses or of sensation, has its place in the mind *a priori*, as a mere form of sensibility (A20-1/B15, AW 730a).

Note Kant's method here
While we arrive at our consideration of pure forms of intuition by a method something like abstraction, Kant does not claim that our knowledge of space (and time) is derived from abstraction.
We are discovering that knowledge of space and time is necessarily presupposed in any empirical intuition.
The psychological process of abstraction is different from the transcendental argument.

VIII. The Intuition Installment of the Copernican Revolution

Kant claims that there are two underlying forms of all intuitions: space and time.
We represent objects as outside of us using our outer sense.
All objects outside of us are represented as extended in space; space is the form of outer sense.
We represent objects according to our inner sense as in time.
Kant argues that both space and time are, and must be, presupposed in our experiences.

> The representation of space must already be presupposed in order for certain sensations to be referred to something outside me (i.e. referred to something in a location of space other than the location in which I am)...We can never have a representation of there being no space, even though we are quite able to think of there being no objects encountered in it. Hence space must be regarded as the condition for the possibility of appearances... (A23-4/B38-9, AW 730b-731a).

Similarly, time must be presupposed for all experiences.

> Simultaneity or succession would not even enter our perception if the representation of time did not underlie them *a priori* (A30/B46, AW 733a).

Note how Kant's argument for the presupposition of space and time recalls Plato's argument for the doctrine of recollection, or *anamnesis*.
In *Phaedo* 74 et seq., Plato argues that our knowledge of equality can not come from looking at equal things.
All things are unequal in some way.
Even if we were to find some perfectly equal things, like atoms, our concept of equality could not come from our experiences with them.
Thus, we must presuppose an idea of the equal in our claims that two objects are equal, and can not learn that concept from unequal objects.
Similarly, Kant argues that our experiences with objects presuppose that they are given in space and time.

The argument for space and time being *a priori* forms of intuition is thus Kant's Copernican revolution applied to intuition.
The idea of a possible experience occurring outside of space or time is nonsense.
Instead of despairing of learning of space and time from experiences which presuppose it, Kant inverts his account to make space and time subjective forms of intuition.
They are ways in which we structure the world of things in themselves, not ways in which the world exists in itself.
They are properties of appearances, which are the objects of our empirical intuition.

IX. Transcendental Idealism and Empirical Realism

Taking space and time to be forms of intuition, Kant extends Hume's claims about causation.
Hume reinterpreted 'cause' as referring to a mental phenomenon.
Kant takes space and time to be forms of our intuition, rather than things in themselves.
Consequently, Kant is able to take objects in space and time to be empirically real.

> Our exposition teaches that space is *real* (i.e. objectively valid) in regard to everything that we can encounter externally as object, but teaches at the same time that space is *ideal* in regard to things when reason considers them in themselves, i.e., without taking into account the character of our sensibility. Hence we assert that space is *empirically real* (as regards all possible outer experience), despite asserting that space is *transcendentally ideal*, i.e., that it is nothing as soon as we omit [that space is] the condition of the possibility of all experience and suppose space to be something underlying things in themselves (A28/B44, AW 732b).

The twin doctrines of empirical realism and transcendental idealism are at the center of Kant's work.
We can say nothing of the noumenal world of things in themselves, not even that they are in space and time.
Berkeley's empirical (or material) idealism made the mistake of denying an outer, material world on the basis of the transcendence of the noumenal world.
The rationalists, as transcendental realists, erred by asserting knowledge of things in themselves.
Kant's claim is that we can have significant knowledge of an external world (of appearances) without claiming any knowledge of the noumenal world.
Space and time are properties of our representations of the world, and not the world as it is in itself.

Kant's transcendental exposition of space and time explains how we can have certainty of both geometry and pure mechanics.
Geometry is the study of the form of outer sense, of pure, *a priori* intuitions of space.
Pure mechanics is the study of the form of inner sense, time.

> Only in time can both of two contradictorily opposed determinations be met with in one thing: namely, *successively*. Hence our concept of time explains the possibility of all that synthetic *a priori* cognition which is set forth by the - quite fertile - general theory of motion (A32/B48-9, AW 734a).

Arithmetic, too, depends essentially on construing addition as successions in time.
But, constructing numbers in intuition requires the synthetic unity of apperception behind the categories of the understanding.
That sentence may not make any sense at this point, but we will get to Kant's view on numbers, later.

X. From Intuition to Understanding

We saw that Kant separates two faculties of cognition: sensibility (the faculty of intuition) and understanding.
There are two pure forms of intuition, space and time, which are not things in themselves, nor properties of things in themselves, but presuppositions we must impose on all our possible experience.
The faculty of intuition is what gives us appearances.
But, appearances are just the raw data, the content, of experience.
Our intuitions are passive.
The raw data of intuition is processed in the understanding by the imposition of concepts.

> All our intuitions, as sensible, rest on our being affected; concepts, on the other hand, rest on functions. By *function* I mean the unity of the act of arranging various representations under one common representation (A68/B93, AW 738b).

This act of arranging what is given in intuition is what Kant calls synthesis of the manifold.
This synthesis is then cognized by the structured application of concepts in the understanding.
If the synthesis is empirical, then we have an ordinary empirical cognition, like the judgment that it is raining.
If the synthesis is pure, then we can arrive at pure concepts of the understanding, which are nevertheless the conditions of possible experience.
Intuition and understanding thus work together to produce experience.

> Thoughts without content are empty; intuitions without concepts are blind (A51/B76, AW 737b).

The transcendental aesthetic consists of Kant's explications of the pure intuitions of space and time.
The transcendental analytic is the much-longer explication of the categories of the understanding, how we impose our conceptual apparatus on what is given in intuition.

What is given in intuition is not necessarily structured by the understanding.
We are given appearances without any conceptual structure.
We are just given appearances in space and time.

> Appearances might possibly be of such a character that the understanding would not find them to conform at all to the conditions of its unity. Everything might then be so confused that, e.g., the sequence of appearances would offer us nothing providing us with a rule of synthesis and thus corresponding to the concept of cause and effect, so that this concept would then be quite empty, null, and without signification. But appearances would nonetheless offer objects to our intuition; for intuition in no way requires the functions of thought (A90-1/B 123, AW 744a).

In order to think about appearances, we have to cognize them.
We cognize using whatever conceptual apparatus we have.
That conceptual apparatus is subjective, in that it belongs to us individually.
But it is also objective, if not noumenal, because the world of objects is precisely the world of appearances, what is given in intuition.