9th Grade Textbook Packet 4/6/2020-4/10/2020

SECTION 3

OBJECTIVES

- Relate the biological species concept to the modern definition of species.
- Explain how the isolation of populations can lead to speciation.
- Compare two kinds of isolation and the pattern of speciation associated with each.
- Contrast the model of punctuated equilibrium with the model of gradual change.

VOCABULARY

speciation morphology biological species concept geographic isolation reproductive isolation gradualism punctuated equilibrium

FIGURE 16-9

The facial features of red-tailed monkeys, *Cercopithecus ascianus*, can differ from individual to individual.



FORMATION OF SPECIES

How many species of organisms exist on Earth today? Undiscovered species may be so numerous that we have no accurate answer. For example, even small areas of tropical rain forests can contain thousands of species of plants, animals, and microorganisms. New species are discovered and others become extinct at an increasing rate. In this section, you will learn how one species can become two through a process called speciation.

THE CONCEPT OF SPECIES

You have learned that existing species are essentially changed versions of older species. The process of species formation, **speciation** (SPEE-shee-AY-shun), results in closely related species. Some are very similar to their shared ancestral species, whereas other descendant species become quite different over time.

Morphological Concept of Species

For many years, scientists used the internal and external structure and appearance of an organism—its **morphology** (mawr-FAHL-uh-jee) as the chief criterion for classifying it as a species. Using the morphological concept of species, scientists defined species primarily according to structure and appearance. Because morphological characteristics are easy to observe, making species designations based on morphology proved convenient.

The morphological concept of species has limitations, however. There can be phenotypic differences among individuals in a



single population. Notice, for example, the variation between the two red-tailed monkeys shown in Figure 16-9. To further complicate the matter, some organisms that appear different enough to belong to different species interbreed in the wild and produce fertile offspring. In response to the capacity of dissimilar organisms to reproduce, the biological species concept arose.

The Biological Species Concept

According to the **biological species concept**, as proposed by German-born, American biologist Ernst Mayr (1904–2005), a species is a population of organisms that can successfully interbreed but cannot breed with other groups. Although this definition is useful for living animals, the biological species concept does not provide a satisfactory definition for species of extinct organisms, whose reproductive compatibility cannot be tested. Nor is it useful for organisms that do not reproduce sexually. Thus, our modern definition of species includes components of both the morphological and biological species concepts. A species is a single kind of organism. Members of a species are morphologically similar and can interbreed to produce fully fertile offspring. The many species alive today diverged from a smaller number of earlier species.

ISOLATION AND SPECIATION

How do species give rise to other, different species? Speciation begins with isolation. In isolation, two parts of a formerly interbreeding population stop interbreeding. Two important types of isolation frequently drive speciation.

Geographic Isolation

Geographic isolation is the physical separation of members of a population. Populations may be physically separated when their original habitat becomes divided. A deep canyon could develop, a river could change course, or a drying climate in a valley could force surviving fragments of an original population into separate mountain ranges. Once the subpopulations become isolated, gene flow between them stops. Natural selection and genetic drift cause the two subpopulations to diverge, eventually making them incompatible for mating.

In pupfish, small freshwater fish shown in Figure 16-10, speciation following geographic isolation apparently took place in parts of the western United States, including the desert of Death Valley. Death Valley has a number of isolated ponds formed by springs. Each pond contains a species of fish that lives only in that one pond, but the fish species of various ponds in the area are quite similar.

How did these different populations of fish become isolated in Death Valley? Geologic evidence indicates that most of Death Valley was covered by a lake during the last ice age. When the ice age ended, the region became dry, and only small, spring-fed ponds remained. Members of a fish species that previously formed a single population in the lake may have become isolated in different ponds. The environments of the isolated ponds differ enough that the separate populations of fish diverged. Eventually, the fishes in the different ponds diverged enough to be considered separate species.

FIGURE 16-10

These two types of pupfish live in isolated water sources in the western United States. Both types appear to have evolved from a common ancestor after undergoing geographic isolation.



(a) desert pupfish, Cyprinodon macularius



(b) Amargosa pupfish, Cyprinodon nevadensis



(a) white-tailed antelope squirrel, Ammospermophilis leucurus



(b) Harris's antelope squirrel, Ammospermophilis harrisi

FIGURE 16-11

These two closely related squirrels are probably the result of allopatric speciation. The white-tailed antelope squirrel (a) is found on the north rim of the Grand Canyon, and Harris's antelope squirrel (b) is found on the south rim.

Word Roots and Origins

prezygotic

from the Latin *prae*, meaning "before," and the Greek *zygotos*, meaning "yoked" Geographic barriers can be formed by canyons, mountain ranges, bodies of water, deserts, or other geographic features that organisms cannot cross. In addition, parts of a population may be accidentally transported to new islands or slowly drift apart of separate continents. On the geologic time scale, the processes geology frequently rearrange populations.

geology frequently rearrange populations Whether or not a geographic barrier will isolate a particular group of organisms depends on the organisms' ability to more around. Birds, for example, can easily fly back and forth across deep canyon. However, a canyon might be a major barrier to small, crawling mammal. An example of such a barrier is the Gran Canyon in Arizona. The ever-deepening canyon separates the habitats of two closely related populations of squirrels, shown in Figure 16-11. These two populations are different enough to be considered separate species, but similar enough that scientists debate whether they might simply be subspecies. Because their ranges do not overlap, the two populations do not interbreed.

Allopatric Speciation

Allopatric speciation happens when species arise as a result of geo. graphic isolation. Allopatric means "different homelands." Populations separated by a geographic barrier no longer experience gene flow between them. So, the gene pools of each separate population may begin to differ due to genetic drift, mutations, and natural selection.

Allopatric speciation is more likely to occur in small populations because a smaller gene pool will be changed more significantly by genetic drift and natural selection. The key question in this type of speciation is whether or not the separated populations become different enough to be reproductively isolated from one another. In other words, if the geographic barrier is removed, could the two groups interbreed and produce fertile offspring?

Reproductive Isolation

Sometimes, groups of organisms within a population become genetically isolated without being geographically isolated. **Reproductive isolation** results from barriers to successful breeding between population groups in the same area. Reproductive isolation and the species formation that follows it may sometimes arise through disruptive selection. Remember that in disruptive selection, the two extremes of a trait in a given population are selected for and the organisms begin to diverge. Once successful mating is prevented between members of the two subpopulations, the effect is the same as what would have occurred if the two subpopulations had been geographically isolated. There are two general types of reproductive isolation: prezygotic (pree-zie-GAHT-ik) isolation and postzygotic isolation. *Prezygotic isolation*, or *premating isolation*, occurs before fertilization, and *postzygotic isolation*, or *postmating isolation*, occurs after fertilization.



FIGURE 16-1

As the graph shows, frogs that share habitats may be reproductively isolated by differences in timing of mating activity.

If two potentially interbreeding species mate and fertilization occurs, success is measured by the production of healthy, fully fertile offspring. But this may be prevented by one of several types of postzygotic isolation. The offspring of interbreeding species may not develop completely and may die early, or, if healthy, they may not be fertile. From an evolutionary standpoint, if death or sterility of offspring occurs, the parent organisms have wasted their gametes producing offspring that cannot, in turn, reproduce.

In contrast, prezygotic isolating mechanisms can reduce the chance of hybrid formation. For example, a mating call that is not recognized as such by a potential mate can contribute to isolation. Differences in mating times are another type of prezygotic isolation. Both mechanisms are in effect for the frogs shown in Figure 16-12. The time of peak mating activity differs for each frog, reducing the chance of interbreeding. As a result, the wood frog and the leopard frog, shown in Figure 16-13, are reproductively isolated. Though these two frogs interbreed in captivity, they do not interbreed where their ranges overlap in the wild. The wood frog usually breeds in late March, and the leopard frog usually breeds in mid-April.

Sympatric Speciation

Sympatric speciation occurs when two subpopulations become reproductively isolated within the same geographic area. Charles Darwin proposed this model of speciation in the 1850s. He hypothesized that competing individuals within a population could gain an adaptive advantage by using slightly different niches. This specialization could lead each group to become reproductively isolated from the other.

For example, a population of insects might live on a single type of plant. If some of the individuals from this population began to live on another type of plant, they might no longer interbreed with the original population. The two groups of insects would then be able to evolve independently and could eventually become two different species.

FIGURE 16-13

Differences in peak mating times and in mating calls appear to have led to reproductive isolation of the wood frog (a) from its close relative, the leopard frog (b).



(a) wood frog, Rana sylvatica



(b) leopard frog, Rana pipiens

(a) GRADUALISM

(b) PUNCTUATED EQUILIBRIUM

Morphological change



Morphological change

FIGURE 16-14

SC

In the model of speciation shown on the left, species evolve gradually, at a stable rate. In the model of speciation shown on the right, species arise abruptly and differ noticeably from the root species. These species then change little over time.

LINKS. www.scilinks.org Topic: Species Formation Keyword: HM61434

RATES OF SPECIATION

Speciation sometimes requires millions of years. But apparently some species can form more rapidly. For example, Polynesians introduced banana trees to the Hawaiian Islands about a thousand years ago. Today, there are several species of moths that are unique to the Hawaiian Islands and that feed only on bananas. These species likely descended from ancestral moths during the past thousand years, since bananas were introduced to Hawaii.

The idea that speciation occurs at a regular, gradual rate is called **gradualism**. However, some scientists think that speciation happens in "bursts" relative to the geologic time scale. The fossil record holds evidence that many species existed without change for long periods of time, whereas in some cases a great diversity of new forms seems to have evolved rapidly. That is, change occurred in a few thousand, rather than a few million, years. Scientists call this pattern of species formation **punctuated equilibrium**. The term *punctuated* refers to sudden, rapid change, and *equilibrium* refers to periods of little change. Figure 16-14 illustrates these two contrasting models as they might apply to the evolution of snakes.

SECTION 3 REVIEW

- What role did Ernst Mayr play in the development of the modern biological species concept?
- 2. Explain how geographic isolation can lead to allopatric speciation.
- 3. Explain how reproductive isolation can lead to sympatric speciation.
- Contrast the model of punctuated equilibrium with the model of gradualism.

CRITICAL THINKING

- Critiquing Explanations What are two shortcomings of the biological species concept?
- 6. Analyzing Concepts Describe one possible scenario of postzygotic reproductive isolation in an animal species.
- 7. Drawing Conclusions How might the generation time of a population affect future speciation?

LIFE SCIENCE

THE PURPOSE SET FORTH (FROM ON MORPHOLOGY)

JOHANN WOLFGANG VON GOETHE

In observing objects of nature, especially those that are alive, we often think the best way of gaining an insight into the relationship between their inner nature and the effects they produce is to divide them into their constituent parts. Such an approach may, in fact, bring us a long way toward our goal. In a word, those familiar with science can recall what chemistry and anatomy have contributed toward an understanding and overview of nature.

But these attempts at division also produce many **adverse** effects when carried to an extreme. To be sure, <u>what is</u> alive can be dissected into its component parts, but from these parts it will be impossible to restore it and bring it back to life. This is true even of many inorganic substances,

to say nothing of things organic in nature.

epoch — a great age, like a century or a millennia, marked by revolutionary happenings

adverse-

negative, unhelpful

tangible – able to be touched Thus scientific minds of every **epoch** have also exhibited an urge to understand living formations as such, to grasp their outward, visible, **tangible** parts in context, to see these parts as an indication of what lies

within and thereby gain some understanding of the whole through an exercise of **intuitive perception**. It is no doubt unnecessary to describe in detail the close relationship between this scientific desire and our need for art and imitation.

Thus the history of art, knowledge, and science has produced many attempts to establish and develop a theory which we will call "morphology." The historical part of our discourse will deal with the different forms in which these attempts have appeared.

Morphos - form

When something has acquired a form it metamorphoses immediately to a new one. If we wish to arrive at some living perception of nature we ourselves must remain as quick and flexible as nature and follow the example she gives.

In anatomy, when we dissect a body into its parts, and further separate these parts into their parts, we will at last arrive at elementary constituents called "similar parts." These will not concern us here. Instead we will concentrate on a higher principle of the organism, a principle we will characterize as follows.

No living thing is unitary in nature; every such thing is a plurality. Even the organism which appears to us as individual exists as a collection of independent living entities. Although alike in idea and predisposition, these entities, as they materialize, grow to become alike or similar, unalike or predisposition dissimilar. In part these entities are joined from the - a tendency to outset, in part they find their way together to form a be a certain way or to do certain things union. They diverge and then seek each other again; entitieseverywhere and in every way they thus work to things that exist, produce a chain of creation without end. here "living

material things"

intuitive perception thoughtful observation

LIFE SCIENCE

The less perfect the creation, the more its parts are alike or similar and the more they resemble the whole. The more perfect the creation the less similar its parts become. In the first instance the whole is like its parts to a degree, in the second the whole is unlike its parts. The more similar the parts, the less they will be subordinated to one another. Subordination of parts subordinated indicates a more perfect creation.

- under the authority of something greater

twig

Although a plant or tree seems to be an individual organism, it undeniably consists only of separate parts which are alike and similar to one another and to the whole. How many plants are propagated by runners! In the least variety of fruit tree the eye puts forth a twig which in turn produces many identical eyes; propagation through seeds is carried out in the eves- the buds same fashion. This propagation occurs through the or bud scares of a development of innumerable identical individuals out of the womb of the mother plant.

Here it is immediately apparent that the secret of propagation by seeds is already present in the principle cited above, and upon closer consideration we will find that even the seed, seemingly a single unity, is itself a collection of identical and similar entities. The bean is usually offered as a good example of the process of germination. If we take a bean in its completely undeveloped state

prior to germination, and cut it open, we will first find two seed leaves. These are not to be compared to a placenta — a sac placenta, for they are two genuine leaves: though of nutrients used distended and stuffed with a mealy substance, they also turn green when given light and air. In addition we will discover the presence of plumules which are again two leaves capable of further and more extensive development. We may also observe that behind every leaf stalk there is an eye, if not actual then at least in latent form. Thus even a seed, seemingly simple, we find a collection of several individual parts which we may characterize as alike in idea and similar in appearance.

What is alike in idea may manifest itself in empirical reality as alike, or similar, or even totally unalike and dissimilar: this gives rise to the ever-changing life of nature. It is this life of nature which we propose to outline in these pages.

. . .

empirical reality-the world as we experience it

Plants and animals in their least perfect state are scarcely to be differentiated. Hardly perceptible to our senses, they differentiated are a pinpoint of life, mutable or semimutable. Are these beginnings-determinable in either direction-- distinguished from one another destined to be transformed by light into plant, or by darkness into animal? This is a question we would not determinable trust ourselves to answer no matter how well we are - here "able to go..." supplied with relevant observations and analogies. We can say, however, that the creatures which gradually emerge from this barely differentiated relationship of plant and animal pursue diametrically opposite paths in their development toward perfection. Thus plants attain their final glory in the tree, enduring and rigid, while the animal does so in man by achieving the

by fetuses in the womb, yolk

distended-

swollen,

highest degree of mobility.

SECTION 3

OBJECTIVES

- Describe how convergent evolution can result among different species.
- Explain how divergent evolution can lead to species diversity.
- Compare artificial selection and natural selection.
- Explain how organisms can undergo coevolution.

VOCABULARY

convergent evolution divergent evolution adaptive radiation artificial selection coevolution

FIGURE 15-11

Each of these lizards is a member of the genus *Anolis* and lives on the island of Hispaniola in the Caribbean. One species (a) dwells mainly on tree trunks and on the ground and has much longer legs than a species (b) that mostly inhabits tree branches. Another species (c) stays mainly in the grass and has a long tail.



(a) Anolis cybotes

EVOLUTION IN ACTION

Evolution is a continuous process. Evolution is going on today in populations of living species and can be observed, recorded, and tested. Patterns of evolution repeat in different times and places. Interactions between species, including humans, affect their ongoing evolution.

CASE STUDY: CARIBBEAN ANOLE LIZARDS

Often, when scientists compare groups of species, the scientists find patterns that are best explained as evolution in progress. An example is the comparison of anole lizard species (genus Anolis) on the Caribbean islands of Cuba, Hispaniola, Jamaica, and Puerto Rico. Among these lizards, each species' body type correlates with the habitat in which the species lives, as shown in Figure 15-11. For example, anole species that live mainly on tree trunks have stocky bodies and long legs. In contrast, those that reside on slender twigs have thin bodies, short legs and tails, and large toe pads. Grass-dwelling anoles tend to be slender and have very long tails. In all, there are at least six anole body types that are each adapted to their environment in a unique way. Also, distinct species of anoles with the same body types occur on different islands. For example, a distinct species of twig-dwelling anole is found on each island.

Many different hypotheses could explain these observations. Two possibilities are that (1) an ancestral anole species specialized for living on twigs originally lived on one island and later migrated to other islands or that (2) each twig-dwelling species evolved independently on each island from distinct ancestor anole species.



(b) Anolis insolitus



(c) Anolis pulchellus

A small number of animals of a species of lizards happens to drift to an island, carried, for example, by a hurricane.

The island's lizard population increases. The lizards exhibit hereditary variation in toe-pad size and leg length.

Animals that have unfavorable combinations of leg length and toe-pad size die at a faster rate in specific habitats. The population splits into several groups, each of which is adapted to a specific habitat. Eventually, each group may become a separate species.

Biologists tested these hypotheses by comparing DNA from various species to look for closely related species. The DNA evidence supported hypothesis 2—twig-dwelling species evolved independently on each island. In other words, each twig-dwelling species came from different ancestors but evolved similar adaptations to similar habitats. The process by which different species evolve similar traits is called **convergent evolution.** Many other examples of convergent evolution can be found in nature.

Divergence and Radiation

A model of Caribbean anole evolution must also explain how the lizards became adapted to their particular habitats. Studies showed that long-legged trunk-dwelling species could run faster on flat surfaces than short-legged twig-dwelling species, but the twig-dwelling species could cling to twigs better and did not fall as often. However, both kinds of lizards on each island were closely related.

The best explanation for this pattern of phylogeny is that divergent evolution occurred on each island. Divergent evolution is a process in which the descendants of a single ancestor diversify into species that each fit different parts of the environment. Lizards with genes for large toe pads and short legs ran so slowly on the trunk and ground that predators often caught them, and lizards with long legs and small toe pads often slipped if they climbed thin branches.

Sometimes, a new population in a new environment, such as an island, will undergo divergent evolution until the population fills many parts of the environment. This pattern of divergence is called **adaptive radiation.** Figure 15-12 illustrates a possible scenario for the evolution of Caribbean anole lizards. Fossil evidence suggests many cases of adaptive radiation on the geologic time scale.

FIGURE 15-12

This diagram shows a possible scenario to explain, through natural selection, the evolution of a variety of anole lizard species in the Caribbean islands by descent from common ancestors.



Observing Adaptations Around You

Materials paper and pencil



Procedure Observe organisms around your school grounds or around your home. Describe any traits that seem to be adaptations to a particular environment or way of life. Also, look for and describe variations within groups of organisms that you see. Explain your reasoning for each inference you make about adaptations. Do not touch or disturb any organism, even plants, during your observation.

Analysis Which variations in the traits that you observed might increase or decrease the fitness of the organisms? Explain your reasoning.



FIGURE 15-13

Recent DNA evidence shows that despite the enormous variation among domestic dogs, all varieties descended from Asian wolves. By artificially selecting the dogs that will be the parents of the next generation, people have increased the rate of divergent evolution among domestic dogs.

ARTIFICIAL SELECTION

Darwin started his famous book with a chapter on **artificial** selection. This process occurs when a human breeder chooses individuals that will parent the next generation. For example, human may choose to breed oat plants that yield more grain per stalk or greyhounds that run faster. Because of the immense differences among varieties of dogs, as shown in Figure 15-13, Darwin doubted that all domestic dog breeds arose from the same wild species. But in the 2000s, geneticists analyzed DNA from 654 dog breeds, including ancient dog remains. Their findings indicated that all breeds of dogs share DNA similarities with wolves in East Asia. These findings support the hypothesis that humans first selected domestic dogs from a wolf population about 15,000 years ago.

COEVOLUTION

It is important to keep in mind that evolution is ongoing and that in a given environment, many species may be evolving at once. Each species is part of the forces of natural selection that act upon the other species. When two or more species have evolved adaptations to each other's influence, the situation is called **coevolution**.

Through coevolution, some species have evolved strategies to avoid being eaten, while the animals that eat them have evolved strategies to keep eating them. Many flowering plants have evolved such that specific insects carry pollen to other plants. Some microbes have evolved to live within certain animals, while these animals have adapted to either benefit from or avoid the microbes.

Humans are also involved in many cases of coevolution. For example, humans have developed and used antibiotics, such as penicillin, to kill disease-causing bacteria. But as antibiotic use has increased, many populations of bacteria have evolved adaptations to resist the effects of some antibiotics. This kind of adaptation is called *resistance*. Similarly, the evolution of resistance to pesticides is observed among populations of insects in agricultural settings.

SECTION 3 REVIEW

- 1. Explain how the anole lizard species on Caribbean islands demonstrate both convergent and divergent evolution.
- 2. What are the key differences and similarities between natural selection and artificial selection?
- Give examples of species that are likely to be coevolving. Describe how each species influences the evolution of the other species.

CRITICAL THINKING

- 4. Inferring Meaning What is the meaning of radiation as used in the term adaptive radiation?
- Constructing Models Draw a phylogenetic tree to match each of the two proposed hypotheses for the evolution of the anole lizards.
- 6. Analyzing Patterns Propose a reason why some Caribbean islands lack lizard species.

Book IV

Definitions

- A rectilineal figure is said to be inscribed in a rectilineal figure when the respective angles of the inscribed figure lie on the respective sides of that in which it is inscribed.
- Similarly a figure is said to be *circumscribed about a figure* when the respective sides of the circumscribed figure pass through the respective angles of that about which it is circumscribed.
- A rectilineal figure is said to be inscribed in a circle when each angle of the inscribed figure lies on the circumference of the circle.
- A rectilineal figure is said to be *circumscribed about a circle*, when each side of the circumscribed figure touches the circumference of the circle.
- Similarly a circle is said to be inscribed in a figure when the circumference of the circle touches each side of the figure in which it is inscribed.
- A circle is said to be circumscribed about a figure when the circumference of the circle passes through each angle of the figure about which it is circumscribed.
- A straight line is said to be *fitted into a circle* when its extremities are on the circumference of the circle.

Proposition 1

Into a given circle to fit a straight line equal to a given straight line which is not greater than the diameter of the circle.



Let ABC be the given circle, and D the given straight line not greater than the diameter of the circle;

thus it is required to fit into the circle ABC a straight line equal to the straight line D.

Let a diameter BC of the circle ABC be drawn.





For the same reason

the angle ACB is also equal to the angle DFE; therefore the remaining angle BAC is also equal to the remaining angle EDF. [1.32] Therefore in the given circle there has been inscribed a triangle equiangular with the given triangle.

Q.E.F.

Proposition 3

About a given circle to circumscribe a triangle equiangular with a given triangle.

Let ABC be the given circle, and DEF the given triangle;

thus it is required to circumscribe about the circle ABC a triangle equiangular with the triangle DEF.

Let EF be produced in both directions to the points G, H, let the centre K of the circle ABC be

taken. [00. 1] and let the straight line KB be drawn

across at random;

on the straight line KB, and at the point K on it, let the angle BKA be constructed equal to the angle DEG.

and the angle BKC equal to the angle DFH;

and through the points A, B, C let LAM, MBN, NCL be drawn touching the circle ABC [III. 16, Por.]

Now, since LM, MN, NL touch the circle ABC at the points A, B, C, and KA, KB, KC have been joined from the centre K to the points A, B, C. therefore the angles at the points A, B, C are right. [111, 18]

And, since the four angles of the quadrilateral AMBK are equal to four right angles, inasmuch as AMBK is in fact divisible into two triangles, and the angles KAM, KBM are right,

therefore the remaining angles AKB, AMB are equal to two right angles.

But the angles DEG, DEF are also equal to two right angles; therefore the angles AKB, AMB are equal to the angles DEG, DEF.

of which the angle AKB is equal to the angle DEG;

therefore the angle AMB which remains is equal to the angle DEF which remains.

Similarly it can be proved that the angle LNB is also equal to the angle DFE; therefore the remaining angle MLN is equal to the angle EDF. [1, 32]

Therefore the triangle LMN is equiangular with the triangle DEF; and it has been circumscribed about the circle ABC.

Therefore about a given circle there has been circumscribed a triangle equiangular with the given triangle.

QEF.

[1. 23]

[1, 13]

Then, if BC is equal to D, that which was enjoined will have been done; for BC has been fitted into the circle ABC equal to the straight line D.

But, if BC is greater than D, let CE be made equal to D, and with centre C and distance CE let the circle EAF be described; let CA be joined.

Then, since the point C is the centre of the circle EAF, CA is equal to CE.

But CE is equal to D:

therefore D is also equal to CA.

Therefore into the given circle ABC there has been fitted CA equal to the given straight line D.

O.E.F.

Proposition 2

In a given circle to inscribe a triangle equiangular with a given triangle.



Let ABC be the given circle, and DEF the given triangle; thus it is required to inscribe in the circle

ABC a triangle equiangular with the triangle DEF.

Let GH be drawn touching the circle ABC at A: [III. 16, Por.]

on the straight line AH, and at the point A on it, let the angle HAC be constructed equal to the angle DEF.

and on the straight line AG, and at the point A on it, let the angle GAB be constructed equal to the angle DFE; [1. 23] let BC be joined.

Then, since a straight line AH touches the circle ABC.

and from the point of contact at A the straight line AC is drawn across in the

therefore the angle HAC is equal to the angle ABC in the alternate segment of [111. 3.2]

But the angle HAC is equal to the angle DEF,

therefore the angle ABC is also equal to the angle DEF.

85

Book Four: Propositions 4-5

Proposition 4

In a given triangle to inscribe a circle.



Let ABC be the given triangle; thus it is required to inscribe a circle in the triangle ABC.

Let the angles ABC, ACB be bisected by the straight lines BD, CD, [1. 9] and let these meet one another at the point D: from D let DE, DF, DG be drawn perpendicular to the straight lines AB, BC, CA.

Now, since the angle ABD is equal to the angle CBD.

and the right angle BED is also equal to the right angle BFD, EBD, FBD are two triangles having two angles equal to two angles and one side equal to one side, namely that subtending one of the equal angles, which is BD

common to the triangles; therefore they will also have the remaining sides equal to the remaining sides; [1. 26]

therefore DE is equal to DF.

For the same reason

DG is also equal to DF.

Therefore the three straight lines DE, DF, DG are equal to one another; therefore the circle described with centre D and distance one of the straight lines DE, DF, DG will pass also through the remaining points, and will touch the straight lines AB, BC, CA, because the angles at the points E, F, G are right.

For, if it cuts them, the straight line drawn at right angles to the diameter of the circle from its extremity will be found to fall within the circle:

which was proved absurd;

therefore the circle described with centre D and distance one of the straight lines DE, DF, DG will not cut the straight lines AB, BC, CA;

therefore it will touch them, and will be the circle inscribed in the triangle ABC. [IV. Def. 5]

Let it be inscribed, as FGE.

Therefore in the given triangle ABC the circle EFG has been inscribed.

O.E.F.

[11]. 16]

Proposition 5

About a given triangle to circumscribe a circle.

Let ABC be the given triangle;

thus it is required to circumscribe a circle about the given triangle ABC.

Let the straight lines AB, AC be bisected at the points D, E, [1. 10] and from the points D, E let DF, EF be drawn at right angles to AB, AC;



they will then meet within the triangle ABC, or on the straight line BC, or outside BC.

First let them meet within at F, and let FB, FC, FA be joined.

Then, since AD is equal to DB,

and DF is common and at right angles, therefore the base AF is equal to the base FB.

[1. 4]

Similarly we can prove that CF is also equal to AF; so that FB is also equal to FC;

therefore the three straight lines FA, FB, FC are equal to one another.

Therefore the circle described with centre F and distance one of the straight lines FA, FB, FC will pass also through the remaining points, and the circle will have been circumscribed about the triangle ABC.

Let it be circumscribed, as ABC.

Next, let DF, EF meet on the straight line BC at F, as is the case in the second figure; and let AF be joined.

Then, similarly, we shall prove that the point F is the centre of the circle circumscribed about the triangle ABC.

Again, let DF, EF meet outside the triangle ABC at F, as is the case in the third figure, and let AF, BF, CF be joined.

Then again, since AD is equal to DB, and DF is common and at right angles,

therefore the base AF is equal to the base BF.

Similarly we can prove that CF is also equal to AF;

so that BF is also equal to FC;

therefore the circle described with centre F and distance one of the straight lines FA, FB, FC will pass also through the remaining points, and will have been circumscribed about the triangle ABC.

Therefore about the given triangle a circle has been circumscribed.

Q.E.F.

[1.4]

And it is manifest that, when the centre of the circle falls within the triangle, the angle BAC, being in a segment greater than the semicircle, is less than a right angle;

when the centre falls on the straight line BC, the angle BAC, being in a semicircle, is right;

and when the centre of the circle falls outside the triangle, the angle BAC, being in a segment less than the semicircle, is greater than a right angle. [111. 31] In a given circle

I say next that For, since the s

For the same re

But it was also and it has been

Therefore in th

Proposition 6

Ä	1
	E
0	1
2	

e to inscribe a square.	
Let ABCD be the given circle; thus it is required to inscribe a square	re in the circle ABCD.
Let two diameters AC, BD of the ci at right angles to one another, and be joined.	rcle ABCD be drawn let AB, BC, CD, DA
Then, since BE is equal to ED, for E is common and at right angles, therefore the base AB is equal	
For the same reason each of the straight lines <i>BC</i> , <i>CD</i> is the straight lines <i>AB</i> , <i>AD</i> ; therefore the quadrilateral <i>ABC</i>	
t is also right-angled.	
raight line BD is a diameter of the circle AB therefore BAD is a semicircle; therefore the angle BAD is right.	3CD, [111. 31]
ason each of the angles <i>ABC</i> , <i>BCD</i> , <i>CDA</i> is also r therefore the quadrilateral <i>ABCD</i> is right-an	ight; igled.
proved equilateral; therefore it is a square; inscribed in the circle <i>ABCD</i> .	[I. Def. 22]
given circle the square ABCD has been inse	cribed.
	Q.E.F.

Proposition 7

About a given circle to circumscribe a square.

Let *ABCD* be the given circle; thus it is required to circumscribe a square about the circle *ABCD*.

Let two diameters AC, BD of the circle ABCD be drawn at right angles to one another, and through the points A, B, C, D let FG, GH, HK, KF be drawn touching the circle ABCD. [III. 16, Por.]

Then, since FG touches the circle ABCD, and EA has been joined from the centre E to the point of contact at A,

therefore the angles at A are right. [III. 18]

For the same reason

the angles at the points B, C, D are also right.

Now, since the angle AEB is right, and the angle EBG is also right,	
therefore GH is parallel to AC.	[1. 28]
For the same reason AC is also parallel to FK, so that GH is also parallel to FK.	[1. 30]
Similarly we can prove that each of the straight lines <i>GF</i> , <i>HK</i> is parallel to <i>BED</i> .	
Therefore GK, GC, AK, FB, BK are parallelograms; therefore GF is equal to HK, and GH to FK.	[1. 34]
And, since AC is equal to BD, and AC is also equal to each of the straight lines GH, FK, while BD is equal to each of the straight lines GF, HK, therefore the quadrilateral FGHK is equilateral.	[1. 34]
I say next that it is also right-angled.	
For, since GBEA is a parallelogram, and the angle AEB is right, therefore the angle AGB is also right.	[1. 34]
Similarly we can prove that the angles at <i>H</i> , <i>K</i> , <i>F</i> are also right.	
Therefore FGHK is right-angled.	
But it was also proved equilateral; therefore it is a square; and it has been circumscribed about the circle ABCD.	
Therefore about the given circle a square has been circumscribed.	

Q.E.F.

Proposition 8

In a given square to inscribe a circle.

Let ABCD be the given square;

thus it is required to inscribe a circle in the given square ABCD.

Let the straight lines AD, AB be bisected at the points E, F respectively, [1. 10] through E let EH be drawn parallel to either AB or CD, and through F let FK be drawn parallel to either AD or BC; [1. 31] three search of the Grammer AK KB, AH HD, AG, GC

therefore each of the figures *AK*, *KB*, *AH*, *HD*, *AG*, *GC*, *BG*, *GD* is a parallelogram, and their opposite sides are evidently equal. [J. 34]

Now, since AD is equal to AB,

and AE is half of AD, and AF half of AB, therefore AE is equal to AF, so that the opposite sides are also equal;



C

therefore FG is equal to GE.

Similarly we can prove that each of the straight lines GH, GK is equal to each of the straight lines FG, GE; therefore the four straight lines GE, GF, GH, GK are equal to one another.

Therefore the circle described with centre G and distance one of the straight lines GE, GF, GH, GK will pass also through the remaining points.

And it will touch the straight lines AB, BC, CD, DA. because the angles at E, F, H, K are right.

For, if the circle cuts AB, BC, CD, DA, the straight line drawn at right angles to the diameter of the circle from its extremity will fall within the circle:

[111. 16] which was proved absurd; therefore the circle described with centre G and distance one of the straight lines GE, GF, GH, GK will not cut the straight lines AB, BC, CD, DA.

Therefore it will touch them, and will have been inscribed in the square ABCD. Therefore in the given square a circle has been inscribed.

Q.E.F.

[1, 6]

Proposition 9

About a given square to circumscribe a circle.

Let ABCD be the given square; thus it is required to circumscribe a circle about the square ABCD.

For let AC, BD be joined, and let them cut one another at E.

Then, since DA is equal to AB, and AC is common, therefore the two sides DA, AC are equal to the two sides BA, AC;

and the base DC is equal to the base BC; therefore the angle DAC is equal to the angle BAC. [1.8]

Therefore the angle DAB is bisected by AC.

Similarly we can prove that each of the angles ABC, BCD, CDA is bisected by the straight lines AC, DB.

Now, since the angle DAB is equal to the angle ABC, and the angle EAB is half the angle DAB, and the angle EBA half the angle ABC, therefore the angle EAB is also equal to the angle EBA; so that the side EA is also equal to EB.

Similarly we can prove that each of the straight lines EA, EB is equal to each of the straight lines EC, ED.

Therefore the four straight lines EA, EB, EC, ED are equal to one another. Therefore the circle described with centre E and distance one of the straight lines EA, EB, EC, ED will pass also through the remaining points;

and it will have been circumscribed about the square ABCD.

Let it be circumscribed, as ABCD.

Therefore about the given square a circle has been circumscribed.

O.E.F.

Proposition 10

To construct an isosceles triangle having each of the angles at the base double of the remaining one.

Let any straight line AB be set out, and let it be cut at the point C so that the rectangle contained by AB, BC is equal to the square on CA; [11, 11] with centre A and distance AB let the circle BDE be described,

and let there be fitted in the circle BDE the straight line BD equal to the straight line AC which is not greater than the diameter of the circle BDE. [IV. 1]

Let AD, DC be joined, and let the circle ACD be circumscribed about the triangle ACD. [IV. 5]



Then, since the rectangle AB, BC is equal to the square on AC,

and AC is equal to BD,

therefore the rectangle AB, BC is equal to the square on BD.

And, since a point B has been taken outside the circle ACD, and from B the two straight lines BA, BD have fallen on the circle ACD, and one of them cuts it, while the other falls on it,

and the rectangle AB, BC is equal to the square on BD,

[11. 37]

therefore BD touches the circle ACD. Since, then, BD touches it, and DC is drawn across from the point of contact at D,

therefore the angle BDC is equal to the angle DAC in the alternate segment of [[]. 32] the circle.

Since, then, the angle BDC is equal to the angle DAC,

let the angle CDA be added to each;

therefore the whole angle BDA is equal to the two angles CDA, DAC.

But the exterior angle BCD is equal to the angles CDA, DAC; [1. 32] therefore the angle BDA is also equal to the angle BCD.

But the angle BDA is equal to the angle CBD, since the side AD is also equal [1. 5] to AB;

so that the angle DBA is also equal to the angle BCD.

Therefore the three angles BDA, DBA, BCD are equal to one another.

And, since the angle DBC is equal to the angle BCD,

the side BD is also equal to the side DC.

But BD is by hypothesis equal to CA; therefore CA is also equal to CD, [1.6]

Now, since the square on EC is equal to the square on CA, the squares on EC, CA are double of the square on CA.	
But the square on <i>EA</i> is equal to the squares on <i>EC</i> , <i>CA</i> ; therefore the square on <i>EA</i> is double of the square on <i>AC</i> .	[l. 47] [C.N. 1]
Again, since FG is equal to EF, the square on FG is also equal to the square on FE; therefore the squares on GF, FE are double of the square on EF.	
But the square on <i>EG</i> is equal to the squares on <i>GF</i> , <i>FE</i> ; therefore the square on <i>EG</i> is double of the square on <i>EF</i> .	[l. 47]
And <i>EF</i> is equal to <i>CD</i> ; therefore the square on <i>EG</i> is double of the square on <i>CD</i> .	[1, 34]
But the square on <i>EA</i> was also proved double of the square on <i>AC</i> ; therefore the squares on <i>AE</i> , <i>EG</i> are double of the squares on <i>AC</i> , <i>CI</i>)
And the square on <i>AG</i> is equal to the squares on <i>AE</i> , <i>EG</i> ; therefore the square on <i>AG</i> is double of the squares on <i>AC</i> , <i>CD</i> .	[1. 47]
But the squares on <i>AD</i> , <i>DG</i> are equal to the square on <i>AG</i> ; therefore the squares on <i>AD</i> , <i>DG</i> are double of the squares on <i>AC</i> , <i>C</i> ,	[1. 47] D.
And <i>DG</i> is equal to <i>DB</i> ; therefore the squares on <i>AD</i> , <i>DB</i> are double of the squares on <i>AC</i> , <i>Cl</i>	D.
Therefore etc.	O.E.D.

Proposition 11

To cut a given straight line so that the rectangle contained by the whole and one of the segments is equal to the square on the remaining segment.

Let *AB* be the given straight line; thus it is required to cut *AB* so that the rectangle contained by the whole and one of the segments is equal to the square on the remaining segment.

For let the square *ABDC* be described on *AB*; [1. 46] let *AC* be bisected at the point *E*, and let *BE* be joined; let *CA* be drawn through to *F*, and let *EF* be made equal to *BE*; let the square *FH* be described on *AF*, and let *GH* be drawn through to *K*.

I say that *AB* has been cut at *H* so as to make the rectangle contained by *AB*, *BH* equal to the square on *AH*.

For, since the straight line AC has been bisected at E, and FA is added to it, the rectangle contained by CF, FA together with the square on AE is equal to the square on EF. [II. 6]

But *EF* is equal to *EB*; therefore the rectangle *CF*, *FA* together with the square on *AE* is equal to the square on *EB*.

But the squares on *BA*, *AE* are equal to the square on *EB*, for the angle at *A* is right; [1. 47]





215

DOCUMENTARY HISTORY OF THE UNITED STATES

RICHARD D. HEFFNER with Alexander Heffner

 ∞

Expanded and Updated Edition



SIGNET Published by the Penguin Group Penguin Group (USA) Inc., 375 Hudson Street, New York, New York 10014, USA



USA | Canada | UK | Ircland | Australia | New Zealand | India | South Africa | China

Penguin Books Ltd., Registered Offices: 80 Strand, London WC2R 0RL, England For more information about the Penguin Group visit penguin.com.

First published by Signet, an imprint of New American Library, a division of Penguin Group (USA) Inc. The seventh and eighth editions of this title were previously published in Signet editions. The first six editions of this title were previously published in Mentor editions.

First Printing (Updated and Expanded Edition), October 2013

Copyright © Richard D. Heffner, 1952, 1956, 1965, 1976, 1985, 1991, 1995, 2001, 2002

Copyright © Richard D. Heffner and Alexander Heffner, 2009, 2013 All rights reserved. No part of this book may be reproduced, scanned, or distributed in any printed or electronic form without permission. Please do not participate in or encourage piracy of copyrighted materials in violation of the author's rights. Purchase only authorized editions.

O REGISTERED TRADEMARK—MARCA REGISTRADA

ISBN 978-0-451-46647-1

Printed in the United States of America 10 9 8 7 6 5

PUBLISHER'S NOTE

While the authors have made every effort to provide accurate telephone numbers, Internet addresses and other contact information at the time of publication, neither the publisher nor the authors assume any responsibility for errors, or for changes that occur after publication. Further, publisher does not have any control over and does not assume any responsibility for author or third-party Web sites or their content.

If you purchased this book without a cover you should be aware that this book is stolen property. It was reported as "unsold and destroyed" to the publisher and neither the authors nor the publisher has received any payment for this "stripped book."

ALWAYS LEARNING

THE COLD WAR

will find no cause for complaint in the Kremlin's challenge to American society. He will rather experience a certain gratitude to a Providence which, by providing the American people with this implacable challenge, has made their entire security as a nation dependent on their pulling themselves together and accepting the responsibilities of moral and political leadership that history plainly intended them to bear.

Acceptance Speech for the Nobel Prize for Literature, William Faulkner, 1949

I feel that this award was not made to me as a man, but to my work—a life's work in the agony and sweat of the human spirit, not for glory and least of all for profit, but to create out of the materials of the human spirit something which did not exist before. So this award is only mine in trust. It will not be difficult to find a dedication for the money part of it commensurate with the purpose and significance of its origin. But I would like to do the same with the acclaim too, by using this moment as a pinnacle from which I might be listened to by the young men and women already dedicated to the same anguish and travail, among whom is already that one who will some day stand here where I am standing.

Our tragedy today is a general and universal physical fear so long sustained by now that we can even bear it. There are no longer problems of the spirit. There is only the question: When will I be blown up? Because of this, the young man or woman writing today has forgotten the problem of the human heart in conflict with itself which alone can make good writing because only that is worth writing about, worth the agony and the sweat.

He must learn them again. He must teach himself that the basest of all things is to be afraid; and, teaching himself that, forget it forever, leaving no room in his workshop for anything but the old verities and truths of the heart, the old universal truths lacking which any story is ephemeral and doomed—love and honor and pity and pride and compassion and sacrifice. Until he does so, he labors under a curse. He writes not of love

424

but of lust, of defeats in which nobody loses anything of value, and of victories without hope and, worst of all, without pity or compassion. His griefs grieve on no universal bones, leaving no scars. He writes not of the heart but of the glands.

Until he relearns these things, he will write as though he stood among and watched the end of man. I decline to accept the end of man. It is easy enough to say that man is immortal simply because he will endure: that when the last dingdong of doom has clanged and faded from the last worthless rock hanging tideless in the last red and dying evening, that even then there will still be one more sound: that of his puny inexhaustible voice, still talking. I refuse to accept this. I believe that man will not merely endure: he will prevail. He is immortal, not because he alone among creatures has an inexhaustible voice, but because he has a soul, a spirit capable of compassion and sacrifice and endurance. The poet's, the writer's, duty is to write about these things. It is his privilege to help man endure by lifting his heart, by reminding him of the courage and honor and hope and pride and compassion and pity and sacrifice which have been the glory of his past. The poet's voice need not merely be the record of man, it can be one of the props, the pillars to help him endure and prevail.

Chapter 26

AMERICA AT MIDCENTURY

Just as in the field of foreign affairs post–World War II America had no real intention of giving up its new sense of international responsibility and returning to prewar isolationism, so in domestic affairs it showed no overwhelming desire to return to "normalcy," to forsake outright the liberalism and social progress of the 1930's for the more conservative political formulas of the distant past. To be sure, there no longer seemed to be any great sense of urgency about domestic reform, and possibly the extension and liberalization of Social Security benefits marked the only major step toward such re-

Brown v. Board of Education: Chief Justice Earl Warren for the Supreme Court, 1954

These cases come to us from the States of Kansas, South Carolina, Virginia, and Delaware. They are premised on different facts and different local conditions, but a common legal question justifies their consideration together in this consolidated opinion.

In each of the cases, minors of the Negro race, through their legal representatives, seek the aid of the courts in obtaining admission to the public schools of their community on a nonsegregated basis. In each instance, they had been denied admission to schools attended by white children under laws requiring or permitting segregation according to race.

This segregation was alleged to deprive the plaintiffs of the equal protection of the laws under the Fourteenth Amendment. In each of the cases other than the Delaware case, a three-judge Federal District Court denied relief to the plaintiffs on the so-called "separate but equal" doctrine announced by this court in Plessy v. Ferguson.

Under that doctrine, equality of treatment is accorded when the races are provided substantially equal facilities, even though these facilities be separate. In the Delaware case, the Supreme Court of Delaware adhered to that doctrine, but ordered that the plaintiffs be admitted to the white schools because of their superiority to the Negro schools.

The plaintiffs contend that segregated public schools are not "equal" and cannot be made "equal" and that, hence, they are deprived of the equal protection of the laws. Because of the obvious importance of the question presented, the Court took jurisdiction. Argument was heard in the 1952 term, and reargument was heard this term on certain questions propounded by the Court.

Reargument was largely devoted to the circumstances surrounding the adoption of the Fourteenth Amendment in 1868. It covered, exhaustively, consideration of the Amendment in Congress, ratification by the states, then existing practices in racial segregation, and the views of proponents and opponents of the Amendment.

This discussion and our own investigation convince us that although these sources cast some light, it is not enough to resolve the problem with which we are faced.

At best, they are inconclusive. The most avid proponents of the postwar Amendments undoubtedly intended them to remove all legal distinctions among "all persons born or naturalized in the United States."

Their opponents, just as certainly, were antagonistic to both the letter and the spirit of the Amendments and wished them to have the most limited effect. What others in Congress and the State Legislature had in mind cannot be determined with any degree of certainty.

An additional reason for the inclusive nature of the Amendment's history, with respect to segregated schools, is the status of public education at that time. In the South, the movement toward free common schools, supported by general taxation, had not yet taken hold. Education of white children was largely in the hands of private groups. Education of Negroes was almost nonexistent, and practically all of the race was illiterate. In fact, any education of Negroes was forbidden by law in some states.

Today, in contrast, many Negroes have achieved outstanding success in the arts and sciences as well as in the business and professional world. It is true that public education has already advanced further in the North, but the effect of the Amendment on Northern States was generally ignored in the Congressional debates.

Even in the North, the conditions of public education did not approximate those existing today. The curriculum was usually rudimentary; ungraded schools were common in rural areas; the school term was but three months a year in many states; and compulsory school attendance was virtually unknown.

As a consequence, it is not surprising that there should be so little in the history of the Fourteenth Amendment relating to its intended effect on public education.

In the first cases in this court construing the Fourteenth Amendment, decided shortly after its adoption, the court interpreted it as proscribing all state-imposed discriminations against the Negro race.

The doctrine of "Separate but Equal" did not make its appearance in this court until 1896 in the case of Plessy v. Ferguson, supra, involving not education but transportation.

American courts have since labored with the doctrine for over half a century. In this court, there have been six cases involving the "separate but equal" doctrine in the field of public education.

In Cumming v. County Board of Education, and Gong Lum v. Rice, the validity of the doctrine itself was not challenged. In most recent cases, all on the graduate school level, inequality was found in that specific benefits enjoyed by white students were denied to Negro students of the same educational qualifications. Missouri ex rel. Gaines v. Canada, 305 U.S. 337; Sipuel v. Oklahoma, 332 U.S. 331; Sweatt v. Painter, 339 U.S. 629; McLaurin v. Oklahoma State Regents, 339 U.S. 637.

In nine of these cases it was necessary to re-examine the doctrine to grant relief to the Negro plaintiff. And in Sweatt v. Painter, supra, the court expressly reserved decision on the question whether Plessy v. Ferguson should be held inapplicable to public education.

In the instant cases, that question is directly presented. Here, unlike Sweatt v. Painter, there are findings below that the Negro and white schools involved have been equalized or are being equalized, with respect to buildings, curricula, qualifications and salaries of teachers, and other "tangible" factors.

Our decision, therefore, cannot turn on merely a comparison of these tangible factors in the Negro and white schools involved in each of the cases. We must look instead to the effect of segregation itself on public education.

In approaching this problem, we cannot turn the clock back to 1868, when the Amendment was adopted, or even to 1896, when Plessy v. Ferguson was written. We must consider public education in the light of its full development and its present place in American life throughout the nation. Only in this way can it be determined if segregation in public schools deprives these plaintiffs of the equal protection of the laws.

Today, education is perhaps the most important function of state and local governments. Compulsory school attendance laws and the great expenditures for education both demonstrate our recognition of the importance of education to our democratic society. It is required in the performance of our most basic public responsibilities, even service in the armed forces. It is the very foundation of good citizenship.

Today, it is a principal instrument in awakening the child to cultural values, in preparing him for later professional training, and in helping him to adjust normally to his environment.

In these days, it is doubtful that any child may reasonably be expected to succeed in life if he is denied the opportunity of an education. Such an opportunity, where the state has undertaken to provide it, is a right which must be made available to all on equal terms.

We come then to the question presented: Does segregation of children in public schools solely on the basis of race, even though the physical facilities and other "tangible" factors may be equal, deprive the children of the minority group of equal educational opportunities? We believe that it does.

In Sweatt v. Painter, supra, in finding that a segregated law school for Negroes could not provide them equal educational opportunities, this court relied in large part on "those qualities which are incapable of objective measurement but which make for greatness in a law school."

In McLaurin v. Oklahoma State Regents, supra, the court, in requiring that a Negro admitted to a white graduate school be treated like all other students, again resorted to intangible considerations: "*** his ability to study, engage in discussions and exchange views with other students, and, in general, to learn his profession."

Such considerations apply with added force to children in grade and high schools. To separate them from others of similar age and qualifications solely because of their race generates a feeling of inferiority as to their status in the community that may affect their hearts and minds in a way unlikely ever to be undone.

The effect of this separation on their education opportunities was well stated by a finding in the Kansas case by a court which, nevertheless felt compelled to rule against the Negro plaintiffs:

Segregation of white and colored children in public schools has a detrimental effect upon the colored children. The impact is greater when it has the sanction of the law; for the policy of separating the races is usually interpreted as denoting the inferiority of the Negro group. . . .

A sense of inferiority affects the motivation of a child to learn. Segregation with the sanction of law, therefore, has a tendency to retard the educational and mental development of Negro children and to deprive them of some of the benefits they would receive in a racially integrated school system.

Whatever may have been the extent of psychological knowledge at the time of Plessy v. Ferguson, this finding is amply supported by modern authority. Any language in Plessy v. Ferguson contrary to this finding is rejected.

We conclude that in the field of public education the doctrine of "separate but equal" has no place. Separate educational facilities are inherently unequal. Therefore, we hold that the plaintiffs and others similarly situated for whom the actions have been brought are, by reason of the segregation complained of, deprived of the equal protection of the laws guaranteed by the Fourteenth Amendment. This disposition makes unnecessary any discussion whether such segregation also violates the Due Process Clause of the Fourteenth Amendment.

Because these are class actions, because of the wide applicability of this decision, and because of the great variety of local conditions, the formulation of decrees in these cases presents problems of considerable complexity. On reargument, the consideration of appropriate relief was necessarily subordinated to the primary question-the constitutionality of segregation in public

We have now announced that such segregation is education. a denial of the equal protection of the laws. In order that we may have the full assistance of the parties in formulating decrees, the cases will be restored to the docket, and the parties are requested to present further argument. . . .

The Attorney General of the United States is again invited to participate. The Attorneys General of the states requiring or permitting segregation in public education will also be permitted to appear as amici curiae upon request to do so. . . .

IT IS SO ORDERED.

Dwight D. Eisenhower's Farewell Address, 1961

Good evening, my fellow Americans. . . .

Three days from now, after half a century in the service of our country, I shall lay down the responsibilities of office as, in traditional and solemn ceremony, the authority of the Presidency is vested in my successor.

This evening I come to you with a message of leavetaking and farewell, and to share a few final thoughts with you, my countrymen. . . .

I wish the new President, and all who will labor with him, Godspeed. I pray that the coming years will be blessed with peace and prosperity for all....

We now stand ten years past the midpoint of a century that has witnessed four major wars among great nations-three of these involved our own country.

Despite these holocausts America is today the strongest, the most influential and most productive nation in the world. Understandably proud of this preeminence, we yet realize that America's leadership and prestige depend, not merely upon our unmatched material progress, riches and military strength, but on how we use our power in the interests of world peace and human betterment.

Throughout America's adventure in free government, our basic purposes have been to keep the peace;

436

grams that appeared vastly to enhance his popularity. And in November, 1964, Lyndon Johnson was elected President in his own right, defeating Arizona's Republican Senator Barry M. Goldwater in an unprecedented landslide victory that gave him over 61 percent of the total popular vote.

Nor did the world outside stand still. By this time Khrushchev had been removed from office in Russia without this signaling an end to a seemingly decisive ideological split between Communist leaders in China and the Soviet Union; the Chinese had exploded their first nuclear bomb; conflict in Vietnam worsened; and the many international problems that beset the new President grew ever more horrendous. But there were now new opportunities, too, largely because on the world stage a great man had come and played his brief role; in the long future John Fitzgerald Kennedy would not be forgotten.

John F. Kennedy's Inaugural Address, 1961

We observe today not a victory of party but a celebration of freedom—symbolizing an end as well as a beginning signifying renewal as well as change. For I have sworn before you and Almighty God the same solemn oath our forebears prescribed nearly a century and threequarters ago.

The world is very different now. For man holds in his mortal hands the power to abolish all forms of human poverty and all forms of human life. And yet the same revolutionary beliefs for which our forebears fought are still at issue around the globe—the belief that the rights of man come not from the generosity of the state but from the hand of God.

We dare not forget today that we are the heirs of that first revolution. Let the word go forth from this time and place, to friend and foe alike, that the torch has been passed to a new generation of Americans—born in this century, tempered by war, disciplined by a hard and bitter peace, proud of our ancient heritage—and unwilling to witness to or permit the slow undoing of those human rights to which this nation has always been

446 FROM THE NEW FRONTIER TO THE GREAT SOCIETY

committed, and to which we are committed today at home and around the world.

Let every nation know, whether it wishes us well or ill, that we shall pay any price, bear any burden, meet any hardship, support any friend, oppose any foe to assure the survival and the success of liberty.

This much we pledge—and more.

To those old allies whose cultural and spiritual origins we share, we pledge the loyalty of faithful friends. United, there is little we cannot do in a host of new cooperative ventures. Divided, there is little we can do—for we dare not meet a powerful challenge at odds and split asunder.

To those new states whom we welcome to the ranks of the free, we pledge our word that one form of colonial control shall not have passed away merely to be replaced by a far more iron tyranny. We shall not always expect to find them supporting our view. But we shall always hope to find them strongly supporting their own freedom—and to remember that, in the past, those who foolishly sought power by riding the back of the tiger ended up inside.

To those people in the huts and villages of half the globe struggling to break the bonds of mass misery, we pledge our best efforts to help them help themselves, for whatever period is required—not because the Communists may be doing it, not because we seek their votes, but because it is right. If a free society cannot help the many who are poor, it cannot save the few who are rich.

To our sister republics south of our border, we offer a special pledge—to convert our good words into good deeds—in a new alliance for progress—to assist free men and free governments in casting off the chains of poverty. But this peaceful revolution of hope cannot become the prey of hostile powers. Let all our neighbors know that we shall join with them to oppose aggression or subversion anywhere in the Americas. And let every other power know that this hemisphere intends to remain the master of its own house.

To that world assembly of sovereign states, the United Nations, our last best hope in an age where the instruments of war have far outpaced the instruments of peace, we renew our pledge of support—to prevent it from becoming merely a forum for invective—to strengthen its shield of the new and the weak—and to enlarge the area in which its writ may run.

Finally, to those nations who would make themselves our adversary, we offer not a pledge but a request: that both sides begin anew the quest for peace, before the dark powers of destruction unleashed by science engulf all humanity in planned or accidental self-destruction.

We dare not tempt them with weakness. For only when our arms are sufficient beyond doubt can we be certain beyond doubt that they will never be employed.

But neither can two great and powerful groups of nations take comfort from our present course—both sides overburdened by the cost of modern weapons, both rightly alarmed by the steady spread of the deadly atom, yet both racing to alter that uncertain balance of terror that stays the hand of mankind's final war.

So let us begin anew—remembering on both sides that civility is not a sign of weakness, and sincerity is always subject to proof. Let us never negotiate out of fear. But let us never fear to negotiate.

Let both sides explore what problems unite us instead of belaboring those problems which divide us.

Let both sides, for the first time, formulate serious and precise proposals for the inspection and control of arms—and bring the absolute power to destroy other nations under the absolute control of all nations.

Let both sides seek to invoke the wonders of science instead of its terrors. Together let us explore the stars, conquer the deserts, eradicate disease, tap the ocean depths and encourage the arts and commerce.

Let both sides unite to heed in all corners of the earth the command of Isaiah—to "undo the heavy burdens . . . [and] let the oppressed go free."

And if a beachhead of cooperation may push back the jungles of suspicion, let both sides join in creating a new endeavor—not a new balance of power, but a new world of law, where the strong are just and the weak secure and the peace preserved.

All this will not be finished in the first 100 days. Nor will it be finished in the first 1,000 days, nor in the life of this Administration, nor even perhaps in our lifetime on this planet. But let us begin. In your hands, my fellow citizens, more than mine, will rest the final success or failure of our course. Since this country was founded, each generation of Americans has been summoned to give testimony to its national loyalty. The graves of young Americans who answered the call to service surround the globe.

Now the trumpet summons us again—not as a call to bear arms, though arms we need—not as a call to battle, though embattled we are—but a call to bear the burden of a long twilight struggle year in and year out, "rejoicing in hope, patient in tribulation"—a struggle against the common enemies of man: tyranny, poverty, disease and war itself.

Can we forge against these enemies a grand and global alliance, north and south, east and west, that can assure a more fruitful life for all mankind? Will you join in that historic effort?

In the long history of the world, only a few generations have been granted the role of defending freedom in its hour of maximum danger. I do not shrink from this responsibility—I welcome it. I do not believe that any of us would exchange places with any other people or any other generation. The energy, the faith, the devotion which we bring to this endeavor will light our country and all who serve it—and the glow from that fire can truly light the world.

And so, my fellow Americans: ask not what your country can do for you—ask what you can do for your country.

My fellow citizens of the world: ask not what America will do for you, but what together we can do for the freedom of man.

Finally, whether you are citizens of America or citizens of the world, ask of us here the same high standards of strength and sacrifice which we ask of you. With a good conscience our only sure reward, with history the final judge of our deeds, let us go forth to lead the land we love, asking His blessing and His help, but knowing that here on earth God's work must truly be our own.

449

The American University "Strategy of Peace" Speech, John F. Kennedy, 1963

... I have, therefore, chosen this time and place to discuss a topic on which ignorance too often abounds and the truth is too rarely perceived—and that is the most important topic on earth: peace.

What kind of peace do I mean and what kind of peace do we seek? Not a Pax Americana enforced on the world by American weapons of war. Not the peace of the grave or the security of the slave. I am talking about genuine peace—the kind of peace that makes life on earth worth living—and the kind that enables men and nations to grow and to hope and build a better life for their children—not merely peace for Americans but peace for all men and women—not merely peace in our time but peace in all time.

I speak of peace because of the new face of war. Total war makes no sense in an age where great powers can maintain large and relatively invulnerable nuclear forces and refuse to surrender without resort to those forces. It makes no sense in an age when a single nuclear weapon contains almost ten times the explosive force delivered by all the Allied air forces in the second world war. It makes no sense in an age when the deadly poisons produced by a nuclear exchange would be carried by wind and water and soil and seed to the far corners of the globe and to generations yet unborn.

Today the expenditure of billions of dollars every year on weapons acquired for the purpose of making sure we never need them is essential to the keeping of peace. But surely the acquisition of such idle stockpiles—which can only destroy and can never create—is not the only, much less the most efficient, means of assuring peace.

I speak of peace, therefore, as the necessary rational end of rational men. I realize the pursuit of peace is not as dramatic as the pursuit of war—and frequently the words of the pursuer fall on deaf ears. But we have no more urgent task.

Some say that it is useless to speak of peace or world law or world disarmament—and that it will be useless until the leaders of the Soviet Union adopt a more enlightened attitude. I hope they do. I believe we can help them do it.

But I also believe that we must re-examine our own attitudes—as individuals and as a nation—for our attitude is as essential as theirs. And every graduate of this school, every thoughtful citizen who despairs of war and wishes to bring peace, should begin by looking inward by examining his own attitude toward the course of the cold war and toward freedom and peace here at home.

First: Examine our attitude toward peace itself. Too many of us think it is impossible. Too many think it is unreal. But that is a dangerous, defeatist belief. It leads to the conclusion that war is inevitable—that mankind is doomed—that we are gripped by forces we cannot control.

We need not accept that view. Our problems are manmade. Therefore, they can be solved by man. And man can be as big as he wants. No problem of human destiny is beyond human beings. Man's reason and spirit have often solved the seemingly unsolvable—and we believe they can do it again.

I am not referring to the absolute, infinite concepts of universal peace and goodwill of which some fantasies and fanatics dream. I do not deny the value of hopes and dreams but we merely invite discouragement and incredulity by making that our only and immediate goal.

Let us focus instead on a more practical, more attainable peace—based not on a sudden revolution in human nature but on a gradual evolution in human institutions—on a series of concrete actions and effective agreement which are in the interests of all concerned.

There is no single, simple key to this peace—no grand or magic formula to be adopted by one or two powers. Genuine peace must be the product of many nations, the sum of many acts. It must be dynamic, not static, changing to meet the challenge of each new generation. For peace is a process—a way of solving problems.

With such a peace, there will still be quarrels and conflicting interests, as there are within families and nations. World peace, like community peace, does not require that each man love his neighbor—it requires only that they live together with mutual tolerance, submitting their disputes to a just and peaceful settlement. And history teaches us that enmities between nations, as between individuals, do not last forever. However fixed our likes and dislikes may seem, the tide of time and events will often bring surprising changes in the relations between nations and neighbors.

So let us persevere. Peace need not be impracticable and war need not be inevitable. By defining our goal more clearly—by making it seem more manageable and less remote—we can help all people to see it, to draw hope from it, and to move irresistibly towards it.

And second: Let us reexamine our attitude towards the Soviet Union. It is discouraging to think that their leaders may actually believe what their propagandists write.

It is discouraging to read a recent authoritative Soviet text on military strategy and find, on page after page, wholly baseless and incredible claims—such as the allegation that "American imperialist circles are preparing to unleash different types of war . . . that there is a very real threat of a preventative war being unleashed by American imperialists against the Soviet Union . . . (and that) the political aims" and I quote, "of the American imperialists are to enslave economically and politically the European and other capitalist countries . . . (and) to achieve world domination . . . by means of aggressive war."

Truly, as it was written long ago: "The wicked flee when no man pursueth." Yet it is sad to read these Soviet statements—to realize the extent of the gulf between us. But it is also a warning—a warning to the American people not to fall into the same trap as the Soviets, not to see only a distorted and desperate view of the other side, not to see conflict as inevitable, accommodation as impossible and communication as nothing more than an exchange of threats.

No government or social system is so evil that its people must be considered as lacking in virtue. As Americans, we find Communism profoundly repugnant as a negation of personal freedom and dignity. But we can still hail the Russian people for their many achievements—in science and space, in economic and industrial growth, in culture, in acts of courage.

Among the many traits the peoples of our two coun-

tries have in common, none is stronger than our mutual abhorrence of war. Almost unique among the major world powers, we have never been at war with each other. And no nation in the history of battle ever suffered more than the Soviet Union in the second world war. At least 20,000,000 lost their lives. Countless millions of homes and families were burned or sacked. A third of the nation's territory, including two-thirds of its industrial base, was turned into a wasteland-a loss equivalent to the destruction of this country east of Chicago.

Today, should total war ever break out again-no matter how-our two countries will be the primary targets. It is an ironic but accurate fact that the two strongest powers are the two in the most danger of devastation. All we have built, all we have worked for. would be destroyed in the first 24 hours. And even in the cold war-which brings burdens and dangers to so many countries, including this nation's closest alliesour two countries bear the heaviest burdens. For we are both devoting massive sums of money to weapons that could be better devoted to combat ignorance, poverty and disease.

We are both caught up in a vicious and dangerous cycle with suspicion on one side breeding suspicion on the other, and new weapons begetting counter-weapons.

In short, both the United States and its allies, and the Soviet Union and its allies, have a mutually deep interest in a just and genuine peace and in halting the arms race. Agreements to this end are in the interests of the Soviet Union as well as ours-and even the most hostile nations can be relied upon to accept and keep those treaty obligations and only those treaty obligations, which are in their own interest.

So, let us not be blind in our differences-but let us also direct attention to our common interests and the means by which those differences can be resolved. And if we cannot end now our differences, at least we can help make the world safe for diversity. For, in the final analysis, our most basic common link is that we all inhabit this small planet. We all breathe the same air. We all cherish our children's future. And we are all mortal.

Third: Let us re-examine our attitude towards the

cold war, remembering we are not engaged in a debate, seeking to pile up debating points. We are not here distributing blame or pointing the finger of judgment. We must deal with the world as it is, and not as it might have been had the history of the last eighteen years been different.

We must, therefore, persevere in the search for peace in the hope that constructive changes within the Communist bloc might bring within reach solutions which now seem beyond us. We must conduct our affairs in such a way that it becomes in the Communists' interest to agree on a genuine peace. And above all, while defending our own vital interests, nuclear powers must avert those confrontations which bring an adversary to a choice of either a humiliating retreat or a nuclear war. To adopt that kind of course in the nuclear age would be evidence only of the bankruptcy of our policy—or of a collective death-wish for the world.

To secure these ends, America's weapons are nonprovocative, carefully controlled, designed to deter and capable of selective use. Our military forces are committed to peace and disciplined in self-restraint. Our diplomats are instructed to avoid unnecessary irritants and purely rhetorical hostility.

For we can seek a relaxation of tensions without relaxing our guard. And, for our part, we do not need to use threats to prove that we are resolute. We do not need to jam foreign broadcasts out of fear our faith will be eroded. We are unwilling to impose our system on any unwilling people—but we are willing and able to engage in peaceful competition with any people on earth.

Meanwhile, we seek to strengthen the United Nations, to help solve its financial problems, to make it a more effective instrument for peace, to develop it into a genuine world security system—a system capable of resolving disputes on the basis of law, of insuring the security of the large and the small, and of creating conditions under which arms can finally be abolished.

At the same time we seek to keep peace inside the non-Communist world, where many nations, all of them our friends, are divided over issues which weaken Western unity, which invite Communist intervention, or which threaten to erupt into war.

453
Our efforts in West New Guinea, in the Congo, in the Middle East and the Indian subcontinent have been persistent and patient despite criticism from both sides. We have also tried to set an example for others—by seeking to adjust small but significant differences with our own closest neighbors in Mexico and Canada.

Speaking of other nations, I wish to make one point clear. We are bound to many nations by alliances. These alliances exist because our concern and theirs substantially overlap. Our commitment to defend Western Europe and West Berlin, for example, stands undiminished because of the identity of our vital interests. The United States will make no deal with the Soviet Union at the expense of other nations and other peoples, not merely because they are our partners, but also because their interests and ours converge.

Our interests converge, however, not only in defending the frontiers of freedom, but in pursuing the paths of peace.

It is our hope—and the purpose of allied policies—to convince the Soviet Union that she, too, should let each nation choose its own future, so long as that choice does not interfere with the choices of others. The communist drive to impose their political and economic system on others is the primary cause of world tension today. For there can be no doubt that, if all nations could refrain from interfering in the self-determination of others, the peace would be much more assured.

This will require a new effort to achieve world law—a new context for world discussions. It will require increased understanding between the Soviets and ourselves. And increased understanding will require increased contact and communication.

One step in this direction is the proposed arrangement for a direct line between Moscow and Washington, to avoid on each side the dangerous delays, misunderstanding, and misreadings of the other's actions which might occur in a time of crisis.

We have also been talking in Geneva about other first-step measures of arms control, designed to limit the intensity of the arms race and reduce the risks of accidental war.

Our primary long-range interest in Geneva, however,

is general and complete disarmament-designed to take place by stages, permitting parallel political developments to build the new institutions of peace which would take the place of arms. The pursuit of disarmament has been an effort of this Government since the 1920's. It has been urgently sought by the past three Administrations. And however dim the prospects are today, we intend to continue this effort-to continue it in order that all countries, including our own, can better grasp what the problems and the possibilities of disarmament are.

The only major area of these negotiations where the end is in sight-yet where a fresh start is badly neededis in a treaty to outlaw nuclear tests. The conclusion of such a treaty-so near and yet so far-would check the spiraling arms race in one of the most dangerous areas. It would place the nuclear powers in a position to deal more effectively with one of the greatest hazards which man faces in 1963—the further spread of nuclear weapons. It would increase our security-it would decrease the prospects of war.

Surely this goal is sufficiently important to require our steady pursuit, yielding neither to the temptation to give up the whole effort nor the temptation to give up our insistence on vital and responsible safeguards.

I am taking this opportunity, therefore, to announce two important decisions in this regard:

First: Chairman Khrushchev, Prime Minister Macmillan and I have agreed that high-level discussions will shortly begin in Moscow towards early agreement on a comprehensive test ban treaty. Our hopes must be tempered with the caution of history-but with our hopes go the hopes of all mankind.

Second: To make clear our good faith and solemn convictions on the matter, I now declare that the United States does not propose to conduct nuclear tests in the atmosphere so long as other states do not do so. We will not be the first to resume. Such a declaration is no substitute for a formal binding treaty-but I hope it will help us achieve one. Nor would such a treaty be a substitute for disarmament-but I hope it will help us achieve it.

Finally, my fellow Americans, let us examine our at-

455

titude towards peace and freedom here at home. The quality and spirit of our own society must justify and support our efforts abroad. We must show it in the dedication of our own lives—as many of you who are graduating today will have an opportunity to do, by serving without pay in the Peace Corps abroad or in the proposed National Service Corps here at home.

But wherever we are, we must all, in our daily lives, live up to the age-old faith that peace and freedom walk together. In too many of our cities today, the peace is not secure because freedom is incomplete.

It is the responsibility of the executive branch at all levels of government—local, state and national—to provide and protect that freedom for all of our citizens by all means within our authority. It is the responsibility of the legislative branch at all levels, wherever the authority is not now adequate, to make it adequate. And it is the responsibility of all citizens in all sections of this country to respect the rights of others and respect the law of the land.

All this is not unrelated to world peace. "When a man's ways please the Lord," the Scriptures tell us, "he maketh even his enemies to be at peace with him." And is not peace, in the last analysis, basically a matter of human rights—the right to live out our lives without fear of devastation—the right to breathe air as nature provided it—the right of future generations to a healthy existence?

While we proceed to safeguard our national interests, let us also safeguard human interests. And the elimination of war and arms is clearly in the interest of both.

No treaty, however much it may be to the advantage of all, however tightly it may be worded, can provide absolute security against the risks of deception and evasion. But it can—if it is sufficiently effective in its enforcement and it is sufficiently in the interests of its signers—offer far more security and far fewer risks than an unabated, uncontrolled, unpredictable arms race.

The United States, as the world knows, will never start a war. We do not want a war. We do not now expect a war. This generation of Americans has already had enough—more than enough—of war and hate and oppression. We shall be prepared if others wish it. We shall be alert to try to stop it. But we shall also do our part to build a world of peace where the weak are safe and the strong are just.

We are not helpless before that task or hopeless of its success. Confident and unafraid, we labor on—not toward a strategy of annihilation but toward a strategy of peace. Thank you.

Civil Rights Speech, John F. Kennedy, 1963

Good evening, my fellow citizens.

This afternoon, following a series of threats and defiant statements, the presence of Alabama National Guardsmen was required on the University of Alabama to carry out the final and unequivocal order of the United States District Court of the Northern District of Alabama.

That order called for the admission of two clearly qualified young Alabama residents who happened to have been born Negro.

That they were admitted peacefully on the campus is due in good measure to the conduct of the students of the University of Alabama who met their responsibilities in a constructive way.

I hope that every American, regardless of where he lives, will stop and examine his conscience about this and other related incidents.

This nation was founded by men of many nations and backgrounds. It was founded on the principle that all men are created equal, and that the rights of every man are diminished when the rights of one man are threatened.

Today we are committed to a worldwide struggle to promote and protect the rights of all who wish to be free. And when Americans are sent to Vietnam or West Berlin we do not ask for whites only.

It ought to be possible, therefore, for American students of any color to attend any public institution they select without having to be backed up by troops. It ought to be possible for American consumers of any color to receive equal service in places of public accommodation, such as hotels and restaurants, and theaters only way that they're going to get their rights is to go in 462 the street and demonstrate."

I think we owe them and we owe ourselves a better

country than that. Therefore, I'm asking for your help in making it easier for us to move ahead and provide the kind of equality of treatment which we would want ourselves-to give a chance for every child to be educated to the limit of

As I've said before, not every child has an equal talhis talent. ent or an equal ability or equal motivation. But they should have the equal right to develop their talent and their ability and their motivation to make something of themselves.

We have a right to expect that the Negro community will be responsible, will uphold the law. But they have a right to expect the law will be fair, that the Constitution will be color blind, as Justice Harlan said at the turn of the century.

This is what we're talking about. This is a matter which concerns this country and what it stands for, and in meeting it I ask the support of all of our citizens.

Thank you very much.

The Birmingham City Jail "Unwise and Untimely" Letter, Martin Luther King, Jr., 1963

My dear Fellow Clergymen,

While confined here in the Birmingham City Jail, I came across your recent statement calling our present activities "unwise and untimely" . . . since I feel that you are men of genuine goodwill and your criticisms are sincerely set forth, I would like to answer your statement in what I hope will be patient and reasonable terms.

I think I should give the reason for my being in Birmingham, since you have been influenced by the argument of "outsiders coming in" . . . Several months ago our local affiliate here in Birmingham invited us to be on call to engage in a nonviolent direct action program if such were deemed necessary. . . . So I am here, along with several members of my staff, because we were invited here. I am here because I have basic organizational ties here.

Beyond this, I am in Birmingham because injustice is here. Just as the eighth-century prophets left their little villages and carried their "thus saith the Lord" far beyond the boundaries of their home towns; and just as the Apostle Paul left his little village of Tarsus and carried the gospel of Jesus Christ to practically every hamlet and city of the Graeco-Roman world, I too am compelled to carry the gospel of freedom beyond my particular home town. Like Paul, I must constantly respond to the Macedonian call for aid.

[•] Moreover, I am cognizant of the interrelatedness of all communities and states. I cannot sit idly by in Atlanta and not be concerned about what happens in Birmingham. Injustice anywhere is a threat to justice everywhere. We are caught in an inescapable network of mutuality, tied in a single garment of destiny. Whatever affects one directly affects all indirectly. Never again can we afford to live with the narrow, provincial "outside agitator" idea. Anyone who lives inside the United States can never be considered an outsider anywhere in this country.

You deplore the demonstrations that are presently taking place in Birmingham. But I am sorry that your statement did not express a similar concern for the conditions that brought the demonstrations into being. I am sure that each of you would want to go beyond the superficial social analyst who looks merely at effects, and does not grapple with underlying causes. I would not hesitate to say that it is unfortunate that so-called demonstrations are taking place in Birmingham at this time, but I would say in more emphatic terms that it is even more unfortunate that the white power-structure of this city left the Negro community with no other alternative...

Birmingham is probably the most thoroughly segregated city in the United States. Its ugly record of police brutality is known in every section of this country. Its unjust treatment of Negroes in the courts is a notorious reality. There have been more unsolved bombings of Negro homes and churches in Birmingham than in any city in this nation. These are the hard, brutal, and unbelievable facts. On the basis of these conditions Negro leaders sought to negotiate with the city fathers. But the political leaders consistently refused to engage in goodfaith negotiation....

You may well ask, "Why direct action? Why sit-ins, marches, etc.? Isn't negotiation a better path?" You are exactly right in your call for negotiation. Indeed, this is the purpose of direct action. Nonviolent direct action seeks to create such a crisis and establish such creative tension that a community that has constantly refused to negotiate is forced to confront the issue. It seeks so to dramatize the issue that it can no longer be ignored. I just referred to the creation of tension as a part of the work of the nonviolent resister. This may sound rather shocking. But I must confess that I am not afraid of the word tension. I have earnestly worked and preached against violent tension, but there is a type of constructive nonviolent tension that is necessary for growth. Just as Socrates felt that it was necessary to create a tension in the mind so that individuals could rise from the bondage of myths and half-truths to the unfettered realm of creative analysis and objective appraisal, we must see the need of having nonviolent gadflies to create the kind of tension in society that will help men to rise from the dark depths of prejudice and racism to the majestic heights of understanding and brotherhood. So the purpose of the direct action is to create a situation so crisis-packed that it will inevitably open the door to negotiation. We, therefore, concur with you in your call for negotiation. Too long has our beloved Southland been bogged down in the tragic attempt to live in monologue rather than dialogue. . . .

My friends, I must say to you that we have not made a single gain in civil rights without determined legal and nonviolent pressure. History is the long and tragic story of the fact that privileged groups seldom give up their privileges voluntarily. Individuals may see the moral fight and voluntarily give up their unjust posture; but as Reinhold Niebuhr has reminded us, groups are more immoral than individuals.

We know through painful experience that freedom is never voluntarily given by the oppressor; it must be demanded by the oppressed. Frankly, I have never yet

engaged in a direct-action movement that was "well timed," according to the timetable of those who have not suffered unduly from the disease of segregation. For years now I have heard the word "Wait!" It rings in the ear of every Negro with a piercing familiarity. This "wait" has almost always meant "never." It has been a tranquilizing thalidomide, relieving the emotional stress for a moment, only to give birth to an ill-formed infant of frustration. We must come to see with the distinguished jurist of yesterday that "justice too long delayed is justice denied." We have waited for more than three hundred and forty years for our constitutional and God-given rights. The nations of Asia and Africa are moving with jetlike speed toward the goal of political independence, and we still creep at horse and buggy pace toward the gaining of a cup of coffee at a lunch counter. I guess it is easy for those who have never felt the stinging darts of segregation to say, "Wait." But when you have seen vicious mobs lynch your mothers and fathers at will and drown your sisters and brothers at whim; when you have seen hate-filled policemen curse, kick, brutalize, and even kill your black brothers and sisters with impunity; when you see the vast majority of your twenty million Negro brothers smothering in an airtight cage of poverty in the midst of an affluent society; when you suddenly find your tongue twisted and your speech stammering as you seek to explain to your six-year-old daughter why she can't go to the public amusement park that has just been advertised on television, and see tears welling up in her little eyes when she is told that Funtown is closed to colored children, and see the depressing clouds of inferiority begin to form in her little mental sky, and see her begin to distort her little personality by unconsciously developing a bitterness toward white people; when you have to concoct an answer for a five-year-old son asking in agonizing pathos: "Daddy, who do white people treat colored people so mean?"; when you take a cross-country drive and find it necessary to sleep night after night in the uncomfortable corners of your automobile because no motel will accept you; when you are humiliated day in and day out by nagging signs reading "white" and "colored"; when your first name becomes "nigger" and your middle

name becomes "boy" (however old you are) and your last name becomes "John," and when your wife and mother are never given the respected title "Mrs."; when you are harried by day and haunted at night by the fact that you are a Negro, living constantly at tip-toe stance never quite knowing what to expect next, and plagued with inner fears and outer resentments; when you are forever fighting a degenerating sense of "nobodiness"; then you will understand why we find it difficult to wait. There comes a time when the cup of endurance runs over, and men are no longer willing to be plunged into an abyss of injustice where they experience the blackness of corroding despair. I hope, sirs, you can understand our legitimate and unavoidable impatience.

You express a great deal of anxiety over our willingness to break laws. This is certainly a legitimate concern. Since we so diligently urge people to obey the Supreme Court's decision of 1954 outlawing segregation in the public schools, it is rather strange and paradoxical to find us consciously breaking laws. One may well ask, "How can you advocate breaking some laws and obeying others?" The answer is found in the fact that there are two types of laws: There are *just* and there are *unjust* laws. I would agree with Saint Augustine that "an unjust law is no law at all."

Now what is the difference between the two? How does one determine when a law is just or unjust? A just law is a man-made code that squares with the moral law or the law of God. An unjust law is a code that is out of harmony with the moral law. To put it in the terms of Saint Thomas Aquinas, an unjust law is a human law that is not rooted in eternal and natural law. Any law that uplifts human personality is just. Any law that degrades human personality is unjust. All segregation statutes are unjust because segregation distorts the soul and damages the personality. It gives the segregator a false sense of superiority, and the segregated a false sense of inferiority. To use the words of Martin Buber, the great Jewish philosopher, segregation substitutes an "I-it" relationship for the "I-thou" relationship, and ends up relegating persons to the status of things. So segregation is not only politically wrong but sinful. Paul Tillich has said that sin is separation. Isn't segregation an exis-

"Unwise and Untimely" Letter, Martin Luther King, Jr. 467

tential expression of man's tragic separation, an expression of his awful estrangement, his terrible sinfulness? So I can urge men to disobey segregation ordinances because they are morally wrong....

There are some instances when a law is just on its face and unjust in its application. For instance, I was arrested Friday on a charge of parading without a permit. Now there is nothing wrong with an ordinance which requires a permit for a parade, but when the ordinance is used to preserve segregation and to deny citizens the First Amendment privilege of peaceful assembly and peaceful protest, then it becomes unjust.

I hope you can see the distinction I am trying to point out. In no sense do I advocate evading or defying the law as the rabid segregationist would do. This would lead to anarchy. One who breaks an unjust law must do it *openly, lovingly* (not hatefully as the white mothers did in New Orleans when they were seen on television screaming "nigger, nigger, nigger"), and with a willingness to accept the penalty. I submit that an individual who breaks a law that conscience tells him is unjust, and willingly accepts the penalty by staying in jail to arouse the conscience of the community over its injustice, is in reality expressing the very highest respect for law.

Of course, there is nothing new about this kind of civil disobedience. It was seen sublimely in the refusal of Shadrach, Meshach, and Abednego to obey the laws of Nebuchadnezzar because a higher moral law was involved. It was practiced superbly by the early Christians who were willing to face hungry lions and the excruciating pain of chopping blocks, before submitting to certain unjust laws of the Roman empire. To a degree academic freedom is a reality today because Socrates practiced civil disobedience.

We can never forget that everything Hitler did in German was "legal" and everything the Hungarian freedom fighters did in Hungary was "illegal." It was "illegal" to aid and comfort a Jew in Hitler's Germany. But I am sure that if I had lived in Germany during that time, I would have aided and comforted my Jewish brothers even though it was illegal. If I lived in a Communist country today, where certain principles dear to the Christian faith are suppressed, I believe I would

openly advocate disobeying these anti-religious laws. I must make two honest confessions to you, my Christian and Jewish brothers. First I must confess that over the last few years I have been gravely disappointed with the white moderate. I have almost reached the regrettable conclusion that the Negro's great stumbling block in the stride toward freedom is not the White Citizen's Council-er or the Ku Klux Klanner, but the white moderate who is more devoted to "order" than to justice; who prefers a negative peace which is the absence of tension to a positive peace which is the presence of justice; who constantly says "I agree with you in the goal vou seek, but I can't agree with your methods of direct action"; who paternalistically feels that he can set the timetable for another man's freedom; who lives by the myth of time and who constantly advises the Negro to wait until a "more convenient season." Shallow understanding from people of goodwill is more frustrating than absolute misunderstanding from people of ill will. Lukewarm acceptance is much more bewildering than outright rejection.

I had hoped that the white moderate would understand that law and order exist for the purpose of establishing justice, and that when they fail to do this they become dangerously structured dams that block the flow of social progress. I had hoped that the white moderate would understand that the present tension in the South is merely a necessary phase of the transition from an obnoxious negative peace, where the Negro passively accepted his unjust plight, to a substance-filled positive peace, where all men will respect the dignity and worth of human personality. Actually, we who engage in nonviolent direct action are not the creators of tension. We merely bring to the surface the hidden tension that is already alive. We bring it out in the open where it can be seen and dealt with. Like a boil that can never be cured as long as it is covered up but must be opened with all its pus-flowing ugliness to the natural medicines of air and light, injustice must likewise be exposed, with all of the tension its exposing creates, to the light of human conscience and the air of national opinion before it can

In your statement you asserted that our actions, even

"Unwise and Untimely" Letter, Martin Luther King, Jr. 469

though peaceful, must be condemned because they precipitate violence. But can this assertion be logically made? Isn't this like condemning the robbed man because his possession of money precipitated the evil act of robbery? Isn't this like condemning Socrates because his unswerving commitment to truth and his philosophical delvings precipitated the misguided popular mind to make him drink the hemlock? Isn't this like condemning Jesus because His unique God-Consciousness and never-ceasing devotion to His will precipitated the evil act of crucifixion? We must come to see, as federal courts have consistently affirmed, that it is immoral to urge an individual to withdraw his efforts to gain his basic constitutional rights because the quest precipitates violence. Society must protect the robbed and punish the robber.

I had also hoped that the white moderate would reject the myth of time. I received a letter this morning from a white brother in Texas which said: "All Christians know that the colored people will receive equal rights eventually, but it is possible that you are in too great a religious hurry. It has taken Christianity almost two thousand years to accomplish what it has. The teachings of Christ take time to come to earth." All that is said here grows out of a tragic misconception of time. It is the strangely irrational notion that there is something in the very flow of time that will inevitably cure all ills. Actually time is neutral. It can be used either destructively or constructively. I am coming to feel that the people of ill will have used time much more effectively than the people of good will. We will have to repent in this generation not merely for the vitriolic words and actions of the bad people, but for the appalling silence of good people. We must come to see that human progress never rolls in on wheels of inevitability. It comes through the tireless efforts and persistent work of men willing to be coworkers with God, and without this hard work time itself becomes an ally of the forces of social stagnation. We must use time creatively, and forever realize that the time is always ripe to do right. Now is the time to make real the promise of democracy, and transform our pending national elegy into a creative psalm of brotherhood. Now is the time to lift our na-

tional policy from the quicksand of racial injustice to the solid rock of human dignity. . . .

... I stand in the middle of two opposing forces in the Negro community. One is a force of complacency made up of Negroes who, as a result of long years of oppression, have been so completely drained of selfrespect and a sense of "somebodiness" that they have adjusted to segregation, and of a few Negroes in the middle class who, because of a degree of academic and economic security, and because at points they profit by segregation, have unconsciously become insensitive to the problems of the masses. The other force is one of bitterness and hatred, and comes perilously close to advocating violence. It is expressed in the various blacknationalist groups that are springing up over the nation, the largest and best known being Elijah Muhammad's Muslim movement. This movement is nourished by the contemporary frustration over the continued existence of racial discrimination. It is made up of people who have lost faith in America, who have absolutely repudiated Christianity, and who have concluded that the white man is an incurable "devil." I have tried to stand between these two forces, saying that we need not follow the "do-nothingism" of the complacent or the hatred and despair of the black nationalist. There is the more excellent way of love and nonviolent protest. I'm grateful to God that, through the Negro church, the dimension of nonviolence entered our struggle. If this philosophy had not emerged, I am convinced that by now many streets of the South would be flowing with floods of blood. And I am further convinced that if our white brothers dismiss as "rabble-rousers" and "outside agitators" those of us who are working through the channels of nonviolent direct action and refuse to support our nonviolent efforts, millions of Negroes, out of frustration and despair, will seek solace and security in black-nationalist ideologies, a development that will lead inevitably to a frightening racial nightmare.

Oppressed people cannot remain oppressed forever. The urge for freedom will eventually come. This is what happened to the American Negro. Something within has reminded him of his birthright of freedom; something without has reminded him that he can gain it.

"Unwise and Untimely" Letter, Martin Luther King, Jr. 471

Consciously and unconsciously, he has been swept in by what the Germans call the Zeitgeist, and with his black brothers of Africa, and his brown and yellow brothers of Asia, South America, and the Caribbean, he is moving with a sense of cosmic urgency toward the promised land of racial justice. Recognizing this vital urge that has engulfed the Negro community, one should readily understand public demonstrations. The Negro has many pent-up resentments and latent frustrations. He has to get them out. So let him march sometime; let him have his prayer pilgrimages to the city hall; understand why he must have sit-ins and freedom rides. If his repressed emotions do not come out in these nonviolent ways, they will come out in ominous expressions of violence. This is not a threat; it is a fact of history. So I have not said to my people "get rid of your discontent." But I have tried to say that this normal and healthy discontent can be channelized through the creative outlet of nonviolent direct action. Now this approach is being dismissed as extremist. I must admit that I was initially disappointed in being so categorized.

But as I continued to think about the matter I gradually gained a bit of satisfaction from being considered an extremist. Was not Jesus an extremist in love-"Love your enemies, bless them that curse you, pray for them that despitefully use you." Was not Amos an extremist for justice—"Let justice roll down like waters and righteousness like a mighty stream." Was not Paul an extremist for the gospel of Jesus Christ-"I bear in my body the marks of the Lord Jesus." Was not Martin Luther an extremist-"Here I stand; I can do none other so help me God." Was not John Bunyan an extremist—"I will stay in jail to the end of my days before I make a butchery of my conscience." Was not Abraham Lincoln an extremist-"This nation cannot survive half slave and half free." Was not Thomas Jefferson an extremist-"We hold these truths to be selfevident, that all men are created equal." So the question is not whether we will be extremist but what kind of extremist will we be. Will we be extremists for hate or will we be extremists for love? Will we be extremists for the preservation of injustice-or will we be extremists for the cause of justice? In that dramatic scene on Calvary's

hill, three men were crucified. We must not forget that all three were crucified for the same crime—the crime of extremism. Two were extremists for immorality, and thusly fell below their environment. The other, Jesus Christ, was an extremist for love, truth, and goodness, and thereby rose above his environment. So, after all, maybe the South, the nation, and the world are in dire need of creative extremists....

I hope the church as a whole will meet the challenge of this decisive hour. But even if the church does not come to the aid of justice, I have no despair about the future. I have no fear about the outcome of our struggle in Birmingham, even if our motives are presently misunderstood. We will reach the goal of freedom in Birmingham and all over the nation, because the goal of America is freedom. Abused and scorned though we may be, our destiny is tied up with the destiny of America. Before the pilgrims landed at Plymouth we were here. Before the pen of Jefferson etched across the pages of history the majestic words of the Declaration of Independence, we were here. For more than two centuries our fore-parents labored in this country without wages; they made cotton king, and they built the homes of their masters in the midst of brutal injustice and shameful humiliation-and yet out of a bottomless vitality they continued to thrive, and develop. If the inexpressible cruelties of slavery could not stop us, the opposition we now face will surely fail. We will win our freedom because the sacred heritage of our nation and the eternal will of God are embodied in our echoing demands.

> Yours for the cause of Peace and Brotherhood, Martin Luther King, Jr.

March on Washington "I Have a Dream" Speech, Martin Luther King, Jr., 1963

I am happy to join with you today in what will go down in history as the greatest demonstration for freedom in the history of our nation.

Five score years ago a great American in whose sym-

"I Have a Dream" Speech, Martin Luther King, Jr. 473

bolic shadow we stand today signed the Emancipation Proclamation. This momentous decree was a great beacon light of hope to millions of Negro slaves who had been seared in the flames of withering injustice. It came as a joyous daybreak to end the long night of their captivity. But 100 years later the Negro still is not free. One hundred years later the life of the Negro is still badly crippled by the manacles of segregation and the chains of discrimination. One hundred years later the Negro lives on a lonely island of poverty in the midst of a vast ocean of material prosperity. One hundred years later the Negro is still languished in the corners of American society and finds himself in exile in his own land. So we've come here today to dramatize a shameful condition.

In a sense we've come to our nation's capital to cash a check. When the architects of our Republic wrote the magnificent words of the Constitution and the Declaration of Independence, they were signing a promissory note to which every American was to fall heir. This note was a promise that all men—yes, black men as well as white men—would be guaranteed the unalienable rights of life, liberty and the pursuit of happiness. It is obvious today that America has defaulted on this promissory note insofar as her citizens of color are concerned. Instead of honoring this sacred obligation, America has given the Negro people a bad check, a check which has come back marked "insufficient funds."

But we refuse to believe that the bank of justice is bankrupt. We refuse to believe that there are insufficient funds in the great vaults of opportunity of this nation. So we've come to cash this check, a check that will give us upon demand the riches of freedom and the security of justice.

We have also come to this hallowed spot to remind America of the fierce urgency of now. This is no time to engage in the luxury of cooling off or to take the tranquilizing drug of gradualism. Now is the time to make real the promises of democracy. Now is the time to rise from the dark and desolate valley of segregation to the sunlit path of racial justice. Now is the time to lift our nation from the quicksands of racial injustice to the solid rock of brotherhood.

Now is the time to make justice a reality for all of God's children. It would be fatal for the nation to over. look the urgency of the moment. This sweltering sum. mer of the Negro's legitimate discontent will not pass until there is an invigorating autumn of freedom and equality—1963 is not an end but a beginning. Those who hope that the Negro needed to blow off steam and will now be content will have a rude awakening if the nation returns to business as usual.

There will be neither rest nor tranquility in America until the Negro is granted his citizenship rights. The whirlwinds of revolt will continue to shake the foundations of our nation until the bright day of justice emerges. And that is something that I must say to my people who stand on the worn threshold which leads into the palace of justice. In the process of gaining our rightful place we must not be guilty of wrongful deeds. Let us not seek to satisfy our thirst for freedom by drinking from the cup of bitterness and hatred.

We must forever conduct our struggle on the high plane of dignity and discipline. We must not allow our creative protests to degenerate into physical violence. Again and again we must rise to the majestic heights of meeting physical force with soul force. The marvelous new militancy which has engulfed the Negro community must not lead us to distrust all white people, for many of our white brothers, as evidenced by their presence here today, have come to realize that their destiny is tied up with our destiny.

They have come to realize that their freedom is inextricably bound to our freedom. We cannot walk alone. And as we walk we must make the pledge that we shall always march ahead. We cannot turn back. There are those who are asking the devotees of civil rights, "When will you be satisfied?" We can never be satisfied as long as the Negro is the victim of the unspeakable horrors of police brutality.

We can never be satisfied as long as our bodies, heavy with the fatigue of travel, cannot gain lodging in the motels of the highways and the hotels of the cities.

We cannot be satisfied as long as the Negro's basic mobility is from a smaller ghetto to a larger one. We can never be satisfied as long as our children are stripped of their adulthood and robbed of their dignity by signs

stating "For Whites Only." stating "For Whites Only." We cannot be satisfied as long as the Negro in Missis-We cannot vote and the Negro in New York believes sippi cannot vote and the vote.

he has nothing for which to vote. No, no, we are not satisfied, and we will not be satisfied until justice rolls down like waters and righteous-

ness like a mighty stream. I am not unmindful that some of you have come here out of great trials and tribulation. Some of you have come fresh from narrow jail cells. Some of you have come from areas where your quest for freedom left you battered by the storms of persecution and staggered by the winds of police brutality. You have been the veterans of creative suffering.

Continue to work with the faith that unearned suffering is redemptive. Go back to Mississippi, go back to Alabama, go back to South Carolina, go back to Georgia, go back to Louisiana, go back to the slums and ghettos of our Northern cities, knowing that somehow this situation can and will be changed. Let us not wallow in the valley of despair.

I say to you today, my friends, though, even though we face the difficulties of today and tomorrow, I still have a dream. It is a dream deeply rooted in the American dream. I have a dream that one day this nation will rise up, live out the true meaning of its creed: "We hold these truths to be self-evident, that all men are created equal."

I have a dream that one day on the red hills of Georgia sons of former slaves and the sons of former slaveowners will be able to sit down together at the table of brotherhood. I have a dream that one day even the state of Mississippi, a state sweltering with the heat of injustice, sweltering with the heat of oppression, will be transformed into an oasis of freedom and justice.

I have a dream that my four little children will one day live in a nation where they will not be judged by the color of their skin but by the content of their character. I have a dream . . . I have a dream that one day in Alabama, with its vicious racists, with its governor having his lips dripping with the words of interposition and nullification, one day right there in Alabama little black boys and black girls will be able to join hands with little white boys and white girls as sisters and brothers.

I have a dream today . . . I have a dream that one day every valley shall be exalted, every hill and mountain shall be made low. The rough places will be made plain, and the crooked places will be made straight. And the glory of the Lord shall be revealed, and all flesh shall see it together. This is our hope. This is the faith that I go back to the South with. With this faith we will be able to hew out of the mountain of despair a stone of hope. With this faith we will be able to transform the jangling discords of our nation into a beautiful symphony of brotherhood. With this faith we will be able to work together, to pray together, to struggle together, to go to jail together, to stand up for freedom together, knowing that we will be free one day.

This will be the day when all of God's children will be able to sing with new meaning, "My country, 'tis of thee, sweet land of liberty, of thee I sing. Land where my fathers died, land of the pilgrim's pride, from every mountain side, let freedom ring." And if America is to be a great nation, this must become true. So let freedom ring from the prodigious hilltops of New Hampshire. Let freedom ring from the mighty mountains of New York. Let freedom ring from the heightening Alleghenies of Pennsylvania. Let freedom ring from the snowcapped Rockies of Colorado. Let freedom ring from the curvaceous slopes of California.

But not only that. Let freedom ring from Stone Mountain of Georgia. Let freedom ring from Lookout Mountain of Tennessee. Let freedom ring from every hill and molehill of Mississippi, from every mountainside. Let freedom ring . . .

When we allow freedom to ring—when we let it ring from every city and every hamlet, from every state and every city, we will be able to speed up that day when all of God's children, black men and white men, Jews and Gentiles, Protestants and Catholics, will be able to join hands and sing in the words of the old Negro spiritual, free at last, Free at last, Great God a-mighty, We are

About the language 1: fearing clause

1 Study the following examples:

timeo ne inquieta sit Britannia, dum Hibernia însula in libertăte manet. I am afraid that (lest, in case) Britain may be unsettled, as long as the island of Ireland remains free.

timöbat luppiter në del ipsi eödem igni cremärentur.

Jupiter feared that the gods themselves might be consumed by the same fire. Quintilianus veretur ne puert Domitiano non placuerint.

Quintilian is afraid that the boys have not pleased Domitian.

Glabriō timēbat në Imperätörem graviter offendisset. Glabrio was afraid that he had seriously offended the emperor.

The groups of words in **boldface** are known as fearing clauses. The verb in a fearing clause in Latin is always subjunctive. Because a fear can be for the past, the present, or the future, you must pay particular attention to the tense of the subjunctive verb

2 In fearing clauses, the conjunction në means that (lest/in case) and the negative is në ... nön. Occasionally the negative can be ut, e.g.

Quïntiliänus verëtur ut puerï Domitiänö placuerint. Quintilian is afraid that the boys have not pleased Domitian.

3 Further examples:

- a timeo ne genus mortale deos fallere conatum sit.
- b Domitia, fragöre audīto, verita est nē Paris dē arbore cecidisset.
 c timēbāmus nē diūtius dubitāvissēmus.
- d anxiane erās ut tē hīs malīs ēriperem?



This coin shows the infant son of Domitian among the stars with the description divus Caesar, divine Caesar, This suggests that the coin was issued after the child's death as emperors and members of their families were often posthumously proclaimed as gods. Domitian and Domitia only had one son and therefore Domitian later took on Titus and Publius as his heirs.

sed tanta erat lovis îra ut imbribus caeli contentus non esset; auxilium ergő å frätre Neptünő petīvit. This Greek bronze sculpture from the fifth century BC stands over 6.5 feet (2 meters) tall and was found in a (2 meters) has an was jound in a shipwreck. It is disputed whether it portrays the Jupiter or Neptune. The figure would have hurled a thunderbolt or trident from his right hand.

Prev Page

70 Stage 39

71 Stage 39

Next Page

Stage 39

Uses of the subjunctive

Complete the following table by underlining the subjunctive in each sentence and giving the reason the subjunctive is used. Then translate each sentence.

		Use of the subjunctive
1	rëx deörum timëbat në deï ipsî eödem ignî cremărentur.	
2	Iuppiter nimbōs ingentēs dē caelō dēmīsit quī genus mortāle dīluviō perderet.	
3	cum Neptūnus terram tridente percussisset, illa valdē tremuit.	
4	Epaphrodītus vēnit ut ruandāta prīncipis atīntiāret.	
5	princeps Tito et Públio imperavit ut ad aulam quam celerrime contenderent.	
6	puerī nesciēbant cūr Imperātor eös vidēre vellet.	
7	puerî timêbant nê Domitiânus se castîgâret vel pûnîret.	
8	cum Quïntiliănus et puerī tablīnum ingressī essent, Domitiānum muscās confīgere temptantem invēnērunt.	
9	Titus tam anxius erat ut vix dicere posset.	
0	Quīntiliānus verēbātur nē Pūblius Imperātōrī non placēret.	
1	Imperator audăciă Titī erat tam obstupefactus ut nihil diceret.	-

Stage 38 Sparsus says to Polla that ...



In the indirect statements below, choose the correct Latin word in each set of parentheses and then translate the entire indirect sentence.

- "pontifex iam porcum sacrificăvit." INDIRECT: Sparsus Pollae dicit (pontificem/pontifex) iam porcum (sacrificăre/sacrificăvisse).
- 2 "pontifex deïs precës offert." INDIRECT ACTIVE: Sparsus Pôllae dïcit (pontificem/pontifex) deïs precës (offerre/obtulisse).
- 3 "precës dets a pontifice offeruntur." INDIRECT PASSIVE: Sparsus Pollae dicit precës deïs (a pontifice/pontifex) (offerti/oblatos esse).
- "ego et tü nüptiäs mox celebrăbinus." INDIRECT: Sparsus Pollae dicit se et Pollam nüptiäs mox (celebrăturos esse/celebrăre).
- 5 "ego et tü posteä ad triclīnium pröcēdēmus et cēnam cönsümēmus." INDIRECT: Sparsus Põllac dīcit sē et Põllam posteä ad triclīnium (pröcessürös esse/pröcessisse) et cēnam (cönsümptürös esse/cönsümere).

D University of Cambridge School Classics Project 2015

Stage 38 Pliny and Cicero write to their wives

Translate the following two letters. Then answer the questions that follow.

A PLINY TO CALPURNIA:

scribis të absentia mea non mediocriter adfici, finumque habëre solacium, quod pro më libellos meos teneas et saepe in vestigio meo collocës, gratum est quod nos requiris, gratum quod his fomentis adquiëscis, invicem ego epistulas tuas lectito atque identidem in mantis quasi novas sumo, sed eo magis ad destderium tui accendor! tu tamen quam frequentissime scribe, quanquam hoc ita më delectat ut torqueat, valë.

5

mediocriter adfici: adficere quod	a little affect that, the fact	fómentis: fómentum adquiéscis:	consolation
de-re-	that	adquiëscere	find comfort
prõ	in place of, instead of	lectito: lectităre sûmo: sûmere	read and re-read take, pick up
vestīgio: vestīgium	place	eõ magis	all the more
collocês: collocáre	place, set, put	desidenum:	
grātum: grātus requīris: requīrere	pleasing	dēsīderium	longing
redums reduitere	miss, need, long for	accendor: accendere	set on fire

B CICERO TO TERENTIA:

in Tusculānum nos ventūros putāmus aut Nonīs aut postrīdiē, ibi, ut sint omnia parāta (plūrēs enim fortasse nobīscum erunt, et, ut arbitror, diūtius ibi commorābimur). labrum sī in balineo non est, ut sit, item cētera quae sunt ad victum et ad valētūdinem necessāria. valē.

Tusculānum: Tusculānus	our Tusculan villa (one of Cicero's country estates)	commorābimur: commorārī labrum	stay, remain basin.
ventiirös = ven	and the second		wash-basin
Nõnis	on the Nones	balmeö:	
ut sint = fac ut	sint; cūrā ut sint	balineum	bath, bathroom
plūrēs	several (men)	item	likewise
arbitror:		victum: victus	good living
arbiträri	think, believe	valētūdinem:	
difitms	for some time	valētūdo	good health

1 What gives Calpurnia consolation? What gives Pliny consolation?

2 If you were Calpurnia, how would you feel on receiving Pliny's letter?

3 If you were Terentia, how would you feel on receiving Cicero's letter?

4 What features in Cicero's letter might especially annoy Terentia?

hērēdē	s prīncipis		Quintilianus:	(timõrem suum dissimulāns) cür perturbāminī,	
n aulā Imperā suer, Titus nom nentē audit, a titus Pābliusa imperātoris fac Titus: Titus: Titus: Datā intere sē a abitāminus eta abitāminus e	I töris, duo puori in studite litterärum sunt occupäti, aher une, fähulam närräre cönätur; aller, nömme Pählua; dest quoque puerörum rätter, M. Pählus, Quäntilänus, e. fält Clämentis ac fählär Pählae, näper börädäs	studiis: studium study litterarum: litterae literature 3 genus mortile iluvio: diluvium flood 10 futmina: tulmen thomderholi ceremaren: tulmen thomderholi ceremaren: tulmen thomderholi diversam: diversus different 13	Pūblius: Quīntiliānus: Quīntiliānus et sedentem musc	 puer? bonë causi perturbănur. Imperitor enim nös sine dubit castīgābit vei pāniet. minist timidas es, Pābl. si prüdenter võis gessertiis, neque castīgābinimin negue pāniēmin. III puerî, lablinum ingressi. Domitiānum ad mēnsam dague silds trānsfigentem tiveimiat. Domitānus neque pānietamis. Luei palētemis. (tandem respiciēms) nõlite timāre, puerī. võis nön pāntāruis sum – nisi mihi displöventis. (mascam aliam ränsfigit. dēmaga, said dedposit, puerīs sakkit interropat.) quam dil disciptil. M. Pabli inan estis? (hassidān) dedus nēmska, domine. nöbis cepš tempus est cognõserer quid didiceritis. (neque veisis gubitānus repete conversus) Pūblī, quid heri docēbānini? versiis gubisdam legēbānus, domine, quēs Dvidus polsta de lite dituvis fibuldās composuit. taque, versibus Ovidānis heri lēcīts, quid hodiā fantišu. hodie contanuer endem fibulam verbis nostris admirātis neatus in nituri angela palarita legibānus, lautinā lautis indirātis at lite dituvis fibuldās termine. hodie contanuer endem fibulam verbis nostris natrificau erai. fibula sactita palssimal ena sadīre velim. The, nārātišonem tuam renovā! (Babaa mindē ravozvās) la loppiter nimbās ingentis dē a-caolā dāmitāre constituit, statim Aquilônem in ca-cavernīs Aodilis inclišt, et Notum fiberāvi, qui madidā šīlās čvolīvi, mabā denā fandita velim. 	 20 castigabit: castigare scold, reprimana võs gessettis: sõ gerere behave, canduet onesel museas: musea fly respicit: respicere look up displicueritis: displicere displicueritis: displicere legendary, famous ovidianus of Ovid 15 20 närrätiönem: närrätiö nimbös: nimbus rain clotid cavernis: caverna cave, cavern Acolia: Acolius Acolian 25 inclustit: inclidere shut up Notum: Notus South wind alis: alin wing gravabaluer: gravare
			Domitiānus;	ex achere cum ingenti fragöre effüsi sunt sed tanta erat lovis Ira ut imbribus caeli sontentus nön esset; auxilium ergö ä frätre Neptinö petiviti qui cum ternam tridente percussisset, illa valdö turemut vianugue patefkeit ubi undae fluerenti statim flümina ingentia per campõs apertõs rubbani. satis närrävistif, Tite, nune tü, Püblt, närrätiönem excipe.	land, weigh down imbribus: Inber. rain 30 Neptunő: Neptuns: Neptune (Roman god of the sea) tridente: tridens trident campös: campus plain exclipe: exclipere take over 35
	66 Stage 39			67 Stage 39	Next Page

iamque inter mare et tellürem nüllum diserimen erat; mare ubique erat, neque ülla lītora habēbat, hominēs exitium eflugere cōnābantur, alīī montēs ascendērunt; alīī, in nāvibus sedentēs, per agrõs Püblius: illös rēmigāvērunt quös nūper arābant; hic suprā segetēs aut tēcta vīllārum mersārum nāvigāvit; ille in summīs arboribus piscēs invēnit. Iupī inter ovēs natābant; leōnēs fulvī undīs vehēbantur. avēs, postquam terram diū quaerēbant ubi consistere possent, tandem in mare fessis alis deciderunt. capellae graciles -

- Martine Ferr

Pühliö hoc närranti Domittiänus manü significat ut devistat. diü tacet, pueris anxiis exspectantibus. Quintillänus verenar në pueri Imperätöri nön placuerint, tandem ille loquitur.

fortūnātī estis, Pūblī ac Tite; nam, ut decorum est prīncipis horēdibus, ab optimo rhētore docēminī, Domitiānus: quī optima exempla vöbīs proposuit, sī vos, puerī, causās vestrās tam tācundē dīxeritis quam Ovidius versõs composuit, saepe victõres e basiliea discedetis; ab omnibus laudabiminī. Titus: (timore iam deposito) nonne una res te fallit. domine? nos sumus heredes tui; nonne igitur nos, cum causãs nostrãs dixerimus, non saepe sed semper victores discedemus et ab omnibus laudābimur?

Quīntiliānus ērubēscit. Domitiānus, audāciā Titī obstupefactus, nihil dīcit. tandem, rīdēns vel rīsum simulāns, puerās rhētoremque dīmittit: deinde, stilö resümptö, muscās iterum trānsfigere incipit.



Prev Page

68 Stage 39

tellürem: tellüs land, earth discrimen boundary. dividing line 40

rèmigäverunt: remigäre row arabant: arare plow hic ... ille this man ... that man, one man ... another 45 man

man suprà over, on top of aut or mersàrum: mergere submerge pisces: piscis fish

oves: ovis sheep

50 fulve: fulvus tawny capellae: capella she-goat gracilës: gracilis graceful causăs ... dixeritis: causam dicere plead a case facunde fluently, eloquently 55

fallit: fallere escape notice of, slip by

60

simulans: simulare pretend resumpto: resumere pick up again



69 Stage 39

Vocabulary checklist 39

arbor, arboris, f. aut cado, cadere, cecidi campus, campī, m. capilli, capillorum, m. pl. discrīmen, discrīminis, n. ergõ fallö, fallere, fefelli, falsus fragor, fragoris, m. genus, generis, n. hinc iuvo, iuvare, iūvī, iūtus littera, litterae, f. litterae, litterārum, f. pl. mēnsis, mēnsis, m. simulō, simulāre, simulāvī, simulātus spargō, spargere, sparsī, sparsus stilus, stilī, m. studium, studiī, n. üllus, ülla, üllum

tree or fall plain hair dividing line; crisis therefore deceive, escape notice of, slip by crash race from here; then, next help, assist letter (of the alphabet) letter, letters (correspondence), literatu month pretend scatter pen (pointed stick for writing on wax tablet) enthusiasm; study any



Domitian's palace: connecting rooms leading to the Hippodrome.

Prev Page

82 Stage 39

Pearsonschool.com/AutenticolA 1

ARITING

Cómo es el cine?

LEER, ESCRIBIR Lee este anuncio del cine.

Q

Cine Parque Arauco

- + Estacionamientos iluminados, gratis
- * Para su comodidad. aire acondicionado
- Las únicas butacas reclinables de la ciudad
- * Excelentes instalaciones para discapacitados
- * Excelente calidad de proyección * Diariamente funciones continuadas desde el mediodía

ealize

- ★ Funciones de trasnoche los miércoles, viernes y sábados
- * Palomitas recién preparadas
- * Servicio amable y eficiente
- Precios especiales para grupos y arriendos de salas de cine

Situado delante del Centro Comercial Gigante

Según el anuncio del Cine Parque Arauco, escribe la palabra apropiada para cada pregunta.

- 1. ¿_____ es la calidad de la proyección en el cine? Excelente.
- 2. ¿____ comen muchas personas allí? Palomitas.
- 3. ¿_____ es el nombre del cine? Cine Parque Arauco.
- 4. ¿____ van las personas a ver películas muy tarde (late) por la noche? Los miércoles, viernes y sábados.
- 5. ¿_____ está el cine? Delante del Centro Comercial Gigante.

CULTURA El mundo hispano

Las películas son una forma popular de entretenimiento1 para los adolescentes en los países hispanos. España, México, Colombia y Venezuela tienen industrias del cine importantes, pero las películas de los Estados Unidos también son populares. Los adolescentes de habla hispana² van al cine en grupos.

Pre-AP® Integration: El entretenimiento y la diversión Compara tus hábitos de ir al cine con los de los adolescentes de habla hispana. ¿Vas con amigos o solo(a)? ¿Son las películas de países hispanos populares en tu comunidad? ¿Por qué?

¹entertainment ²Spanish-speaking



Los actores españoles Penélope Cruz y Javier Bardem

Cuándo Por qué Cómo Cuál Qué Dónde



Lectura

OBJECTIVES

- Read about after-school and weekend
- Use prior knowledge to better understand
- Compare the instruments used in Andean music to those used in music you enjoy

Al centro comercial

Lee las actividades diferentes que puedes hacer en la semana del 11 al 17 de enero durante tu tiempo libre.

Strategy

Using prior knowledge Think about special what you know about special-event weeks at shopping centers. List key words for events that you think might be offered at a mall.

¡Vamos a la Plaza del Sol!

Aquí en la Plaza del Sol, ¡siempre hay algo que hacer!

Actividades para el 11 al 17 de enero

lunes 11	
7.00 P.M.	Música andina
martes 12	
7.00 P.M.	Clase de yoga
miércoles 13	
8.00 P.M.	Noche de jazz
jueves 14	
7.00 P.M.	Clase de repostería ¹
viernes 15	
8.00 P.M.	Música andina
sábado 16	
1.30 P.M.	Exposición de fotografía
2.00 P.M.	Show infantil
4.00 P.M.	Exhibición de yoga
3.00 P.M.	Sábado flamenco
lomingo 17	
.30 P.M.	Exposición de fotografía
00 P.M.	Show infantil
00 P.M.	Exhibición de yoga
00 P.M.	Noche de tango



Música andina

Un grupo toca música andina fusionada con bossa nova y jazz el lunes a las 8.00 P.M. Abierto² al público.

Clase de yoga

La práctica de yoga es todos los martes desde las 7.00 hasta las 9.00 P.M. La instructora Lucía Gómez Paloma enseña los secretos de esta disciplina. Inscríbase³ en el teléfono 224-24-16. Vacantes limitadas.

pastry making 20pen 3Register

4.

8.0

PearsonSchool.com/AutenticoTX 1



Clase de reposteria

Sábado flamenco

El Sábado flamenco es el programa más popular de la semana. María del Carmen Ramachi baila acompañada por el quitarrista Ernesto Hermoza el sábado a las 8.00 P.M. Es una noche emocionante v sensacional de música v danza. Abierto al público.



Inscríbase gratis⁴ en la clase de repostería programada para el jueves a las 7.00 P.M. Preparamos unos pasteles deliciosos gracias a la Repostería Ideal y al maestro Rudolfo Torres. Inscríbase en el teléfono 224-24-16. Vacantes limitadas.

4free



¿Comprendes?

- 1. You will be in town from January 9 through February 2. Which activities will you be able to attend?
- 2. Which events require you to sign up in advance? Which do not? What key phrases provide this information?
- 3. Which day(s) would be best to go with a six-year-old child?
- 4. Según los intereses de estos chicos, ¿a qué eventos van ellos?

Raquel:	Me gusta mucho hacer ejercicio.
Roberto:	Me encantan los pasteles.
Teresa:	Estudio baile. Tomo lecciones todos los jueves.
Alejandro:	Me gusta escuchar música; toda clase de música.

5. ¿Qué actividad es más interesante para ti?

CULTURA Bolivia · Chile · Ecuador · Perú

La música andina es muy popular en todo el mundo. Este interesante estilo de música se originó en las montañas de los Andes en Perú, Ecuador, Bolivia y Chile. Los artistas a veces llevan trajes¹ tradicionales andinos. En la música andina los músicos tocan instrumentos especiales: los tambores2 de materiales naturales, la flauta³ quena, la guaira⁴ o quena y una guitarra pequeña llamada charango.

En la música andina los instrumentos son diferentes a los instrumentos de la música clásica. ¿Qué instrumentos usan en la música que te gusta a ti?

wear clothing 2drums 3flute 4panpipes

