4—Variations on a Theme

True or false? All ACT prompts are different. Well, yes and no. On the one hand, they all *appear* different, with different topics and different perspectives. But if you look closely at several ACT prompts, you'll see they're very similar under the surface. They all present pro and con views on some hot topic and they all demand analysis of different, often conflicting, points of view.

In this chapter we'll take a look at a second prompt similar in format to "Intelligent Machines." The same methodology will apply. In the beginning stages of any new endeavor, it helps to have repetition of the main ideas and techniques to build confidence and take ownership. Here we go.

Sample Prompt

Genetically Modified Foods

Many of the agricultural products and foods we consume daily are now produced by large farms whose genetic material has been altered through modern biotechnology engineering techniques. Researchers create combinations of plant, animal, bacteria, and viral genes for food products that would not exist naturally, where once there were simple, farm-made products. We can now manipulate foods to increase nutrient components and resistance to pests. This technology is generally seen as a sign of progress, but what is lost when we replace natural foods with modified organisms? Given the accelerating variety and prevalence of genetically modified organisms (GMOs), it is worth examining the implication and meaning of their presence in our lives.

Read and carefully consider these perspectives. Each suggests a particular way of thinking about the genetically modified foods.

Perspective One	Perspective Two	Perspective Three
We lose the ability to choose what we eat when genetically modified crops insinuate themselves into natural farming practices. This results in a loss of understanding about what consumers are actually buying when GMO goods populate grocery shelves.	Genetically modified organisms are good at boosting yields on crops. They also increase plant resistance to cold and drought, while providing nutrients that would not otherwise exist within the food. This efficiency leads to a more prosperous and progressive world.	Genetically modified organisms challenge our long-standing ideas about what food can provide nutritionally and the impact of food production on the environment. This pushes both researchers and consumers toward new unimagined possibilities.

Planning Your Essay

As before — and, hereafter, *as usua*l — the first order of business is to map out the basic issues presented in the prompt and develop pro and con arguments in a T-chart.

Isolate the Contrast

ACT prompts give you a running start on your essay by introducing a theme with contrasting points of view. Think back on the first paragraph of this sample prompt and hone in on this sentence:

> This technology is generally seen as a sign of progress, but what is lost when we replace natural foods with modified organisms?

Here it's clear the contrast is between the benefits and drawbacks of progress. Once you isolate the contrast, you're ready to parse the prompt.

Using the simple T-chart introduced in the previous paragraph, we can split the general introduction of this GMO prompt into pro and con arguments. For example:

Pro	Con
GMOs are a sign of progress and efficiency.	What is lost when we replace natural foods with modified organisms?

Now use these contrasting themes to organize the sub-arguments of your essay.

Sub-arguments	
GMOs raise food production by increasing crop yields	Movie "Food Inc." exposes negative aspects of GMO
Make food more nutritious and resistant to harmful bacteria	Large corporations like Monsanto secretly tampering with food

≡

Merging these two together, as described in the previous chapter, gives you the following T-chart, which provides a roadmap for your essay.

Pro	Con
GMOs are a sign of progress and efficiency	What is lost when we replace natural foods with modified organisms?
Sub-arguments	**Sub-arguments**
GMOs raise food production by increasing crop yields	Movie "Food Inc." exposes negative aspects of GMO
Make food more nutritious and resistant to harmful bacteria	Large corporations like Monsanto secretly tampering with food

As in the previous chapter, notice that while some of the sub-arguments are drawn directly from the prompt, others are either extrapolations of the theme (GMOs increase crop yields) or imaginative images from movies ("Food, Inc.") that can be used to add details and depth to the presentation.

You need to use your imagination here in order to come up with interesting arguments you can use in your essay. You have 40 minutes to write the essay so it's OK to spend a little time brainstorming on your pro and con positions.

You'll also want to consider the three perspectives provided by the ACT for each prompt to determine whether you agree or disagree. Remember, as you consider the perspectives, it's important to think of concrete examples you can use to support your case. The devil is always in the details. The more specific examples you provide to buttress your arguments, the higher your essay score.

The point of all these T-charts and all this pre-planning is to help you organize your essay in a clear and straightforward manner with enough concrete detail to impress the ACT readers with the logic, depth and order of your presentation. The point being, of course, to construct a top-scoring essay.

Here's the Perspectives-chart that summarizes the perspectives and provides concrete examples for support:

Perspectives Chart
Perspective One Lose basic understanding of what we eat. Consumers don't know what they're buying CONCRETE EXAMPLES: Companies aren't required to label GMOs - staple foods like corn are injected with insecticide but sold unlabeled **Perspective Two** GMOs boost the quality and quantity of our food and, therefore, make the world more prosperous CONCRETE EXAMPLES: Apples with high antioxidant content of blueberries, thrive in arid climates **Perspective Three** GMOs offer a future of unimagined possibilities for both researchers and consumers CONCRETE EXAMPLES: GMOs offer a way to feed growing population but could lead to health problems. Support both pro and con positions.

This parsing of the prompt and evaluation of perspectives should take you no more than 5 to 10 minutes, after which you'll have a rough outline/roadmap for your essay.

Feel free, of course, to vary or augment the outline as new ideas emerge in the process of writing your essay. This roadmap will ensure that you get to your ultimate destination without being hopelessly sidetracked along the way.

Now let's take a look at another sample essay constructed around the T-charts and Perspectives-chart discussed above. Brandon, one of my top students, agreed to tackle the essay.

Sample Essay

Genetically Modified Foods

The way in which our food is grown has become a hot-button issue. Many people feel that natural farm-made products are superior to artificial ones associated with the rapidly growing industry of genetically modified foods (GMOs). Scientists are using biotechnology to craft and design so-called super-foods that are more nutritious and pest-resistant than their natural counterparts. However, genetic modification remains a controversial subject. Human-based agriculture has existed for thousands of years. What happens to our health and well-being when the human component is reshaped and altered by biotechnology?

In today's society, consumers are more wary than ever about what they are eating. Shoppers rely on nutrition labels to guide them towards healthy choices and away from processed garbage. But what if these labels were hiding something? Surprisingly, food companies aren't required to inform the consumer that their products contain genetically modified organisms. Therefore, staple foods like corn may be injected with harsh insecticides and masquerade as traditional products, rendering the consumer completely unaware as to what they are actually buying. In the viral documentary, "Food Inc.", it is revealed that monopolistic corporations like Monsanto are responsible for this secret genetic tampering. Some critics call these GMO products "franken-food" since they are artificially designed and exist outside of nature.

However, genetically modified food may not be the devil that some make it out to be. From a societal perspective, GMOs offer a way to boost crop yields and feed the world's ever-burgeoning population. Furthermore, these modified crops can be designed to thrive in harsh winters and arid climates where farming was previously impossible. Not to mention these foods can have increased nutrition content. Imagine eating an apple with the high antioxidant content of a blueberry. Soon, parents may be encouraging their kids to eat their GMO fruits and vegetables.

In the timeline of human farming, GMOs are a relatively recent phenomenon. Since their introduction in 1980, the very definition of food has changed. What were once genetically limited crops are now dynamic and customizable plants that can adapt to the needs of our growing population. By eliminating harmful pesticides that pollute groundwater and harm wildlife, ecosystems may be saved and farmlands restored. However, it may turn out that we end up substituting one sort of dangerous compound for another. Laboratory rats exposed to GMO foods, for example, have been know to come down with cancer and a host of other neurological disorders. Many challenges lie ahead.

Overall, the addition of GMOs to our society is a double-edged sword. On one hand, it offers a promising way to solve the world's disastrous hunger problem by both boosting the yield and nutrition of crops. On the other hand, its long-term health ramifications are unknown. The general population serves as unknowing test subjects to this grand experiment of genetic modification. Will GMOs save the world, or be the downfall of humanity? Only time will answer this burning question.

Building Blocks

As we saw in the previous chapter, every ACT essay is really just a series of building blocks stacked one on top of the other. In this section, we walk through the sample essay from start to finish, highlighting the function of each of the major building blocks.

Introductory Paragraph

Notice how the introduction of the essay sets the scene by *isolating the contrast* in the second sentence — the conflict between farm-made products and artificial, genetically modified foods. Some of the advantages of GMOs are introduced along with a cautionary, rhetorical question that asks the reader to consider the human downside and potential drawbacks to the technology.

As mentioned previously, rhetorical questions are a sophisticated way for writers to get their points across by inviting the reader to engage directly in the conversation.

First Body Paragraph

The first body paragraph of the essay supports Perspective One by expanding on the idea that biotechnology companies aren't required to inform the consumer that their products are GMO. More detail is provided about harsh insecticides and the dangers of monopolistic companies like Monsanto. The paragraph concludes with a reference to a popular documentary "Food, Inc." which exposes the evils of so-called "franken-foods." All this provides good supporting detail for the fact that consumers don't actually understand what they're buying when they purchase these modified goods.

Second Body Paragraph

The second body paragraph takes the opposite position, addressing Perspective Two by arguing that GMOs may offer a way to boost crop yields and feed the world's ever-burgeoning population. This acts as a CONCESSION paragraph to show the writer understands how to evaluate both sides of an argument.

Increased nutritional content and the ability to thrive in arid climates are mentioned as positive qualities of GMOs. A concrete example is given of apples that might possess the same high antioxidant content of blueberries. This is good, imaginative, supporting detail.

Third Body Paragraph

The third body paragraph, which addresses Perspective Three, presents a mixed bag of arguments both in support of and in opposition to GMOs. Details about health issues like cancer are set against the restoration of farmlands and ecosystems.

Conclusion

The essay concludes with a summary of the pro and con positions stated throughout the work and ends with a flourish, asking the reader to ponder whether GMOs will save the world or be the downfall of humanity? Nice apocalyptic flourish at the end.

It should be noted, although it may already be abundantly clear, that the conclusion of an ACT essay is really the easiest part. Just roll back through the pro and con arguments you've previously presented in your essay, cherry-picking the best and brightest. Then end with a flourish in the form of a quote, an anecdote, or, as in this case, a rhetorical question about the future of humanity!

Parting Thoughts

Since this chapter is about variations on a theme, I want to present a different, more imaginative introduction to the essay we just reviewed. Brandon, in fact, wrote two different introductions, the one we just saw, which was good, and another, more imaginative one, which is great.

Lest I give you the impression that your ACT essays have to be all button-down, academic exercises in form and function, let me show you a more adventurous take on an opening salvo for your essay.

New Intro

> One year at Thanksgiving, my grandfather jokingly said, "Life expectancy would grow by leaps and bounds if green vegetables smelled as good as bacon." Everybody at the table laughed and agreed wholeheartedly, thinking his joke had no real-life implications. However, thanks to the rapid growth of the GMO industry, his fantasy may soon become reality. Scientists are using biotechnology to craft and design artificial foods that are more nutritious and pest-resistant than their natural counterparts. However, genetic modification remains a controversial subject due to its experimental and artificial nature.

As you can probably agree, this sort of introduction is more tasty, more enticing to the reader than the conventional intro we saw. Of course, it takes a leap of imagination to get off to a cinematic start like this. But if you have the inclination and the stylistic moves to pull this off, my advice is: go for it!

Return to Intelligent Machines

Finally, since we're talking variations on a theme here, let's return to the sample essay on *Intelligent Machines* from the previous chapter. Here are two different takes on that prompt, one world class, and the other somewhat lacking in both style and substance.

Caie's Essay

The first variation on the *Intelligent Machines* prompt is by my former student Caie, who constructs such sophisticated, detailed and provocative prose that it's no wonder she got into Harvard!

Intelligent Machines

> Twenty years ago, Michael J. Sandel, a leading political philosopher in America, postulated that if we did not place limits on the technological machines that were at the time just beginning to dominate modern society, we would lose our own humanity. For many, his concerns felt unwarranted, because the changes that accompanied these machines meant progress and better communication. Today's reality, however, may lie somewhere between the two extremes: neither fearing these intelligent machines nor praising them unconditionally paints a clear picture of how they should be viewed. Instead, we must acknowledge the labor saving uses of machines while we also realize that their presence can damage our ability to communicate with each other.
>
> It may be argued that because computers are capable of nearly every basic human function, their resource should be utilized for efficiency. Failing to take advantage of progress is not progress at all, as Erik Brynjolfsson explains in The Second Machine Age: computers are now able to pick stocks, diagnose disease, and even grant parole based on analysis of the law. If we have the technology to do work for us – if Google can create a car that drives safer than humans, if programmers can create a Consumer Price Index that updates daily on its own, if machines can track our symptoms better than a trained medical specialist in the field – why shouldn't it be allowed to do so? Having robots that create greater safety and knowledge about humanity augments, not hurts, our own decisions.
>
> But if machines are allowed to do so much, what have we left to their mercy? Although technology may challenge our long-standing ideas about what humans can be, viewing this as an entirely positive phenomenon is to forget its negative consequences. In the past thirty years, what was once only a personal computer became tablets, smartphones, and the cloud. Yet these progressive movements accompanied accelerating income inequality, where highly skilled workers benefited from the changes while leaving huge masses of people behind. Intelligent machines segmented the population into two large groups: those at the top and those at the bottom, leading to an ever-shrinking middle class. These concerns are reflected in much of modern media, with recent titles like, "What Machines Can't Do", "The Robots are Winning", and "More Jobs Predicted for Machines, Not People". Thus, celebrating one side of progress without acknowledging the other is not the way to proceed, either.

So perhaps the answer to the modern place for intelligent machines lies in between: it is time for humanity to find a role that does not create dependency on robots but also allows them to be placed where they function best. It is true that machines are better at low-skill, repetitive jobs, and finding use for them in these places is not a bad thing because everyone benefits from greater efficiency.

However, allowing machines to replace our everyday interactions, as we have already done through mediums like Facebook, Snapchat, or Instagram, may be going too far. Intelligent machines may shift our views about the role of humanity, but they should not eliminate our duties altogether. In the face of ever-increasing routinized information processing, our role is to be passionate, personalized, and far from neutral, for pure emotions like empathy and love cannot be mimicked on a screen. As we continue to move forward in these coming ages of ever-increasing machine capability, it is crucial that we hold on to the emotive, communicative piece of ourselves that will always be able to embody what it means to be human better than a robot.

Richard's Essay

Now compare and contrast Caie's essay with this offering from Richard, another student of mine who, in an early draft of his essay, is still struggling to find his voice, particularly when it comes to providing concrete details.

Note: It's often just as valuable to analyze what went wrong with an essay as it is to applaud what went right!

Intelligent Machines

In this growing technological age, the use of machines has changed the way we as humans interact with each other. Before the women's rights movement, housewives were bound to their duties of cleaning the house. But with the innovation of household appliances, women were able to spend more time thinking about the status quo of their rights and pushed themselves to gain the unimaginable before their time: the right to vote. With the increased efficiency of intelligent machines comes the price of losing the vital connections between individuals. I personally support the efficiency that intelligent machines can provide us with and believe machines and humans can work together.

Efficiency of machines frees up the time for humans to think of innovative ways to progress humanity. Without the constant burden of working to support a family, humans have more time to think of ways to socially advance themselves. It also gives humans leverage to demand change without the risk of losing the means to feed their family. Ultimately, without the creation of machines, humanity would lack the time to push for progress.

That being said, I do not believe that machines should take away personal interactions. Human interactions should not be replaced by machine services. Looking back on the history of humanity, groups were instinctively formed to create bonds to survive. Therefore, it is not in humanity's best interest to have machines replace the connections that have caused for our success as a species.

In order to bring about progress, humans must find the balance between the efficiency of machines and the essential human connections that need to be preserved. In the case of whether education should become more technologically based, I disagree because it is vital that young students interact with each other. Since their minds are developing, interactions are critical to wiring their brains to be able to work with people. This skill can help them in the future to push themselves to come together to create a better tomorrow. It is not that we need to take out machines; we must find the balance that will make us successful in the present and future.

The development of intelligent machines speaks to humans astonishing ability to think and improve our lives. It is our job now to adapt the role machines play in our lives to progress humanity toward a future of endless possibilities while maintaining our own humanity.

Several problems should be apparent to you at once in this essay. Let's break the writing down paragraph by paragraph.

First of all, the introductory paragraph is "fuzzy"; which is to say it lacks clarity, cohesion and contrasts. The writer rambles on about women's rights, housework, the status quo and the right to vote. What these topics have to do with intelligent machines is not specifically clear. Richard unwisely addresses the prompt with abstractions that skirt the topic rather than illuminate it.

When he finally gets to the meat of the matter — the contrasts explicit in the prompt — he offers a fairly bland summary:

With the increased efficiency of intelligent machines comes the price of losing the vital connections between individuals.

Compare this with Caie's introduction, where the contrasting aspects of the prompt are clearly delineated:

Today's reality, however, may lie somewhere between the two extremes: neither fearing these intelligent machines nor praising them unconditionally paints a clear picture of how they should be viewed.

To make matters worse, Richard turns the focus on himself in the last sentence of the paragraph, saying:

I personally support the efficiency that intelligent machines can provide us with and believe machines and humans can work together.

Well, truth be told, the ACT readers don't really care what he *believes* unless he can buttress his belief with concrete examples that relate directly to the prompt. Vague personal pronouncements won't cut it.

Compare the end of Richards intro paragraph to the final sentence of Caie's introduction, where she says:

> Instead, we must acknowledge the labor saving uses of machines while we also realize that their presence can damage our ability to communicate with each other.

Using "we", as Caie does, rather than "I", as Richard does, draws the reader into the writing and implies that the writer will take an objective — rather than subjective — stand on the issues.

ACT readers are looking for analysis of the prompt and support for positions taken, *not* personal opinions!

In the next paragraph, Richard mentions that:

> Efficiency of machines frees up the time for humans to think of innovative ways to progress humanity.

What's missing here are concrete details, specific examples that demonstrate HOW machines free up time for humans to become more innovative.

Caie, in contrast, fills her second paragraph with interesting details like these:

> Computers are now able to pick stocks, diagnose disease, and even grant parole based on analysis of the law . . . we have the technology do work for us – if Google can create a car that drives safer than humans, if programmers can create a Consumer Price Index . . .

And so on. For good writers, the devil is in the details, details, details.

In the third paragraph, Richard starts to make progress: he introduces a concession to the prompt — an essential part of every ACT essay — but follows that with a series of bland pronouncements, writing:

> That being said, I do not believe that machines should take away personal interactions. Human interactions should not be replaced by machine services. Looking back on the history of humanity, groups were instinctively formed to create bonds to survive. Therefore, it is not in humanity's best interest to have machines replace the connections that have caused for our success as a species.

Finally, his conclusion is weak since it doesn't summarize the contrasts of the prompt or the perspectives provided. Compare it to Caie's essay where major points are recapped, new details are provided and an inspiring conclusion is broached.

Not to pile on but one final point: Richard's overall word count is low, barely reaching 400 words. Top-scoring ACT essays clock in at 450 or more words.

Last Word

On some level, of course, it's not fair to directly compare a world-class essay with one less accomplished. Still, showing how it should be done can help illuminate how it could be done for students struggling to improve their prose.

To paraphrase the great Spanish philosopher, Santayana: "Those who don't understand their mistakes are forever forced to repeat them."

With this in mind, then, let's recap the main mistakes in Richard's essay:

1. A rambling unfocused introductory paragraph that fails to parse the prompt and isolate the contrast

2. A subjective, rather than objective, analysis of the topic

3. A tendency to write in bland abstract pronouncements

4. A lack of concrete supporting detail throughout the essay

5. A weak conclusion that fails to summarize the perspectives provided and the contrasting points of view

6. An essay deficient in word count

What's Next

After you've written an essay, it helps to know how to score it. In the next chapter we'll delve into the rubric (rules) that ACT readers are expected to apply when scoring essays. I'll also give my take on the rubric in order to bring it down to earth.