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Source: *BYU Studies Quarterly*, Vol. 23, No. 4 (1983), pp. 497-501.

Published by: BYU Studies

Abstract: No abstract available.



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Watermelons, Alma 32, and the Experimental Method

Joseph Thomas Hepworth

It was a warm, beautiful morning in the early spring as I stood surveying my burgeoning garden with a peaceful, calm contentment. A fortnight ago I had planted our “southeast acre,” and on every morning since I’ve sat under the date-palm tree to watch the first rays of sunlight warm the furrows and reveal traces of green stretching toward the warmth through the dark brown soil. I could clearly discern the corn, squash, peas, beans, and cucumbers. It looked like a promising crop.

As I stood imagining the fresh vegetable dinners we would enjoy later in the summer, I could almost taste the succulent squash and crispy cucumbers. I even pictured myself reaching for a toothpick to dislodge the ubiquitous remains from buttery corn-on-the-cob prior to dessert. The cakes, cookies, and candies of the winter months would of necessity have to give way to the fresh fruits of summer, especially to an ice-cold slice of sweet red watermelon.

Watermelon? The thought roused me from my reverie. Again I inspected the now sun-drenched garden plot: corn, squash, peas, beans, cucumbers . . . but *no* watermelon. That couldn’t be! The one crop for which I would sacrifice all others hadn’t come. It was still early spring and I was determined to have watermelon this year, so a few hours later I was hunched over in the heat of the day replanting two rows with a new package of watermelon seeds.

Perhaps it’s the humbling experience of bowing oneself close to the earth, or perhaps it’s the actual planting of a seed, that inevitably turns my thoughts to Alma’s discourse on faith in which he compares the process of exercising faith with the planting of a seed. Here I was, planting watermelon seeds for the second time this year. The two previous years I also planted watermelon seeds, but I have yet to taste

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the fruit of this labor. Why was I planting again? Hadn't I tried my "watermelon experiment" three times before, each time finding that "it groweth not"? Surely this should be sufficient evidence that the watermelon seed "is not good" and therefore should be "cast away." Why am I so persistent with my watermelon experiments?

Reflecting on the words of the prophets which Alma likened unto seeds which should be nourished and cultivated by faith, I wondered how many times I would be willing to repeat gospel living experiments? Four? Three? Maybe two? I have tried genealogy, daily scripture study, cleaning up the yard, and sundry other commandments, more often than not half-heartedly, only to conclude after my first feeble attempts that these "words" were not good and immediately cast them away. Why was I so much more persistent in my physical experiments than in my spiritual experiments? Again my thoughts turned toward watermelons.

My father always has a beautiful garden and exquisite watermelons. It's a treat to take the boys over to Grandpa and Grandma's to have watermelon. And other people around the valley are successful in growing watermelons; there are always plenty of watermelons at the store. I have seen and tasted the fruits of their labor: watermelon seeds *do* germinate, grow, and produce watermelons.

Wanting a successful garden this year, my wife and I had started weeding our plot very early and then worked in bag after bag of manure, mulch, and even chemical fertilizers. We had designed the furrows strategically a week before we planted. Everything was going to be perfect, but still the watermelon did not come up, and here I was planting more watermelon seeds while my thoughts vacillated between the planting and Alma 32.

As I was growing up, and I still consider myself to be in that process, I was constantly plagued by thoughts of Alma's experiment. How long do you nourish the seed before you conclude that it is not good and cast it out? What if I tried this experiment on the doctrines of the Mormon church but didn't feel the "swelling motions"? Would that be evidence that the Church was not true? No one gave me a specific answer as to how long one should "nourish the seed," and it is well that they shouldn't. Germination time undoubtedly varies with the type of seed planted, the type of soil, and other ambient conditions. From this analysis I have concluded not only that the time we allow for the "swelling motions" to occur will differ from principle to principle (and from individual to individual) but also that the experiment must be done "word by word" rather than on all the words collectively. I seriously doubt that one can experiment

on the Mormon church as a whole, or on any other church for that matter. We progress step-by-step, each step strengthening our faith in the Church as a whole. Initially we might think we are experimenting on the whole Church, but upon closer examination we see that at different stages the “whole Church” consists primarily of the Word of Wisdom or tithing or genealogy. These are the parts or single units we join together to form our testimony. I now can better accept the relativity involved in this experiment and the necessity of proceeding “line-upon-line” rather than expecting a fulness at first.

I soon learned that merely expressing my second question precluded the possibility of my ever performing a satisfactory experiment. The question “What if I don’t feel the ‘swelling motions?’” means that I doubt, or, in other words, that I am already casting the seed out by unbelief. Alma 32 has its own “Catch 22.” If the seed were a “Latter-day Saint seed” and I failed to feel the “swelling motions,” it would be because: (1) I had cast it out by unbelief, (2) I had resisted the Spirit of the Lord, or (3) some variant of the first two; for example, perhaps I had not had adequate preparation or I lacked sincerity. And the solution was always the same: to try again, but this time with more fasting, prayer, and scripture study. I was puzzled: why should anyone experiment at all if it really weren’t an experiment to see if a principle were true or false, but an experiment to be repeated until it was shown to be true?

My spiritual “Catch 22” seems to be very similar to my physical watermelons. The same principle of repeated experimentation which I found so problematic in spiritual matters, I was actually applying in my physical gardening. What was the difference? After planting the last of my watermelon seeds, I stepped back to commence watering, and I saw my garden from a different perspective. Could it be that I had been viewing “spiritual experimentation” from a microperspective whereas I had been viewing “physical experimentation” from a macroperspective? In my spiritual questions and experiments, I was trying to test the verity of principles or the goodness of seeds based solely on my own experience—“How long should I try?” or “What if I didn’t feel swelling motions?” I was neglecting the research prerequisite to experimentation. I hadn’t reviewed the “spiritual journals.” If I had taken this microperspective concerning my watermelon, I probably would not have planted again this year. But I relied on the experience of others. I took a macroperspective: I saw others producing watermelons. I knew they could be grown if conditions were right. Reviewing the spiritual literature more thoroughly, or looking at my father’s crops of “genealogy, scripture

study, and a well-maintained home'' should have convinced me that these crops can be produced just as surely as watermelons can. Seeing the fruits of the gospel around us abundantly, we should be determined to repeat the experiment, making sure all the conditions are right, until we get the desired results.

But is this experiment really a true experiment in the scientific sense? What happens when researchers perform an experiment and the results do not support the theory they are testing? Is that theory discarded? What are some parallels between testing a scientific theory and testing a spiritual principle through the experimental method?

First of all, not all scientific theories are of equal status. Some theories have been around for a long time and have received much experimental support. Some have received so much empirical support that we do not even consider them as theories but have elevated them to the level of "facts" or "laws." Other theories are relatively new or the evidence supporting them is very tentative. Given exactly the same results from two experiments, one testing a well-established theory and one testing a new theory, a person might draw very different conclusions about the two experiments. Let's assume these two experiments were done, and the results of each suggest that its theory is false. In the case of the new theory we might very well accept these results and discard the theory in favor of another, or at least modify the theory to accommodate our findings. But what would we do with the well-established theory? Would we want to discard it or make major modifications in it because of this one experiment? Probably not. A more likely course of action would be to examine the experiment itself for flaws. Were the theoretical constructs properly implemented? Were the measuring instruments accurate and reliable? Were all the conditions properly controlled? Many factors could vitiate an experiment.

We can apply this same logic to testing spiritual principles experimentally. Assume that we are testing a spiritual principle that is well supported—for example, tithing. (Remember that we will need to do our spiritual literature review to determine which principles are or are not well supported.) If we try living that law and see no apparent benefit, do we conclude that tithing is not a good or true principle? Perhaps we didn't implement it properly: Was our tithe 5% or 10%? Perhaps our measuring instruments were not accurate or even appropriate: Were we just measuring the results by looking at our checkbook balances? What about blessings of health and safety? The question of proper control is always important, too. Suppose we started living the law of tithing but at the same time started breaking

the Word of Wisdom or violating the Sabbath day. The results could not be clearly attributed to any one of these factors. Since our lives are not controlled laboratories, introspection and good record keeping are necessary to determine cause and effect. As spiritual scientists, we must take as much care in our experimentation as do the physical scientists.

This leads me to one last point concerning the experimental method. Many scientists I know shun religion because they feel its principles, theories, and tenets cannot be demonstrated scientifically. By this they often mean that the results from spiritual experiments cannot be replicated, and replication is vital to the advancement of science. On this point I would disagree with my colleagues. I believe that the results of a spiritual experiment are just as easily replicated as the results of a physical experiment. The experimental procedures are spelled out in the scriptures; we need only do our homework and apply the proper controls to see the results replicated. The spiritual experiment is neither easier nor harder to conduct than the physical experiment. Our scientists have spent many years being trained to perform their physical experiments. We should not expect commensurate results with spiritual experiments without paying a comparable price.

As I gaze out over my garden with the shadows lengthening after a good day's work, I wonder if these newly planted watermelon seeds will germinate, grow, and produce our summer dessert. Yes, I still wonder and I still doubt; I still read Alma 32 with tinctures of a "Catch 22," and my experimentation in both the physical and spiritual realms still continues. New plans incorporating different forms of cultivation, irrigation, and fertilization are already being developed. Having tasted watermelon, I will plant again until I harvest the fruit myself.