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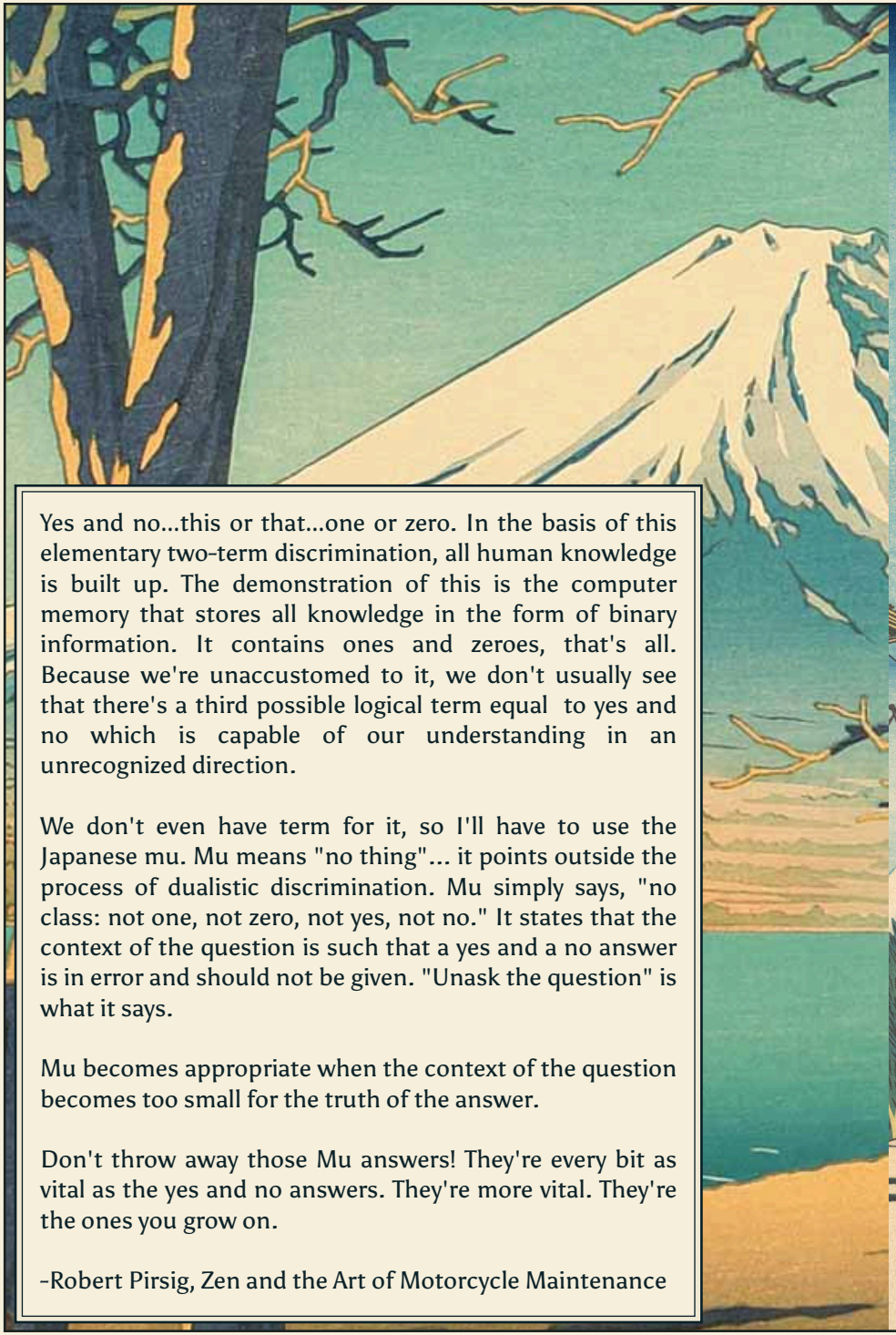
un-asking questions

machinae ex deo - 2024 issue 4



Yes and no...this or that...one or zero. In the basis of this elementary two-term discrimination, all human knowledge is built up. The demonstration of this is the computer memory that stores all knowledge in the form of binary information. It contains ones and zeroes, that's all. Because we're unaccustomed to it, we don't usually see that there's a third possible logical term equal to yes and no which is capable of our understanding in an unrecognized direction.

We don't even have term for it, so I'll have to use the Japanese mu. Mu means "no thing"... it points outside the process of dualistic discrimination. Mu simply says, "no class: not one, not zero, not yes, not no." It states that the context of the question is such that a yes and a no answer is in error and should not be given. "Unask the question" is what it says.

Mu becomes appropriate when the context of the question becomes too small for the truth of the answer.

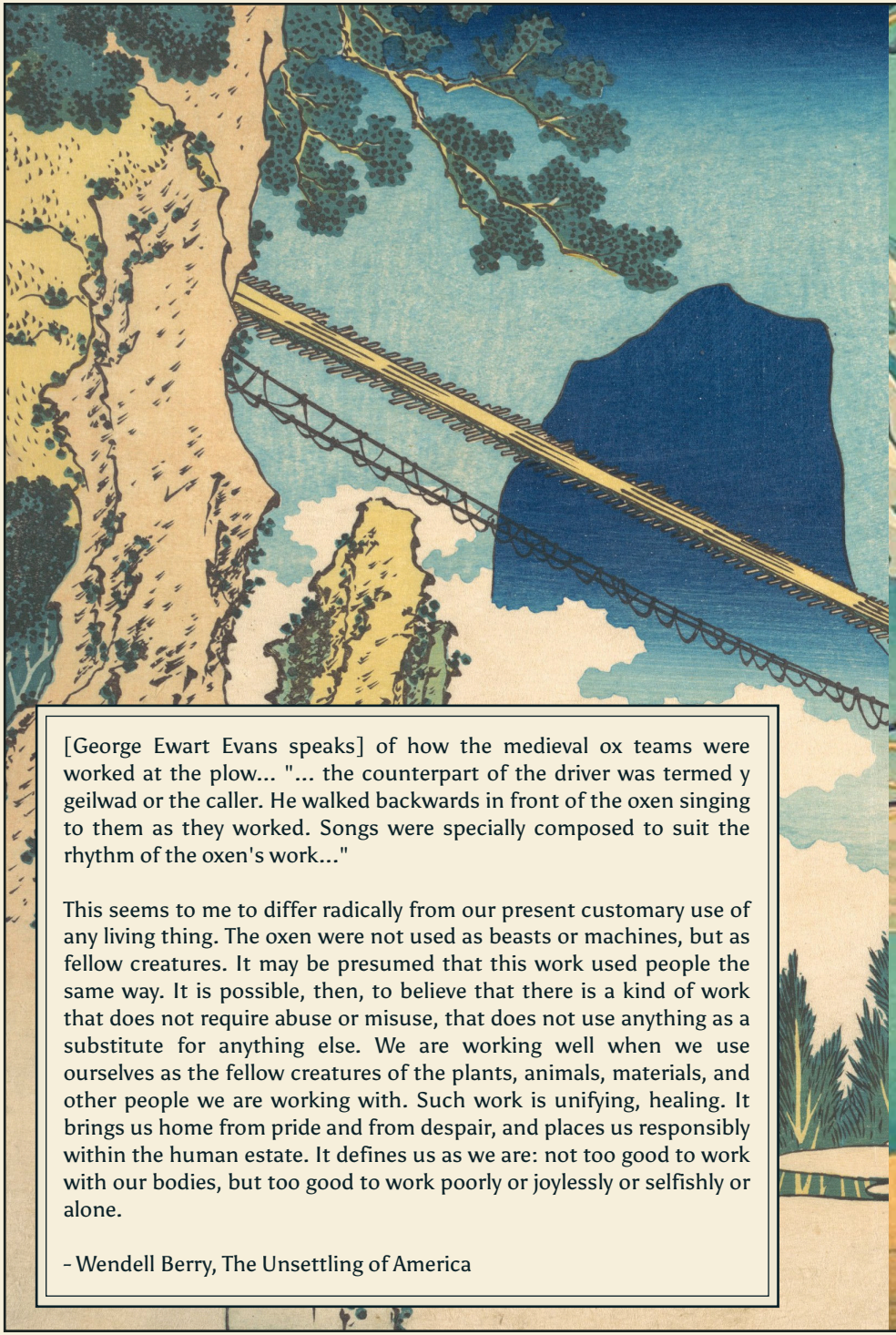
Don't throw away those Mu answers! They're every bit as vital as the yes and no answers. They're more vital. They're the ones you grow on.

-Robert Pirsig, Zen and the Art of Motorcycle Maintenance

How do we avoid over-using the land, machines, animals, employees, or even ourselves? Perhaps such questions are really not about over-use, but mis-use.

We ought not to be looking for less use, but looking for how we can use things in accordance with their natures. This sort of use will come from knowing a thing not for a few attributes, but from knowing a thing very deeply. Such knowledge will cease to be reductive, it will not treat oxen as tractors or worse. It will not treat fellow men as machines that simply have more complicated fuel and storage needs. It will not treat the land as dimension.

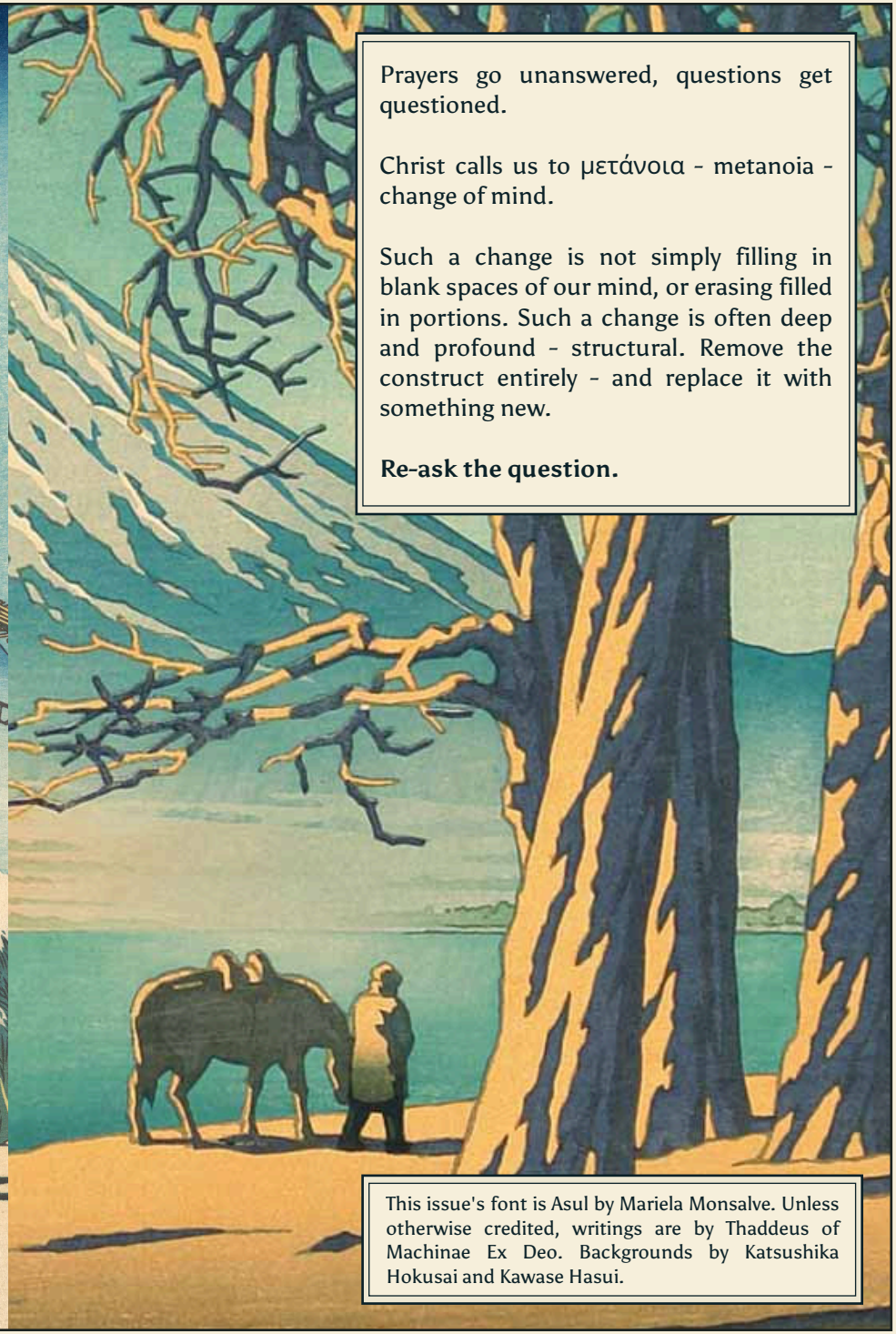
Any slavery is too much - any ab-use is too great. But work is not slavery, and stress is not abuse. How pleasant it is for the carpenter to build! How exalted is the land that brings forth fruit! How delighted is the dog who herds! Let us seek not a world freed from work, but freed **to** work to the fullest.



[George Ewart Evans speaks] of how the medieval ox teams were worked at the plow... "... the counterpart of the driver was termed y geilwad or the caller. He walked backwards in front of the oxen singing to them as they worked. Songs were specially composed to suit the rhythm of the oxen's work..."

This seems to me to differ radically from our present customary use of any living thing. The oxen were not used as beasts or machines, but as fellow creatures. It may be presumed that this work used people the same way. It is possible, then, to believe that there is a kind of work that does not require abuse or misuse, that does not use anything as a substitute for anything else. We are working well when we use ourselves as the fellow creatures of the plants, animals, materials, and other people we are working with. Such work is unifying, healing. It brings us home from pride and from despair, and places us responsibly within the human estate. It defines us as we are: not too good to work with our bodies, but too good to work poorly or joylessly or selfishly or alone.

- Wendell Berry, The Unsettling of America



Prayers go unanswered, questions get questioned.

Christ calls us to μετάνοια - metanoia - change of mind.

Such a change is not simply filling in blank spaces of our mind, or erasing filled in portions. Such a change is often deep and profound - structural. Remove the construct entirely - and replace it with something new.

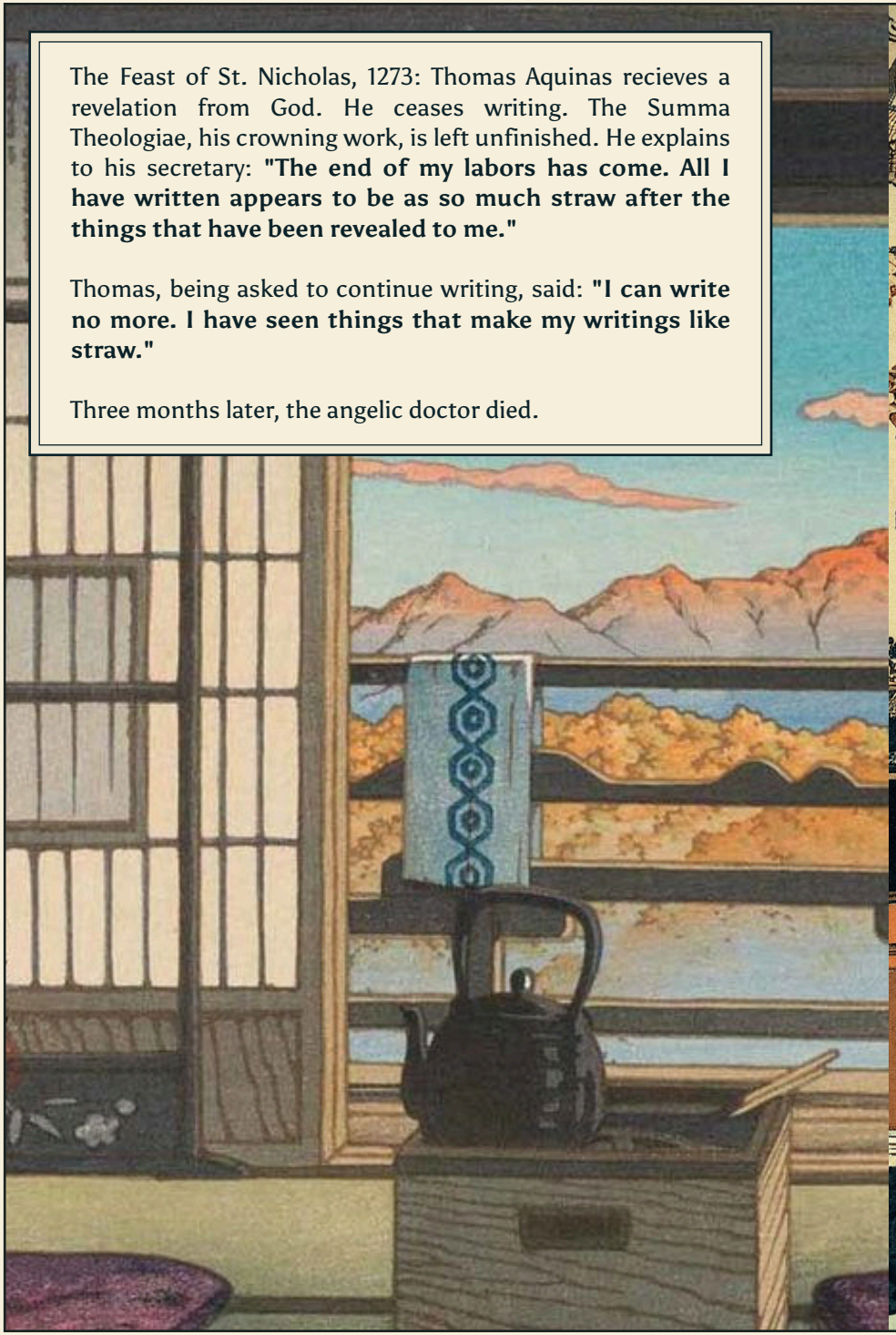
Re-ask the question.

This issue's font is Asul by Mariela Monsalve. Unless otherwise credited, writings are by Thaddeus of Machinae Ex Deo. Backgrounds by Katsushika Hokusai and Kawase Hasui.

The Feast of St. Nicholas, 1273: Thomas Aquinas recieves a revelation from God. He ceases writing. The Summa Theologiae, his crowning work, is left unfinished. He explains to his secretary: **"The end of my labors has come. All I have written appears to be as so much straw after the things that have been revealed to me."**

Thomas, being asked to continue writing, said: **"I can write no more. I have seen things that make my writings like straw."**

Three months later, the angelic doctor died.



The modern advancements have their merits. Some technologies help us do more with less. Some help us to use our bodies better with ergonomics. Others improve safety, reducing risk of life and limb. What we need is not to go back, but to look back, with bias neither towards the present nor the past when deciding how to act in the future.

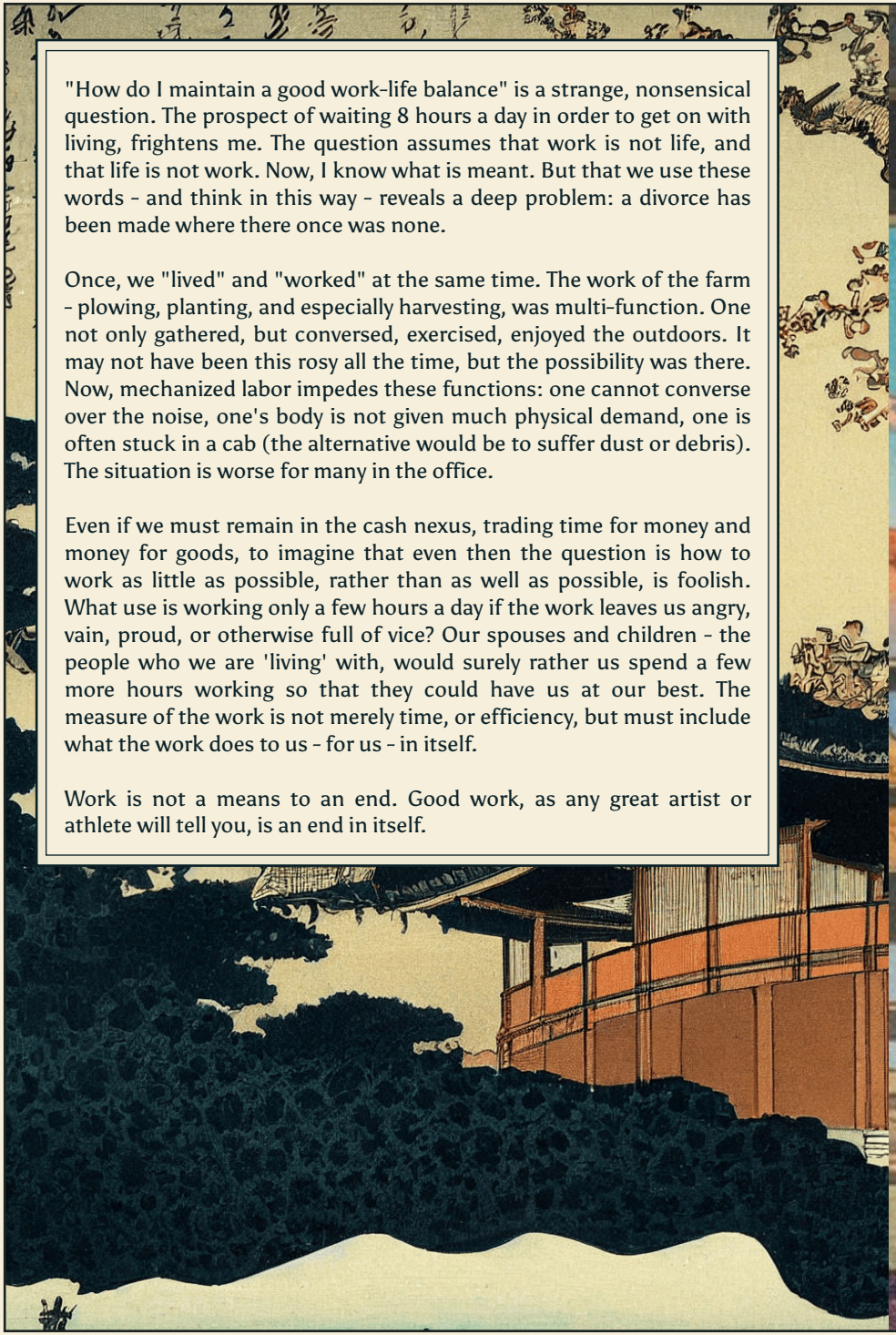
What techniques and tools are truly most fitting for the people and kingdom of God?

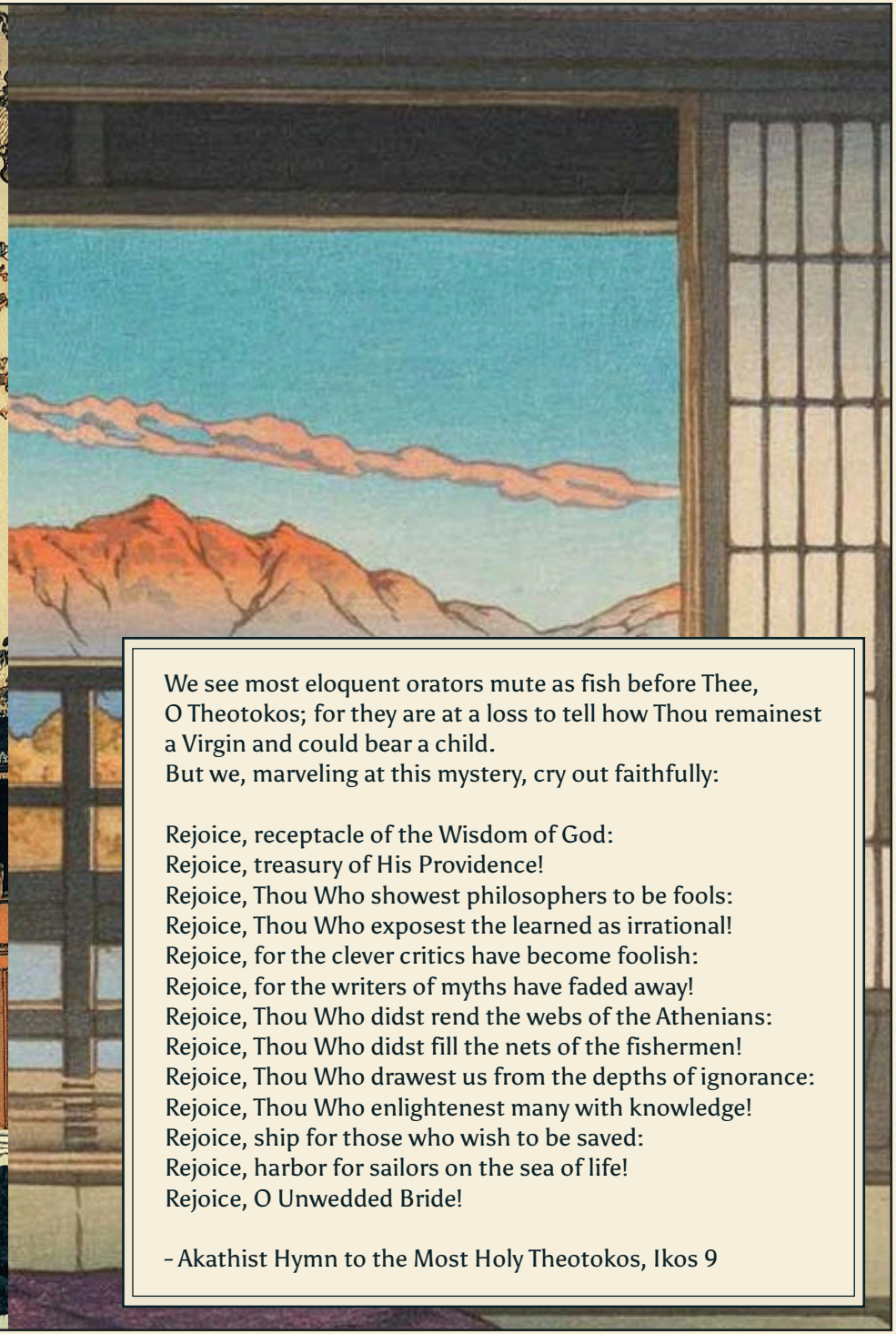
"How do I maintain a good work-life balance" is a strange, nonsensical question. The prospect of waiting 8 hours a day in order to get on with living, frightens me. The question assumes that work is not life, and that life is not work. Now, I know what is meant. But that we use these words - and think in this way - reveals a deep problem: a divorce has been made where there once was none.

Once, we "lived" and "worked" at the same time. The work of the farm - plowing, planting, and especially harvesting, was multi-function. One not only gathered, but conversed, exercised, enjoyed the outdoors. It may not have been this rosy all the time, but the possibility was there. Now, mechanized labor impedes these functions: one cannot converse over the noise, one's body is not given much physical demand, one is often stuck in a cab (the alternative would be to suffer dust or debris). The situation is worse for many in the office.

Even if we must remain in the cash nexus, trading time for money and money for goods, to imagine that even then the question is how to work as little as possible, rather than as well as possible, is foolish. What use is working only a few hours a day if the work leaves us angry, vain, proud, or otherwise full of vice? Our spouses and children - the people who we are 'living' with, would surely rather us spend a few more hours working so that they could have us at our best. The measure of the work is not merely time, or efficiency, but must include what the work does to us - for us - in itself.

Work is not a means to an end. Good work, as any great artist or athlete will tell you, is an end in itself.

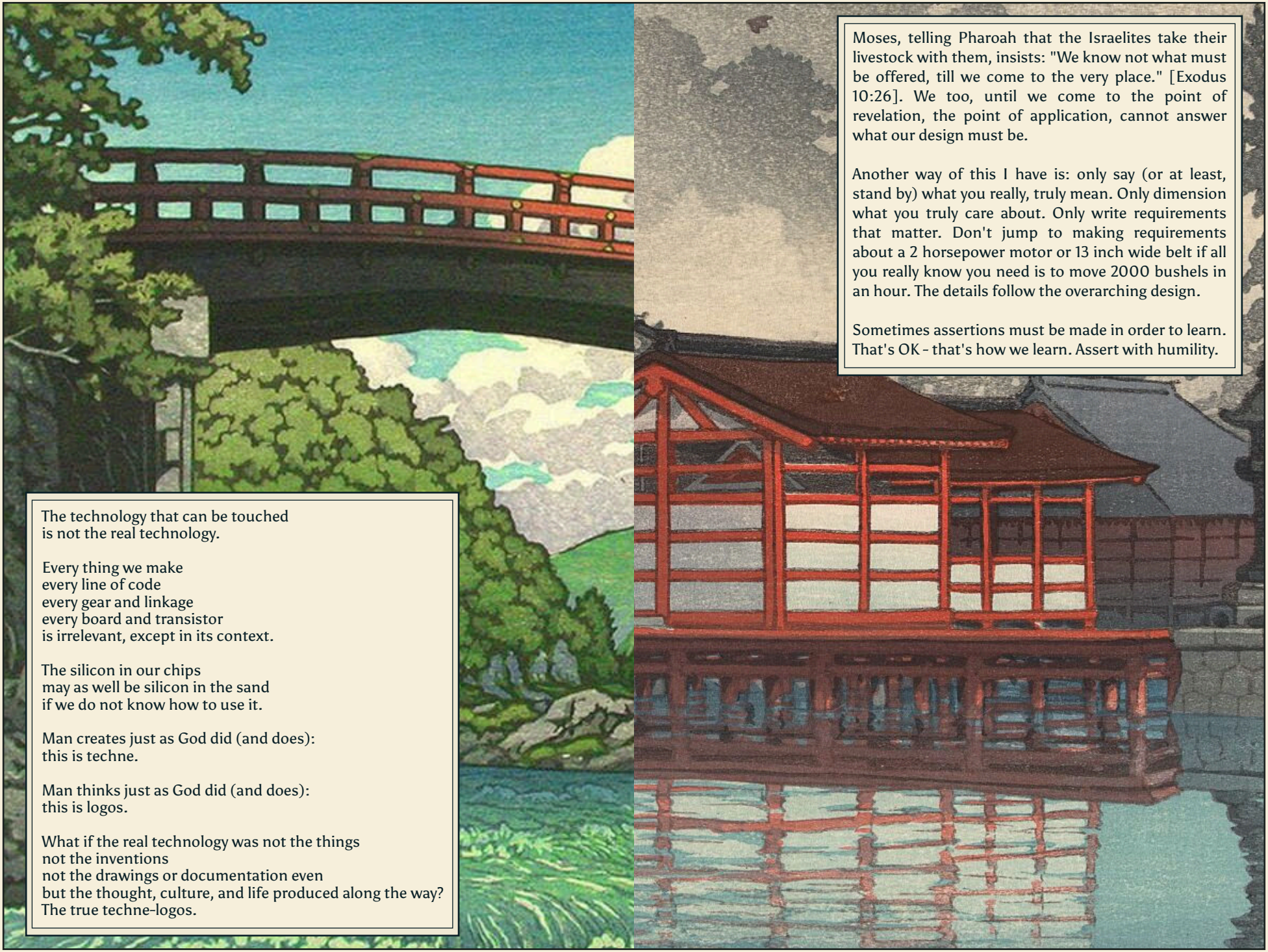




We see most eloquent orators mute as fish before Thee,
O Theotokos; for they are at a loss to tell how Thou remainest a Virgin and could bear a child.
But we, marveling at this mystery, cry out faithfully:

Rejoice, receptacle of the Wisdom of God:
Rejoice, treasury of His Providence!
Rejoice, Thou Who showest philosophers to be fools:
Rejoice, Thou Who exposest the learned as irrational!
Rejoice, for the clever critics have become foolish:
Rejoice, for the writers of myths have faded away!
Rejoice, Thou Who didst rend the webs of the Athenians:
Rejoice, Thou Who didst fill the nets of the fishermen!
Rejoice, Thou Who drawest us from the depths of ignorance:
Rejoice, Thou Who enlightenest many with knowledge!
Rejoice, ship for those who wish to be saved:
Rejoice, harbor for sailors on the sea of life!
Rejoice, O Unwedded Bride!

- Akathist Hymn to the Most Holy Theotokos, Ikos 9



The technology that can be touched
is not the real technology.

Every thing we make
every line of code
every gear and linkage
every board and transistor
is irrelevant, except in its context.

The silicon in our chips
may as well be silicon in the sand
if we do not know how to use it.

Man creates just as God did (and does):
this is techne.

Man thinks just as God did (and does):
this is logos.

What if the real technology was not the things
not the inventions
not the drawings or documentation even
but the thought, culture, and life produced along the way?
The true techne-logos.

Moses, telling Pharoah that the Israelites take their livestock with them, insists: "We know not what must be offered, till we come to the very place." [Exodus 10:26]. We too, until we come to the point of revelation, the point of application, cannot answer what our design must be.

Another way of this I have is: only say (or at least, stand by) what you really, truly mean. Only dimension what you truly care about. Only write requirements that matter. Don't jump to making requirements about a 2 horsepower motor or 13 inch wide belt if all you really know you need is to move 2000 bushels in an hour. The details follow the overarching design.

Sometimes assertions must be made in order to learn. That's OK - that's how we learn. Assert with humility.

This principle of not-yes, not-no may serve us well in how we approach design, especially in the early stages. We should not pretend to know the answers.

"Let the ambiguity in your design communicate the ambiguity in your thought," says Mark of Full Stack Theology.

Our culture - especially commercial culture - abhors uncertainty. The cult of professionalism insists either to find "the right thing", or to fake-it-til-you-make-it. If the answer is unclear, unknown, or even unknowable, these approaches are an affront to humility.

To come forth and say: "I do not fully comprehend the end purpose", is bold and admirable.

As a child,
I was fascinated by technology
and in particular by programming
(the task and culture, that is)
because it was thinking about thinking.

The transhumanists see
something transcendent in technology
something that reaches beyond its origin
(they do forget that such things can reach down, too)
and if they mean what I mean
that technology is not the material things
but technology resides squarely in the mind of man
then of course:
technology is transcendent.

But if they mean that the machines will replace us
in the task of fulfilling the world's purpose
they are sorely mistaken.

Man cannot live on bread alone
but on every word that comes from God.

Machine cannot live on electricity alone
but on every word that comes from Man.

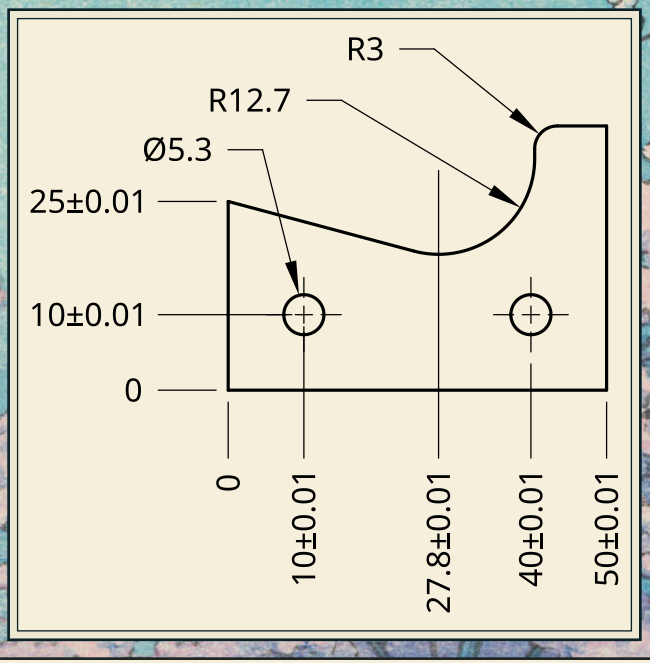
The technology that can be touched
is not the real technology.

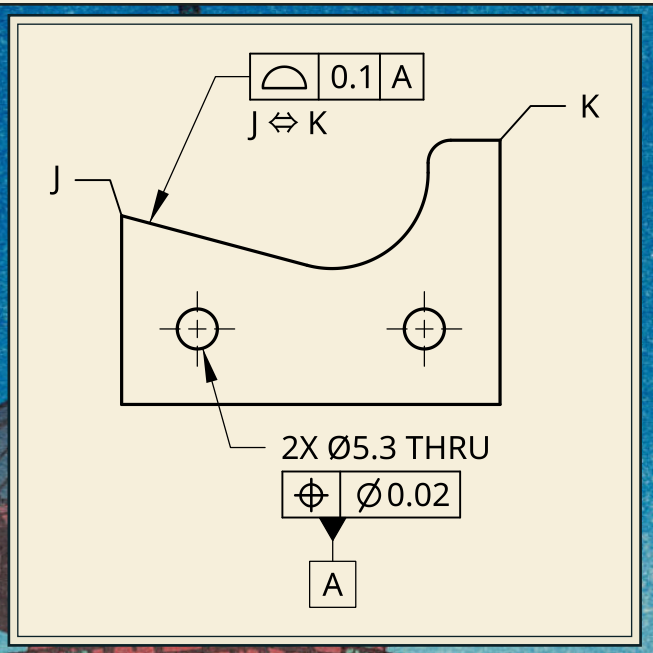
I love Geometric Design and Tolerancing. It's such a beautiful metanoia above linear dimensioning schemes. It thinks about things in a fundamentally different way.

But most people hate it. And so most people want to use it like linear dimensioning schemes: just another way to prescribe dimensions that the boss-man says we need to do. But GD&T does not answer the same question that linear dimensioning does - or at least, it answers questions higher than linear dimensioning does. Take for example these two drawings of the same parts meant to fit together. On the left, the part is drawn linearly. On the right, with GD&T callouts.

The left is pretty easy to understand at first sight. But once we get into tolerancing - it becomes rigid and tyrranical, and even though it is verbose, it is ultimately less helpful in determining how accurate one must be. The advent of computerized machining further reduces the need for this verbosity.

Many designers make drawings out of necessity to get parts made - but forget what they are doing, and why they are doing it. They ask questions about "how precise does this need to be?", without asking the more important questions such as: "In what way does this need to be precise? What does this need to be precise relative to?"





A drawing in this fashion, using GD&T, not only increases readability, but conveys a very different message. This drawing better conveys the relationship between parts. It is useful to make the part, and readily tied back and checked by the part's function in the larger system.

The holes are called out as a pattern - already, they have a relationship to themselves, and are dimensioned accordingly (with a 0.02 tolerance zone). These holes are then deemed to be datum A.

The top surface (from J to K) is dimensioned not with particularities, but as a zone. This zone is 0.1 in width, and is not with respect to some arbitrary surface, but with respect to the mounting holes (datum A). Now it is clear to see what sort of precision is required to make this surface - and that precision is in relationship to something that matters.