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Jesscia: Welcome to Tangible: Theology Learned and Lived.
We're exploring the ways in which theology permeates all aspects of life.
Through conversations with faculty at Concordia Seminary St. Louis, we will challenge you to deepen your theology and live out your faith in Christ.
I'm your producer and host, Jessica Bordeleau.
I'll talk with a variety of professors on a variety of topics, something different every episode, but all pointing to the intersection of faith and daily life, because it's Tangible: Theology Learned and Lived.
Today we're talking about technology and the church.
That's the theme of this year's Theological Symposium here at Concordia Seminary.
One of the plenary speakers who is in town for the symposium is Dr. Bernard Bull.
Dr. Bull is the president at Concordia University, Nebraska.
As a professor, author, speaker and academic administrator, he's had an ongoing interest and expertise in educational technology.
That's the area in which he earned his doctorate.
Dr. Bull, welcome to the show.

Bernard: Thanks.
Good to be here.

Jesscia: Our other guest is Dr. David Maxwell.
He is a professor of systematic theology here at Concordia Seminary, St. Louis.
You've heard him on previous episodes, including artificial intelligence and the church.
He is also one of our plenary speakers at the symposium and his presentation is titled AI and the Soul.
Dr. Maxwell, welcome back to the show.

David: Thanks, Jessica.
It's good to be here.

Jesscia:
I want to know more about how technology has influenced the church, past, present and future.
So here's your opening question.
Which two forms of technology have had the greatest influence on the church in the past and you can't say the printing press?
That's too easy.
Dr. Bull, you get to go first.

Bernard: We could go so many different directions on this one.

Well, maybe even before I answer the question, I should explain how I think of a technology, the definition that I use.
So I often just use a very broad concept.
So bodies of knowledge that are used and applied for a variety of purposes.
Some talk about technology just in terms of solving problems, but I don't actually use that definition because a lot of technology today is not necessarily being used to solve a problem as much as to pursue a possibility or to explore something.
So I tend to think of technology in terms of applied systematic knowledge, but also just making use of resources around us.
With that really long kind of introduction, or at least with that caveat of definition,

The first technology that I think of when I look into the scriptures is a technology that God introduced, which is clothing.
So we know that takes us all the way back to the Genesis account of sin entering the world and we have this example of God creating these clothing so that they won't be naked.
But it's really interesting to think about how the introduction of the technology of clothing has emerged and developed throughout history.
Think about even the role of clothing within the church.

We have all these Old Testament examples of how clothing was used to symbolize or represent different things in the contemporary church.
We have vestments and other forms of clothing.
In fact, start this conversation with a group of people.
Ask them about the origin of the clerical collar.
It's fascinating because people will give you some possible answers, but it's much harder to actually track a single source of where the clerical collar emerged with any kind of definitive confidence.
So I will say, not that that's necessarily one that had the biggest impact, but I describe it because it's the first example of a technology that we have in the scripture.
And it shows us how a technology sort of develops over time.
And especially when we take our sinful nature and combine it with a technology, even one that was granted by God, and how we can misuse and abuse that and how it takes on many and varied forms.

Jesscia: David, what about you?

David: Well, I would actually say writing would be one.
And I don't mean the printing press.
I mean writing, because you don't have Holy Scriptures if you don't have writing.
Old Testament scriptures are written on scrolls.
Actually the New Testament represents a technological advance too, because then you get the codex form.
So Christians don't tend to have scrolls, they have books.
And so that's a technological change as well, although probably not quite as significant as writing itself.

Jesscia: What was the second that you were going to say?

Bernard: Well, writing is a really interesting one to kind of jump off of and continue.
That also is another one where we have an example of God's role in the use of a technology, especially in the Old Testament, right, in terms of the Ten Commandments being provided.
But we have, as the scriptures are being recorded, our understanding, our theology, is this is not just some independent human endeavor, but it's God at work through his people to preserve the truth and ensure that it's proclaimed with truth and integrity.
So I'm intrigued, when we start talking about technologies, especially in the church, I'm

intrigued with the idea of starting with technologies where we know, we have definitive evidence

that God was involved in the use of that technology at some point, at some moment in history.
So I'm drawn to those examples as a starting point.

Jesscia: Are there any other ones?

Bernard: Well, we have plenty.
I mean, if we go through the scriptures, you could have dozens and dozens of examples of

technologies.
We have the, you go back to the Old Testament, we have containers that are used.
We have the Ark of the Covenant.
We have Moses that's using a staff.
We have, you just go through the scriptures and it's full of instances of knowledge and resources being combined for some kind of purpose.

Jesscia: What about you, Dr. Maxwell?

David: Well, I don't know if this is the church in particular, but since we're on the topic of technology in the Bible, one thing that fascinates me about it is there are also examples of technology that's clearly negative in the Bible.

And so for example, you know, after you have Cain and Abel, then you have the descendants of Cain and they're responsible for things like metalworking and even building musical instruments and stuff like this.
So there's at least a suggestion that all this is coming from Cain.
So you wonder, is that a criticism of it or how do you take that?
You have the Tower of Babel.
That's obviously a negative use of technology where you're using it to try to kind of replace God.
We want to live where God lives, you know, up in the sky.
But on the other hand, if you think about the book Revelation, you have the streets of gold.
Well, now metalworking seems to be okay, right?
I mean, so the Bible itself is very interesting in how it portrays different technologies.
And I don't quite know what to do with all of that, but it just strikes me.
This is still biblical, but the cross is a piece of technology.
So that would be pretty influential on the Christian church.
I suppose there's all kinds of things if you're thinking about the Roman period, the road system, the ships, I mean, because it enables things like the missionary journeys and things like this.

Bernard: Yeah.
So the road system, there's been a lot written about that, of course, in the way in which the road system became a wonderful gift and resource for communicating the faith in the early church.
But we also have just the form of communication across distance, certainly not to the point of the telephone and the internet and other technologies like we have today and the speed at which messages can travel from one location to another.

But we did already have in the early church with the Roman road system and with the method

of passing messages from one place to another, there was a really ornate system in different in certain parts of the world for getting a message and someone traveling from one place to another, you'd have these couriers or people located in certain places.
So a person would bring the message.
They'd have to take it a certain distance and hand it to the next person whom returned would hand it to the next.
So there was a whole system.
It was kind of like a first generation US postal service, maybe not quite as reliable,

but a system like that.

So we have all sorts of examples like that of kind of maybe we call them societal technology, social technologies, communication technologies that emerged that were a significant part of the gospel proclamation in the early church, the role of ships for sea vessels and other kinds of transportation tools.
All of those were a key part of early church life and the gospel spreading throughout the known world.

David: The postal system was actually faster than you might think it would be.
So there I was doing some work with this sixth century stuff, but apparently it took about a month to get a message from Constantinople to Rome, which is pretty quick.

Bernard: It's faster than the guitar I wanted to have shipped from China recently.

David: The other thing I learned in doing this was at least if you're the emperor, you have access to some kind of federal express system because there was a case where explicitly said he sent a letter to Rome and then he sent a second letter that was designed to get there first because he changed his mind.
So he apparently had a way of doing an express mail in the sixth century.
That was Justinian who did that.

Bernard:

If we think about the call to love God and love your neighbor, there are many, many examples of how the technologies of their day would have been used to help or harm one's neighbor in terms of food distribution, caring for the poor, helping those in need.
The medical technology of the day would have been used to care for people, at least the level of medical knowledge that existed at the time, means of preparing food, all of those kinds of technologies existed.
Again, a way of loving your neighbor and caring for those in need around you.
We have the use of art and visual art and visual media in the early church used quite early as a means of communication and then that continued on keeping in mind that we are a church that grew out of a pre-literate era.
The Monteroia people not capable of reading and those who were didn't necessarily have access to a lot of written literature for much of the history of our church.
And so certainly the use of art in many forms and we see this in the catacombs and in other places, even we always like that story of the symbol of the fish in the sand as a secret sign that you're part of the way.
So I would definitely not limit it to communication technologies.

David: There is at least one incident where medical technology plays a pretty important role.

Jesscia: Within the church?

David: Yeah, because there is this really interesting sociological question of how does the church go from being 2% of the Roman Empire in the third century to being about 60% in the fourth century.
I mean it's just a huge spike in terms of Christian population.
And so you have sociologists like Rodney Stark today who are trying to grapple with how do you explain this, I mean other than it's the Holy Spirit, but I mean how do you explain it from the perspective of sociology.
And he actually has, lists like 10 different reasons, but one of the reasons interestingly is that Christians would, when a plague hit, Christians would tend to stay around and care for the sick people and the pagans would tend to leave the city.
And so the medical, like just doing basic nursing care for people who are suffering

from the plague turns out to improve their chance of survival quite a bit.
They're not going to die of infection as much because you're bathing them and that's going to increase Christian population in two ways.
One is you're going to have more Christians surviving because they're doing this and plus they would take care of the non-Christians who would then of course be favorably disposed to them after they helped them through this whole ordeal.
So that's just one piece of that explanation where medical technology plays a role.
Another and I don't know if this is really technology, but you have a whole system of education in the ancient world and there are some really important church fathers who are highly educated.
So I'm thinking particularly of St. Augustine and Origen.
And so they're kind of at the pinnacle of the educational system and then they able to use that for the benefit of the church.

Bernard: I make the claim, I'm making it right now, that we sometimes, we oftentimes do not understanding
how significant, how significantly a technology has changed a group of people over a period of time.
I can't fully comprehend what it would be like to live in a predominantly oral tradition culture where the spoken word is the dominant means of communication.
I can imagine it, I can study the text, I can read up on it, I can learn about it a lot, but it's pretty hard for me to relate and understand.
But in striving to do so, it helps me to appreciate some really beautiful and valuable parts of our life together in the Christian church.
It helps me understand, for example, why the liturgy has been so valued throughout history and played a role.
The liturgy, if we think about this as even in a pre-literate, pre-written tradition kind of form, many times in the Lutheran churches that we go to, we have the hymnal open, but you didn't have mass produced books for much of the history of Christianity.
And so it's not as if gathering in the divine service, you had some big screen up front with it being printed or handout printouts or anything like that.
That's kind of an oral tradition and it baffles me, for example, why people's memories seem to be so incredible and their capacity to recite and to remember things.
I just can't remember, I don't know my kids' phone numbers today.
It's in my cell phone and I look it up and I don't have that.
So I sometimes think that we underestimate how significant those changes are.
And I think it's a real gift to spend some time just thinking about it, learning from it.
But what the most significant technology for today?
I don't know, we might need to ask people 50 years from now or 100 years from now and they're probably going to have a better answer.

Jesscia: In the last 10 years, which technology has developed that has influenced the church the most?
But it didn't seem like that was long enough.
It seemed like, like you said, like would it have been something 50 years ago that's showing up now?

David: Well, one technology that we probably ought to mention is radio.

Jesscia: Oh, there you go.

David: Because this is actually an anniversary year for KFUO, which is the reason why we're having a technology-themed symposium.

That was the impetus for it.
We wanted to broaden it beyond just radio.
But it's a really interesting case of the Missouri Synod kind of being an early adopter of a new technology and trying to use it in service of the gospel.

Bernard: Yeah, I think that's beautiful.
And actually in the talk that I'll be giving at the symposium I'm at right now is, I go through 10 stories of different technologies in the life of the church historically.
And radio is actually, is one of them for that reason.
And it's a much bigger story than just our church body or just the United States.
It's the role of radio around the world and its use.
And even before, I mean, even at different stages there was, we had things like the school of the air.
This was beyond the life of the church where they would have a radio broadcast from an airplane that would travel around to communicate and provide education.
But we have radio usage in different parts of the world.
And pretty much every continent we can find examples of the use of radio for sharing the gospel by different church bodies.
If I had to pick one that's sort of more recent, I mean, in terms of last hundred years or so, I would also point to the role of recording devices.
So the ability to capture and record the voice and transmit it.
And it goes back more than a hundred years for sort of early technologies.
But that was also pretty significant in the ability to record and to replay something at another time.
I mean, we're having a real time conversation right now, but nobody is hearing it.
They're going to hear an edited and distributed version and they're not going to be in the same room with us.
They're not going to see our body language.
They're not going to see the eye contact we are or are not making.
That Jessica just yawned.
No, I'm just kidding.
That didn't really happen.
But I mean, they're not going to see all that.
And that changes the way that we communicate too over time.
So the technology, we begin to shape ourselves to the technology.
I'm babbling a little bit, but here to follow this.
So in the history of music and the history of music technology, many people don't know this.
But when they first started recording, making audio recordings of music and they would distribute
it, they began to teach performers to sing in ways that were more in line with the record.
So they taught them to kind of restrain their voices a little bit and to try to replicate what the records sounded like.
And then they would promote the records as real world authentic, just like what you would hear on stage.
But they did that by having the people on stage conform themselves to the way that a recording sounds.
Technology is always a Faustian bargain.
It always has plus sides and downsides.

It can be used for ill or it can be used oftentimes for good.
It always tends to have winners and losers.

Some people benefit while other people maybe have more disadvantages as a result of a shifting of power or influence of a technology.
It always seems to have that.
And it always over time changes us in some way.
It has an influence on our behaviors, our actions, how we speak, sometimes even our beliefs and our values over time.
And that's why I like an example of something like audio recordings.
The fact, and it was amazing to me when I first learned that.
I had no idea, but the thought that somehow performers were actually going to be taught and then just do it because they saw other people doing it, taught to sing live in a different way because the technology was leading them to do that.
And we have lots of examples of that today from new and emerging technologies.

David: Well I can sort of relate to that.
So I'm an organist and there have been times when I'm learning this piece and I want to say, well, I'm not sure exactly how to interpret it.
So I go on YouTube and find a couple of examples and just see how other people do it.
And that does have an influence.

Bernard: Yeah.
You could look at just a history of the use of instruments at different times in the history of the church and what role did that play.
Of course we know that the pipe organ wasn't being used in the first century church.

So what we do know that there was an ordom to the divine service as people gathered together, however, likely more acapella kind of singing and the like.
But that'd be a fascinating journey to see how just one strand of musical technology through the history of the church has influenced and shaped what we do today.

Every major technology has an era where there were people that expressed usually legitimate, genuine concerns about the risks and the dangers and how it would change something about their
community together, their life together, about society, something like that.
We have examples.
There's this little account at the beginning of a book, Neil Postman, who wrote a lot of books about technology while he was alive.

And I think it was at the beginning, the introduction to his book, Technopoly, might've been one of his others, I don't know.
Maybe some listener can fact check this.
But he referenced this dialogue called the judgment of themes.

It's this dialogue between this Egyptian dialogue where this person introduces a technology, the technology of writing, and he introduces it to the king.
And the king rejects the technology because he says that this is going to wreak havoc.
This is going to do harm.
It's going to dull people's minds.

Their memories will no longer be as strong as they were before.
And he begins to outline all the harm of this technology called writing.
And he was absolutely right.
It's true.
Those things do happen.
That is a downside of writing.
But there are also some real positives of writing.

And we have examples of that in the Old Testament, examples of where God's word was lost for a time and it was discovered in the scroll.
And so we have God recording the Ten Commandments on the tablets.
So we certainly have examples of where the use of writing can remind us of that which we've forgotten and point us back to the truth that God wants us to rest and reside in.

Jesscia: Now, Dr. Maxwell, you've done some neural networking with AI, kind of dabbling with it at home, and you are speaking at the symposium about AI and the human soul.
Now there's a lot of fear about AI.
Do you think that that will be a technology used by the church for positive in the future?

David: I think the place we're at with AI, it's too soon to tell what's going to happen.
I mean, my sense is that this is a kind of turning point in history and that we can't really imagine what society is going to be like after this thing fully kicks in.
So I don't really want to make any predictions.

Jesscia: Well then you'll have trouble answering my third question.
Which developing technology do you see as a game changer for the future church?

Bernard: Well certainly the two that even many listeners probably think of, one of them is certainly AI because it's getting a lot of attention right now.
And I don't want to downplay it at all.
There's no question that what we're experiencing here is AI is not a single technology.
It's a combination of multiple technologies coming together to make it possible.
But it is significant because it's like, for example, a computer is not a single technology.

Computer is hundreds and hundreds of thousands of technologies that are combined together and AI takes that to a whole other level.
And it's one that if I have to put on kind of my skeptic hat, the one where I get very concerned about how big of an impact it can have, it's algorithm driven, short video social media platforms.
So the Instagrams, the TikToks, the others.
And here's why.

So I remember I wrote the book Digitized however many years ago, five, six, seven years ago.
And a lot of what I wrote was based on the research I had done over the prior 20 years.
So some of those ideas I had started presenting on some of the stuff about spirituality and digital culture back in the mid 1990s.
That's when I first started really reading, researching about it.
And when Google came about and some of the different search engines emerged, the early search engines on the internet were search engine companies.
They were companies whose primary service was to help you search the internet and find things.
Google was not created with that as its primary purpose.

Google was and is an advertising company.
That's what they do.
I've been to Google, I've talked to some of the leaders at Google and they will tell you when you go on a tour at Google, most people don't realize, but Google is an advertising company.
And people say, well, how is that possible?
Well, it's because when you search for something, we all know that even first generation of Google, one of the ways that they made their money was that the first things to show up on your search were not necessarily the ones most closely aligned or the best fit for what you were seeking, but they were the people who paid for the premier spots.
So essentially you were being sold to the companies, your attention, your eyeballs were being sold to the company, right?
But you had to, you got to choose what you would click on or what you wouldn't click on.
There was still some freedom for you to vet and decide what you were going to read.
And most of it was reading in the earliest generation.

Sometimes now, you know, you might go straight to images or video or other things like that.
Well, so follow that note now though, that concept.
And so now follow it to modern social media platforms that are primarily short form video formats, like a TikTok or an Instagram.
Now whenever I want to find something on a TikTok or an Instagram, it is not like doing an internet search.
I might put in my interests.
I might type a keyword or a phrase or something like that.
But most of what I see is driven by an algorithm, an adaptive algorithm that's based upon my behaviors, my habits, my interests, the data that is collected about me.
So say I, so and I've actually experimented with this with multiple accounts.
I'll give you, I don't have a TikTok account for this reason today, but I experimented with different models.
I had multiple accounts and I created one that was very much focused on CrossFit and different fitness things that I'm interested in.
I was interested in it because I wanted it to feed me more fitness content.
And so I did.
That's what I did.
I put all my interests and I was very, very careful to like the things that were in line with what I wanted and not like the others, right?
But what I found to be very, very interesting though is that it would occasionally feed me something a bit beyond the scope of what I was interested in, perhaps to test the range of what I was interested in.
And so it could feed me more content that it would be relevant.
So it was almost as if it was trying to, I'm not claiming some kind of consciousness, but it's trying to discover what would best keep me engaged in the platform, right?
And so over time, it changes.
Over time, no longer is it just giving me the stuff that I wanted and that I consciously decided was best for me, but it will start to give me that which it thinks is going to keep my attention.
So that leads toward the more flamboyant, the more kind of provocative kind of content.

Not that it was showing me pornography or anything like that, but it might have been showing things that were more about people that were taking risky behaviors physically, right?
So all of a sudden, my account, which was really about exercises, I wanted to learn new exercises that could help me stay fit.
Now they're showing me how to jump off buildings and not get hurt and things like that.

Or they're showing me videos of extreme sports, which are maybe kind of interesting to watch, but that was not actually what I was interested in consciously.
But it would capture my attention.
So I'd watch the video for a half second as opposed to a quarter of a second.
And the technology has the ability to note something more subtle than I even know about myself.
And then it begins to test that and feed me, oh, he was on this for a half second, this only a quarter of a second, I'm going to feed him more of that content.
And over time, it's actually reprogrammed itself in a sense to give me that content, which is not best for me, but which will best keep my attention.
Now we can imagine all sorts of scenarios of how that could be used to lead people in different directions.

j Did your TikTok account change your behavior?

Bernard: Well, I did not jump off of any buildings.
So that's a good thing.

But I can say that as I've experimented with different technologies, because I'm an ethnographic

researcher by training, so I've studied different digital platforms in different other communities.
And so I've studied community since the 90s online.
So I don't have as much time as a university president to do that kind of thing now.
But when I've used these platforms, I can absolutely say that the change in content, and if I were to allow myself to be immersed, would certainly lead me to a darker, more negative way of thinking.
It could lead to depression, anxiety, other things like that.
That's largely undisputed by some of the more recent emerging research as well, that we know that that's a negative consequence.

Jesscia: What kind of technology makes you feel fearful?

David: Terrified of podcasts.

Bernard: So what scares you about podcasts?

David: Yes, everything.

Bernard: So the fact that people can, sometime in the future, a hundred years from now, if Jesus hasn't returned first, they could take your voice and they can make it say whatever they want.

David: Oh, thanks.
I didn't even think of that.

Jesscia: Oh, no, I can totally do that.
Yeah, that's right.
Okay, the final question on the show is always this.
What do you want our listeners to remember?

David: You know, the church has been around for 2000 years, and it's survived all sorts of shifts

of technology, philosophy, worldview, political systems, you name it.
We have shown the ability to adapt to change in our history.
So I don't think we have to take a view that like the world is coming to an end.

Bernard: I would hope that there are a few things.
One is that a recognition that the role of technology, we think of it in terms of new and emerging technology, but every generation thought about certain technologies as new and emerging technologies, and they are not values neutral.
Each technology has values laden in some way, and so it's important for us to take time to prayerfully consider with other Christians what the implications are, to prayerfully consider how we will use or choose not to use them and to also approach it with a measure of humility and learn and grow together.
So I think that's something that I would encourage people as they think about this.
Also, I would hope that people would walk away with an understanding that it's not just about learning how to use technology.
It's taking time to figure out how it uses and influences us.
That's an important lesson.
Also, to acknowledge that technology is not something kind of distant and separate from the life of believers from every era and age, but it's something that even God himself used, and we see examples of that throughout.
And so I think that would be good.
But I also hope and pray that people would walk away, not with a place of fear or anxiety or anything like that.
We have a God who reminds us to come to him when we're weary and burdened and he will give us rest.
We have a God of what I call bread and fish and eggs who promises when we ask for a loaf of bread will not give us a stone.
And we have a God who hears and responds to our prayers.
We have a God who has accomplished what is most important through Christ on the cross.
And that is unchanging, even as all of this stuff around us is changing.
And we have a God who has clear teachings in the scriptures and incredible and comforting promises that we can lean upon in each and every age of believers.
And we can lean upon now.
And even though the future of these technologies may be somewhat uncertain, God has promised
us a future that is incredibly certain in Christ.

Jesscia: That's it for today.
I'd like to thank our guest, Dr. Bernard Bull.
Thanks for taking time while you're here in town.

Bernard: Thanks.
It was a fun conversation.

Jesscia: Dr. Maxwell, thank you for being here.

David: Thanks, Jessica.

Jesscia: And thank you for listening.
You can find more episodes of Tangible and all the major hosting apps and on our website, ConcordiaTheology.org.
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Join me next time when we talk about the intersection of theology and daily life, because it's Tangible: Theology Learned and Lived.