

Outline teaching notes for three 30-minute snippets on introducing science into preaching

Resources include: introductory material, teaching notes, example sermon excerpts, suggestions for assessment

Aim: To show how scientific subjects can be introduced into preaching

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Introduction/background

Whether we recognise it or not, science is a central feature of our lives. Science underlies the technology that we rely on every day, and has allowed us to recognise the reality of global climate change and to understand the human activities that are its cause. Science is fundamental to the modern practice of medicine and is present in many other areas of life.

The prevalence of science in everyday life is reflected in the number of people working in science and technology industries. According to the Office of National Statistics,¹ in 2013 nearly 3 million people in the UK (8.7% of the population) were employed in 'Professional, Scientific and Technical Activities'. There has been a growth in the popularity of science, technology, engineering and maths (STEM) subjects in recent years, as well. In 2014, the *Guardian*² reported that there had been an 8% increase in the number of students studying STEM subjects at undergraduate level in the 2013-14 academic year compared to the previous academic year. Applications to study STEM subjects at degree level are also on the increase, as are the number of students studying STEM subjects at A-level.²

Given these numbers, it is highly likely that many clergy will find that they have scientists, or others working in the science and technology industry, worshipping in their congregations. This likelihood increases for churches near to large, research-active universities or major

¹ Office for National Statistics. (2014). *Labour market profile – Great Britain*. www.nomisweb.co.uk/reports/imp/gor/2092957698/report.aspx#tabwfjobs. (Last accessed 14 October 2015).
² Kim Thomas. (2014) 'Number of students studying STEM courses in UK at record high.' www.theguardian.com/higher-education-network/blog/2014/apr/10/more-students-accepted-onto-stem-courses-hecfe-report[Accessed 14 October 2015].

science/technology centres. Despite this, science is rarely talked about in church. There are several possible reasons for this. For example, science may not be thought of as something appropriate for inclusion in sermons, prayers or Bible studies, or something that may not be of interest to a congregation. Many clergy will not themselves have science backgrounds and may feel uncomfortable venturing into a field in which they lack expert knowledge.

If we are not making links between science and Christianity, how can the scientists in our congregations connect their faith to the work that they do day by day, or communicate the faith in a relevant way to their non-Christian colleagues?



Snippet 1: Opportunities for introducing science from the pulpit

Length: 30 minutes Level: 5

Objectives: By the end students should be able to

1. identify occasions suitable for preaching on scientific subjects
2. draw out themes from science that can be related to certain Christian festivals

Preparatory reading: sermon excerpts (see appendix 1)

Teaching session

Introduce the idea of preaching on science subjects. Ask the class (by show of hands) how many would feel confident preaching on science or a subject relating to science.

Discuss the fact that it is not *always* appropriate to bring science into a sermon. There are certain contexts which more readily lend themselves to a conversation between faith and science.

Suggest the following as opportunities for bringing science into one's preaching and ask students to discuss in small groups if they agree/disagree and what scientific concepts they think might fit each occasion:

- Christmas
- Easter
- Trinity Sunday
- Harvest

You may wish to discuss how the sermon excerpts provided bring together scientific and theological concepts, and whether students feel that these are or aren't effective. Consider whether the use of science in these sermons might work as a tool for apologetics to those who are engaged in the sciences and are not regular church-goers (but who may attend for festivals and special occasions).

As well as Christian festivals, there are important moments in the history of science that can be commemorated (on the anniversary of the event, for example). These might include the anniversary of the birth or death of a notable scientist, the anniversary of the publication of a key scientific theory (gravity, evolution, etc), or to commemorate or celebrate a particular event or achievement. Ask students to discuss in small groups what occasions of this sort they feel would be appropriate to include in a sermon.

Suggested assignment: Write a 10- minute sermon for one of the festivals discussed (this can be for an adult or all-age congregation), that either makes connections with a concept in science, or uses science to help convey the Gospel message. This should be accompanied by a 500-word rationale detailing the festival chosen and the target congregation (adult only or all-age), the scientific subject/concept chosen and why, and how this relates to the key message of the sermon.



“I’ve heard him preach. How is he able to hold himself to only 140 characters on Twitter?”

Bob VOJTKO 18317 Walnut Drive Strongsville, OH 44149 # RY23

Snippet 2: Biblical passages

Length: 30 minutes Level: 5

Objectives: By the end students should be able to

1. identify biblical passages that lend themselves to preaching on scientific subjects
2. confidently bring together ideas in science and the Bible

Preparatory reading: sermon excerpts (see appendix 2)

Preparatory activity: ask students to try to find at least one biblical passage that might lend itself to a sermon that includes a scientific subject or the relationship between science and faith, and to be prepared to share their finding in class

Teaching session:

There are several biblical passages that easily lend themselves to the inclusion of scientific subjects in preaching, a selection of which is given below. Divide students into groups and ask each group to discuss one of the passages given below. Questions they could discuss include:

- i. In what way(s) does the passage lend itself to including either the relationship between science & faith or a specific scientific subject within a sermon?
- ii. What scientific ideas or subjects would they include if preaching on this passage?

Passages:

Genesis 8.1-12

*This passage describes Noah's 'experiments' to determine whether or not the waters had receded enough for it to be safe to open the ark.
What might this say about the place of experiment and exploration of the world in relation to faith?*

Isaiah 40.12-17

*This passage describes God's power and authority by reference to the act of creation.
God's work of creation in this passage is re-told in terms that make it sound very much like a work of engineering, done with scientific precision.*

This passage also reminds us that, no matter how great our knowledge and power, it will always be insignificant compared with the knowledge and power of the Creator.

John 16.12-15

In this passage we hear Jesus' words about the Spirit guiding us into 'all truth'.

Given that the medieval natural philosophers and scientists of the early enlightenment sought to understand God by understanding his creation, can we say that scientific truth is part of 'all truth' to which the Spirit guides us? What is the relationship between worldly and spiritual truths?

John 20.24-29

This passage describes the encounter between Thomas and the risen Christ. In some ways, Thomas' insistence on seeing the evidence for himself resembles a form of scientific enquiry. Is it right to label this 'doubt' (as in 'doubting Thomas')?

How might Thomas' example help the Church to engage with scientists?

Acts 17.22-27

This passage recounts Paul's speech in Athens.

This is a good example of a Christian engaging a different world-view and way of thinking. What lessons can be drawn for how the Church can engage with a scientific world-view?

Ask if students were able to identify any other biblical passages that might lend themselves to a sermon on a scientific subject, how they think the passage they have chosen lends itself to talking about science or science and faith.

You may wish to discuss how the sermon excerpts provided link the biblical passages on which the sermons are based to the relationship between science and faith. Discuss how this may (or may not) help Christians to engage with science or allow science to help inform their faith.

Suggested assignment: Write a sermon outline of up to 800 words for a sermon based on a passage thought to lend itself to including a science subject or the relationship between science and faith. The outline should include a scientific concept (or the aspect of the relationship between science and faith), a link between this and the religious message/theme of the passage and a practical application for the life of the Church. The outline should make clear how the student would introduce the relationship between the passage and the science message.

Snippet 3: The place of the material in Christianity and preaching on science

Length: 30 minutes Level: 5

Objectives: By the end students should be able to

1. articulate the importance of the material to the Christian faith
2. demonstrate that science, as an exploration of the material world, is a suitable subject for Christian consideration
3. demonstrate that, through the value it places on the material world, the Christian faith is not in opposition to science or scientists

Preparatory reading: sermon excerpts (see appendix 3)

Teaching session:

A key aspect of the Christian faith is its affirmation of the material as well as the spiritual. This is particularly evident in God's proclamation of the goodness of creation in Genesis 1, the incarnation and the bread and wine of the Eucharist.

Ask students to discuss in small groups

- what Genesis 1.16-25 and Genesis 1.31 suggest in relation to how we, as Christians, should value the natural world, and how that relates to human dominion in Genesis 1.26
- the ways in which the incarnation validates the goodness of creation as well as human endeavours in relation to the material world
- how the Eucharist connects the material and the spiritual

As a class, discuss in what way(s) each of the above might be used to help explain or discuss the positive ways in which Christianity and science can engage with one another.

You may wish to use the sermon excerpts provided as the basis for a discussion about how scientific knowledge about the physical world can inform the ways in which we live out our faith.

Suggested assignment: Draft a 10-minute sermon on the Eucharist that highlights the importance given to the material through the use of bread and wine in this spiritual act. The sermon should also make reference to how this sanctification of material things offers us a perspective on other aspects of the material world and their value.

References

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Excerpt from a sermon for Easter Day

“[...]We’re told that two of the disciples, Peter and an unnamed disciple, thought to be John, on hearing Mary’s story, jump up and run off to see for themselves. And when they arrive, we’re told that Peter went in first, and looked at the linen cloths that had been wrapped around Jesus’ body, and were now lying there empty. Then John came in and looked around. And, the Gospel tells us, he believed. But then the Gospel tells us something else.

Something that seems to make no sense. “He saw and believed; for as yet they did not understand the scripture, that he must rise from the dead.” He believed, but did not understand.

It isn’t surprising that they didn’t understand. This was something unprecedented. Many people who are not believers - and many who are - still find it very hard to understand. How could someone who had been dead for two days rise again? And how could his death and resurrection achieve salvation for the whole world?

The disciple John believed, though he did not yet understand. That’s the thing about faith. You don’t have to understand all the finer points of theology and doctrine in order to believe. John believed that Jesus was no longer dead, though he didn’t understand what it meant or why things had to happen the way they did. We can believe, even if, like John, we don’t fully understand. In fact, belief often precedes understanding.

In our society, which puts a great emphasis on facts, and instant access to information and knowledge, this notion of believing without understanding can feel a bit wrong. Surely, some would say, it has to be the other way round. How can you believe what you don’t understand? But we do, all the time. We believe in love, for example, though we don’t always understand it. We believe in beauty, but it can be difficult to understand sometimes what makes a particular thing beautiful. This happens in science, too. Even that most famous of scientific theories (and the one most often described as hostile to religion), Evolution, followed this model of belief without complete understanding.

Darwin believed that evolution by natural selection explained how we came to have so many diverse species on earth, even though he didn’t understand the mechanism by which it all worked, which we now know to be DNA. Many scientific theories are formulated and believed to be true, even before they are proven or even completely understood. Dark energy and dark matter are examples of this believing without understanding. Scientists

³ Jennifer E. Brown. Excerpts from sermons (unpublished).

believe that these exist, because of what they can see (or what they can't see, as the case may be).

From observations of galaxies, combined with some frankly really complicated mathematics, cosmologists believe that there is more to the universe than what we can see, and this something more has an effect on the things we can see. How exactly dark energy and dark matter interact with 'normal' matter is, as far as I'm aware, still not really understood, and neither dark energy nor dark matter have been directly observed. So in both spiritual things and in science, there is the possibility, perhaps even the necessity, for belief before understanding. [...]"

Excerpt from a sermon for Trinity Sunday

"[...]The concept of the Trinity is also a paradox. How can one God also and at the same time be three persons and three persons be, not three gods but One God? In terms of simple logic, or basic arithmetic, it doesn't make any sense. It is paradoxical. Does that make it untrue? No. We see paradox in the natural world, too, and while it is difficult, it doesn't render things unreal. One example of this is Einstein's theory of relativity and quantum mechanics. Relativity describes well the way the universe works at the macro level, but it doesn't work at all on the subatomic level.

Quantum mechanics explains how things work at the subatomic level, and how subatomic particles relate and interact with each other, but doesn't describe at all how things work at the macro level. The fundamental laws of nature don't apply at all levels of nature. It doesn't get much more paradoxical than that. We don't yet understand how these different levels of the physical universe relate to each other, but that relationship may hold the key to understanding why and how the universe exists as it does. Working out how the quantum level of the physical universe relates to the macro level is something that is keeping physicists in employment even now.

It is in our nature to want to understand things, to work out how things fit together - in other words, to define the relationship between one thing and another. And that deeply ingrained desire to know and to understand can make it difficult for us to accept and live with paradox. This is why people often find the concept of the Trinity a difficult one.

[...]"

Appendix 2: Sermon excerpts for snippet 2⁴

Excerpt from a sermon referencing John 16.12-15

“[...]Sometimes people of faith have trouble reconciling the things we find in scripture with the things that science teaches us are true. But we shouldn’t expect to find modern scientific theories in ancient religious texts.

It has taken us several generations of observing the world, developing hypotheses, testing theories, and learning how to do some very advanced mathematics to reach the level of understanding we have today. These were truths that would have been ungraspable to those living in the ancient world. They simply didn’t have the knowledge base to support them. That we can take the facts of science and integrate them with a living, vibrant faith; that we can combine the truth of science and truth of revelation and make use of both in our understanding of God, is one of those potentially hard-to-bear truths to which the Holy Spirit has been leading the Church over the past two centuries of modern scientific enquiry.

Jesus promised his followers that the Holy Spirit would lead them into all truth. There are some truths we still find difficult to bear, but if they are truth, then the challenges those truths pose must be faced. If we are open to the leading of Spirit, then we will be guided into truth, and given the strength to respond in faith.”

Excerpt from a sermon referencing Acts 17.22–27

“What is mission? [...] at the core [is] sharing God’s love with others, making connections and building relationships. This is what St Paul was doing in his speech to the Athenians. On the face of it, Paul’s would seem like an impossible mission. He was speaking to people who came from a vastly different religious world than his own. [...] It would be difficult for those two different cultures to talk religion together. They would, in effect, be speaking different languages, coming at things from completely different world views. [...] Like St Paul, we live in an age where different cultures bump up against one another, and in which there can be radically different views on religion.

In our situation, however, the main problem isn’t trying to have fruitful conversations between different religions. What we find most difficult is trying to explain our faith – what we believe, why we believe it, why we think it matters – to a secular culture that dismisses religion as old fashioned, superstitious, silly, or worse.

That’s not to say that our society doesn’t have myths. Every society does. And one of the myths in our society is the myth that science has all the answers. Science has given us answers to many important questions, and has prompted us, as a society and as a species, to ask questions that we might not ever have thought of without it. Science is valuable and important and interesting and exciting. But it is not everything. Science can’t tell us how to

⁴ Jennifer E. Brown. Excerpts from sermons (unpublished).

love our neighbour. It can't tell us how to forgive those who wrong us. It can't tell us what our purpose in life is. It can't, ultimately, give meaning to our existence.

There is another myth about science that is popular in our society, and that is the myth that science and religion are enemies and cannot co-exist. That is simply not true. The earliest scientists were men of faith, who wanted to learn about how the world worked because they wanted to know more about God who created the world. They wanted to explore God's creation as a means of honouring God. And there are still many scientists today who have a genuine and active faith, and many people of faith who have an interest in, or at least know a bit about, science. [...]

Our faith gives us a lens for looking at the world, and a system of values, symbols and language for making sense of it. But that doesn't mean that we must deny or exclude other lenses, like the lens of science, that might give us a slightly different way of looking at the world, another perspective from which to look at it. We use these different lenses to help us build up a bigger and fuller picture of the world. That picture of the world, in turn, helps us to understand our place within it, and, I hope, also inspires us to be thoughtful, creative, and attentive. For then we get a glimpse of God himself acting in the world around us, and are open to seeing the opportunities that he has laid before us – opportunities for us to grow closer to him, and opportunities to make him known to others.”

Appendix 3: Sermon excerpts for snippet 3⁵

Excerpt from a sermon referring to being made in the image of God (Genesis 1.26) and the relevance of the incarnation (Philippians 2.6–8)

“[...] It is all too easy to look at the opening passages of Genesis, see that human beings are made in the image of God, and decide that this means we are superior to everything else in creation, and can therefore use and exploit the rest of creation for our own ends. But is that what God is like? In today’s society, when we talk about someone’s image, we are often talking of something incredibly superficial, something perhaps not entirely real or truthful, that someone wants portrayed to the world in order that others will think about them in a certain way. When the Bible talks of God’s image, it is anything but superficial. It isn’t some made-up collection of characteristics and behaviours to fool people into thinking God is something other than what God really is. When we talk of God’s image, we are speaking of the depth of God’s being. God’s God-ness, if you like. We are made in the likeness of God. We are made to reflect the essential qualities of God.

Sadly, that’s not generally what we see when we look at ourselves or our fellow human beings. Sin has marred the image of God within us. There is only one place to see the true image and likeness of God, and that is in Jesus. And the Philippians passage tells us what that is. The essential qualities of God are selflessness and self-giving, serving others, including and especially those lesser than himself; and complete and uncompromising love. That is what it means to be made in the image of God. That is the kind of relationship we are meant to have with the rest of creation.

Jesus ‘Did not count equality with God as something to be grasped.’ In contrast, we cling to our identity as made in the image of God, separate and special. Human distinctiveness – the notion that we are somehow categorically different from and superior to the rest of creation, and particularly other animals - is deep-seated in human self-understanding. But science is teaching us that humans are not so distinctive as we would like to believe. This is one of the reasons that Darwin’s theory of evolution was so controversial. [...] we are biologically linked to other, ‘lesser’ creatures, not made unique, distinct from and above other animals. Biology, ethology, and behavioural psychology have all uncovered evidence that things we once thought uniquely human are anything but. Tool use, problem solving, emotions, language, self-awareness, all are found to different degrees and in different forms in the animal kingdom.

What does that mean for our theology? It means that we must admit that we are not so different from our fellow creatures as we may like.

It means that we cannot cling to the image of God within us as something that makes us superior and gives us the right to exploit, control and destroy the other members of creation as we see fit.

⁵ Jennifer E. Brown. Excerpts from sermons (unpublished).

Instead, we must model ourselves on Christ, who gave up equality with God to become a servant of those lesser than himself, and gave his life out of love. If we are to live up to the promise of our salvation – the possibility of truly inhabiting the likeness of God within us, and knowing eternal life, can we do anything less?”

Excerpt from a sermon on the Eucharist

“[...]In the bread and wine we receive here, God takes the ordinary material of creation and infuses it with his grace, making it extraordinary and holy. God does not disdain the simple or the material. In the Eucharist, there is no divide between physical and spiritual. [...] We are reminded of the creation narrative of Genesis 1, in which the Spirit of God hovers over the waters of creation – the holy and the mundane, the Spirit and the material world in intimate relationship.[...]”