



Global Faculty Initiative

**The Faculty Initiative
seeks to promote the integration
of Christian faith and academic disciplines
by bringing theologians into conversation with scholars
across the spectrum of faculties
in research universities
worldwide.**

www.globalfacultyinitiative.net

Disciplinary Brief

LOVE AND NATURAL SCIENCE

Ian Hutchinson

Professor Emeritus of Nuclear Science and Engineering, Massachusetts Institute of Technology (MIT)

Oliver O'Donovan's theology brief "The Sovereignty of Love" [1] springs from Jesus' two great commandments (Matt 22:37-40): to love God with all your heart, soul, and mind, and to love your neighbor as yourself. "On these two commandments hang all the law and the prophets", says Jesus. O'Donovan's explanations and insights are splendid in their scope, clarity, and poetic inspiration, ranging over both the theoretical and practical understanding of love in the life of the scholar. They warrant deep study and careful engagement, a brief example of which I offer here from the perspective of a scientist.

Love of Nature in the Intellectual Challenge of Science

O'Donovan takes as his first working definition (which, thankfully for us non-theologians, is one of the few places where he allows himself technically abbreviated language) that love is "affective and directive attention to a good". This robust expression encompasses a wide range of types, or as he prefers, *moments* of love. But then he clarifies the importance of love in *action*, more than mere feeling; and soon after offers another qualification of love in the context of the two great commandments, from which a modified definition emerges: "affective and directive attention to the good of persons" (God and our neighbor). This last refinement poses a puzzle for scientists. Science (and I mean natural science) is not about persons, it is about the reproducible behavior of the world observed and systematized regardless of personality. As Robert Boyle put it in his *A free enquiry into the Vulgarly Received Notion of Nature* (1686) the nature that science studies is "the established order or settled course of things". Thus, even though one of its purposes was to be "the relief of man's estate" [2], the subject matter of natural philosophy, as science was then called, is inherently impersonal [3]. In science then, is the significance of love (since it is attention to the good of persons) limited to the personal and professional interactions of its practitioners, or to its deployment in engineering? Does love not have a role to play in the intellectual challenge, the awesome wonder, the simple pleasure that understanding the laws of nature can inspire?

I suggest that there is a Biblical sense in which it would be a mistake to limit the Christian understanding of love to the good of persons. I grant that in the context of Jesus' response about the greatest of commandments, he emphatically points to love of persons. But I am struck by what hangs on the two

commandments: "all the law and the prophets". At the risk of trespassing on the expertise of Bible scholars, I suggest that the frequent interpretation of this phrase as meaning all of the Old Testament omits a nuance. Perhaps the phrase was in common use in the first century with that comprehensive meaning; but it also could be interpreted somewhat more narrowly as referring to just two of the three parts of the *Tanakh* (Old Testament as a whole), namely the *Torah* and *Nevi'im* (law and prophets), and not so much to the third, *Ketuvim* (writings), which includes the Psalms, Proverbs, Ecclesiastes, Song of Solomon, poetry, stories, and even some history. [4]

Many scientists testify to their fascination with the impersonal *ideas* in science as being the root of their motivation to pursue their studies. This is a kind of love that is more like aesthetic love of beauty than about love of persons. I am not fully persuaded by O'Donovan's argument that aesthetic appreciation of art or music requires one to recognize Michelangelo's or Bach's "personal singularity". Even art historians and professional musicians surely recognize first the artistry of the composition, and are only later drawn to consider more deeply the personality of the composer. The perspectives are complementary, but the intellectual and the personal loves are not indetical.

Christians in science (or monotheists generally, for that matter) can recognize and celebrate God's personal hand in their love of nature, and be drawn to worship. Unbelievers are also often awe-struck by the majesty of creation, though they do not immediately recognize a personal hand. This sort of awed love toward creation is expressed frequently in the Psalms. I think there is here a love shared by both believer and unbeliever, even though they do not both recognize the personality behind it. The law and the prophets might not hang on it, but it can nevertheless be wholesome, and sometimes draw the unbeliever to God. Likewise a love of wisdom in non-scientific disciplines can surely be abstracted to some degree from direct connection to individuals, even if its purpose is to promote the benefit of society. The Proverbs are practical, offered in love, and very often about personal relationships, but they are mostly generic, not singular. When Psalm 119 says "I find my delight in the commandments, which I love" (v47) or "Oh, how I love thy law? It is my meditation all the day." (v97), it is surely expressing a sentiment not unlike the scholar's love for knowledge.

So O'Donovan's early focus on love as toward "the good of persons" can be accepted, perhaps, as the context of the two great commandments. But that context is not the entirety of the scriptural understanding or teaching of love. For scholars, and especially scientists, their disciplines encompass important loves that are impersonal, as O'Donovan goes on to acknowledge in respect of Plato's ideal of Eros and intellectual loves, in his fourth section about types of love.

Love in Academic Life

Consideration of the intimate relationship between love and knowledge, both of which depend on truth as their "criterion", then leads O'Donovan to the key question for Christians in academia: "how may they love that one aspect of the world which they know very well, while focussing their love finally upon God and

their neighbours?". He answers under three main headings: Vocation, Order, and Education.

Vocation

"Understanding work as a vocation from God", is unproblematic. In part, I would say, that is because it is a spiritual invitation not just to academics but to all workers: plumbers and bricklayers as much as physicists and historians. The consequence for academics, though, is that we should assess our vocations with humility. Our vocation is not more spiritually valuable than less intellectual work. "Who sweeps a room as for thy laws Makes that and th'action fine" is how George Herbert put it [5]. The practical substance of that vocation for most scientists evolves with the years from pupil (undergraduate), to apprentice (graduate student), to journeyman (postdoc or junior staff), and for those who stay in the academy to teacher, and further leadership as principal investigator, perhaps eventually to major project leader. In each of these stages, I have found, love has a subtly different call in our human relationships; but each one, whether in subordination or authority, can be received and carried out as part of the overall life call of faithful service to the Lord, and to neighbor.

Order

The second heading, seems to allude, more problematically in my view, to a hierarchy of loves. Augustine is cited as teaching "inanimate things are loved `for the sake of animate things'; creatures are loved `for the sake of God'; God alone is loved `for his own sake ' ". I find this summary even more puzzling than implied by O'Donovan's helpful gloss that it is a call for "reflective appreciation of each in its true relation to the others". I think God loves us "for our own sake"; so it cannot be that God *alone* is loved in this way. I think that God loves the creation for its own sake too, and that humans can, and at their best do, mirror that love. This common grace is not eclipsed by estrangement from the creator.

At the same time, scientific disciplines, perhaps even more than humanities and social ones, present temptations, especially toward the arrogance of the expert and toward excessive competitiveness. There is an important role, in intellectual investigation, for open and unfettered exchange of differences; a practice that has been seriously hampered for decades in western academia by political correctness and related orthodoxies, and corrupted by the incivilities of social media. However, O'Donovan's word *eristic* (previously unknown to me) I discover means "fond of wrangling", with the implication that it is argument for its own sake rather than for the pursuit of truth. To win the argument cannot be the purpose of academic discourse; nor can the competitive possession of "intellectual property". To discover and disseminate truth must surely be the real academic mission. And for a Christian, Jesus embodies truth. Unfortunately many non-scientific fields have fallen prey to a doctrine that declares claims to truth are nothing but a power play. Science and engineering are highly resistant to this debilitating belief. Perhaps that is one reason why, in academia, Christians are represented most highly among those disciplines.

Education

O'Donovan's third heading emerges from a discussion of established knowledge and communication. According to O'Donovan, love in the academy needs "rationally agreed descriptions" as well as openness to "new communications". I see that need as part of the balance between discovery and dissemination. In science and technology, discovery is usually identified with novelty and innovation. The dissemination of the novelty takes place initially in professional journals, but dissemination of the established knowledge takes place in classes, textbooks, labs, and tutorials, undergirded by settled definitions and modes of expression. In non-scientific disciplines novelty has also been emphasized in recent decades, but with far less obvious justification. The pell-mell innovations for example in online language seem to promote fleeting linguistic fashions more than either rationally agreed descriptions or new communications. The study of literature, by its nature, must have a deep appreciation for stable and historic language. Novelty in pop culture arguably has limited need for academic endorsement or analysis. Public opinion, cultural critics, and time are the courts that will judge its excellence. In science, as much as any other discipline, we can heartily endorse O'Donovan's insistence that education must strive "to strengthen others to live well", to teach ethically, even toward "a life lived fruitfully to God's glory". But what constitutes living well is a fraught question in the rich and powerful societies that science and technology have brought about.

Love and Virtues in the Academy

In his following section "Love as the form of the virtues" O'Donovan reminds us insightfully that of the various lists of virtues in the New Testament, love is the "unifying factor" and the greatest of the virtues that endure. According to Aquinas "love directs virtues to their end". Virtues are specific to the particular situation: courage to danger, patience to long-term projects, humility to other's achievements.

Humility and Servant Leadership

To me, humility seems the most difficult virtue in the academy. Faculty self-promotion, generally expected in high-prestige universities, seems sometimes contradictory to it. St. Paul's bidding "not to think of himself more highly than he ought" but instead exercise "sober judgment" [6], is a hard balance to achieve. Yet I observe in my own secular university a disproportionate representation in academic administration of *Christian* professors; and I believe this reflects the importance of the servant leadership to which Christ calls his followers: especially when undertaking sometimes thankless academic administration. Can we promote and celebrate the achievements of others? In love we can.

O'Donovan's consideration of the relationship of love and justice contains essential warnings to humility and moderation. Some of my thoughts on justice and nature [7] were presented in response to Wolterstorff's theology brief, and I shall not repeat them here, though they are relevant. I am struck, though, by O'Donovan's remark that in the New Testament "Justice is primarily an attribute of God, designating the self-consistency of all that he wills and does in the world, his `judgments'; only secondarily

is it an attribute of human acts, and that not in respect of their intentions, but of their actual conformity to God's judgments." This perspective leads him to observe that "practical knowledge needs an end in the justice of God's kingdom". And he immediately cautions that in justice "there is a danger of finalising the provisional. The justice we want is always more than the justice we can achieve."

Humility, Moderation and Social Justice

Picking up this point, I want to add my emphasis to the importance in the academy of humility and moderation in the pursuit of social justice. Of course love calls us as Christ's followers to practical empathy for the unfortunate. We should each consider and commit to the compassionate actions that are appropriate to that call. That is a vital part of love for neighbor, and for some might become their overriding vocation. However, there is a recent fashion in western academia, especially but not only in sociological disciplines and the humanities, to prize and promote social justice activism even above dispassionate rational debate, and above intellectual excellence. Much of the resulting activity fails in respect of humility and moderation. It arrogantly presumes to unambiguous judgment of right and wrong in complex political and ethical questions; and it immoderately demands that other people and institutions act in accordance with its prescriptions to correct the social injustices it perceives. For example, a former president of the American Sociological Association argued in his presidential address that one of the main purposes of sociology is to stand in opposition to capitalism [8]. Such a rush to judgment, often based on debatable theoretical interpretations of history and society, inevitably alienates those who do not agree with the judgment, or who recognize the situation's ambiguities. Higher education in America is currently suffering a major loss of public confidence, much of which is attributable to this sort of dynamic. The academy needs to be far humbler and circumspect in its approach to justice; not to justice's importance, but to the ability of academics to determine or prescribe it. That too is a call of love. Social justice activism cannot and must not replace the discovery and dissemination of truth as the mission of the academy.

Love of Neighbor in the Intellectual Engine of the Scientific Enterprise

Nature cannot be fooled [9]; nor persuaded by rhetoric or self-interest. Unambiguous experiment lends to science a final arbiter of truth that is rarely present in the humanities and social disciplines. Yet scientists *can* be fooled or self-interested. They need each other to correct and counteract their human failings. In this need, love has a vital role to play. Love of scientific truth turns the heart outward toward the creation, which for those with ears to hear speaks of its creator. Love of neighbor, of fellow scientists, team members, correspondents, and critics is the lubrication for the intellectual engine of the scientific enterprise. And, in my experience, it is a source of personal fellowship and pleasure as well as scientific achievement.

Endnotes

- [1] https://www.globalfacultyinitiative.net/content_item/1607
- [2] Francis Bacon: *Novum Organum*, 1620.
- [3] See Ian Hutchinson *Monopolizing Knowledge* (Belmont, Fias Publishing, 2011) [chapter 1](#).
- [4] <https://www.britannica.com/topic/Ketuvim>
- [5] *The Elixir* (1633)
- [6] Romans 12:3
- [7] [Doing Justice to Nature](#)
- [8] [Reported by Fabio Rojas, 2024](#)
- [9] Richard P Feynman, [Report of the PRESIDENTIAL COMMISSION](#) on the Space Shuttle Challenger Accident, Volume 2: Appendix F - Personal Observations on Reliability of Shuttle. Richard Feynman's book "What do you care what other people think?" (Norton, New York 1988) entertainingly tells the background story.

For more information

www.globalfacultyinitiative.net