

the issue in question: human dignity. More seriously perhaps is that in common with most books on bioethical issues problems are grouped in terms of the beginning of life, the end of life and questions of conscience. The rest of life and in particular disability is either merged with the beginning and genetic testing or hovers around dying and death. It is in the area of disability that we need a truly robust defence of human dignity in all its aspects of attributed, intrinsic and flourishing.

PIA MATTHEWS

**UNLOCKING DIVINE ACTION: CONTEMPORARY SCIENCE AND THOMAS AQUINAS** by Michael J. Dodds OP, *The Catholic University of America Press, Washington DC, 2012, pp. xii + 311, \$ 69.95, hbk*

In recent years the relationship between science and religion has been hotly debated and whatever side of the debate is taken, the question of how God acts in the world will inevitably come up. However, in the past many people who have written on this subject have been somewhat hampered by a rather restricted understanding of causality. This is something that Michael Dodds OP seeks to redress in this book. Dodds is a professor at the Dominican School of Philosophy and Theology in Berkeley, California, and his latest work reflects 15 years of research.

There are many dangers for the theologian if certain premises of modern science are accepted too uncritically. The Catholic physicist and philosopher Wolfgang Smith, whom Dodds quotes, goes as far as saying 'I have no doubt that the ongoing de-Christianization of Western society is due in large measure to the imposition of the prevailing scientific world-view'. Therefore, if anyone sympathetic to Christianity is not to be unduly handicapped in the debate on divine action, they need to be aware of and ready to challenge the philosophical assumptions many people take for granted. In this regard Dodds' book is particularly helpful.

Clearly, the philosophical assumption that Dodds most has in mind is the assumption that causality has only one meaning. The default position is to assume that causality means efficient causality, and the paradigm of efficient causality is taken to be that of Newtonian physics: the only real effects in the world are caused by the forces between physical particles. Dodds expands this notion of causality by giving a clear account of Aristotle's four causes: material, formal, efficient and final causality. Little philosophical background is assumed and this makes Dodds' s book very accessible.

Whilst there has been a tendency amongst scientists since the enlightenment to reject formal and final causality and to have a distorted notion of material causality, Dodds argues that among some scientific circles, these pre-modern notions of causality are now making something of a come back. For instance, the common belief among many quantum physicists that on the subatomic level particle behaviour is fundamentally indeterministic very much lends itself to Aristotle's notion of material causality; the belief that there can be emergent properties of a system that cannot be explained purely in terms of its parts lends itself to the notion formal causality; and the anthropic principle, the fact that the constants of physics need to be very finely tuned in order for life to inhabit the universe, lends itself to the notion of final causality.

Of course there is still much debate on whether contemporary science really needs to appeal to these Aristotelian notions of causality and Dodds does discuss

this. For instance many physicists are willing to speculate that there are trillions of parallel universes with different constants of physics rather than concede that the anthropic principle implies any final causality. But if one is not willing to accept such radical solutions, contemporary science does seem to make Aristotelian notions of causality rather more plausible.

With this fuller understanding of causality, Dodds argues that it is once again becoming philosophically tenable for scientists to embrace Thomistic theology: God is totally transcendent but is also immanently present; God does not compete with nature, but gives things their nature; God is not one cause among many, but causes causality. Dodds goes on to discuss divine action in the context of providence, prayers and miracles. Something on divine action in the context of the sacraments would have been interesting, but Dodds does not discuss this.

Despite the new openness that contemporary science presents to theology, Dodds observes that many contributors to the science and religion debate continue to think of causality in terms of the old Newtonian paradigm. Rather than seeking a fuller understanding of causality that is compatible with traditional theism, modern scientific discoveries are instead interpreted in a way so as to explain how God might act as an efficient cause in the world without violating the laws of nature. For example, the indeterminacy in quantum mechanics could give God space to act without getting noticed. Dodds goes to some detail in explaining such approaches, but he also highlights the great difficulties they can entail. Indeed, these approaches are heavily dependent on a particular scientific interpretation, and so if a more convincing scientific interpretation should present itself, belief in God could be undermined. Also these approaches are usually incompatible with traditional theism and they tend to lead to notions such as pantheism, process theology or a self-limiting God. By clearly highlighting these dangers and presenting a viable alternative, Dodds makes a valuable contribution to the science and religion debate on divine action.

ROBERT VERRILL OP

**AUGUSTINE OF CANTERBURY: LEADERSHIP, MISSION AND LEGACY** by Robin Mackintosh, *Canterbury Press*, Norwich, 2013, pp. 192, £10.50, pbk

In *Augustine of Canterbury: Leadership, Mission and Legacy*, the Reverend Canon Robin Mackintosh, who for the past two decades has run a popular training programme on ecclesiastical leadership, concisely delivers a meticulously-researched history of the mission from Rome that founded the English Catholic church at the end of the 6<sup>th</sup> Century. Politicians, kings and military commanders of that eventful time may have left broader, deeper trails of historical evidence, but Mackintosh demonstrates that Augustine of Canterbury did more to shape modern England than any other figure in the pre-medieval era.

The author skilfully draws from the scant historical record profound insights on what it means to be a successful leader, in both Augustine's time and now. Mackintosh's story of Augustine's mission shows us that for any organisation to subsist, it must possess in equal measure two key attributes. First, it must pursue and attain a visionary, collective purpose. Secondly, it must have strong coherence as a community. (An organisation without either attainment or community, or which temporarily loses one or the other, risks dissolution; its former members will simply seek out a more promising group to join.) Successful leadership thus