**Niccolò Guicciardini**

Reflective case-studies engaged with a view to testing a philosophical model or to trying it on for size, can teach philosophers valuable lessons by bringing their theoretical models down to earth and rendering them concrete. Niccolò Guicciardini’s wisely light-handed application of our account of rational scientific framework transitions, outlined in the final chapter of *The View From Within*, and developed more fully in *Creatively Undecided*, has much to offer us in this regard. We would like to point at two important lessons we have learnt from his intriguing retelling of Robert Hooke’s unsettling interaction with Newton – one, presented by him as a hesitant corrective to our account, the other, as an important addition to it to which our overly analytical approach rendered us partially blind. The first speaks to the invisibility from which ambivalated practitioners usually suffer, the second to the nature of ambivalence itself. We start with the latter point.

Our account of scientific framework transitions makes much of the role played by normatively ambivalated individuals of standing in setting them in motion. However, merely *being* of two minds will have little impact on the community. It is when their normative undecidedness is translated creatively into an inevitably disturbing hybridic account of the field, that other leading members of the community are liable to take heed and respond. In this regard, as Guicciardini explains, the startlingly split account of planetary motion Hooke communicated to Newton was the classical example.

To fully narrate a framework transition such as that of Newton’s theory of gravity requires, we argue, first, to explain the origin of Hooke’s ambivalence by revealing the source of external critique to which it initially owed; second, to describe the hybridic, split nature of the new work he began pressing on his colleagues as a result; and third, to show how those colleagues responded by further developing his novel departures from the accepted norm. Guicciardini focuses exclusively on the last two stages. He tells us nothing about who or what caused Hooke to be of two minds, mechanical à la Descartes, and occult à la Gilbert, with respect to planetary motion, only that well before writing to Newton, he was. On the other hand, he has quite a bit to tell us about Hooke’s background, circumstance and positioning, which from the analytically blinkered philosophical perspective of our book, would appear irrelevant.

What catches the eye immediately in the light of our model, is how Hooke emerges from under Guicciardini’s hand as the very embodiment of social, professional, even epistemic hybridity. Everything about his station and standing is split down the middle as if already *disposed* to be ambivalated. This is something we never thought of; something that only a concrete historically rich case-study could alert us to. Ambivalation, especially among strong-minded creative individuals is more than a matter of exposure to normative critique – which as we note repeatedly, more times than none will have the exact opposite effect in direct proportion to the depth of the commitment challenged. We never thought of the possibility that certain practitioners of voice and standing would be better disposed toward ambivalation than others. Guicciardini’s Hooke’s very personal identity consists of major straddlings of unbridgeable social and professional divides.

The divides were real. He wasn’t a mechanic *posing* as a scientist, any more than he was a commoner posing as a gentleman. He was both, and, in a sense, therefore, neither. He moved authentically between the “watchmakers’ shops, the chambers of the Royal Society, and the laboratory at Gresham College”, and was, therefore, never fully at home in any of them. He was at once the paid Curator of Experiments of the newly founded Royal Society, and a full-fledged Fellow; a man who’s everyday bestrides such boundaries with ease, not at all in a state of ambivalence, or tortured indecision, yet with the keen double-vision required of someone accustomed to living in more than one world. And it comes now at no surprise that the mechanical/magnetic hybrid with which he so effectively confronted Newton, represented an even more profound and at the time philosophically unthinkable grafting of “Baconian experientialism and … moderate Cartesian hypotheticism”, as Guicciardini puts it![[1]](#footnote-1)

In *The* *View From Within* we associate the ability to transform ambivalence into a well-crafted hybridic structure (rather than stomp it out defensively), with the *creativity* of a Galileo, a Tycho, a Peacock, a Whewell or a Poincare. But we were missing something important. Defensive moves can be creative too. Thanks to Guicciardini, stories of social straddling similar to Hooke’s, we now see, can be told about each of these creative thinkers, which can far better explain their predisposition to crafting the game-changing normative hybrids they authored.

As for the point related to visibility raised by Guicciardini. We fully agree that latter-day historians of science, such as Steve Shapin, have indeed rendered “technicians” such as was Hooke, visible again, after being obscured from sight by the historiographical blinkering of too exclusive an internalist focus on the fate of theories. Hooke is indeed no longer invisible. However, the position rightly criticized by Guicciardini is not exactly ours... What we claim is rendered invisible by current historiography - Shapin’s included! - is not Hooke (or, for that matter, Galileo, or Tycho or Whewell or Peacock), but the fact that, despite their confident tone, the hybrids they produced represented an unsettling dithering or ambivalence, that proved contagious upon those who elected to contend with them - which is precisely why Guicciardini’s new account of Hook’s role is so refreshingly novel and philosophically informing!

1. On the impossibility at the time of such a grafting, see Menachem Fisch, “Judaism, and the Religious Crisis of Modern Science", in J.M. van der Meer and S. Mandelbrote (eds.), *Nature & Scripture in the Abrahamic Religions: 1700-Present*, Vol II, 2008, 525-567, . [↑](#footnote-ref-1)