EDITORIAL

THESIS, ANTITHESIS (SYNTHESIS?)

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Some 200 years ago, the German philosopher Georg Wilhelm Freidrich Hegel set himself a daunting goal: to develop a philosophical theory that could be used not only to explain the past, but to predict the future as well.

Hegel believed that the universe was governed by a rational and positive process, and consequently that his goal would be achievable, if only the universe could be sufficiently understood. To achieve that ambition, he adopted a mode of thinking that, while different in technique, made him a kind or ancestor to Einstein and his successors, who embarked on a quest to refine the partial explanation of natural laws known as Newtonian physics into an empirically provable “Theory of Everything.”

Hegel posited that human history demonstrated an ongoing contest between competing theories, each of which claimed to explain reality. His revelation was that such theories could be used as tools to reach a fuller understanding of life, even if each theory was known to be imperfect as a starting point. The method he developed to achieve this end has come to be known as the “thesis/antithesis/synthesis” model of analysis.

In this methodology, our understanding of reality is refined by first describing what appears to be objective reality (the thesis). Once the thesis has been explicated, its opposite (the antithesis) can also be described. True reality may be assumed to lie somewhere between these two extremes. By critically comparing thesis and antithesis, a truer understanding of reality may be achieved and described (the synthesis). The synthesis then becomes thesis upon which the next round of the exercise is based, and the process is continued in asymptotic fashion to progressively narrow the gap between human understanding and objective reality. Hegel referred to the elusive, ultimate truth towards which this search was directed as the “absolute idea.”

Hegel's methodology works best in disciplines where the goal is to understand ostensibly timeless values, such as in science (“what is light?”) and philosophy (“what is truth?”). In human history, however, an interesting inversion occurs. Systems often evolve from original thesis towards what seems to be a sort of "absolute idea," becoming more likely to eventually breed a new antithesis when the absolute idea has been attained.

This phenomenon can be seen most obviously in political systems. If the leadership of a chief in a tribe makes sense, then why not of a prince in a city state, and ultimately a king in a nation, each with ever more absolute power? However, while the concentration of power into rigid hierarchies can bring relative stability and secure borders, it may also lead to unrest when that power is abused. In the particular case, this can lead to a rebellion. Sometimes, the result can be a new antithesis that represents a new political system entirely: democracy, socialism or communism.

The same dynamic can also be observed in quasi-political systems, such as religion (think of the Reformation), and, indeed, in standard setting. Since the dawn of recorded history, elementary standards have existed (weights, measures, coinage, and so on). With the advent of international trade and more sophisticated technologies, a broader range of tools was needed, and a global, hierarchical system rapidly involved that was capable of creating universally recognized and implemented standards of many types.
But as that standard setting system became more complete, it also became more bureaucratic. As it was
global, it was also difficult for any individual company to influence an outcome too greatly, or even for any
group of companies to affect results too easily. When the pace of information technology (IT) innovation
accelerated and the matters at stake became highly strategic, the traditional system was not deemed to
be adequate by some IT vendors that were anxious to achieve the full commercial promise of their new
inventions, or to further their strategic interests.

The result was a fragmentation of the IT standard setting infrastructure that has been at once creative,
frustrating, fruitful and inefficient. Multiple structural and procedural antitheses (e.g., consortia and open
source projects) have not only been posited, but also implemented hundreds of times over, with
demonstrable success. In some instances, synthesis can be observed in the field as well. For example,
a number of open source projects (e.g., the Eclipse Foundation) now operate on top of a consortium-like
infrastructure; many global consortia (e.g., the W3C and OASIS) are becoming indistinguishable from
their accredited, national brethren; and some accredited bodies (e.g., ASTM and IEEE) now welcome
members from beyond their historical, national borders.

But while examples of synthesis can be observed, the process of combining the best that both the new as
well as the old methodologies had to offer has not, in our view, been completed. As a result, while
consortia offer much that is desirable to those that join them, they do not offer many of the benefits that
the traditional standard setting system offers, such as: the ability to centralize work in one place; the
ability to coordinate related work within a single system under similar rules; greater resources and political
influence; increased likelihood of global adoption; and more. Both the thesis and the antithesis still
coeexist, and synthesis has not yet been achieved. Indeed, there is not even any current movement in the
IT industry to achieve it.

Of course, the technology world is hardly static, and therefore the answer to the question of "how should
standards be set?" can never be answerable in the same way that the answer to the question "what is
light?" may, someday, be known. If, by some remote chance we ever got the standard setting process
"right," that virtuous state would be likely to evanescence almost before its perfection had been realized.

But the real world, unlike the virtual spheres of philosophy, does offer one advantage: the organizations
that set standards offer real-time data that can be observed. Thus, as those that push and jockey in the
marketplace play out their experiments of thesis and antithesis, we can work towards, if not an Absolute
Idea, at least a more introspective and productive synthesis upon which to do the work of the future.

Perhaps the road into the 21st century would be smoother if we paid closer attention to the lessons of an
18th century philosopher.

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