

Humanities in Engineering and Engineering in Humanities

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Abstract — *This paper aims at examining the interaction between Humanities and Engineering as a part of a university curriculum – acquainting engineers with the decision making processes invariably involving Humanities on one hand, and on the other engaging the Arts (i.e. Humanities) graduates to become aware of the possibilities Engineering offers and in general demystifying technology. The latter is considered particularly important as it is often the non-engineers who are the decision makers in our society, if for no other reason, then by their sheer number.*

Index Terms — *Humanities, Engineering, curriculum.*

INTRODUCTION

Humanities have a strong reputation for creativity and the multifaceted manner in which it is conveyed to the society. Their wide breath of vision knows no bounds and challenges they provide are endless. They are an essential aspect of civilization and constitute the very fibre of what may be described as culture. It is arguable that they often set the aims or a direction towards which a society strives. However while these may be the attributes of Humanities, they do not define what they are. One¹ definition describes it as follows:

The Humanities are academic disciplines which study the human condition, using methods that are primarily analytic, critical, or speculative, as distinguished from the mainly empirical approaches of the natural and social sciences.

On the other hand, diametrically opposite is the world of Science, pragmatic and factual, curious and always striving to understand the essence of the physical world. It provides a platform of understanding of natural phenomena. However, it often sees this quest for understanding as an end in itself, and while it contributes to the wisdom of the society, it does not actively sustain it. Like Humanities, it is an aspect of civilization, sometimes seen in conflict with the constructs of the Humanities as it tackles some of its philosophical speculations – yet it is totally impartial, devoid of subjectivity and self correcting as it iterates through hypotheses about reality.

Given the challenge posed by the Humanities, it is the role of Engineering to use the wisdom Science provides to supply the solution. It is *the* rather than *an* because engineering solutions are the result of optimizations in the light of ever present constraints. The final product is *the* result of competing considerations. Given such a scenario, it is always necessary to make a choice. It is perhaps here that a tangible nexus is made with the Humanities through Ethics – thus, at least in this manner, indicating the multifaceted nature of Engineering.

This paper aims at examining the interaction between Humanities and Engineering as a part of a university curriculum – acquainting engineers with the decision making processes invariably involving Humanities on one hand, and on the other engaging the Arts (i.e. Humanities) graduates to become aware of the possibilities Engineering offers and in general demystifying technology. The latter is considered particularly important as it is often the non-engineers who are the decision makers in our society, if for no other reason, then by their sheer numbers.

¹ <http://en.wikipedia.org/wiki/Humanities> (10/2/2010)