Projects, programmes, portfolios and the discontinuous mind

In his essay 'Gaps in the mind' (first published as part of the Great Ape Project[1]), Richard Dawkins talks about Man's inclination to divide any continuum into arbitrary, discrete components.

As an analogy, he observes that "We'd all agree that a six-foot woman is tall and a five-foot woman is not. Words like 'tall' and 'short' tempt us to force the world into qualitative classes, but this doesn't mean that the world is really discontinuously distributed. We're you to tell me that a woman is five feet nine inches tall and ask me to decide whether she should be called tall or not, I'd shrug and say 'She's five feet nine, doesn't that tell you what you need to know?'

Dawkins was making the point in the context of our distinction between species, particularly species that evolve into other species. He observes that there is no point at which a mother of one species gives birth to a daughter of another species, the changes from one species to the next are imperceptible and lie, by definition, on a continuum. He calls this inclination to categorise 'the discontinuous mind'.

'All very interesting if you are an evolutionary biologist, but what's this got to do with project management?' you may ask. Well, it's all to do with our preoccupation with whether we should call something a project or a programme or a portfolio.

Historically, the terms project and programme were broadly interchangeable and not used to describe distinctive entities. The major defence initiatives of the 1940's and 1950's that were the origin of so many scheduling tools still in use today, were variously known as 'The Manhattan *Project*' and 'The Polaris *Programme*' (and not a Business Change Manager in sight). Hence the acronym PERT, that names a technique used on many a *project*, actually stands for *Programme* Evaluation and Review Technique.

A useful milestone in understanding the separation of the terms was the publication in 1992 of "An Introduction to Programme Management" by the CCTA. This evolved into the 'Managing Successful Programmes[2]' (MSP) we know today and was probably instrumental in the Project Management Institute (PMI) creating its 'Guide to the Program Management Body of Knowledge[3]' (PgMBoK Guide). This was the first formalised image of the business change programme that we now recognise as a typical example of a programme as opposed to a project.

This happily feeds the discontinuous mind and leads to the situation where an on-line forum recently hosted a discussion starting with the question: "I have a sizeable initiative showing on portfolio [sic], lots of internal discussion on whether or not this should be treated as a project or as a program". It went on to ask if "anyone has a good decision framework they use successfully to make those kind of decisions", i.e. a set of criteria that would help define whether this initiative was a project or programme.

Predictably the responses varied. Some were close to conventional definitions of project and programme, others defined programmes in a way more commonly used for portfolios, and some simply asked "does it really matter?"

This is the perfect example of us forcing the world into qualitative classes. The assumption is that the initiative is either a project or a programme, as if there is a gap between the two where nothing exists. It also pre-supposes that there is a deterministic way of deciding whether the initiative is a project or a programme.

The fact is that projects, programmes and portfolios are points on a continuum. There is no clear point at which an initiative ceases to be a project and suddenly becomes a programme. Neither does it cease to be a programme and suddenly become a portfolio (the first few editions of MSP even contained something called 'a portfolio programme' – not to be confused with 'the programme portfolio').

So why don't we do away with all this 'P3' nonsense and just call everything a project? Well, sometimes qualitative classes can be useful. I may look at someone and not know their exact height but I do know they are tall. I can therefore communicate some useful qualitative information without the use of a tape measure.

It is the same with the terms project, programme and portfolio. They are useful qualitative shortcuts to describing a class of initiative. The danger with qualitative terms is that they are also subjective. My definition of 'tall' may be the same as yours for some people but there are always those that I may regard as 'quite tall' who you regard as 'just above average'.

While it can be a useful shorthand to talk about projects, programmes and portfolios as we would talk about short, average and tall people, these must not pass for quantitative categories. Unfortunately this has come to pass in P3 management. Both Axelos in the UK and the PMI in the US publish separate guides for each of the three 'types' of initiative. You can be a qualified project manager, a qualified programme manager or a qualified portfolio manager – and so the mirage of three discrete entities is perpetuated.

We really need to recognise the true nature of these qualitative terms. It's easy to understand that short and tall are manifestations of someone's height as measured in feet and inches, or metres and centimetres, whichever you prefer. Simply by defining someone's actual height, rather than their qualitative height, we understand the continuum.

But what is the unit by which the project, programme, portfolio continuum is measured? I suggest it is 'complexity'.

In simple terms, initiatives with low complexity are projects. As the complexity increases we may choose to manage the initiative as a 'complex project' or a programme. As the complexity increases even more it becomes a portfolio.

Unfortunately complexity is not quite so easy to define as units of height and much has been written about what is complex and what is not. To simplify things slightly, I suggest that the complexity in which we should really be interested is 'complexity of scope'. The distinction between the organisational structures and techniques used in projects, programmes and techniques are all (either directly or indirectly) related to the complexity of scope.

I can give one simple example of how this works. Convention has it (as defined by the likes of PRINCE2 and MSP) that projects deliver outputs not benefits whereas programmes deliver benefits from the outputs of their component projects. This is the discontinuous mind working again.

A continuum based approach would say – an initiative that creates one output from which one benefit is realised with low level organisational change is not very complex and can be managed as a project. Conversely, an initiative with 23 outputs that have many-to-many relationships with 14 quantified benefits requiring difficult organisational change, is complex and should be managed as a programme. Of course, there is nothing to say that the financial value of the low complexity project isn't actually greater than the complex programme. Size doesn't matter – it's all about the complexity of the scope.

The terms project, programme and portfolio are useful. In the same way that the terms short, average and tall are useful. But we should always remember that these are qualitative and are simply our choice of discontinuous labels on a continuum of scope complexity.

So, "is it a project, programme or portfolio?" is the wrong question. The right questions are "How complex is the scope and how do I need to manage that complexity?" If the resulting management approach looks like something that can usefully be called project management then the work is a project, if it's something that can usefully be called programme management then the work is a programme, and the same with portfolios.

If our profession is to progress, we need to promote the continuous mind over the discontinuous mind in all aspects of what we do.

1. Singer and Cavalieri (Eds), The Great Ape Project, St. Martin's Griffin, New York.
2. Axelos (2014), Managing Successful Programmes, TSO, Norwich
3. Project Management Institute (2013), The Standard for Program Management, PMI, Philadelphia